

## DOCUMENT RESUME

ED 330 086

EA 022 809

AUTHOR Snyder, Thomas D.; Hoffman, Charlene M.  
TITLE Digest of Education Statistics, 1990.  
INSTITUTION National Center for Education Statistics (ED),  
Washington, DC.  
REPORT NO NCES-91-660  
PUB DATE Feb 91  
NOTE 526p.; Some small print may not reproduce adequately  
in paper copy.  
PUB TYPE Statistical Data (110)

EDRS PRICE MF02/PC22 Plus Postage.  
DESCRIPTORS Academic Achievement; Adult Education; Degrees  
(Academic); Dropout Rate; \*Educational Attainment;  
\*Educational Finance; Educational Trends; Elementary  
Secondary Education; Employment Level; \*Enrollment;  
Ethnic Groups; Federal Programs; Government  
Publications; Higher Education; Information  
Technology; \*Institutional Characteristics;  
International Education; Library Statistics;  
Microcomputers; National Norms; Postsecondary  
Education; Preschool Education; Private Schools;  
Public Schools; \*School Demography; School Holding  
Power; \*School Statistics; Student Characteristics;  
Student Costs; Student Financial Aid: Tables (Data);  
Teacher Characteristics; Technical Education

## ABSTRACT

This document, consisting of 7 chapters, 35 figures, and 380 tables, provides statistical data on most aspects of United States education, both public and private, from kindergarten through graduate school. The chapters cover the following topics; (1) all levels of education; (2) elementary and secondary education; (3) postsecondary, college, university, vocational, and adult education; (4) federal programs for education and related activities; (5) outcomes of education; (6) international comparisons of education; and (7) learning resources and technology. A wide range of information is presented on subjects including the number of schools and colleges, teachers, enrollment, graduates, educational attainment, finances, federal funds for education, employment and income of graduates, libraries, and international education. Supplemental information on population trends, attitudes on education, educational characteristics of the labor force, government finances, and economic trends is provided. Included among data not appearing in previous editions are the following: salary comparisons of public and private school teachers and principals; mean tuition charges of private schools; student participation rates in federal, state, and local programs; residence and migration of first-time college students; student performance on history and geography tests; trend profiles of persons earning doctor's degrees in humanities and life sciences; characteristics of college faculty; faculty salaries; staff employed in higher education institutions; and computer use by students and adults. A short introduction highlights major findings, and each chapter contains a brief overview of significant trends. A guide to sources, definitions, and an index are included. (MLF)

The ERIC Facility has assigned this document for processing to:

EA  
TM

In our judgment, this document is also of interest to the Clearinghouses noted to the right. Indexing should reflect their special points of view.

ED330086

**NATIONAL CENTER FOR EDUCATION STATISTICS**

**Digest of  
Education Statistics  
1990**

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

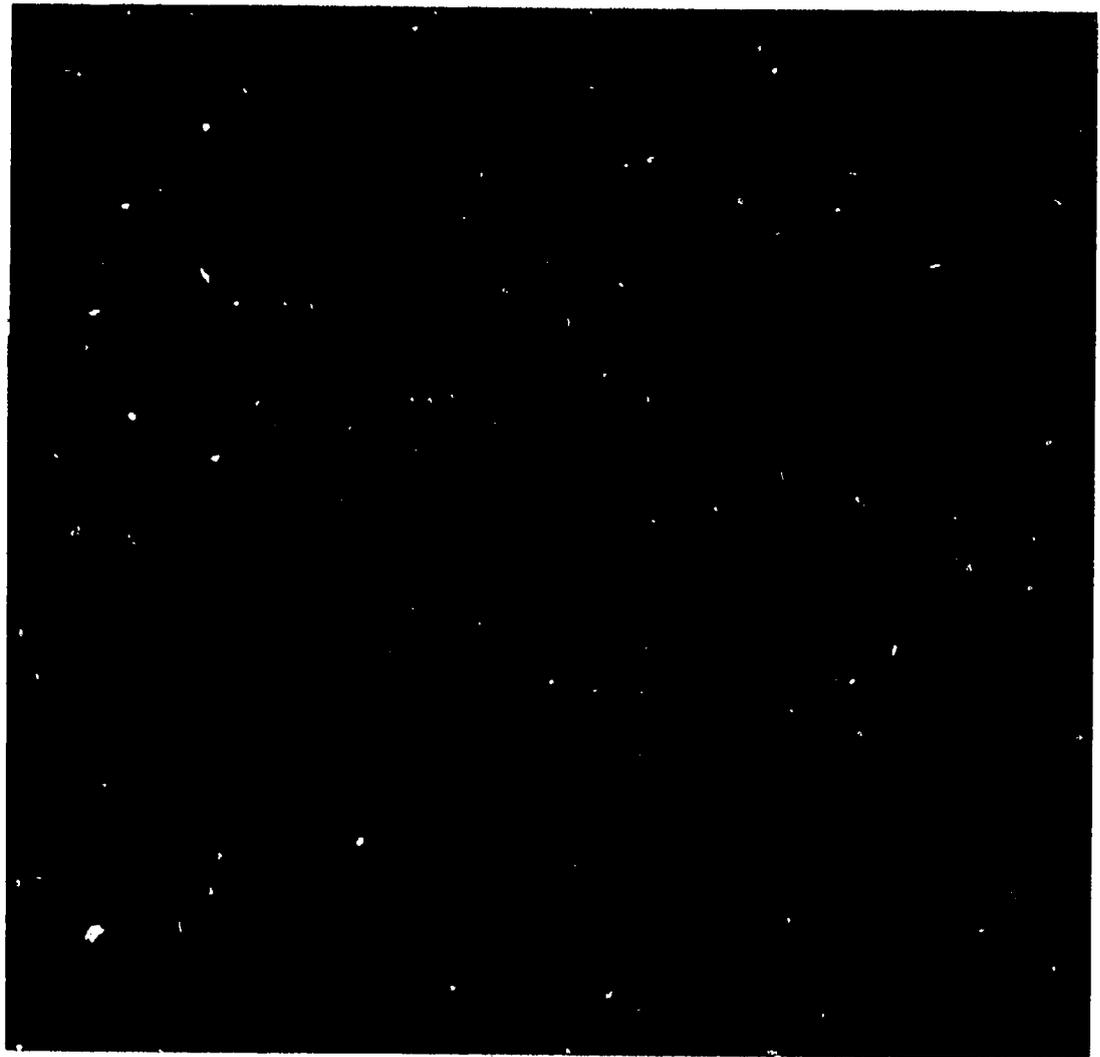
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

U.S. Department of Education  
Office of Educational Research and Improvement NCES 91-660

**BEST COPY AVAILABLE**

EA 022 809

# **Digest of Education Statistics 1990**



**Thomas D. Snyder**  
**Project Director**  
**Charlene M. Hoffman**  
**Project Manager**  
**National Center for Education Statistics**

**U.S. Department of Education**  
**Ted Sanders**  
*Acting Secretary*

**Office of Educational Research and Improvement**  
**Christopher T. Cross**  
*Assistant Secretary*

**National Center for Education Statistics**  
**Emerson J. Elliott**  
*Acting Commissioner*

**National Center for Education Statistics**

"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

February 1991

# Foreword

This 1990 edition of the *Digest of Education Statistics* is the 26th in a series of publications initiated in 1962. (The *Digest* has been issued annually except for combined editions for the years 1977-78, 1983-84, and 1985-86.) Its primary purpose is to provide a compilation of statistical information covering the broad field of American education from kindergarten through graduate school. The *Digest* includes a selection of data from many sources, both government and private, and draws especially on the results of surveys and activities carried out by the National Center for Education Statistics (NCES). The publication contains information on a variety of subjects in the field of education statistics, including the number of schools and colleges, teachers, enrollments, and graduates, in addition to educational attainment, finances, Federal funds for education employment and income of graduates, libraries, and international education. Supplemental information on population trends, attitudes on education, education characteristics of the labor force, government finances, and economic trends provides background for evaluating education data.

The *Digest* is divided into seven chapters: "All Levels of Education," "Elementary and Secondary Education," "Postsecondary Education," "Federal Programs for Education and Related Activities," "Outcomes of Education," "International Comparisons of Education," and "Learning Resources and Technology." To qualify for inclusion, material must be nationwide in scope and of current interest and value. The introduction includes a brief overview of current trends in American education, which supplements the tabular materials in chapters 1 through 7. Information on the structure of the statistical tables is contained in the "Guide to Tabular Presentation." The "Guide to Sources" provides a brief synopsis of the surveys used to generate the tabulations for the *Digest*. Also, a "Definitions" section is included to help readers understand terms.

In addition to updating many of the statistics that have appeared in previous years, this edition contains a substantial amount of new material, including:

- Salary comparisons of public and private school teachers;
- Comparisons of public and private school principals;
- Mean tuition charges of private elementary and secondary schools;
- Student participation rates in Federal, State and local programs;
- Residence and migration of first-time college students;
- Student performance on history and geography tests;
- Trend profiles of persons earning doctor's degrees in humanities and life sciences;
- Characteristics of college faculty;
- Faculty salaries, by rank, control of institution, and State;
- Staff employed in higher education institutions, by function; and,
- Computer use by students and adults.

In the past, the *Digest of Education Statistics* has proved to be of interest and value to education researchers and administrators, government officials, the media, the business community, and the general public. Recently, we have implemented a program to expand the scope of materials included in the *Digest* to make it even more comprehensive. We welcome comments and suggestions to improve future editions. We trust that the users of this 26th edition will find it even more valuable than its predecessors.

Emerson J. Elliott,  
Acting Commissioner  
National Center for Education Statistics  
December 1990

# Acknowledgments

Many people have contributed in one way or another to the development of the *Digest*. Foremost among these contributors is W. Vance Grant, who served as an editor of this series from 1962 to 1986. His developmental work made the publication the widely used and respected report it is today. Thomas D. Snyder was responsible for the overall development and preparation of this *Digest* which was prepared under the general direction of Jeanne E. Griffith.

Charlene M. Hoffman provided technical assistance in all phases of its preparation and was responsible for Chapter 4, "Federal Programs for Education and Related Activities," and for tables on degrees conferred. Celeste Loar compiled tabulations on international education and on faculty and teachers. Jackie O'Neal prepared tables on public school data. Bill Sonnenberg developed special analyses on school districts and on use of computers. Debra E. Gerald and William J. Hussar prepared projections of school enrollment and finance statistics. Walter J. West developed materials on parent involvement in school-related activities. Celestine J. Davis provided statistical assistance.

A number of individuals outside the Center also expended large amounts of time and effort on the *Digest*. James J. Corina, Robert Craig, and Frank

Schneider of Pinkerton Computer Consultants, Inc., provided computer support. Louise Woerner, Barbara Robinson, Donna Grande, Jeannette Bernardo, Linda Burbank, and Theodore Willis of HCR provided research assistance. In the Office of Information Services, Skee Smith provided editorial assistance and managed typesetting, and Phil Carr designed the cover.

This year's edition of the *Digest* has received extensive reviews by individuals within and outside the Department of Education. We wish to thank them for their time and expert advice. In the Office of Educational Research and Improvement (OERI), John Burkett, W. Vance Grant, Mary Frase, and Salvatore Corrallo reviewed the entire manuscript. Rolf Blank (Council of Chief State School Officers) and Rosemary Clark (U.S. Bureau of the Census) also reviewed the entire document. OERI staff who reviewed portions of the manuscript were: Susan Ahmed, Nabeel Alsalam, Patricia Q. Brown, Judy Carpenter, Emmett Fleming, Martin M. Frankel, William Freund, William J. Fowler, Kerry J. Gruber, Edith K. McArthur, Nancy Shantz, and Douglas A. Wright. Agency reviews were conducted by the Office of Planning, Budget, and Evaluation and the Office of Vocational and Adult Education, U.S. Department of Education.

# Contents

	<b>Page</b>
Foreword.....	iii
Acknowledgments .....	v
Introduction.....	1
Chapter 1. All Levels of Education.....	5
Chapter 2. Elementary and Secondary Education.....	41
Chapter 3. Postsecondary Education.....	159
College and University Education .....	159
Vocational and Adult Education .....	318
Chapter 4. Federal Programs for Education and Related Activities.....	325
Chapter 5. Outcomes of Education.....	355
Chapter 6. International Comparisons of Education.....	373
Chapter 7. Learning Resources and Technology .....	387
Appendix	
Guide to Tabular Presentation.....	399
Guide to Sources .....	401
Definitions .....	435
Index of Table Numbers .....	449

**Figures**

1. The structure of education in the United States.....	7
2. Enrollment and total expenditures in current and constant dollars, by level of education: 1960-61 to 1989-90.....	8
3. Years of school completed by persons 25 years old and over: 1940 to 1989.....	9
4. Years of school completed by persons 25 to 29 years of age: 1940 to 1988.....	9
5. Highest degree earned by persons 18 years old and over: 1984.....	10
6. Items most frequently cited by the public as the chief problem facing the local public schools: 1980 to 1989.....	10
7. Preprimary enrollment of 3- to 5-year olds, by attendance status: October 1970 to October 1989.....	43
8. Enrollment, number of teachers, pupil-teacher ratios, and expenditures in public schools: 1960-61 to 1989-90.....	44
9. Percentage change in public elementary and secondary enrollment, by State: Fall 1984 to fall 1989.....	45
10. Average annual salary for public elementary and secondary school teachers: 1969-70 to 1989-90.....	45
11. Sources of revenue for public elementary and secondary schools: 1969-70 to 1987-88.....	46
12. Current expenditure per student in average daily attendance in public elementary and secondary schools: 1969-70 to 1988-89.....	46
13. Enrollment, degrees conferred, and expenditures in institutions of higher education: 1960-61 to 1988-89.....	162
14. Percentage change in total enrollment in institutions of higher education: Fall 1983 to fall 1988.....	163
15. Enrollment in institutions of higher education, by age: Fall 1970 to fall 1990.....	163
16. Full-time-equivalent students per staff member in public and private institutions of higher education: 1976 and 1987.....	164
17. Trends in bachelor's degrees conferred in selected fields of study: 1977-78, 1982-83, and 1987-88.....	164
18. Sources of current-fund revenue for public institutions of higher education: 1986-87.....	165
19. Sources of current-fund revenue for private institutions of higher education: 1986-87.....	165
20. Federal funds for education, by agency: Fiscal year 1990.....	333
21. Federal funds for education, by level: 1965 to 1990.....	334
22. Department of Education outlays, by type of recipient: Fiscal year 1990.....	334

23. Unemployment rates for persons 16 years old and over, by years of school completed: March 1989 .....	357
24. Labor force status of 1987-88 high school dropouts and graduates: October 1988 ....	357
25. Median annual income of full-time workers 25 years old and over, by years of school completed and sex: 1988.....	358
26. Percentage of 1985-86 bachelor's degree recipients who have pursued additional higher education, by undergraduate major field of study: 1987.....	358
27. Changes in enrollment, by area of the world and level of education: 1980-81 to 1986-87 .....	375
28. Public expenditures for education as a percentage of gross national product: Selected countries, 1987 .....	375
29. Distribution of elementary and secondary enrollment, by major area of the world: 1986-87 .....	376
30. Distribution of higher education enrollment, by major area of the world: 1986-87.....	376
31. Mathematics proficiency at age 13, by country/province: 1988.....	377
32. Science proficiency at age 13, by country/province: 1988.....	377
33. Volumes held by public school libraries, by size of school and level of education: Fall 1985.....	388
34. Public schools with computers, by level of school: 1982 to 1986 .....	388
35. Student use of computers at home, by level of instruction and household income: October 1989 .....	389

## Tables

### 1. All Levels of Education

#### *Enrollment, Teachers, and Schools*

1. Estimated number of participants in elementary and secondary education and in higher education: Fall 1989 .....	11
2. Enrollment in educational institutions, by level and control of institution: Fall 1980 to fall 2000 .....	11
3. Enrollment in educational institutions, by level and by control of institution: 1869-70 to fall 2000 .....	12
4. Teachers in elementary and secondary schools, and senior instructional staff in institutions of higher education, by control of institution: Fall 1970 to fall 2000 .....	13
5. Educational institutions, by level and control of institution: 1976-77 to 1989-90.....	14

#### *Enrollment Rates*

6. Percentage of the population 3 to 34 years old enrolled in school, by age: April 1940 to October 1989.....	15
7. Percentage of the population 3 to 34 years old enrolled in school, by race/ethnicity, sex, and age: October 1975 to October 1989 .....	16

***Educational Attainment***

8. Years of school completed by persons age 25 and over and 25 to 29, by race: 1910 to 1989 ..... 17

9. Years of school completed by persons age 18 and over, by age, sex, and race/ethnicity: 1988..... 18

10. Number of persons age 18 and over who hold a bachelor's or higher degree, by field of study, sex, race, and age: Spring 1984 ..... 19

11. Highest educational level and degree earned by persons age 18 and over, by sex, race, and age: Spring 1984 ..... 20

12. Years of school completed by persons age 25 and over, by State: April 1980 ..... 21

13. Years of school completed by persons age 25 and over in the 15 largest States and the 15 largest metropolitan areas: March 1987 ..... 22

***Population***

14. Estimates of resident population, by age group: July 1, 1960 to July 1, 1988. .... 22

15. Estimates of school-age resident population, by race and sex: July 1, 1960 to July 1, 1988 ..... 23

16. Estimated total and school-age populations, by State: 1970 to 1988 ..... 24

***Characteristics of Families with Children***

17. Families, by family status and presence of own children under 18: 1970 to 1988..... 25

18. Characteristics of families with own children under 18, by family status and race/ethnicity: 1988..... 26

19. Poverty status of persons, families, and children under 18, by race/ethnicity: 1959 to 1988 ..... 27

***Opinions on Education***

20. Average grade that the public would give the schools in their community and in the Nation at large: 1974 to 1989 ..... 28

21. Items most frequently cited by the general public as the chief problems facing the local public schools: 1970 to 1989..... 28

22. Parental involvement in 8th graders' school-related activities, by selected parental characteristics: 1988 ..... 29

23. Beliefs held by teachers about what activities and programs would help to improve education: 1989..... 29

24. Rating of school problems by teachers and students: 1988..... 30

***Finances***

25. Percentage of households contributing to education and other charitable organizations and average annual donation, by type of charity: 1987..... 30

26. Volunteer workers for schools and other organizations, by selected characteristics: Year ending May 1989 ..... 31

27. Total expenditures of educational institutions related to the gross national product, by level of institution: 1959-60 to 1989-90.....	32
28. Total expenditures of educational institutions, by level and control of institution: 1899-1900 to 1989-90.....	33
29. Estimated total expenditures of educational institutions, by level, control of institution, and source of funds: 1975-76 to 1986-87.....	34
30. Governmental expenditures, by level of government and function: 1970-71 to 1987-88.....	35
31. Direct general expenditures of State and local governments for all functions and for education, by level and State: 1987-88.....	36
32. Direct general expenditures per capita of State and local governments for all functions and for education, by level and State: 1987-88.....	37
33. Gross national product, State and local expenditures, personal income, disposable personal income, median family income, and population: 1929 to 1989.....	38
34. Gross national product price deflator, Consumer Price Index, education price indexes, and Federal budget composite deflator: 1919 to 1990.....	39

## 2. Elementary and Secondary Education

### *Enrollment*

35. Historical summary of public elementary and secondary school statistics: 1869-70 to 1987-88.....	47
36. Enrollment in public elementary and secondary schools, by grade: Fall 1974 to fall 1988.....	49
37. Enrollment in public elementary and secondary schools, by level and State: Fall 1981 to fall 1989.....	50
38. Enrollment in public elementary and secondary schools, by grade and State: Fall 1988.....	52
39. Enrollment in public elementary and secondary schools, by grade and State: Fall 1987.....	54
40. Enrollment in public elementary and secondary schools, by grade and State: Fall 1986.....	56
41. Membership and attendance in public elementary and secondary schools, by State: 1980-81, 1986-87, and 1987-88.....	58
42. Average daily attendance in public elementary and secondary schools, by State: 1969-70 to 1987-88.....	59
43. Enrollment in public elementary and secondary schools, by race or ethnicity and State: Fall 1986.....	60
44. Enrollment of 3-, 4-, and 5-year-old children in preprimary programs, by level and control of program and by attendance status: October 1965 to October 1989.....	61
45. Public school pupils transported at public expense and current expenditures for transportation: 1929-30 to 1987-88.....	62

46. Children 0 to 21 years old served in federally-supported special education programs, by type of handicap: 1976-77 to 1988-89 .....	63
47. Percentage distribution of handicapped persons 6 to 21 years old receiving special education services, by educational environment: 1987-88 .....	64
48. Number of children 3-5 years old served under The Education of the Handicapped Act, by State: 1986-87, 1987-88, and 1988-89 .....	64
49. State legislation on gifted and talented programs and number and percentage of students receiving services in public elementary and secondary schools, by State: 1986-87 .....	65
50. Enrollment in grades 9 to 12 in public and private schools compared with population 14 to 17 years of age: 1989-90 to fall 1988 .....	66
51. Enrollment in foreign language courses compared with enrollment in grades 9 to 12 of public secondary schools: Fall 1948 to fall 1985 .....	67
52. Student participation in school programs and services, by control, level, and community type of school: 1987-88 .....	68
<b><i>Private Elementary and Secondary Schools</i></b>	
53. Private elementary and secondary enrollment and schools, by selected characteristics: 1987-88 .....	68
54. Private elementary and secondary staff and student-staff ratios, by level and orientation of school: 1987-88 .....	69
55. Private elementary and secondary enrollment and schools, by amount of tuition, level, and orientation of school: 1987-88 .....	70
56. Summary statistics on Catholic elementary and secondary schools, by level: 1919-20 to 1988-89 .....	70
57. Enrollment, teachers, and high school graduates in private elementary and secondary schools, by State: Fall 1980 and 1979-80 .....	71
<b><i>Teachers and Other Instructional Staff</i></b>	
58. Public and private elementary and secondary teachers and pupil-teacher ratios, by level: Fall 1955 to fall 1990 .....	72
59. Public elementary and secondary teachers, by level and State: Fall 1984 to fall 1989 .....	73
60. Teachers, enrollment, and pupil-teacher ratios in public elementary and secondary schools, by State: Fall 1985 to fall 1988 .....	74
61. Teachers in public and private elementary and secondary schools, by selected characteristics: 1987-88 .....	75
62. Highest degree earned and number of years teaching experience for teachers in public elementary and secondary schools, by State: 1987-88 .....	76
63. Selected characteristics of public school teachers: Spring 1961 to spring 1986 .....	77
64. Public secondary school teachers, by subject taught: Spring 1966 to spring 1986 .....	78

65. Teacher candidates' reasons for majoring in education and their perceptions of readiness to teach: Spring 1986 .....	78
66. Selected characteristics of public school teachers' current teaching assignments, by State: 1987 .....	79
67. Percentage of teachers involved in making selected decisions, by State: 1987.....	80
68. Percentage of teachers reporting various problems in their school, by State: 1987 .....	81
69. Average salaries for full-time teachers in public and private elementary and secondary schools, by selected characteristics: 1987-88.....	82
70. Job satisfaction of public school teachers: 1984 to 1989 .....	83
71. Estimated average annual salary of teachers in public elementary and secondary schools: 1959-60 to 1989-90 .....	83
72. Estimated average annual salary of teachers in public elementary and secondary schools, by State: 1969-70 to 1989-90 .....	84
73. Minimum and average teacher salaries, by State: 1987-88 and 1988-89.....	85
74. Average annual salary of instructional staff in public elementary and secondary schools, by State: 1939-40 to 1989-90 .....	86
75. Average annual salary of instructional staff in public elementary and secondary schools and average annual earnings of full-time employees in all industries: 1929-30 to 1989-90.....	88
76. Staff employed in public elementary and secondary school systems, by functional area: 1949-50 to fall 1988.....	89
77. Staff employed in public school systems, by type of assignment and State: Fall 1988 .....	90
78. Staff employed in public school systems, by type of assignment and State: Fall 1987 .....	91
79. Staff and teachers in public elementary and secondary schools, by State: Fall 1985 to fall 1988 .....	92
80. Staff, enrollment, and pupil-staff ratios in public elementary and secondary schools, by State: Fall 1985 to fall 1988.....	93
81. Principals in public and private elementary and secondary schools, by selected characteristics: 1987-88 .....	94
82. Secondary school principals' beliefs about educational issues and purposes: 1965, 1977, and 1987 .....	95
83. Administrative roadblocks reported by secondary school principals: 1965, 1977, and 1987 .....	95
<b><i>Schools and School Districts</i></b>	
84. Public school districts and public and private elementary and secondary schools: 1929-30 to 1988-89.....	96

85. Public school districts and enrollment, by size of district: 1986-87, 1987-88, and 1988-89 .....	96
86. Number and percentage of public elementary and secondary education agencies, by State and type of agency: 1988-89 .....	97
87. Selected statistics for public school districts enrolling more than 20,000 pupils, by State: 1988-89 .....	98
88. Enrollment of the 130 largest public school districts: Fall 1988 .....	103
89. Public elementary and secondary schools, by type of school: 1967-68 to 1988-89 ....	104
90. Public elementary and secondary schools, by type and size of school: 1988-89 .....	104
91. Public elementary and secondary schools, by type and State: 1986-87 to 1988-89 ...	105
92. Public elementary schools by grade span, and average school size, by State: 1988-89 .....	106
93. Public secondary schools by grade span, and average school size, by State: 1988-89 .....	107
<b><i>High School Seniors, Completions, and Dropouts</i></b>	
94. High school graduates compared with population 17 years of age: 1869-70 to 1989-90 .....	108
95. Public high school graduates, by State: 1969-70 to 1989-90 .....	109
96. General Educational Development (GED) credentials issued and age of test takers: 1974 to 1989 .....	110
97. Percentage of high school dropouts among persons 16 to 24 years old, by sex and race/ethnicity: October 1967 to October 1989 .....	110
98. Percentage of high school dropouts among persons 14 to 34 years old, by age, race/ethnicity, and sex: October 1970 to October 1989 .....	111
99. Students with handicaps exiting the educational system, by age, handicapping condition, and basis of exit: United States and outlying areas, 1987-88 .....	112
100. Employment status, wages earned, and living arrangements of special education students out of high school more than 1 year: 1987 .....	112
<b><i>Educational Achievement</i></b>	
101. Student proficiency in reading, by age and selected characteristics of students: 1970-71 to 1987-88 .....	113
102. Student proficiency in reading, by percentile and age: 1970-71 to 1987-88 .....	113
103. Student proficiency in reading, by age, amount of time spent on homework and reading habits: 1979-80, 1983-84, and 1987-88 .....	114
104. Student reading in school, by type of reading material: 1983-84 and 1987-88 .....	114
105. Percentage of students at or above selected reading proficiency levels, by race/ethnicity, and age: 1970-71 to 1987-88 .....	115

106.	Writing performance of 4th, 8th, and 11th graders, by sex, race/ethnicity, and region: 1984 and 1988 .....	116
107.	Student values and attitudes toward writing, by grade level: 1984 and 1988 .....	116
108.	Percentage of students writing at a minimal level or better, by sex and race/ethnicity, by age: 1974, 1979, and 1984 .....	117
109.	Student writing in school, by type of writing assignment: 1983-84 and 1987-88 .....	118
110.	Student proficiency in geography, U.S. history, and literature, by student characteristics: 1986 and 1988 .....	118
111.	Percentage of students at or above selected history proficiency levels, by age, sex, race/ethnicity, and region: 1988 .....	119
112.	Average percentage of students responding correctly to history questions, by time period and grade: 1988 .....	119
113.	Mathematics proficiency, by age and by selected characteristics of students: 1977-78, 1981-82, and 1985-86 .....	120
114.	Percentage of students at or above five mathematics proficiency levels, by race/ethnicity and age: 1977-78, 1981-82, and 1985-86 .....	120
115.	Percentage of students at or above five science proficiency levels, by race/ethnicity and age: 1976-77, 1981-82, and 1985-86 .....	121
116.	Science proficiency, by age and by selected characteristics of students: 1976-77, 1981-82, and 1985-86 .....	121
117.	Student proficiency in civics, by sex, race/ethnicity, and age: 1976, 1982, and 1988 .....	122
118.	Eighth graders' achievement on history, mathematics, reading, and science tests: 1988 .....	122
119.	Scholastic Aptitude Test score averages for college-bound high school seniors, by sex: 1966-67 to 1988-89 .....	123
120.	Scholastic Aptitude Test score averages, by race/ethnicity: 1975-76 to 1988-89 .....	123
121.	Distribution of Scholastic Aptitude Test scores, by sex of student: 1975-76 to 1988-89 .....	124
122.	Scholastic Aptitude Test score averages, by intended area of study: 1977-78 to 1988-89 .....	125
123.	Scholastic Aptitude Test score averages, by State: 1974-75 to 1988-89 .....	126
124.	Profile of Scholastic Aptitude Test takers: 1988-89 .....	127
125.	American College Testing (ACT) score averages, by sex: 1969-70 to 1988-89 .....	127
126.	Average number of Carnegie units earned by high school graduates in various subject fields, by student characteristic: 1982 and 1987 .....	128
127.	Average number of Carnegie units earned by high school graduates in vocational education courses, by student characteristic: 1982 and 1987 .....	129

128. Percentage of high school graduates earning minimum credits in selected combinations of academic courses: 1982 and 1987 ..... 130

129. High school courses taken by persons age 16 and over, by sex, race, and age: Spring 1984 ..... 130

**Student Activities and Behavior**

130. Eighth graders' attitudes about selected classes, by selected student and school characteristics: 1988 ..... 131

131. Expected occupations of 8th graders at age 30, by selected student and school characteristics: 1988 ..... 131

132. Eighth graders' attitudes about school climate, by student and school characteristics: 1988 ..... 132

133. Sex education in public and private schools: 1986 ..... 132

134. Participation of high school seniors in extracurricular activities, by selected student characteristics: 1972 and 1982 ..... 133

135. Incidence of student infractions, disciplinary actions, and perceived changes in amount of classroom disruption in public secondary schools, by school characteristics: 1963-84 ..... 134

136. Teacher perceptions of changes in disruptive student behavior, by school characteristics: 1986-87 ..... 135

137. Percentage of teachers rating selected factors as limiting their ability to maintain order, by school level and metropolitan status: 1986-87 ..... 135

138. Trends in drug use among high school seniors, by type of drug and frequency of use: 1975 to 1989 ..... 136

**State Regulations**

139. Ages for compulsory school attendance and compulsory provision of services for special education students, by State: 1989 ..... 137

140. Eighth graders' attendance patterns, by student and school characteristics: 1988 ..... 138

141. Average number of days per school year, classes per day, hours of class per day, and minutes per class in public high schools, by selected school characteristics: 1984-85 ..... 138

142. State requirements for high school graduation, in Carnegie units: 1980 and 1989 ..... 139

143. States using minimum-competency testing, by government level setting standards, grade levels assessed, and expected uses of standards: November 1985 ..... 144

144. States requiring testing for initial certification of teachers, by authorization, year enacted, year effective, and test used: 1987 and 1989 ..... 145

145. Percentage of public high schools having or strengthening various policies, programs, or practices: 1987-88 ..... 146

146. States requiring education, minimum curriculum standards, and teacher certification on substance abuse education, by State: 1986-87 ..... 146

**Revenues and Expenditures**

147. Revenues for public elementary and secondary schools, by source of funds: 1919-20 to 1987-88.....	147
148. Revenues for public elementary and secondary schools, by source and State: 1987-88 .....	148
149. Revenues for public elementary and secondary schools, by source and State: 1986-87 .....	149
150. Current expenditures for public elementary and secondary education, by State: 1959-60 to 1989-90.....	150
151. Summary of expenditures for public elementary and secondary education, by purpose: 1919-20 to 1979-80 .....	152
152. Current expenditures for public elementary and secondary education, by function and State: 1987-88 .....	153
153. Current expenditures for public elementary and secondary education, by function and State: 1986-87 .....	154
154. Total and current expenditure per pupil in public elementary and secondary schools: 1919-20 to 1989-90.....	155
155. Current expenditure per pupil in average daily attendance in public elementary and secondary schools, by State: 1959-60 to 1987-88 .....	156

**3-A. Postsecondary Education: College and University Education****Enrollment**

156. Historical summary of faculty, students, degrees, and finances in institutions of higher education: 1869-70 to 1987-88.....	166
157. Total enrollment in institutions of higher education, by attendance status, sex of student, and control of institution: Fall 1947 to fall 1988 .....	167
158. Total enrollment in institutions of higher education, by control and type of institution: Fall 1963 to fall 1988 .....	168
159. Total enrollment in institutions of higher education, by attendance status, sex, and age: Fall 1970 to fall 1996.....	169
160. Total enrollment in institutions of higher education, by level, sex, age, and attendance status of student: Fall 1987 .....	170
161. Total enrollment in institutions of higher education, by type and control of institution, and age and attendance status of student: Fall 1987 .....	171
162. Total enrollment in institutions of higher education, by level of enrollment, sex, attendance status, and type and control of institution: Fall 1987 and fall 1988.....	172
163. Total enrollment in institutions of higher education, by type and control of institution, attendance status, and sex of student: Fall 1970 to fall 1988.....	173
164. Enrollment and number of institutions of higher education, by affiliation of institution: Fall 1980 to fall 1985 .....	174

165.	Total first-time freshmen enrollment in institutions of higher education, by sex of student, attendance status, and type and control of institution: Fall 1955 to fall 1988 .....	176
166.	Total first-time freshmen enrollment in institutions of higher education, by attendance status, sex, control of institution, and State: Fall 1986 to fall 1988 .....	177
167.	College enrollment rates of high school graduates, by race/ethnicity: 1960 to 1988...	178
168.	College enrollment rates of high school graduates, by sex: 1960 to 1988.....	179
169.	Graduation, college preparation, and college application rates of 12th graders, by selected school characteristics: 1987-88.....	180
170.	Enrollment rates of 18- to 24-year-olds in institutions of higher education, by race/ethnicity: 1967 to 1988.....	181
171.	Total undergraduate enrollment in institutions of higher education, by sex of student, attendance status, and control of institution: Fall 1969 to fall 1988 .....	181
172.	Total graduate enrollment in institutions of higher education, by sex of student, attendance status, and control of institution: Fall 1969 to fall 1988.....	182
173.	Total first-professional enrollment in institutions of higher education, by sex of student, attendance status, and control of institution: Fall 1969 to fall 1988.....	182
174.	Total enrollment in institutions of higher education, by State: Fall 1970 to fall 1988....	183
175.	Total enrollment in public institutions of higher education, by State: Fall 1970 to fall 1988 .....	184
176.	Total enrollment in private institutions of higher education, by State: Fall 1970 to fall 1988 .....	185
177.	Total enrollment in all institutions of higher education, by attendance status, sex, and State: Fall 1987 and fall 1988 .....	186
178.	Total enrollment in public institutions of higher education, by attendance status, sex, and State: Fall 1987 and fall 1988 ....	187
179.	Total enrollment in private institutions of higher education, by attendance status, sex, and State: Fall 1987 and fall 1988 .....	188
180.	Total enrollment in institutions of higher education, by control and type of institution and State: Fall 1987 and fall 1988 .....	189
181.	Total enrollment in institutions of higher education, by level of enrollment and State: Fall 1986 to fall 1988 .....	190
182.	Total enrollment in institutions of higher education, by control, level of enrollment, and State: Fall 1988 .....	191
183.	Total enrollment in institutions of higher education, by control, level of enrollment, and State: Fall 1987 .....	192
184.	Full-time-equivalent enrollment in institutions of higher education, by control and type of institution: Fall 1970 to fall 1988 .....	193
185.	Full-time-equivalent enrollment in institutions of higher education, by control, type of institution, and State: Fall 1986 to fall 1988.....	194

186.	Full-time-equivalent enrollment in institutions of higher education, by control and State: Fall 1980 to fall 1988 .....	195
187.	Residence and migration of all freshmen students in institutions of higher education, by State: Fall 1988 .....	196
188.	Residence and migration of all freshmen students graduating from high school in the past 12 months, by State: Fall 1988.....	197
189.	Residence and migration of all freshmen students in 4-year colleges graduating from high school in the past 12 months, by State: Fall 1988 .....	198
190.	Total enrollment in institutions of higher education, by type and control of institution and race/ethnicity of student: Fall 1976 to fall 1988 .....	199
191.	Total enrollment in institutions of higher education, by level of study and race/ethnicity of student: Fall 1976 to fall 1988.....	200
192.	Total enrollment in institutions of higher education, by race/ethnicity of student and by State: Fall 1988 .....	201
193.	Disabled students enrolled in postsecondary institutions, by type of disability: Fall 1986 .....	202
194.	Students enrolled in postsecondary institutions, by disability status and selected student characteristics: Fall 1986 .....	202
195.	Enrollment of persons 14 to 34 years of age in institutions of higher education, by race/ethnicity, sex, and year of college: October 1965 to October 1989 .....	203
196.	Total enrollment in selected major fields of study in 4-year institutions of higher education, by sex: Fall 1976 to fall 1988.....	204
197.	Total enrollment in selected major fields of study in 4-year institutions of higher education, by level, sex, and attendance status: Fall 1988 .....	205
198.	Graduate enrollment in science and engineering programs in institutions of higher education, by field of study: United States and outlying areas, 1977 to 1988.....	206
199.	Institutions of higher education and branches, by type, control, and size of enrollment: Fall 1988.....	207
200.	Selected statistics for college and university campuses enrolling more than 14,500 students in 1988 .....	208
201.	Enrollment of the 120 largest college and university campuses: Fall 1988.....	214
202.	Selected statistics on traditionally black institutions of higher education: 1985-86, 1986-87, and fall 1987 .....	215
<b>Staff</b>		
203.	Employees in institutions of higher education, by primary occupation, employment status, and control of institution: Fall 1976 and fall 1987.....	216
204.	Employees in institutions of higher education, by primary occupation, employment status, sex, and by type or control of institution: Fall 1987.....	217
205.	Employees in institutions of higher education, by primary occupation, employment status, sex, and by type and control of institution: Fall 1987.....	218

**Faculty**

206. Full-time and part-time senior instructional faculty in institutions of higher education, by employment status and control and type of institution: Fall 1970 to fall 1987..... 219

207. Full-time instructional faculty in institutions of higher education, by race/ethnicity, academic rank, and sex: Fall 1985..... 219

208. Full-time regular instructional faculty in institutions of higher education, by selected characteristics and type and control of institution: Fall 1987..... 220

209. Total regular and temporary instructional faculty in institutions of higher education, by selected characteristics and type and control of institution: Fall 1987..... 221

210. Part-time regular instructional faculty in institutions of higher education, by selected characteristics and type and control of institution: Fall 1987..... 222

211. Average salary of full-time instructional faculty in institutions of higher education, by academic rank and sex: 1972-73 to 1987-88..... 223

212. Average salary of full-time instructional faculty on 9-month contracts in institutions of higher education, by academic rank and sex and by type and control of institution: 1980-81, 1982-83, 1985-86, and 1987-88 ..... 224

213. Average salary of full-time instructional faculty on 9-month contracts in institutions of higher education, by type and control of institution and by State: 1987-88 ..... 225

214. Average salary of full-time instructional faculty on 9-month contracts in 4-year institutions of higher education, by control of institution and rank of faculty and by State: 1987-88 ..... 226

215. Full-time instructional faculty with tenure for institutions reporting tenure status, by academic rank, sex, and type and control of institution: 1980-81, 1982-83, 1985-86, and 1987-88 ..... 227

**Institutions**

216. Institutions of higher education, by control and type of institution: 1949-50 to 1989-90..... 228

217. Institutions of higher education and branches, by control of institution, highest level of offering, and sex of student body: 1985-86 ..... 229

218. Institutions of higher education and branches, by type, control of institution, and State: 1989-90 ..... 230

219. Institutions of higher education that have closed their doors, by control and type of institution: 1960-61 to 1989-90 ..... 231

**Degrees**

220. Earned degrees conferred by institutions of higher education, by level of degree and sex of student: 1869-70 to 1994-95..... 232

221. Earned degrees conferred by institutions of higher education, by level of degree and by State: 1986-87 and 1987-88 ..... 233

222. 1- to 4-year awards and associate degrees, by field of study: 1983-84 to 1987-88 .... 234

223.	Associate degrees and other subbaccalaureate awards, by length of curriculum, sex of student, and field of study: 1987-88.....	235
224.	Bachelor's, master's, and doctor's degrees conferred by institutions of higher education, by sex of student and field of study: 1987-88.....	236
225.	Bachelor's degrees conferred by institutions of higher education, by discipline division: 1970-71 to 1987-88.....	244
226.	Master's degrees conferred by institutions of higher education, by discipline division: 1970-71 to 1987-88.....	245
227.	Doctor's degrees conferred by institutions of higher education, by discipline division: 1970-71 to 1987-88.....	246
228.	Degrees conferred by institutions of higher education, by control of institution: 1973-74 to 1987-88.....	247
229.	Earned degrees conferred by institutions of higher education, by control of institution, level of degree, and discipline division: 1987-88.....	247
230.	Number of institutions of higher education conferring degrees, by level of degree and discipline division: 1987-88.....	248
231.	First-professional degrees conferred in dentistry, medicine, and law, by sex: 1949-50 to 1987-88.....	248
232.	First-professional degrees conferred by institutions of higher education, by sex of student, control of institution, and field of study: 1981-82 to 1987-88.....	249
233.	Associate degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87.....	250
234.	Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1986-87.....	252
235.	Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87.....	253
236.	Master's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1986-87.....	255
237.	Master's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87.....	256
238.	Doctor's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1986-87.....	258
239.	Doctor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87.....	259
240.	First-professional degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87.....	261
241.	Earned degrees in agriculture and natural resources conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88.....	262
242.	Earned degrees in architecture and environmental design conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88.....	262

243.	Earned degrees in business and management conferred by institutions of higher education, by level of degree and sex of student: 1955-56 to 1987-88.....	263
244.	Earned degrees in communications conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88.....	263
245.	Earned degrees in computer and information sciences conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88.....	264
246.	Earned degrees in education conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88 .....	264
247.	Earned degrees in engineering conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88 .....	265
248.	Earned degrees in chemical, civil, and electrical engineering conferred by institutions of higher education, by level of degree: 1970-71 to 1987-88.....	265
249.	Earned degrees in English and literature conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88.....	266
250.	Earned degrees in modern foreign languages conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88.....	266
251.	Earned degrees in French, German, and Spanish conferred by institutions of higher education, by level of degree: 1949-50 to 1987-88 .....	267
252.	Earned degrees in health professions conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88.....	267
253.	Earned degrees in the life sciences conferred by institutions of higher education, by level of degree and sex of student: 1951-52 to 1987-88.....	268
254.	Earned degrees in biology, zoology, and microbiology conferred by institutions of higher education, by level of degree: 1970-71 to 1987-88 .....	268
255.	Earned degrees in mathematics conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88.....	269
256.	Earned degrees in the physical sciences conferred by institutions of higher education, by level of degree and sex of student: 1951-52 to 1987-88.....	269
257.	Earned degrees in chemistry, physics, and geology conferred by institutions of higher education, by level of degree: 1970-71 to 1987-88 .....	270
258.	Earned degrees in psychology conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88 .....	270
259.	Earned degrees in public affairs and services conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88.....	271
260.	Earned degrees in the social sciences conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88.....	271
261.	Earned degrees in economics, history, political science and government, and sociology conferred by institutions of higher education, by level of degree: 1949-50 to 1987-88.....	272

262.	Earned degrees in visual and performing arts conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88 .....	272
263.	Statistical profile of persons receiving doctor's degrees, by field of study: 1987-88 ....	273
264.	Statistical profile of persons receiving doctor's degrees in education: 1977-78 to 1987-88.....	274
265.	Statistical profile of persons receiving doctor's degrees in engineering: 1977-78 to 1987-88.....	274
266.	Statistical profile of persons receiving doctor's degrees in the humanities: 1977-78 to 1987-88.....	275
267.	Statistical profile of persons receiving doctor's degrees in the life sciences: 1977-78 to 1987-88.....	275
268.	Statistical profile of persons receiving doctor's degrees in the physical sciences: 1977-78 to 1987-88.....	276
269.	Statistical profile of persons receiving doctor's degrees in the social sciences: 1977-78 to 1987-88.....	276
270.	Doctor's degrees conferred by 60 large institutions of higher education: 1978-79 to 1987-88.....	277
<b>Outcomes</b>		
271.	Percentage of the high school class of 1980 enrolled in postsecondary education, by attendance status, sex, race/ethnicity, socioeconomic status, and ability level: Fall 1980 to fall 1985 .....	278
272.	Percentage of the high school class of 1980 enrolled in 4-year colleges, by attendance status, sex, race/ethnicity, socioeconomic status, and ability level: Fall 1980 to fall 1985 .....	278
273.	Mean number of semester credits completed by bachelor's degree recipients, by major and course area: 1972 to 1976 and 1980 to 1984.....	279
274.	Colleges and universities offering remedial instruction or tutoring, by type and control of institution: 1980, 1984, and 1988.....	279
275.	Highest level of education attained by 1980 high school seniors, by selected student and school characteristics: Spring 1986.....	280
276.	Highest level of education attained by 1980 high school seniors, by race/ethnicity and October 1980 postsecondary education attendance status: Spring 1986.....	281
277.	Highest level of education attained by 1980 high school seniors, by socioeconomic status and race/ethnicity: Spring 1986 .....	281
278.	Cumulative percentage of 1972, 1980, and 1982 high school graduates completing college, by level of degree and selected student characteristics: 1976 to 1986 .....	282
279.	Changes in scores on Graduate Record Examination (GRE) and professional school admission tests: 1964 to 1988 .....	283

**Student Charges and Student Financial Assistance**

280.	Average undergraduate tuition and fees and room and board rates paid by students in institutions of higher education, by control of institution and by State: 1989-90 ...	284
281.	Average undergraduate tuition and fees and room and board rates paid by students in institutions of higher education, by type and control of institution: 1964-65 to 1989-90.....	285
282.	Percentage of undergraduates enrolled in fall 1986 and average amount awarded per student, by type and source of aid and selected student characteristics.....	287
283.	Undergraduates enrolled in fall 1986, by aid status and source of aid during 1986-87, and control and level of institution .....	288
284.	Undergraduates enrolled in fall 1986, by type and source of aid received during 1986-87, and by control and level of institution .....	289
285.	Postbaccalaureate students enrolled in fall 1986, by aid status and source of aid during 1986-87, and by control and level of institution .....	289
286.	Undergraduates enrolled in fall 1986, by Federal aid program and by control and level of institution: 1986-87 .....	290
287.	Postbaccalaureate students enrolled in fall 1986, by type of aid received during 1986-87, by level of study and by control and level of institution .....	290
288.	Scholarship and fellowship awards of institutions of higher education, by control of institution: 1959-60 to 1986-87 .....	291
289.	Pell Grant revenue of institutions of higher education compared to current-fund revenue and tuition, by type and control of institution: 1982-83 to 1986-87 .....	292
290.	State awards for need-based undergraduate scholarship and grant programs, by State: 1981-82 to 1988-89 .....	293

**Income**

291.	Current-fund revenue of institutions of higher education, by source: 1977-78 to 1986-87.....	294
292.	Current-fund revenue of public institutions of higher education, by source: 1977-78 to 1986-87.....	295
293.	Current-fund revenue of private institutions of higher education, by source: 1977-78 to 1986-87.....	296
294.	Revenue of institutions of higher education, by source of funds: 1919-20 to 1986-87.....	297
295.	Current-fund revenue for public institutions of higher education, by State: 1974-75 to 1986-87.....	298
296.	Current-fund revenue from State and local governments for institutions of higher education, by State: 1982-83 to 1986-87.....	299
297.	Current-fund revenue received from the Federal Government by the 100 institutions of higher education receiving the largest amounts: 1986-87 .....	300

**Expenditures**

298. Current-fund expenditures and expenditures per full-time-equivalent student in institutions of higher education, by type and control of institution: 1970-71 to 1986-87.....	301
299. Current-fund expenditures of institutions of higher education, by purpose: 1977-78 to 1986-87.....	302
300. Current-fund expenditures of public institutions of higher education, by purpose: 1977-78 to 1986-87.....	303
301. Current-fund expenditures of private institutions of higher education, by purpose: 1977-78 to 1986-87.....	304
302. Voluntary support for institutions of higher education, by source and purpose of support: 1949-50 to 1987-88 .....	305
303. Expenditures of institutions of higher education: 1929-30 to 1973-74 .....	305
304. Educational and general expenditures of public universities, by purpose: 1976-77 to 1985-86.....	306
305. Educational and general expenditures of public 4-year colleges, by purpose: 1976-77 to 1985-86.....	307
306. Educational and general expenditures of public 2-year colleges, by purpose: 1976-77 to 1985-86.....	308
307. Educational and general expenditures of private (nonprofit) universities, by purpose: 1976-77 to 1985-86.....	309
308. Educational and general expenditures of private (nonprofit) 4-year colleges, by purpose: 1976-77 to 1985-86 .....	310
309. Educational and general expenditures of private (nonprofit) 2-year colleges, by purpose: 1976-77 to 1985-86 .....	311
310. Current-fund expenditures for public institutions of higher education, by State: 1974-75 to 1986-87.....	312
311. Current-fund expenditures per full-time-equivalent student in institutions of higher education, by control and type of institution and purpose of expenditure: 1985-86 .....	313

**Property**

312. Capital expenditures for science and engineering programs in institutions of higher education, by field of study and source of funds: United States and outlying areas, 1976-77 to 1987-88.....	314
313. Value of property and liabilities of institutions of higher education: 1899-1900 to 1985-86 .....	315
314. Physical plant value and endowment funds per student in institutions of higher education, by type and control of institution: 1975-76 to 1985-86.....	316
315. Endowment funds of the 100 institutions of higher education with the largest amounts: Fiscal year 1987.....	317

316.	Additions to physical plant value of institutions of higher education, by type of addition and control of institution: 1969-70 to 1985-86.....	318
<b>3-B. Postsecondary Education: Vocational and Adult Education</b>		
<b><i>Adult Education</i></b>		
317.	Participants in postsecondary academic, vocational, and continuing education, by sex, race, age group, and labor force status: October 1982 .....	318
318.	Selected characteristics of participants in adult education: 1984 .....	319
319.	Courses taken by participants in adult education, by sex, age, and field of study: Year ending May 1984.....	320
320.	Courses taken by participants in adult education, by sex, age, and reason for taking course: Year ending May 1984 .....	321
321.	Participants in adult basic and secondary education programs, by sex, level of enrollment, and State: Fiscal years 1980, 1984 and 1988.....	322
<b><i>Vocational Education</i></b>		
322.	Enrollment, mean charges, and mean number of hours required to complete selected programs in noncollegiate noncorrespondence postsecondary schools offering occupational programs, by control of school: United States and outlying areas, 1980-81.....	323
323.	Number of noncollegiate institutions offering postsecondary education, by control and State: 1988-89 and 1989-90.....	324
<b>4. Federal Programs for Education and Related Activities</b>		
324.	Federal education support by category: Fiscal years 1965 to 1990.....	335
325.	Federal funds for education and related programs, by agency: Fiscal years 1965 to 1990 .....	336
326.	Federal funds for education and related programs, by level of education or activity, agency, and program: Fiscal years 1965 to 1990 .....	337
327.	Federal funds obligated for programs administered by the Department of Education: Fiscal years 1980 to 1990 .....	343
328.	Department of Education outlays, by level of education and type of recipient: Fiscal years 1980 to 1990 .....	344
329.	Department of Education obligations for major programs, by State or other area: Fiscal year 1989.....	345
330.	Department of Education obligations for major programs, by State or other area: Fiscal year 1988.....	346
331.	Appropriations for Chapter 1 and Chapter 2, Education Consolidation and Improvement Act of 1981, by State or other area: 1988-89 and 1989-90.....	347
332.	Federal obligations to colleges and universities, by agency and State: Fiscal year 1988.....	348
333.	Summary of Federal funds for research, development, and R & D plant: Fiscal years 1982 to 1990 .....	349

334.	Federal obligations to colleges and universities for research and development, by field: United States and outlying areas: 1976-77 to 1987-88 .....	351
335.	Department of Agriculture obligations for child nutrition programs, by State or other area: Fiscal years 1988 and 1989 .....	352
336.	Department of Health and Human Services allocations for Head Start and enrollment in Head Start, by State or other area: Fiscal years 1987, 1988, and 1989 .....	353
337.	Public and private school students receiving publicly funded free or reduced price lunch, by selected school characteristics: School year 1987-88 .....	354
338.	Public and private school students receiving publicly funded ECIA Chapter I services, by selected school characteristics: School year 1987-88 .....	354
<b>5. Outcomes of Education</b>		
<b><i>Educational Characteristics of the Workforce</i></b>		
339.	Percentage of 1972 and 1982 high school seniors who felt that certain life values were "very important," by sex: 1972 to 1986.....	359
340.	Labor force participation of persons 16 years old and over, by years of school completed and age, sex, and race/ethnicity: March 1989 .....	359
341.	Occupation of employed persons 16 years old and over, by years of school completed and sex: March 1989 .....	360
342.	Unemployment rate of persons 16 years old and over, by age, sex, race/ethnicity, and years of school completed: March 1989.....	361
343.	Employment status and hourly wages of 1972 high school graduates in Spring 1986, by race/ethnicity and socioeconomic status... ..	362
344.	Median annual income of year-round full-time workers 25 years old and over, by years of school completed and sex: 1970 to 1988 .....	363
345.	Total annual money income of persons 25 years old and over, by years of school completed, sex, and age: 1987.....	364
<b><i>Recent High School and College Graduates</i></b>		
346.	College enrollment and labor force status of 1987 and 1988 high school graduates 16 to 24 years old, by sex and race/ethnicity: October 1987 and October 1988.....	366
347.	Labor force status of 1979-80 to 1987-88 high school dropouts 16 to 24 years old, by sex and race/ethnicity: October 1980 to October 1988.....	367
348.	Full-time-employment status of bachelor's degree recipients 1 year after graduation, by field of study: 1976 to 1987 .....	368
349.	Occupation of 1985-86 bachelor's degree recipients 1 year after graduation, by field of study and occupational area: 1987.....	369
350.	Percentage of 1985-86 bachelor's degree recipients who have pursued additional higher education, by type of degree sought or obtained, and undergraduate major field of study: 1987 .....	370
351.	Percentage of 1985-86 bachelor's degree recipients who have applied for additional education and reasons for not applying, by major field of study: 1987 .....	370

352.	Average annual salary of bachelor's degree recipients employed full-time 1 year after graduation, by field of study: 1976 to 1987.....	371
353.	Income, earnings, and work activity of persons who held a bachelor's or advanced degree, by field of study: Spring 1984 .....	371
354.	Participation of young adults in voluntary organizations, by selected characteristics: 1984 to 1986.....	372
355.	Literacy skills and reading scores of young adults, by race/ethnicity and level of education: 1985.....	372
<b>6. International Comparisons of Education</b>		
356.	Estimated population, school enrollment, teachers, and public expenditures for education in major areas of the world: 1970-71, 1980-81, and 1986-87.....	378
357.	Pupils per teacher in public and private elementary and secondary schools: Selected countries, 1970, 1980, and 1987.....	379
358.	Public expenditures for education as a percentage of government expenditures for all purposes: Selected countries, 1960 to 1987 .....	379
359.	Selected statistics for countries with populations over 10 million, by continent: 1970 to 1987 .....	380
360.	Elementary and secondary enrollment and current expenditures: Selected countries, 1980 and 1986.....	381
361.	Public expenditures for education as a percent of gross national product: Selected countries, 1960 to 1987.....	382
362.	International Assessment of Educational Progress in mathematics for age 13, by content area: 1988 .....	382
363.	Average percentage of items answered correctly on an international mathematics test of 8th grade students: Selected countries, 1981-82.....	383
364.	International mathematics test scores and percentage of age group taking tests in the 12th grade: Selected countries, 1981-82 .....	383
365.	International Assessment of Educational Progress in science for age 13, by content area: 1988.....	384
366.	Science test scores for 10- and 14-year-olds, percentage of age groups in school, and mean ages of students tested in selected countries: 1983 to 1986 .....	384
367.	Science test scores for 12th graders enrolled and not enrolled in science classes, by subject. Selected countries, 1983 to 1986.....	385
368.	Mean number of areas correctly identified in a test of geography knowledge, by country and age: 1988 .....	385
369.	Foreign students enrolled in institutions of higher education in the United States and outlying areas, by continent, region, and selected countries of origin: 1980-81 to 1988-89.....	386

## 7. Learning Resources and Technology

### *Libraries*

370. Selected statistics on public school libraries/media centers, by level and size of school: Fall 1985 .....	389
371. General statistics of public school libraries/media centers, by level of school: 1973-74 to fall 1985.....	390
372. Holdings and expenditures of public school libraries/media centers, by level and size of school: 1984-85 .....	391
373. Selected statistics on private school libraries/media centers, by level and size of school: 1984-85.....	392
374. General statistics of college and university libraries: United States and outlying areas, 1974-75 to 1984-85.....	393
375. Selected statistics on the collections, staff, and operating expenditures of 50 large college and university libraries: 1985 .....	394
376. General statistics of public libraries, by population of area served: Fiscal year 1982...	395
377. Public libraries with 1 million or more volumes, by size of collection: 1982 .....	395

### *Computers and Technology*

378. Microcomputer use by elementary and secondary schools, by level, control, and size of school: 1981 to 1986.....	396
379. Percentage of workers using computers on the job, by sex, educational attainment, and selected computer activities: October 1989 .....	396
380. Student use of computers, by level of instruction and selected characteristics: October 1989 .....	397

## Guide to Sources

### *Appendix Tables*

A1. Selected standard errors for selected items in the 1985 Survey of Public and Private School Libraries and Media Centers .....	426
A2. Respondent counts for selected High School and Beyond surveys.....	427
A3. Design effects (DEFF) and root design effects (DEFT) for selected High School and Beyond surveys and subsamples .....	428
A4. Standard errors for the NAEP reading proficiency study: 1970-71 to 1987-88.....	428
A5. Standard errors for the NAEP writing, history, and civics proficiency studies: 1976 to 1988 .....	428
A6. Standard errors for the NAEP mathematics and science proficiency studies: 1976-77 to 1985-86.....	429
A7. Respondent counts for selected National Longitudinal Study surveys.....	429
A8. Approximate standard errors for percentages estimated from the National Longitudinal Study survey: 1979 .....	430

<b>A9. Respondent counts of full-time workers from the Recent College Graduate survey: 1976 to 1987 .....</b>	<b>430</b>
<b>A10. Standard errors for selected items in the 1985 Survey of School Discipline Policies and Practices.....</b>	<b>431</b>
<b>A11. Estimated enrollment rates and standard errors in the October Current Population Survey .....</b>	<b>431</b>
<b>A12. Estimated educational attainment rates and standard errors in the March Current Population Survey .....</b>	<b>432</b>
<b>A13. Estimated standard errors for selected estimates of persons from the "Participation in Adult Education" CPS supplement.....</b>	<b>432</b>
<b>A14. Estimated participation rates and standard errors in the "Participation in Adult Education" CPS supplement.....</b>	<b>432</b>
<b>A15. Percent of seniors who had ever used selected drugs and 95 percent confidence limits: 1986.....</b>	<b>433</b>
<b>A16. Sampling errors (95 percent confidence level) for percentages estimated from the Gallup Poll: 1987.....</b>	<b>433</b>
<b>A17. Sampling errors (95 percent confidence level) for the difference in two percentages estimated from the Gallup Poll: 1987 .....</b>	<b>433</b>
<b>A18. Approximate sampling errors (95 percent confidence level) for percentages estimated from the Metropolitan Life Survey of the American Teacher, 1987 .....</b>	<b>434</b>
<b>A19. Approximate sampling errors (95 percent confidence level) for the differences in two percentages estimated from the Metropolitan Life Survey of the American Teacher, 1987 .....</b>	<b>434</b>
<b>A20. Maximum differences required for significance (90 percent confidence level) between sample subgroups of the Status of the American Public School Teacher survey.....</b>	<b>434</b>

# Introduction

In the fall of 1989, about 59.2 million persons were enrolled in American schools and colleges (table 1). About 3.5 million were employed as elementary and secondary school teachers and as college instructors. Other professional, administrative, and support staff of educational institutions numbered 3.8 million. Thus more than 66 million Americans were involved, directly or indirectly, in providing or receiving formal education. In a Nation with a population of about 249 million, more than 1 out of every 4 persons participated in the educational process.

Enrollment in elementary and secondary schools grew rapidly during the 1950s and 1960s and peaked in 1971 (table 3). This enrollment rise was caused by what is known as the "baby boom," a dramatic increase in births following World War II. From 1971 to 1984, total elementary and secondary school enrollment decreased steadily, reflecting the decline in the school-age population over that period. After these years of decline, enrollment in public elementary and secondary schools showed a small increase in the fall of 1985 (table 3). Enrollment in kindergarten through grade eight rose from 27.0 million in fall 1985 to an estimated 29.1 million in fall 1989. Enrollment in the upper grades declined from 12.4 million to an estimated 11.5 million over the same period. The net result of these two divergent trends was an overall increase in public school enrollment.

Private school enrollment was estimated at 5.4 million in fall 1989. About 4.2 million students were enrolled at the elementary level and 1.2 million at the secondary level. Approximately 12 percent of all elementary and secondary students attend private schools.

Recent increases in elementary enrollment indicate a new trend that will affect elementary and secondary schools for a number of years. Projections of the National Center for Education Statistics (NCES) indicate that public elementary school enrollment will continue to increase, reaching 29.5 million in 1990 and 31.1 million in 1995 (table 3). Between fall 1988 and fall 1990, elementary enrollment is projected to grow by 4 percent, while secondary school enrollment is expected to decline by 4 percent. The new wave of young pupils will begin to cause increases at the secondary school level during the early 1990s.

College enrollment in fall 1989 was projected at 13.4 million—reflecting a slight increase from the record level of the previous fall. Total college enroll-

ment is not expected to change significantly during the early 1990s, despite decreases in the traditional college-age population (table 2). The number of persons in the 18- to 24-year-old age group peaked in 1981 and then began a decline that is expected to continue throughout most of the next decade (table 14). However, recent trends suggest that total enrollment will remain relatively high because of the increased participation of older women students and a high rate of college attendance for recent high school graduates. Although total enrollment may remain relatively stable, some shifts of students from full-time to part-time status are expected (table 15).

About 2.7 million elementary and secondary school teachers were engaged in classroom instruction in the fall of 1989 (table 4). This number has risen in recent years, up about 9 percent since 1984. The number of public school teachers in 1989 was about 2.4 million and the number in private schools was estimated at 0.4 million. About 1.6 million teachers were teaching in elementary schools, while about 1.1 million were employed at the secondary level (table 4).

The number of public school teachers has risen at a faster rate than the number of students in recent years, resulting in a continuing decrease in the pupil-teacher ratio. In the fall of 1989, there were 17.2 pupils per public school teacher compared with 19.1 pupils per teacher 10 years earlier. During the same time period, the pupil-teacher ratio in private schools fell from 18.1 to 14.2. The declining pupil-teacher ratio reflects the trend toward smaller classes and more specialized education programs (table 58).

Teacher salaries, which lost purchasing power to inflation during the 1970s, rose faster than the inflation rate in the 1980s. The rising salaries reflect both an interest by State and local education agencies in boosting teacher salary schedules and an increase in teachers' experience and education levels (table 63). According to data from the National Education Association and NCES projections, the value of teachers' salaries, after adjustment for inflation, rose about 20 percent between 1980-81 and 1989-90. The average salary for teachers in 1989-90 was \$31,300, a record-high level (table 71).

Some improvements have been registered in the area of reading proficiency of elementary and secondary school students. Reading proficiency of 9-

and 13-year-olds rose between 1970-71 and 1979-80 (table 101). Reading proficiency of 17-year-olds rose between 1979-80 and 1983-84, but the proficiency of 9-year-olds declined slightly. No significant changes occurred in the overall reading performance of any of the age groups between 1983-84 and 1987-88. Although the reading proficiency of minority children remains below that of other students, blacks have made very large gains. For example, the proportion of black 9-year-olds reading at a basic level or above rose from 22 percent in 1970-71 to 39 percent in 1987-88.

Results from assessments of mathematics proficiency also indicate that students have made some improvements in their skill with basic computations. However, performance on more advanced mathematical operations have shown no improvement. The proportion of 9-year-olds who showed beginning skills and understanding rose from 70 percent in 1977-78 to 74 percent 1985-86, but there was no change in the proportion demonstrating higher levels of performance (table 114).

Similarly, the proportion of 13- and 17-year-olds with an understanding of basic operations rose between 1977-78 and 1985-86, but no change occurred in the proportion with proficiency in moderately complex procedures or multi-step problem solving and algebra. However, notable improvements were made by minority children at all three age groups. The proportion of black 13-year-olds with proficiency in basic operations rose from 30 percent in 1977-78 to 49 percent in 1985-86; for Hispanics the proportion rose from 36 percent to 55 percent (table 114).

Small improvements also were registered on science proficiency exams between 1976-77 and 1985-86. The proportion of 9-year-olds who understood simple scientific principles rose from 68 percent in 1976-77 to 71 percent in 1985-86, but no improvement occurred in more advanced levels of achievement. Similarly, the percentage of 13-year-olds demonstrating application of basic scientific information rose from 49 to 53 percent between 1976-77 and 1985-86, but no improvement was registered at the upper levels of achievement. No significant changes occurred in the overall achievement of 17-year-olds between 1976-77 and 1985-86 (table 115).

Despite some evidence that student achievement has improved, there is still reason for concern. The national assessment measures have not shown a consistent pattern of improvement, especially for upper level skills. Recent international tests of mathematics and science have highlighted the relatively low level of achievement of U.S. students compared to their peers in other countries (tables 362 to 368). Also, a major U.S. study of writing achievement found that even 11th-grade students had consider-

able difficulty with persuasive writing assignments (table 108).

The number of high school graduates in 1988-89 totaled about 2.8 million. About 2.5 million graduated from public schools and about 0.3 million graduated from private schools. The number of high school graduates has declined from its peak in 1976-77, when 3.2 million persons earned their diplomas. Although the number of graduates has been lower in recent years, the proportion of 17- and 18-year-olds graduating from high school has remained relatively stable for more than 2 decades. There was a slight dip in the proportion of young people graduating from high school from 1976-77 to 1979-80 (table 94).

The number of postsecondary degrees to be conferred during the year 1989-90 is projected to be: 458,000 associate degrees; 1,017,000 bachelor's degrees; 320,000 master's degrees; 35,600 doctor's degrees; and 74,000 first-professional degrees (table 220). The number of associate, bachelor's, master's, and doctor's degrees are expected to be at or near an all-time high. The number of first-professional degrees is expected to be down slightly from its 1985 peak.

The Bureau of the Census has collected annual statistics on the educational attainment of the population in terms of years of school completed. These data indicate that, between 1980 and 1988, the proportion of the adult population 25 years of age and over with 4 years of high school or more rose from 69 percent to 76 percent and the proportion of adults with at least 4 years of college increased from 17 percent to 20 percent. In contrast, the proportion of adults, 25- to 29-year-olds, attaining these levels did not change significantly over this time period (table 8).

Expenditures for public and private education, from preprimary through graduate school, are estimated at \$337 billion for 1988-89, and projections indicate that they will reach \$359 billion in 1989-90 (table 28). The expenditures of elementary and secondary schools are expected to total about \$216 billion for 1989-90, while institutions of higher education will spend about \$143 billion. The outlays of public schools and colleges are expected to reach \$291 billion, while for privately controlled institutions, they are expected to be about \$68 billion. Viewed in another context, the total expenditures for education in recent years have amounted to nearly 7 percent of the gross national product and are expected to remain at that level in 1989-90 (table 25).

The statistical highlights in this section of the report provide a quantitative description of the current American education scene. Clearly, from the large number of participants, the number of years

that people spend in school, and the vast sums expended by educational institutions, the American people have a high regard for education. Yet, data on mathematics and science proficiency suggest that improvements in recent years have been limited. Disappointing scores of American students in international tests pose concerns for the future.

*NOTE: Readers should be aware of the limitations of statistics. These limitations vary with the exact nature of a particular survey. For example, estimates based on a sample of institutions will differ some-*

*what from the figures that would have been obtained if a complete census had been taken using the same survey procedures. Although many of the surveys conducted by the National Center for Education Statistics are complete, census-type surveys, all surveys are subject to design, reporting, and processing errors and errors due to nonresponse. More information on survey methodologies can be found in the "Guide to Sources" in the appendix. Price indexes for inflation adjustments may be found on table 34.*

## CHAPTER 1

# All Levels of Education

This chapter provides a broad overview of education in the United States. It brings together material from preprimary, elementary, secondary, and higher education and from the general population to present a composite picture of the American educational system. It contains tables which show the total number of persons enrolled in school, the number of teachers, the number of schools, and total expenditures for education at all levels. This chapter also includes statistics on education-related topics such as education attainment, family characteristics, population, and opinions about schools. Economic indicators and price indexes have been added to assist researchers in preparing comparative analyses.

Figure 1 provides an overview of the structure of education in the United States. It shows the three levels of education (elementary, secondary, and postsecondary) and gives the approximate age of persons at each level. Pupils ordinarily spend from 6 to 8 years in the elementary grades, which may be preceded by 1 or 2 years in nursery school and kindergarten. The elementary school program is followed by a 4- to 6-year program in high school. Pupils normally complete the entire program through grade 12 by age 17 or 18.

High school graduates who decide to continue their education may enter a 2-year college, a technical institution, or a 4-year college or university. A 2-year college normally offers the first 2 years of a standard 4-year college curriculum and a selection of terminal-vocational programs. Academic courses completed at a 2-year college are transferable for credit at 4-year colleges and universities. A technical institution offers postsecondary technical training leading to a specific career.

An associate degree requires at least 2 years of college-level work, and a bachelor's degree normally can be earned in 4 years. At least 1 year beyond the bachelor's is necessary for a master's degree, while a doctor's degree usually requires a minimum of 3 or 4 years beyond the bachelor's.

Professional schools differ widely in admission requirements and in program length. Medical students, for example, generally complete a 4-year program of premedical studies at a college or university before they can enter the 4-year program at a medical

school. Law programs normally require 3 years of coursework beyond the bachelor's degree level.

Many of the statistics in this chapter are derived from the statistical activities of the National Center for Education Statistics. In addition, substantial contributions have been drawn from the work of other groups, both government and nongovernment, as shown in the source notes of the appropriate tables. Information on survey methodologies is in the "Guide to Sources" in the appendix and in the publications cited in the source notes.

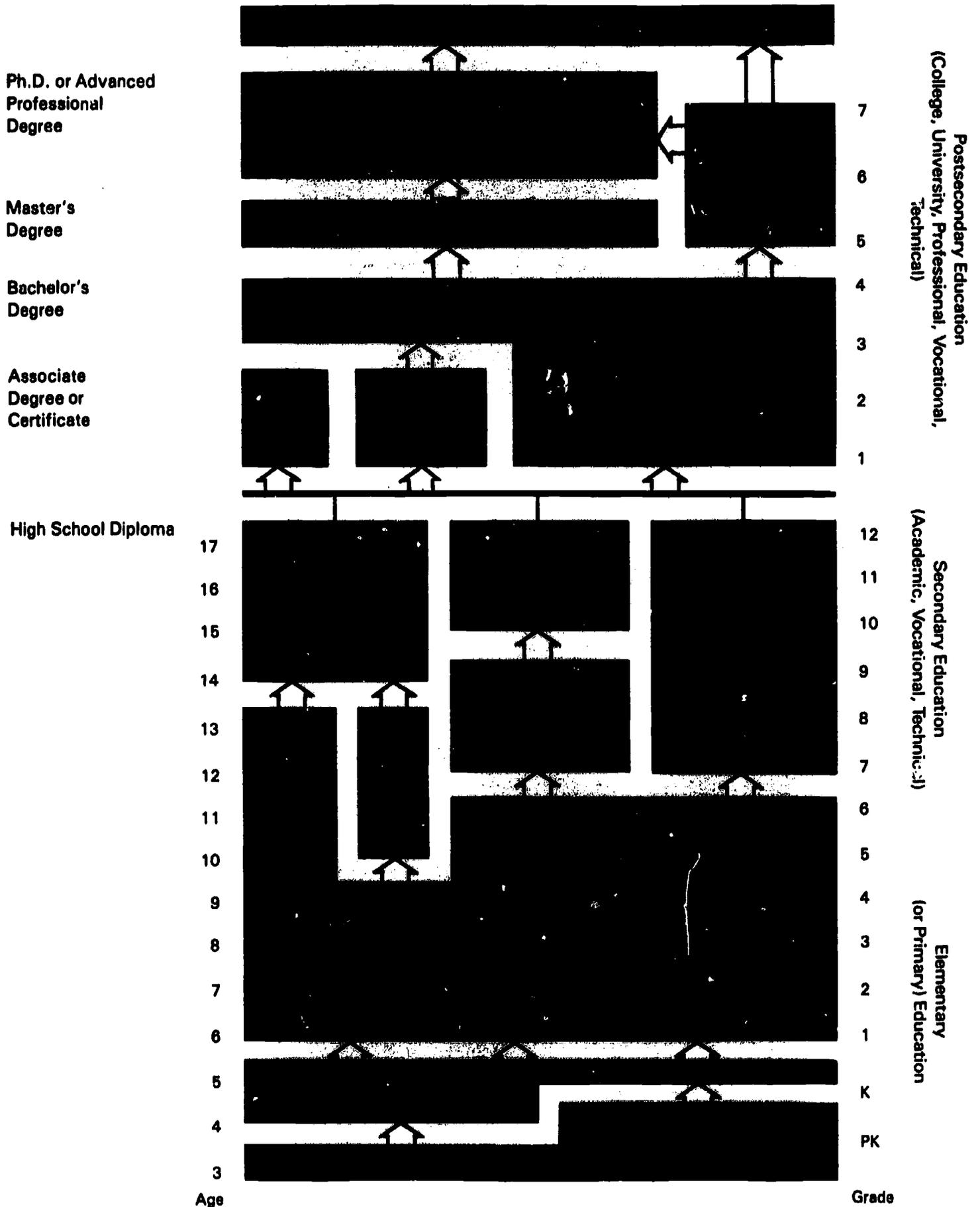
## Highlights

- In the fall of 1985, total elementary and secondary school enrollment increased for the first time since 1971. The increase from 1985 to 1989 was concentrated in the elementary grades, but this pattern is expected to change in the early 1990s. Between fall 1989 and 1995, public elementary enrollment is expected to rise 7 percent, while public secondary enrollment is expected to increase by 10 percent. Overall, enrollment is expected to increase by 3.1 million students, or about 8 percent. (Table 3)
- Over the past 10 years, there has been little change in the proportion of students in private schools and colleges. Between 1979 and 1989, the proportion of elementary and secondary school students in private schools has been around 12 percent. At the same time, the proportion of college students in private institutions has remained at about 22 percent. (Table 3)
- College enrollment rose to a record level of 13.4 million in fall 1989, reflecting a significant increase in public college enrollment. Enrollment is expected to remain steady through the 1990s because of the high attendance rates of younger age groups and the large number of older students. (Tables 3 and 159)
- The proportion of some age groups attending school has risen over the past two decades, but attendance rates for most groups have remained relatively steady. A relatively large change occurred among 3- and 4-year-olds whose attendance rate rose from 16 percent in 1969 to 39 per-

cent in 1989. Also, the proportion of 18- and 19-year-olds attending high school or college rose from 50 to 56 percent between 1969 and 1989. (Table 6)

- Increases in the amount of education completed by Americans has continued. In 1989, 77 percent of the population 25 years old and over had completed high school and 21 percent had completed 4 or more years of college. This represents an increase from 1980, when 69 percent had completed high school and 17 percent had 4 years of college. (Table 8)
- About 15 percent of persons over 18 had completed a bachelor's or higher degree in 1984. About 3 percent held a master's degree, 1 percent held a professional degree (e.g., medicine or law), and 0.5 percent held a doctor's degree. (Table 11)
- Between 1970 and 1988, the composition of families shifted substantially. In 1970, 50 percent of families were married-couple families with children under 18, compared to 38 percent in 1988. The proportion of families headed by women (no husband present) who had children under 18 rose from 6 percent to 10 percent. Altogether, more than one out of five children under 18 lived with one parent in 1988. (Tables 17 and 18)
- According to results of a nationwide survey, Americans rated public schools more favorably in the mid 1980s compared to the later 1980s and the early 1980s. In another opinion survey, Americans indicated that the two largest problems facing schools were drugs (34 percent) and discipline (19 percent). (Tables 20 and 21)
- Parents who had not completed high school were less likely than other parents to report having regular talks with their children about school experiences, high school plans, or plans after high school. (Table 22)
- A 1988 survey asked teachers and students to rate the magnitude of school problems. Students named alcohol abuse as the most prevalent problem followed by discipline and drug abuse. Teachers most frequently named alcohol abuse as a "very serious" problem at their school, followed by the number of students lacking basic skills, discipline, and drug abuse. (Table 24)
- The proportion of total State and local government funds spent on education declined between 1978 and 1988, at least partly as a result of the drop in elementary and secondary enrollment and the expansion of other governmental services. Of the 1988 State and local funds spent on education, about 70 percent went to elementary and secondary schools, 26 percent to colleges and universities, and 4 percent to other education programs. (Tables 32 and 33)
- Education expenditures are expected to rise to a record high of \$359 billion in the 1989-90 school year. Elementary and secondary schools are expected to spend about 60 percent of this total, and colleges and universities are expected to account for the remaining 40 percent. Approximately 6.9 percent of the gross national product was spent by elementary and secondary schools and colleges and universities in 1989-90. (Tables 27 and 28)

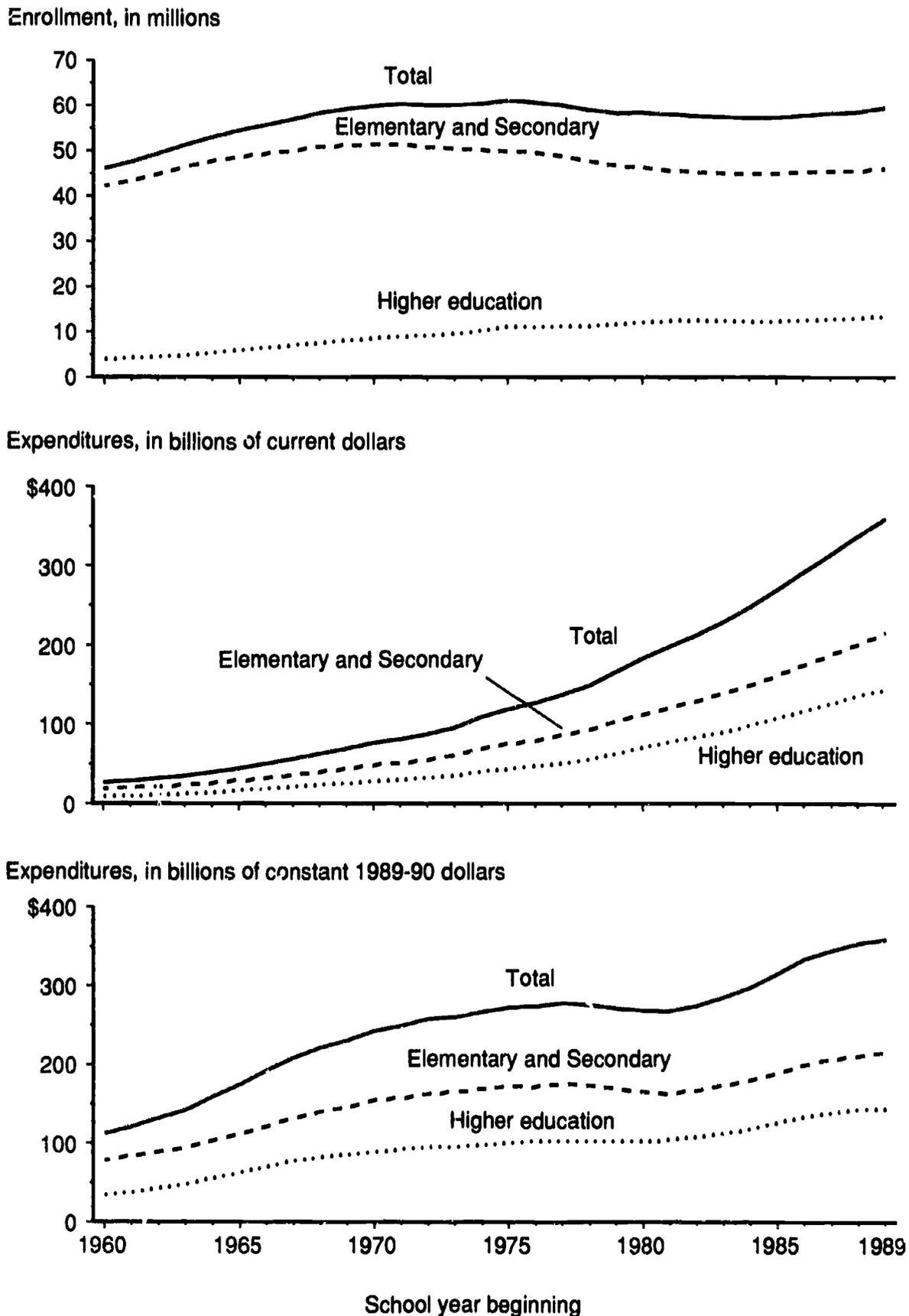
Figure 1.—The structure of education in the United States



NOTE.—Adult education programs, while not separately delineated above, may provide instruction at the elementary, secondary, or higher education level. Chart reflects typical patterns of progression rather than all possible variations.

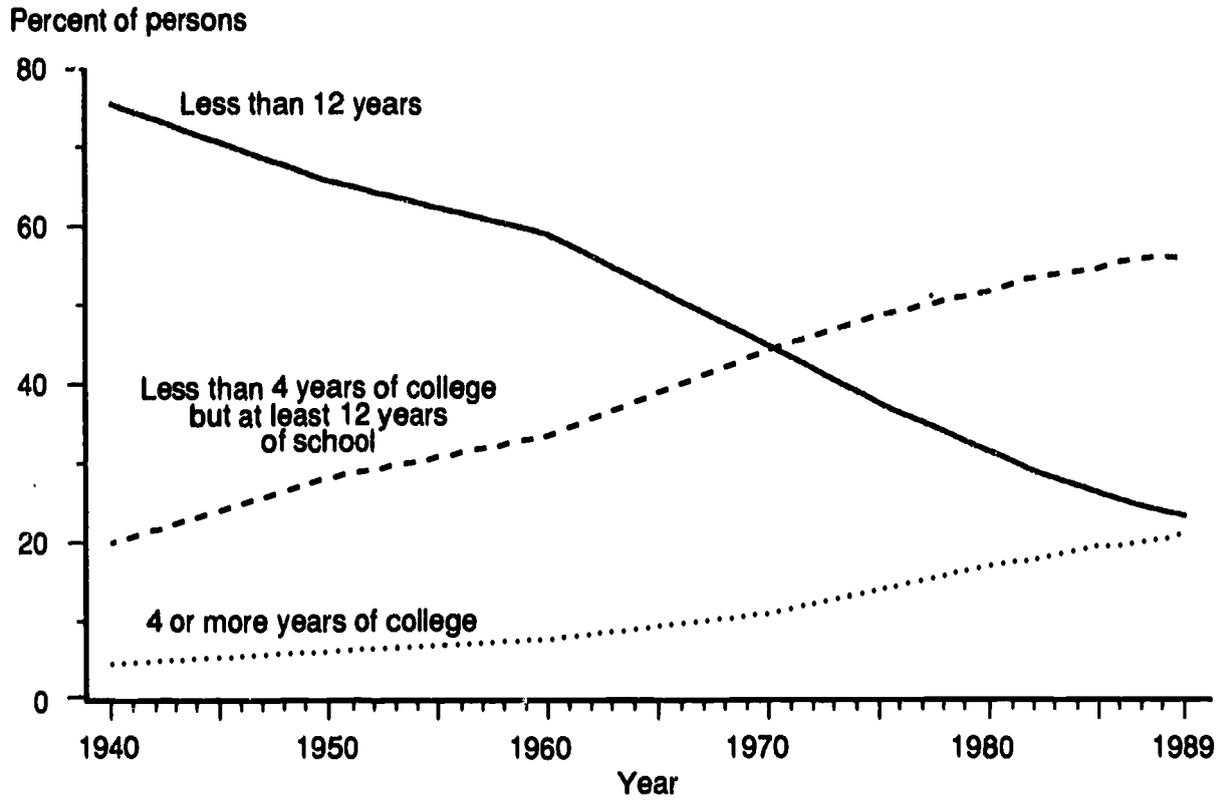
SOURCE: U.S. Department of Education, National Center for Education Statistics.

**Figure 2.—Enrollment and total expenditures in current and constant dollars, by level of education: 1960-61 to 1989-90**



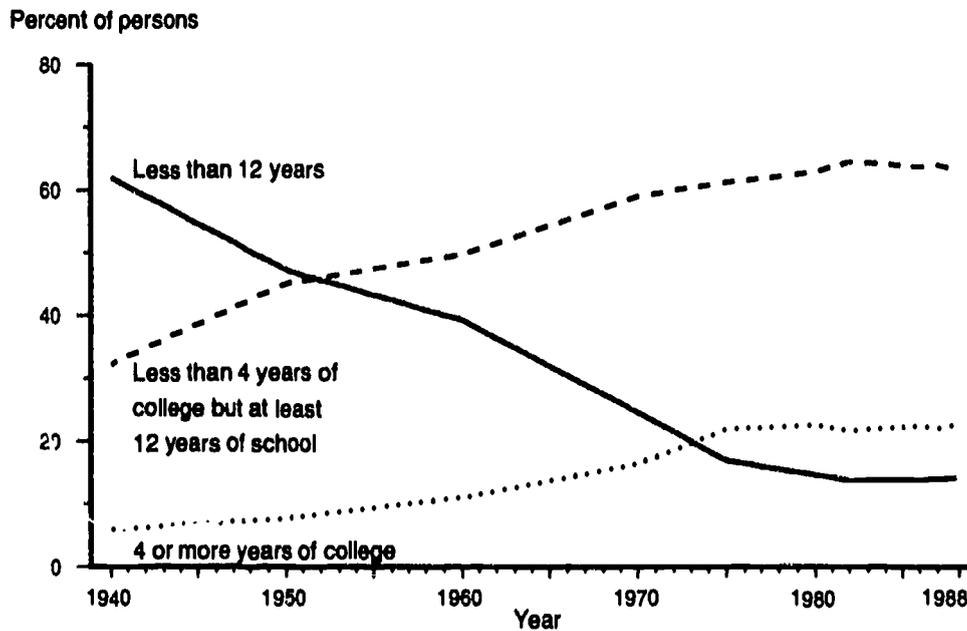
SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistics of Public Elementary and Secondary School Systems; Statistics of Nonpublic Secondary School Systems; Statistics of Nonpublic Elementary and Secondary Schools; Revenues and Expenditures for Public Elementary and Secondary Education; Fall Enrollment in Institutions of Higher Education; Financial Statistics of Institutions of Higher Education*; and Common Core of Data surveys.

**Figure 3.—Years of school completed by persons 25 years old and over: 1940 to 1989**



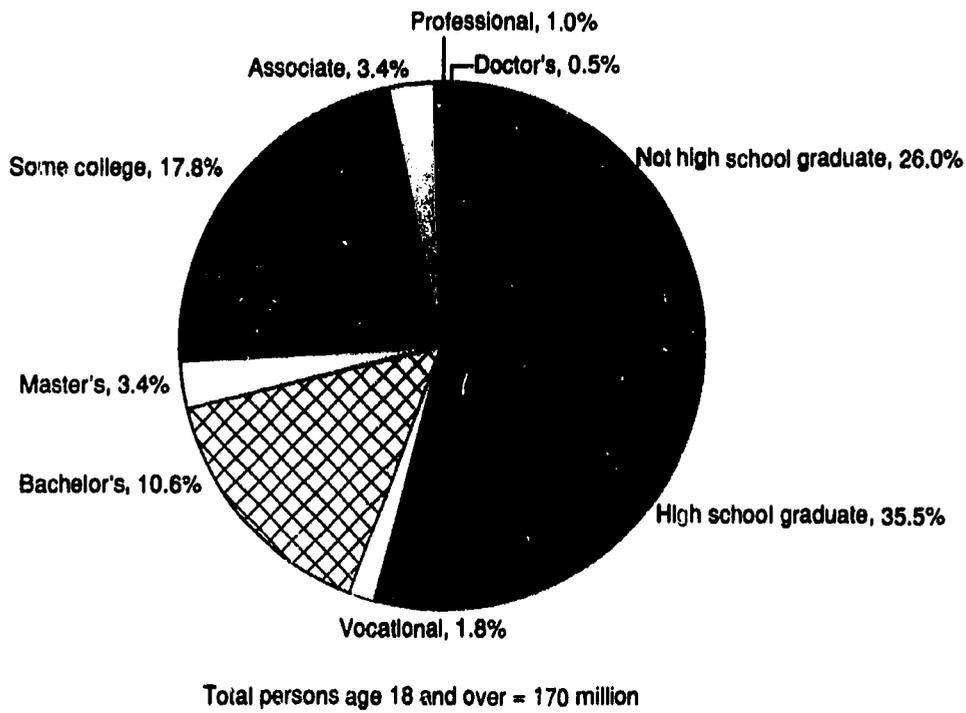
SOURCE: U.S. Department of Commerce, Bureau of the Census, *1960 Census of Population*, Vol. 1 part 1; and *Current Population Reports*, Series P-20 "Educational Attainment in the United States," and U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1989," unpublished.

**Figure 4.—Years of school completed by persons 25 to 29 years of age: 1940 to 1988**



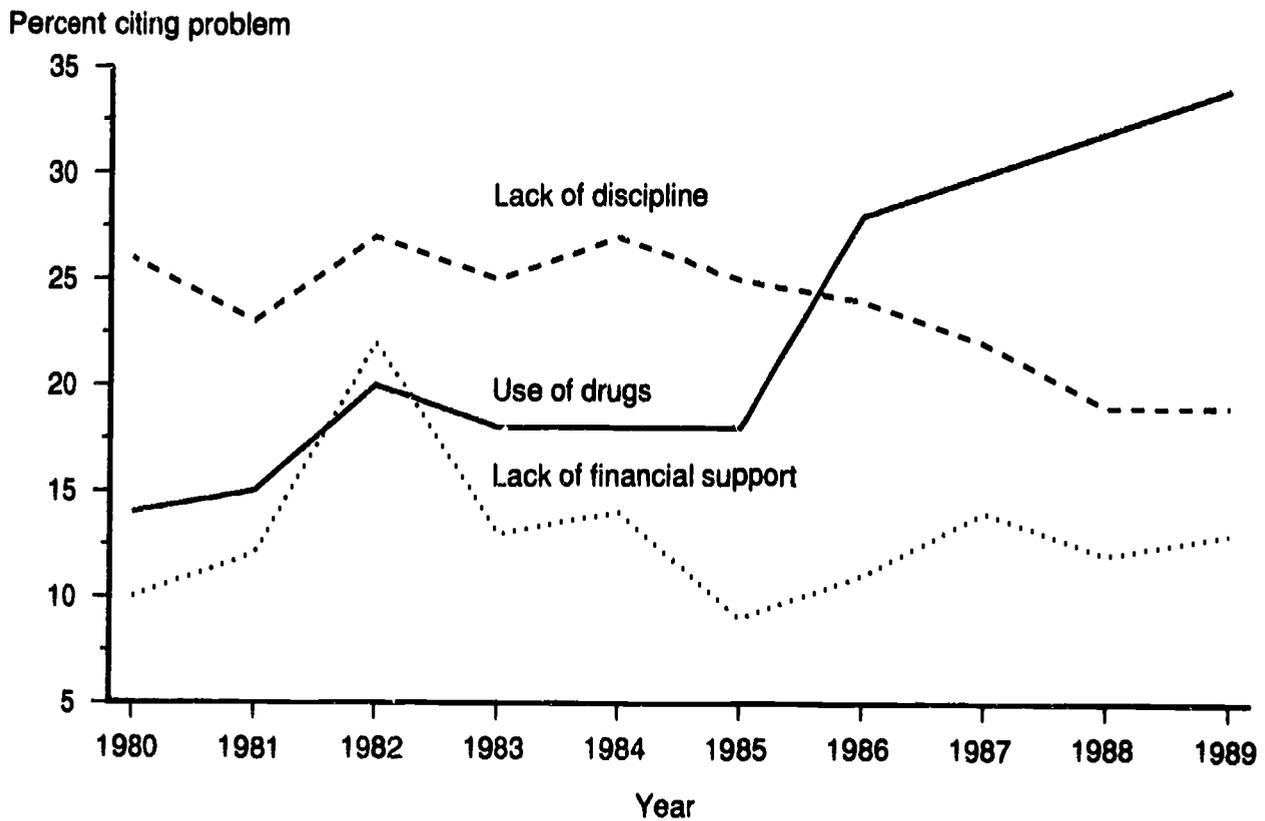
SOURCE: U. S. Department of Commerce, Bureau of the Census, *1960 Census of Population*, Vol. 1 part 1; and *Current Population Reports*, Series P-20, "Educational Attainment in the United States."

**Figure 5.—Highest degree earned by persons 18 years old and over: 1984**



SOURCE: U. S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-70, No. 11, "Educational Background and Economics Status: Spring 1984."

**Figure 6.—Items most frequently cited by the public as the chief problem facing the local public schools: 1980 to 1989**



SOURCE: *Phi Delta Kappan*, "The 20th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," September 1989.

**Table 1.—Estimated number of participants in elementary and secondary education and in higher education:  
Fall 1989**  
(In millions)

Participants	All levels (elementary, secondary, and higher education)	Elementary and secondary schools			Institutions of higher education
		Total	Public	Private	
<b>Total</b> .....	<b>66.6</b>	<b>51.0</b>	<b>45.1</b>	<b>5.9</b>	<b>15.6</b>
Enrollment <sup>1</sup> .....	59.4	46.0	40.6	5.4	13.4
Teachers and faculty.....	3.5	2.7	2.4	0.4	<sup>2</sup> 0.8
Other professional, administrative, and support staff.....	3.7	2.3	2.1	0.2	1.5

<sup>1</sup> Includes enrollments in local public school systems and in most private schools (religiously affiliated and nonsectarian). Excludes subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools. Elementary and secondary includes most kindergarten and some nursery school enrollment. Excludes preprimary enrollment in schools that do not offer first grade. Higher education comprises full-time and part-time students enrolled in degree-credit and non-degree-credit programs in universities, other four-year colleges, and two-year colleges.  
<sup>2</sup> Includes full-time and part-time faculty with the rank of instructor or above.

NOTE.—The enrollment figures include all students in elementary and secondary schools and colleges and universities. However, the data for teachers and other staff in public and private elementary and secondary schools are reported in terms of full-time equivalents. The staff data for institutions of higher education include all full-time and part-time professional, administrative, and support personnel. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, unpublished projections and estimates. (This table was prepared July 1990.)

**Table 2.—Enrollment in educational institutions, by level and control of institution: Fall 1980 to fall 2000**  
(In thousands)

Level of instruction and type of control	Fall 1980	Fall 1983	Fall 1984	Fall 1985	Fall 1986	Fall 1987	Fall 1988 <sup>1</sup>	Estimated fall 1989	Projected fall 1990	Projected fall 1995	Projected fall 2000
1	2	3	4	5	6	7	8	9	10	11	12
<b>All levels</b> .....	<b>56,346</b>	<b>57,432</b>	<b>57,150</b>	<b>57,226</b>	<b>57,709</b>	<b>58,254</b>	<b>58,477</b>	<b>59,382</b>	<b>59,750</b>	<b>63,088</b>	<b>64,302</b>
Public.....	50,376	48,935	48,686	48,901	49,467	49,981	50,349	51,038	51,340	54,319	55,357
Private.....	7,971	8,497	3,465	8,325	8,242	8,273	8,128	8,344	8,410	8,769	8,945
<b>Elementary and secondary education</b> <sup>2</sup> .....	<b>46,249</b>	<b>44,967</b>	<b>44,808</b>	<b>44,979</b>	<b>45,205</b>	<b>45,487</b>	<b>45,434</b>	<b>45,963</b>	<b>46,192</b>	<b>49,431</b>	<b>49,976</b>
Public.....	40,918	39,252	39,208	39,422	39,753	40,008	40,192	40,608	40,801	43,682	44,186
Private.....	5,331	5,715	<sup>3</sup> 5,700	5,557	<sup>3</sup> 5,452	5,479	5,241	5,355	5,391	5,749	5,790
<b>Grades K-8</b> <sup>4</sup> .....	<b>31,669</b>	<b>31,294</b>	<b>31,201</b>	<b>31,225</b>	<b>31,535</b>	<b>32,162</b>	<b>32,537</b>	<b>33,309</b>	<b>33,765</b>	<b>35,496</b>	<b>35,145</b>
Public.....	27,677	26,979	26,901	27,030	27,419	27,930	28,501	29,147	29,546	31,061	30,754
Private.....	3,992	4,315	<sup>3</sup> 4,300	4,195	<sup>3</sup> 4,116	4,232	4,036	4,162	4,219	4,435	4,391
<b>Grades 9-12</b> .....	<b>14,581</b>	<b>13,674</b>	<b>13,708</b>	<b>13,754</b>	<b>13,670</b>	<b>13,325</b>	<b>12,899</b>	<b>12,654</b>	<b>12,427</b>	<b>13,935</b>	<b>14,630</b>
Public.....	13,242	12,274	12,308	12,392	12,334	12,078	11,692	11,461	11,255	12,621	13,432
Private.....	1,339	1,400	<sup>3</sup> 1,400	1,362	<sup>3</sup> 1,336	1,247	1,206	1,193	1,172	1,314	1,398
<b>Higher education</b> <sup>5</sup> .....	<b>12,087</b>	<b>12,465</b>	<b>12,242</b>	<b>12,247</b>	<b>12,504</b>	<b>12,767</b>	<b>13,043</b>	<b>13,419</b>	<b>13,558</b>	<b>13,657</b>	<b>14,326</b>
Public.....	9,457	9,683	9,477	9,479	9,714	9,973	10,156	10,430	10,539	10,637	11,171
Undergraduate <sup>6</sup> .....	8,442	8,697	8,493	8,477	8,661	8,919	9,099	9,283	9,375	9,421	9,968
First-professional.....	114	113	114	112	112	110	109	117	118	122	115
Graduate <sup>7</sup> .....	901	872	870	890	941	945	949	1,030	1,046	1,094	1,088
Private.....	2,640	2,762	2,765	2,768	2,790	2,793	2,887	2,989	3,019	3,020	3,155
Undergraduate <sup>6</sup> .....	2,033	2,149	2,125	2,120	2,137	2,128	2,205	2,255	2,276	2,247	2,397
First-professional.....	163	165	165	162	158	158	158	169	172	176	167
Graduate <sup>7</sup> .....	443	468	475	486	494	507	523	565	571	599	591

<sup>1</sup> Preliminary.  
<sup>2</sup> Includes enrollments in local public school systems and in most private schools (religiously affiliated and nonsectarian). Excludes subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools. Excludes preprimary pupils in schools without elementary grades.  
<sup>3</sup> Estimated.  
<sup>4</sup> Includes kindergarten and a relatively small number of nursery school pupils.  
<sup>5</sup> Includes full-time and part-time students enrolled in degree-credit and nondegree-credit programs in colleges, universities, professional schools, teachers colleges, and 2-year colleges.

<sup>6</sup> Includes unclassified students below the baccalaureate level.  
<sup>7</sup> Includes unclassified postbaccalaureate students.  
NOTE.—Because of rounding, details may not add to totals. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data and "Fall Enrollment in Institutions of Higher Education" surveys; Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys, and Projections of Education Statistics to 2001. (This table was prepared July 1990.)

**BEST COPY AVAILABLE**

Table 3.—Enrollment in educational institutions, by level and by control of institution: 1869-70 to fall 2001

(In thousands)

Year	Total enrollment, all levels	Elementary and secondary, total	Public elementary and secondary schools			Private elementary and secondary schools <sup>1</sup>			Higher education <sup>2</sup>		
			Total	Kindergarten through grade 8	Grades 9 through 12	Total	Kindergarten through grade 8	Grades 9 through 12	Total	Public	Private
1	2	3	4	5	6	7	8	9	10	11	12
1869-70.....	—	—	6,872	6,792	80	—	—	—	52	—	—
1879-80.....	—	—	9,868	9,757	110	—	—	—	116	—	—
1889-90.....	14,491	14,334	12,723	12,520	203	1,811	1,516	95	157	—	—
1899-1900.....	17,092	16,955	15,503	14,984	519	1,352	1,241	111	238	—	—
1909-10.....	19,722	19,372	17,814	16,999	915	1,558	1,441	117	355	—	—
1919-20.....	23,876	23,276	21,576	19,376	2,200	1,699	1,486	214	598	—	—
1929-30.....	29,430	28,329	25,879	21,279	4,399	2,651	2,310	341	1,101	—	—
1939-40.....	29,539	28,045	25,434	18,932	6,601	2,611	2,153	458	1,494	797	698
1949-50.....	31,151	29,492	25,111	19,387	5,725	3,390	2,708	672	2,659	1,355	1,304
Fall 1959.....	44,497	40,857	35,182	26,911	8,271	5,675	4,640	1,035	3,640	2,181	1,459
Fall 1964.....	52,996	47,716	41,416	30,025	11,391	6,300	5,000	1,300	5,280	3,468	1,812
Fall 1965.....	54,394	48,473	42,173	30,563	11,610	6,300	4,900	1,400	5,921	3,970	1,951
Fall 1966.....	55,629	49,239	43,039	31,145	11,894	6,200	4,800	1,400	6,390	4,349	2,041
Fall 1967.....	56,803	49,891	43,891	31,641	12,250	6,000	4,600	1,400	6,912	4,616	2,096
Fall 1968.....	58,257	50,744	44,944	32,226	12,718	5,800	4,400	1,400	7,513	5,431	2,082
Fall 1969.....	59,124	51,119	45,819	32,597	13,022	5,500	4,200	1,300	8,005	5,997	2,108
Fall 1970.....	59,853	51,272	45,909	32,577	13,332	5,363	4,052	1,311	8,581	6,428	2,153
Fall 1971.....	60,230	51,261	46,081	32,285	13,616	5,200	3,900	1,300	8,949	6,804	2,144
Fall 1972.....	59,959	50,744	45,744	31,831	13,913	5,000	3,700	1,300	9,215	7,071	2,144
Fall 1973.....	60,031	50,429	45,429	31,353	14,077	5,000	3,700	1,300	9,602	7,420	2,183
Fall 1974.....	60,277	50,053	45,053	30,921	14,132	5,000	3,700	1,300	10,224	7,989	2,235
Fall 1975.....	60,978	49,791	44,791	30,487	14,304	5,000	3,700	1,300	11,185	8,835	2,350
Fall 1976.....	60,496	49,484	44,317	29,006	14,311	5,167	3,825	1,342	11,012	8,653	2,359
Fall 1977.....	60,003	48,717	43,577	29,336	14,240	5,140	3,797	1,343	11,286	8,847	2,439
Fall 1978.....	58,696	47,636	42,550	28,328	14,223	5,086	3,732	1,353	11,260	8,786	2,474
Fall 1979.....	58,215	46,845	41,845	27,931	13,714	5,000	3,700	1,300	11,570	9,037	2,533
Fall 1980.....	58,346	46,249	40,916	27,677	13,242	5,331	3,992	1,339	12,097	9,457	2,640
Fall 1981.....	57,894	45,522	40,022	27,270	12,752	5,500	4,100	1,400	12,372	9,647	2,725
Fall 1982.....	57,591	45,166	39,566	27,158	12,407	5,600	4,200	1,400	12,426	9,696	2,730
Fall 1983.....	57,432	44,967	39,252	26,979	12,274	5,715	4,315	1,400	12,465	9,683	2,782
Fall 1984.....	57,150	44,908	39,208	26,901	12,308	5,700	4,300	1,400	12,242	9,477	2,765
Fall 1985.....	57,226	44,979	39,422	27,030	12,392	5,557	4,195	1,362	12,247	9,479	2,768
Fall 1986.....	57,709	45,205	39,753	27,419	12,334	5,452	4,116	1,338	12,504	9,714	2,790
Fall 1987.....	58,254	45,487	40,008	27,930	12,078	5,479	4,232	1,247	12,767	9,973	2,793
Fall 1988.....	58,477	45,433	40,192	28,501	11,692	5,241	4,038	1,208	13,043	10,156	2,887
Fall 1989 <sup>3</sup> .....	59,382	45,983	40,608	29,147	11,461	5,355	4,162	1,193	13,419	10,430	2,989
Fall 1990 <sup>3</sup> .....	59,750	46,192	40,901	29,546	11,255	5,391	4,219	1,172	13,558	10,539	3,019
Fall 1991 <sup>3</sup> .....	60,499	46,856	41,367	30,006	11,381	5,469	4,285	1,185	13,643	10,608	3,035
Fall 1992 <sup>3</sup> .....	61,159	47,546	41,997	30,423	11,574	5,549	4,344	1,205	13,613	10,587	3,026
Fall 1993 <sup>3</sup> .....	61,623	48,226	42,602	30,732	11,870	5,624	4,368	1,256	13,597	10,579	3,018
Fall 1994 <sup>3</sup> .....	62,486	48,909	43,214	30,930	12,284	5,695	4,417	1,279	13,579	10,571	3,008
Fall 1995 <sup>3</sup> .....	63,088	49,431	43,882	31,061	12,621	5,749	4,435	1,314	13,657	10,637	3,020
Fall 1996 <sup>3</sup> .....	63,590	49,643	44,054	31,104	12,950	5,789	4,441	1,348	13,747	10,710	3,037
Fall 1997 <sup>3</sup> .....	63,986	50,080	44,269	31,094	13,175	5,811	4,440	1,371	13,906	10,834	3,072
Fall 1998 <sup>3</sup> .....	64,225	50,136	44,319	31,098	13,221	5,817	4,441	1,376	14,069	10,977	3,112
Fall 1999 <sup>3</sup> .....	64,273	50,136	44,299	30,939	13,360	5,809	4,416	1,391	14,165	11,047	3,116
Fall 2000 <sup>3</sup> .....	64,302	49,670	44,186	30,754	13,432	5,790	4,391	1,398	14,326	11,171	3,155
Fall 2001 <sup>3</sup> .....	64,233	49,786	44,022	30,528	13,494	5,764	4,359	1,405	14,447	11,264	3,183

<sup>1</sup> Beginning in fall 1960, data include estimates for an expanded universe of private schools. Therefore, these totals may differ from figures shown in other tables, and direct comparisons with earlier years should be avoided.

<sup>2</sup> Data for 1869-70 through 1949-50 include resident degree-credit students enrolled at any time during the academic year. Beginning in 1959, data include all resident and extension students enrolled at the beginning of the fall term.

<sup>3</sup> Estimated.

<sup>4</sup> Preliminary data.

<sup>5</sup> Based on "Early Estimates" surveys.

<sup>6</sup> Projected.

—Data not available.

NOTE.—Elementary and secondary enrollment includes pupils in local public school systems and in most private schools (religiously affiliated and nonsectarian), but generally excludes pupils in subcollegiate departments of institutions of higher education, resi-

dential schools for exceptional children, and Federal schools. Elementary enrollment includes some prekindergarten pupils. Higher education enrollment includes students in colleges, universities, professional schools, teachers colleges, and 2-year colleges. Higher education enrollment projections are based on the middle alternative projections published by the National Center for Education Statistics. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistics of Public Elementary and Secondary School Systems; Statistics of Nonpublic Elementary and Secondary Schools; Projections of Education Statistics to 2000; Common Core of Data; "Fall Enrollment in Institutions of Higher Education"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment"* surveys. (This table was prepared July 1990.)

**Table 4.—Teachers in elementary and secondary schools, and senior instructional staff in institutions of higher education, by control of institution: Fall 1970 to fall 2000**

[In thousands]

Level of instruction and type of control	Fall 1970	Fall 1975	Fall 1980	Fall 1982	Fall 1983	Fall 1984	Fall 1985	Fall 1986	Fall 1987 <sup>1</sup>	Estimated fall 1988	Projected fall 1989	Projected fall 1990	Projected fall 1995	Projected fall 2000
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>All levels .....</b>	<b>2,762</b>	<b>3,079</b>	<b>3,171</b>	<b>3,156</b>	<b>3,167</b>	<b>3,225</b>	<b>3,265</b>	<b>3,314</b>	<b>3,425</b>	<b>3,402</b>	<b>3,492</b>	<b>3,547</b>	<b>3,759</b>	<b>3,993</b>
Public .....	2,369	2,639	2,679	2,627	2,638	2,673	2,710	2,754	2,832	2,840	2,894	2,940	3,128	3,319
Private .....	393	440	492	529	549	552	555	560	593	562	598	607	631	664
<b>Elementary and secondary teachers<sup>2</sup> .....</b>	<b>2,288</b>	<b>2,451</b>	<b>2,485</b>	<b>2,448</b>	<b>2,463</b>	<b>2,508</b>	<b>2,550</b>	<b>2,592</b>	<b>2,632</b>	<b>2,661</b>	<b>2,737</b>	<b>2,785</b>	<b>3,016</b>	<b>3,212</b>
Public schools .....	2,055	2,196	2,184	2,121	2,128	2,166	2,207	2,241	2,279	2,316	2,366	2,401	2,602	2,772
Private schools .....	233	<sup>3</sup> 255	301	<sup>3</sup> 325	337	<sup>3</sup> 340	343	<sup>3</sup> 348	353	345	377	384	414	439
<b>Elementary teachers .....</b>	<b>1,261</b>	<b>1,352</b>	<b>1,401</b>	<b>1,402</b>	<b>1,418</b>	<b>1,448</b>	<b>1,483</b>	<b>1,517</b>	<b>1,555</b>	<b>1,588</b>	<b>1,607</b>	<b>1,642</b>	<b>1,751</b>	<b>1,848</b>
Public schools .....	1,128	1,180	1,189	1,171	1,178	1,205	1,237	1,267	1,297	1,337	1,332	1,361	1,451	1,532
Private schools .....	153	<sup>3</sup> 172	212	<sup>3</sup> 231	240	<sup>3</sup> 243	248	<sup>3</sup> 250	<sup>3</sup> 257	251	275	281	300	316
<b>Secondary teachers .....</b>	<b>1,007</b>	<b>1,099</b>	<b>1,084</b>	<b>1,044</b>	<b>1,045</b>	<b>1,060</b>	<b>1,067</b>	<b>1,075</b>	<b>1,077</b>	<b>1,073</b>	<b>1,130</b>	<b>1,142</b>	<b>1,266</b>	<b>1,364</b>
Public schools .....	927	1,016	995	950	946	963	970	977	982	979	1,028	1,039	1,151	1,241
Private schools .....	80	<sup>3</sup> 83	89	<sup>3</sup> 94	97	<sup>3</sup> 97	97	<sup>3</sup> 98	<sup>3</sup> 95	94	102	103	114	123
<b>Higher education senior instructional staff<sup>4</sup> .....</b>	<b>474</b>	<b>628</b>	<b><sup>3</sup> 686</b>	<b><sup>3</sup> 710</b>	<b>724</b>	<b><sup>3</sup> 717</b>	<b><sup>3</sup> 715</b>	<b><sup>3</sup> 722</b>	<b><sup>3</sup> 783</b>	<b>741</b>	<b>755</b>	<b>762</b>	<b>743</b>	<b>771</b>
Public institutions .....	314	443	<sup>3</sup> 495	<sup>3</sup> 506	512	<sup>3</sup> 505	<sup>3</sup> 503	<sup>3</sup> 510	<sup>3</sup> 553	524	534	539	526	547
Private institutions .....	160	185	<sup>3</sup> 191	<sup>3</sup> 204	212	<sup>3</sup> 212	<sup>3</sup> 212	<sup>3</sup> 212	<sup>3</sup> 240	217	221	223	217	225

<sup>1</sup> Preliminary data.

<sup>2</sup> Includes teachers in local public school systems and in most private schools (religiously affiliated and nonsectarian). Excludes subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools. Teachers are reported in terms of full-time equivalents.

<sup>3</sup> Estimated on the basis of enrollment.

<sup>4</sup> Includes full-time and part-time faculty with the rank of instructor or above in colleges, universities, professional schools, teachers colleges, and 2-year colleges. Excludes teaching assistants.

<sup>5</sup> Based on actual survey data. Methodology is not consistent with figures for other years.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data: *Projections of Education Statistics to 2000*; and Equal Employment Opportunity Commission, unpublished data. (This table was prepared July 1990.)

Table 5.—Educational Institutions, by level and control of institution: 1976-77 to 1989-90

Level and control of institution	1976-77	1978-79	1980-81	1982-83	1984-85	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7	8	9	10
All institutions.....	—	—	117,707	—	—	121,433	122,111	—	—
Elementary and secondary schools.....	—	—	106,748	—	—	109,071	110,055	—	—
Elementary.....	74,053	73,082	72,659	—	—	74,104	76,398	—	—
Secondary.....	26,457	25,259	24,858	—	—	23,844	23,183	—	—
Combined.....	4,859	4,904	5,202	—	—	6,932	9,475	—	—
Other.....	—	—	4,029	—	—	4,191	1,000	—	—
Public schools.....	—	—	85,982	84,740	84,007	83,455	83,248	83,165	—
Elementary.....	61,123	60,312	59,326	58,051	57,231	58,801	59,311	59,296	—
Secondary.....	23,857	22,834	22,619	22,363	22,320	21,406	20,758	20,550	—
Combined.....	1,521	1,670	1,743	1,605	1,596	1,983	2,179	2,235	—
Other.....	—	—	2,294	2,701	2,860	1,265	1,000	1,084	—
Private schools.....	19,910	19,489	20,764	—	—	125,616	26,807	—	—
Elementary.....	12,930	12,750	13,333	—	—	15,303	17,087	—	—
Secondary.....	2,800	2,425	2,237	—	—	2,438	2,425	—	—
Combined.....	3,338	3,234	3,459	—	—	4,849	7,296	—	—
Other.....	1,042	1,080	1,735	—	—	2,926	—	—	—
Postsecondary institutions.....	—	—	210,961	—	—	12,362	12,056	11,389	10,808
Public.....	—	—	22,393	—	—	2,363	2,250	2,169	2,120
Private nonprofit.....	—	—	22,359	—	—	3,432	3,254	3,092	2,942
Proprietary.....	—	—	26,209	—	—	6,567	6,552	6,126	5,544
Noncollegiate institutions.....	—	—	27,730	—	—	8,956	8,469	7,824	7,071
Public.....	—	—	2896	—	—	830	659	587	557
Private nonprofit.....	—	—	2790	—	—	1,797	1,581	1,434	1,286
Proprietary.....	—	—	26,044	—	—	6,329	6,229	5,803	5,226
Institutions of higher education <sup>3</sup> .....	3,048	3,134	3,231	3,280	3,331	3,406	3,587	3,565	3,535
2-year colleges.....	1,133	1,193	1,274	1,296	1,308	1,336	1,452	1,436	1,408
Public.....	905	924	945	933	935	960	992	984	968
Private nonprofit.....	188	188	182	363	186	173	165	180	177
Proprietary.....	40	81	147	(4)	185	203	274	272	263
4-year colleges.....	1,913	1,941	1,957	1,984	2,025	2,070	2,135	2,129	2,127
Public.....	550	550	552	560	566	573	599	598	596
Private nonprofit.....	1,348	1,378	1,387	1,424	1,430	1,462	1,487	1,478	1,479
Proprietary.....	15	15	18	(4)	29	35	49	53	53

<sup>1</sup> Data are for 1985-86. Data were collected from a sample survey that differed significantly from earlier surveys. The sample survey was designed to correct an undercount of about 10 percent that was known to have occurred in earlier surveys.

<sup>2</sup> Because of changes in survey procedures, figures are not directly comparable with data for 1986-87 and 1987-88.

<sup>3</sup> Includes only those institutions designated as institutions of higher education by the Higher Education General Information Survey system. Includes branch campuses. Beginning in 1980, total includes some schools accredited by the National Association of Trade and Technical Schools.

<sup>4</sup> Included under "private nonprofit."

—Data not available.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data and Private School surveys: Higher Education General Information Survey, "Institutional Characteristics of Colleges and Universities"; and Integrated Postsecondary Education Data System, "Institutional Characteristics." (This table was prepared July 1990.)

Table 6.—Percentage of the population 3 to 34 years old enrolled in school,<sup>1</sup> by age: April 1940 to October 1989

Year	Total, 3 to 34 years	3 and 4 years	5 and 6 years	7 to 13 years	14 to 17 years	18 and 19 years	20 to 24 years			25 to 29 years	30 to 34 years
							Total	20 and 21 years	22 to 24 years		
1	2	3	4	5	6	7	8	9	10	11	12
1940 <sup>2</sup>	—	—	43.0	95.0	79.3	26.9	6.6	—	—	—	—
1945	—	—	60.4	98.1	78.4	20.7	3.9	—	—	—	—
1947	—	—	58.0	98.5	79.3	24.3	10.2	—	—	3.0	—
1948	—	—	56.0	98.1	81.8	26.9	9.7	—	—	2.6	—
1949	—	—	59.3	98.6	81.8	25.3	9.2	—	—	3.8	—
1950	—	—	58.2	98.7	83.4	29.7	9.2	—	—	3.0	0.9
1951	—	—	54.5	99.1	85.2	26.2	8.6	—	—	2.5	—
1952	—	—	54.7	98.8	85.2	26.6	9.7	—	—	2.6	1.2
1953	—	—	55.7	96.4	85.9	31.2	11.1	—	—	2.9	1.7
1954	—	—	77.3	99.4	87.1	32.4	11.2	—	—	4.1	1.6
1955	—	—	78.1	99.2	86.9	31.5	11.1	—	—	4.2	1.8
1956	—	—	77.6	99.3	88.2	35.4	12.8	—	—	5.1	1.9
1957	—	—	78.6	99.5	89.5	34.9	14.0	—	—	—	—
1958	—	—	80.4	99.5	89.2	37.8	13.4	—	—	—	—
1959	—	—	80.0	99.4	90.2	36.8	12.7	—	—	—	—
1960	—	—	80.7	99.5	90.3	38.4	13.1	—	—	4.9	2.4
1961	—	—	81.7	99.3	91.4	36.0	13.7	—	—	—	—
1962	—	—	82.2	99.3	92.0	41.8	15.6	—	—	—	—
1963	—	—	82.7	99.3	92.9	40.9	17.3	—	—	—	—
1964	—	—	83.3	99.0	93.1	41.6	16.8	—	—	5.2	2.6
1965	55.5	10.8	84.9	99.4	93.2	46.3	19.0	27.6	13.2	6.1	3.2
1966	56.1	12.5	85.8	99.3	93.7	47.2	19.9	29.9	13.2	6.5	2.7
1967	56.6	14.2	87.4	99.3	93.7	47.6	22.0	33.3	13.6	6.6	4.0
1968	56.7	15.7	87.6	99.1	94.2	50.4	21.4	31.2	13.8	7.0	3.9
1969	57.0	18.1	88.4	99.2	94.0	50.2	23.0	34.1	15.4	7.9	4.8
1970	56.4	20.5	89.5	99.2	94.1	47.7	21.5	31.9	14.9	7.5	4.2
1971	56.2	21.2	91.6	99.1	94.5	49.2	21.9	32.2	15.4	8.0	4.9
1972	54.9	24.4	91.9	99.2	93.9	46.3	21.6	31.4	14.8	6.6	4.6
1973	53.5	24.2	92.5	99.2	92.9	42.9	20.8	30.1	14.5	6.5	4.5
1974	53.6	26.8	94.2	99.3	92.9	43.1	21.4	30.2	15.1	9.6	5.7
1975	53.7	31.5	94.7	99.3	93.6	46.9	22.4	31.2	16.2	10.1	6.6
1976	53.1	31.3	95.5	99.2	93.7	46.2	23.3	32.0	17.1	10.0	6.0
1977	52.5	32.0	95.8	99.4	93.6	46.2	22.9	31.6	16.5	10.6	6.9
1978	51.2	34.2	95.3	99.1	93.7	45.4	21.8	29.5	16.3	9.4	6.4
1979	50.3	35.1	95.8	99.2	93.6	45.0	21.7	30.2	15.8	9.6	6.4
1980	49.7	36.7	95.7	99.3	93.4	48.4	22.3	31.0	16.3	9.3	6.4
1981	48.9	36.0	94.0	99.2	94.1	49.0	22.5	31.6	16.5	9.0	6.9
1982	48.6	36.4	95.0	99.2	94.4	47.8	23.5	34.0	16.8	9.6	6.3
1983	48.4	37.5	95.4	99.2	95.0	50.4	22.7	32.5	16.6	9.6	6.4
1984	47.9	38.3	94.5	99.2	94.7	50.1	23.7	33.9	17.3	9.1	6.3
1985	48.3	38.9	96.1	99.2	94.9	51.8	24.0	35.3	16.9	9.2	6.1
1986	48.2	38.9	95.3	99.2	94.9	54.6	23.6	33.0	17.9	8.6	6.0
1987	48.6	38.3	95.1	99.5	95.0	55.6	25.5	38.7	17.5	9.0	5.8
1988	48.7	38.2	96.0	99.7	95.1	55.6	26.1	39.1	18.2	8.3	5.9
1989	49.1	39.1	95.2	99.3	95.7	56.0	27.0	38.5	19.9	9.3	5.7

<sup>1</sup> Includes enrollment in any type of graded public, parochial, or other private school in regular school systems. Includes nursery schools, kindergartens, elementary schools, colleges, universities, and professional schools. Attendance may be on either a full-time or part-time basis and during the day or night. Enrollments in "special" schools, such as trade schools, business colleges, or correspondence schools, are not included.

<sup>2</sup> Data are as of April 1940. Data for all other years are as of October.  
—Data not available.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*; *Current Population Reports, Series P-20*, various years; and unpublished data. (This table was prepared March 1990.)

**Table 7.—Percentage of the population 3 to 34 years old enrolled in school,<sup>1</sup> by race/ethnicity, sex, and age: October 1975 to October 1989**

Year and age	Total				Men				Women			
	All races	White <sup>2</sup>	Black <sup>2</sup>	Hispanic origin <sup>3</sup>	All races	White <sup>2</sup>	Black <sup>2</sup>	Hispanic origin <sup>3</sup>	All races	White <sup>2</sup>	Black <sup>2</sup>	Hispanic origin <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1975</b>												
Total, 3 to 34 years .....	53.7	53.1	57.6	54.6	56.1	53.4	60.5	58.1	51.5	50.8	55.3	51.7
3 and 4 years .....	31.5	30.8	34.2	27.3	30.9	30.8	31.1	28.7	32.1	30.7	37.3	27.9
5 and 6 years .....	94.7	94.8	94.4	92.1	94.4	94.4	94.9	99.7	95.1	95.3	94.0	94.4
7 to 9 years .....	99.3	99.4	99.3	99.6	99.2	99.2	99.4	99.6	99.5	99.5	99.2	99.5
10 to 13 years .....	99.3	99.3	99.1	99.2	98.9	99.0	98.9	98.6	99.6	99.6	99.3	99.7
14 and 15 years .....	99.2	99.3	97.4	95.6	98.4	98.5	97.6	97.4	98.0	98.1	97.2	99.8
16 and 17 years .....	89.0	89.3	86.9	86.2	90.7	91.0	88.2	88.3	87.2	87.5	85.6	84.0
18 and 19 years .....	48.9	48.5	47.1	44.0	49.9	49.6	49.9	51.9	44.2	43.5	44.7	37.1
20 and 21 years .....	31.2	31.8	27.1	27.5	35.3	36.3	28.7	31.3	27.4	27.5	25.8	24.3
22 to 24 years .....	16.2	16.3	14.2	14.1	20.0	20.5	14.7	15.9	12.6	12.2	13.8	12.5
25 to 29 years .....	10.1	10.0	9.4	8.3	13.1	13.1	11.8	11.9	7.2	7.0	7.5	5.3
30 to 34 years .....	6.6	6.6	7.1	5.5	7.7	7.5	6.6	7.2	5.8	5.7	5.9	4.1
<b>1980</b>												
Total, 3 to 34 years .....	49.7	48.9	53.9	49.6	50.9	50.0	56.1	49.9	48.5	47.9	52.0	49.8
3 and 4 years .....	36.7	36.3	38.2	26.5	37.8	36.0	36.6	30.1	35.5	34.8	39.7	26.6
5 and 6 years .....	95.7	95.8	95.4	94.5	95.0	95.2	94.1	94.0	96.4	96.4	96.7	94.9
7 to 9 years .....	99.1	99.0	99.4	98.4	99.0	98.8	99.5	97.7	99.2	99.2	99.3	99.0
10 to 13 years .....	99.4	99.4	99.4	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.3	99.9
14 and 15 years .....	98.2	98.3	97.9	94.3	98.7	98.7	98.5	96.7	97.7	97.8	97.4	92.1
16 and 17 years .....	89.0	88.6	90.6	81.8	89.1	88.8	90.8	81.5	88.6	88.4	90.4	82.2
18 and 19 years .....	48.4	48.3	45.7	37.8	47.0	47.5	42.8	38.9	45.8	45.1	48.2	38.6
20 and 21 years .....	31.0	31.9	23.4	19.5	32.6	33.7	23.0	21.4	29.5	30.2	23.7	17.8
22 to 24 years .....	16.3	16.4	13.8	11.7	17.8	18.2	13.3	10.7	14.9	14.8	13.9	12.6
25 to 29 years .....	9.3	9.2	8.8	6.7	9.8	9.6	10.6	6.8	6.8	6.9	7.4	6.9
30 to 34 years .....	6.4	6.3	6.8	5.1	5.9	5.6	7.3	6.2	7.0	7.0	6.5	4.1
<b>1985</b>												
Total, 3 to 34 years .....	48.3	47.6	50.9	47.7	49.2	48.5	52.6	47.5	47.4	47.0	49.4	47.9
3 and 4 years .....	38.9	38.6	42.7	27.0	38.7	37.3	34.6	26.4	41.2	39.9	50.2	27.7
5 and 6 years .....	96.1	96.4	95.7	94.5	95.9	95.7	94.6	95.3	97.0	97.1	97.1	93.7
7 to 9 years .....	99.1	99.3	98.4	98.4	99.0	99.3	98.2	98.9	99.2	99.3	98.7	98.0
10 to 13 years .....	99.3	99.3	99.5	99.4	99.2	99.2	99.1	99.1	99.4	99.3	99.9	99.7
14 and 15 years .....	98.1	98.1	97.9	96.1	98.3	98.2	98.2	98.2	97.9	97.9	97.6	93.0
16 and 17 years .....	91.7	91.6	91.7	84.5	92.4	92.5	91.8	88.9	90.9	90.8	91.8	80.0
18 and 19 years .....	51.6	52.4	44.1	41.8	52.2	51.9	49.5	38.6	51.0	52.3	39.0	44.7
20 and 21 years .....	35.3	36.1	27.7	24.0	36.5	37.2	29.7	20.3	34.1	35.0	26.0	27.4
22 to 24 years .....	16.9	17.0	13.7	11.6	18.6	19.0	13.2	12.6	15.1	15.0	14.1	10.4
25 to 29 years .....	9.2	9.2	7.4	6.6	9.4	9.5	5.7	6.2	9.1	9.0	6.8	4.9
30 to 34 years .....	6.1	6.2	5.1	5.7	5.4	5.4	3.9	4.0	6.8	6.9	6.2	7.5
<b>1988</b>												
Total, 3 to 34 years .....	48.7	48.0	50.8	48.0	49.6	48.7	52.4	48.2	47.7	47.2	49.0	45.8
3 and 4 years .....	38.2	38.9	33.4	24.5	38.3	39.0	34.5	27.9	38.1	38.6	32.3	20.7
5 and 6 years .....	96.0	96.1	95.5	95.7	95.9	96.1	96.0	96.7	96.0	96.1	94.9	94.6
7 to 9 years .....	99.6	99.7	99.7	99.6	99.6	99.7	99.6	99.2	99.6	99.6	99.6	100.0
10 to 13 years .....	99.7	99.7	99.8	99.6	99.7	99.6	100.0	100.0	99.7	99.8	99.3	99.6
14 and 15 years .....	98.9	98.8	98.9	98.8	98.9	98.9	99.1	98.1	98.8	98.8	98.6	98.6
16 and 17 years .....	91.6	91.4	91.5	78.6	92.1	91.6	93.2	80.9	91.2	91.1	89.8	76.6
18 and 19 years .....	55.8	55.8	50.3	44.1	56.2	56.5	49.7	44.7	55.2	55.1	50.9	43.5
20 and 21 years .....	39.1	40.2	28.1	16.7	39.0	40.9	20.7	21.6	39.1	39.6	34.3	11.2
22 to 24 years .....	16.2	16.6	13.2	12.1	20.5	20.7	14.7	12.5	16.2	16.5	11.9	11.5
25 to 29 years .....	8.3	8.2	7.2	5.6	8.1	7.8	6.3	4.5	8.8	8.5	7.9	7.2
30 to 34 years .....	5.9	5.9	5.6	5.6	5.5	5.4	4.1	4.9	6.4	6.3	6.6	6.2
<b>1989</b>												
Total, 3 to 34 years .....	49.0	48.4	51.5	45.7	49.7	48.9	52.8	45.5	48.4	47.9	50.3	45.9
3 and 4 years .....	39.1	39.5	36.7	22.9	38.8	38.9	39.5	19.3	39.5	40.2	37.8	25.5
5 and 6 years .....	95.2	95.3	94.7	93.3	95.1	95.4	93.0	92.6	95.2	95.2	96.4	93.7
7 to 9 years .....	99.2	99.2	99.0	99.1	99.2	99.3	98.8	97.5	99.2	99.1	99.2	98.7
10 to 13 years .....	99.4	99.4	99.4	99.1	99.2	99.2	98.8	98.6	99.6	99.6	99.9	99.6
14 and 15 years .....	98.3	98.7	99.4	96.4	99.2	99.3	99.3	98.0	98.4	98.1	99.5	95.0
16 and 17 years .....	92.7	92.3	93.7	86.4	93.2	92.8	95.6	88.7	92.2	92.1	91.7	83.7
18 and 19 years .....	56.0	56.4	50.2	44.6	56.8	57.2	51.0	44.2	55.4	55.6	49.4	45.0
20 and 21 years .....	38.5	39.5	30.7	18.8	37.3	39.3	23.1	17.1	39.7	39.7	37.3	20.8
22 to 24 years .....	19.9	20.0	17.2	12.0	20.4	20.4	15.5	12.2	19.5	19.6	18.8	11.9
25 to 29 years .....	9.3	9.4	6.4	6.6	9.3	9.3	5.5	7.3	9.3	9.6	7.1	5.8
30 to 34 years .....	5.7	5.6	4.9	3.8	5.0	5.0	3.2	4.1	6.4	6.2	6.3	3.5

<sup>1</sup> Includes enrollment in any type of graded public, parochial, or other private school in regular school systems. Includes nursery schools, kindergartens, elementary schools, high schools, colleges, universities, and professional schools. Attendance may be on either a full-time or part-time basis and during the day or night. Enrollments in "special" schools, such as trade schools, business colleges, or correspondence schools, are not included.

<sup>2</sup> Includes persons of Hispanic origin.

<sup>3</sup> Persons of Hispanic origin may be of any race.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, *School Enrollment—Social and Economic Characteristics of Students*, Series P-20, Nos. 303, 362, and 426; and unpublished data. (This table was prepared April 1990.)

Table 8.—Years of school completed by persons age 25 and over and 25 to 29, by race: 1910 to 1989

Race, age, and date	Percent, by years of school completed			Median school years completed	Race, age, and date	Percent, by years of school completed			Median school years completed
	Less than 5 years of elementary school	4 years of high school or more	4 or more years of college			Less than 5 years of elementary school	4 years of high school or more	4 or more years of college	
1	2	3	4	5	1	2	3	4	5
<b>All races</b>					<b>White<sup>2</sup> (continued)</b>				
<b>25 and over</b>					<b>25 to 29</b>				
1910 <sup>1</sup> .....	23.6	13.6	2.7	6.1	1920 <sup>1</sup> .....	12.9	22.0	4.5	6.5
1920 <sup>1</sup> .....	22.0	16.4	3.3	6.2	April 1940.....	3.4	41.2	6.4	10.7
1930 <sup>1</sup> .....	17.6	19.1	3.9	6.4	April 1950.....	3.3	56.3	8.2	12.2
April 1940.....	13.7	24.6	4.6	6.6	April 1960.....	2.2	63.7	11.8	12.3
April 1950.....	11.1	34.3	6.2	9.3	March 1970.....	0.9	77.6	17.3	12.6
April 1960.....	8.3	41.1	7.7	10.6	March 1975.....	1.0	84.4	22.8	12.6
March 1970.....	6.3	55.2	11.0	12.2	March 1980.....	0.8	86.9	23.7	12.9
March 1975.....	4.2	62.6	13.9	12.3	March 1982.....	0.8	86.9	22.7	12.9
March 1980.....	3.4	66.6	17.0	12.6	March 1985.....	0.8	86.8	23.2	12.9
March 1982.....	3.0	71.0	17.7	12.6	March 1986.....	0.9	86.5	23.5	12.9
March 1985.....	2.7	73.9	19.4	12.6	March 1987.....	0.8	86.3	23.0	12.9
March 1986.....	2.7	74.7	19.4	12.6	March 1988.....	1.0	86.6	23.5	12.9
March 1987.....	2.4	75.6	19.9	12.7	<b>Black and other races<sup>2</sup></b>				
March 1988.....	2.4	76.2	20.3	12.7	<b>25 and over</b>				
March 1989.....	2.6	76.6	21.1	12.7	April 1940.....	41.8	7.7	1.3	5.7
<b>25 to 29</b>					April 1950.....	32.6	13.7	2.2	6.9
April 1940.....	6.9	36.1	6.9	10.3	April 1960.....	23.5	21.7	3.5	8.2
April 1950.....	4.6	52.6	7.7	12.1	March 1970.....	14.7	36.1	6.1	10.1
April 1960.....	2.8	60.7	11.0	12.3	March 1975.....	11.7	48.4	9.2	11.4
March 1970.....	1.1	76.4	16.4	12.6	March 1980.....	6.8	54.6	11.1	12.2
March 1975.....	1.0	83.1	21.9	12.6	March 1982.....	7.4	58.1	12.4	12.3
March 1980.....	0.6	85.4	22.6	12.9	March 1985.....	6.0	63.2	15.4	12.4
March 1982.....	0.6	86.2	21.7	12.6	March 1986.....	5.5	65.3	15.2	12.4
March 1985.....	0.7	86.1	22.2	12.9	March 1987.....	5.1	66.7	15.7	12.4
March 1986.....	0.9	86.1	22.4	12.9	March 1988.....	5.1	66.7	16.4	12.5
March 1987.....	0.9	86.0	22.0	12.6	March 1989.....	5.8	67.0	16.8	12.5
March 1988.....	1.0	85.9	22.7	12.6	<b>25 to 29</b>				
<b>White<sup>2</sup></b>					1920 <sup>1</sup> .....	44.6	6.3	1.2	5.4
<b>25 and over</b>					April 1940.....	27.0	12.3	1.6	7.1
April 1940.....	10.9	26.1	4.9	6.7	April 1950.....	16.1	23.6	2.6	8.7
April 1950.....	8.9	36.4	6.6	8.7	April 1960.....	7.2	36.6	5.4	10.8
April 1960.....	6.7	43.2	8.1	10.8	March 1970.....	2.2	56.4	10.0	12.2
March 1970.....	4.2	67.4	11.6	12.2	March 1975.....	0.7	73.8	15.4	12.6
March 1975.....	3.3	64.6	14.5	12.4	March 1980.....	1.0	77.0	15.2	12.7
March 1980.....	2.6	70.6	17.6	12.5	March 1982.....	0.7	82.2	15.8	12.6
March 1982.....	2.4	72.6	18.5	12.6	March 1985.....	0.5	82.4	16.7	12.8
March 1985.....	2.2	75.6	20.0	12.7	March 1986.....	0.9	84.3	16.3	12.8
March 1986.....	2.2	76.2	20.1	12.7	March 1987.....	1.1	84.1	16.9	12.8
March 1987.....	2.0	77.0	20.6	12.7	March 1988.....	1.2	82.0	16.1	12.6
March 1988.....	2.0	77.7	20.9	12.7					
March 1989.....	2.0	78.3	21.7	12.7					

<sup>1</sup> Estimates based on retrojection, by the Bureau of the Census, of 1940 census data on education by age.

<sup>2</sup> Persons of Hispanic origin are included, as appropriate, in the "white" or in the "black and other races" category.

NOTE.—Data for 1975 and subsequent years are for the noninstitutional population. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1980, Vol. 1 part 1; *Current Population Reports*, Series P-20; Series P-19, No. 4; 1960 Census Monograph, "Education of the American Population," by John K. Folger and Charles B. Nam; and U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1989," unpublished. (This table was prepared May 1990.)

**Table 9.—Years of school completed by persons <sup>1</sup> age 18 and over, by age, sex, and race/ethnicity: 1988**

[In thousands]

Age, sex, and race	Total population <sup>1</sup>	Elementary level		High school		College		
		Less than 6 years	6 years	1 to 3 years	4 years	1 to 3 years	4 years	5 years or more
1	2	3	4	5	6	7	8	9
<b>Total</b>								
18 and over.....	177,877	10,878	8,403	22,484	70,194	32,932	19,622	13,188
18 and 19 years old.....	7,221	88	132	2,610	3,453	935	3	—
20 to 24 years old.....	16,640	446	312	2,041	7,801	6,213	1,749	277
25 years old and over.....	151,616	10,341	7,959	17,813	58,940	25,784	17,870	12,911
25 to 29 years old.....	21,523	502	330	2,205	9,093	4,514	3,483	1,397
30 to 34 years old.....	21,446	635	288	1,677	8,796	4,554	3,345	1,951
35 to 39 years old.....	19,854	697	265	1,523	7,182	4,164	2,772	2,251
40 to 49 years old.....	28,604	1,203	735	2,854	11,345	5,291	3,636	3,571
50 to 59 years old.....	21,670	1,673	1,285	3,080	8,943	3,047	2,049	1,793
60 to 69 years old.....	20,595	2,212	1,668	3,309	6,039	2,475	1,499	1,174
70 years old and over.....	18,724	3,417	3,148	2,967	5,562	1,769	1,086	773
<b>Men</b>								
18 and over.....	84,776	5,429	3,824	10,724	31,143	15,439	10,311	7,905
18 and 19 years old.....	3,581	54	79	1,439	1,821	387	1	—
20 to 24 years old.....	9,254	250	145	1,067	3,648	2,999	766	159
25 years old and over.....	71,941	5,125	3,600	6,217	25,674	12,053	9,525	7,746
25 to 29 years old.....	10,669	266	154	1,190	4,375	2,166	1,733	784
30 to 34 years old.....	10,851	349	115	1,028	4,219	2,112	1,738	1,091
35 to 39 years old.....	9,321	372	147	705	3,266	2,045	1,497	1,299
40 to 49 years old.....	13,959	616	377	1,297	4,946	2,516	1,982	2,233
50 to 59 years old.....	10,485	881	688	1,318	3,757	1,481	1,160	1,199
60 to 69 years old.....	9,478	1,123	880	1,551	3,159	1,099	909	759
70 years old and over.....	7,377	1,496	1,239	1,139	1,952	654	486	410
<b>Women</b>								
18 and over.....	92,902	5,444	4,579	11,743	39,051	17,494	9,306	5,284
18 and 19 years old.....	3,640	34	53	1,171	1,632	549	1	—
20 to 24 years old.....	9,586	194	167	974	3,953	3,213	963	119
25 years old and over.....	79,676	5,216	4,359	9,597	33,266	13,731	8,345	5,185
25 to 29 years old.....	10,854	216	176	1,015	4,716	2,348	1,750	633
30 to 34 years old.....	10,795	266	173	849	4,577	2,442	1,607	860
35 to 39 years old.....	9,533	325	138	818	3,896	2,119	1,275	982
40 to 49 years old.....	14,845	585	358	1,567	6,399	2,745	1,854	1,336
50 to 59 years old.....	11,385	792	597	1,782	5,166	1,686	899	694
60 to 69 years old.....	11,117	1,089	1,006	1,758	4,680	1,376	590	415
70 years old and over.....	11,347	1,921	1,909	1,628	3,610	1,115	600	383
<b>White <sup>2</sup></b>								
18 and over.....	152,644	6,299	7,262	18,119	61,090	28,640	17,402	11,833
18 and 19 years old.....	5,927	72	95	2,036	2,905	817	3	—
20 to 24 years old.....	15,625	389	245	1,563	6,390	5,224	1,557	259
25 years old and over.....	131,091	7,839	6,923	14,520	51,795	22,599	15,842	11,574
25 to 29 years old.....	18,070	437	269	1,710	7,837	3,784	3,031	1,222
30 to 34 years old.....	18,076	531	236	1,431	7,415	3,857	2,922	1,686
35 to 39 years old.....	16,059	582	228	1,142	6,073	3,588	2,421	2,016
40 to 49 years old.....	24,683	942	595	2,240	9,857	4,624	3,197	3,228
50 to 59 years old.....	19,001	1,247	1,091	2,485	6,055	2,730	1,824	1,599
60 to 69 years old.....	18,308	1,550	1,617	2,830	7,485	2,350	1,413	1,065
70 years old and over.....	16,694	2,552	2,887	2,702	5,294	1,678	1,034	747
<b>Black <sup>2</sup></b>								
18 and over.....	19,549	2,067	961	3,877	7,541	3,173	1,227	702
18 and 19 years old.....	1,043	15	30	498	432	79	—	—
20 to 24 years old.....	2,576	49	61	424	1,195	712	125	9
25 years old and over.....	15,930	2,003	870	2,966	5,914	2,382	1,102	693
25 to 29 years old.....	2,701	26	48	444	1,279	573	254	78
30 to 34 years old.....	2,571	76	37	397	1,167	532	248	113
35 to 39 years old.....	2,122	71	38	336	931	432	196	119
40 to 49 years old.....	2,913	174	119	557	1,216	455	201	190
50 to 59 years old.....	2,250	345	165	561	708	234	120	118
60 to 69 years old.....	1,861	575	442	421	421	95	49	52
70 years old and over.....	1,512	736	236	229	194	61	34	23
<b>Hispanic origin <sup>3</sup></b>								
18 and over.....	12,605	3,067	803	2,108	3,854	1,698	702	373
18 and 19 years old.....	690	45	33	304	260	48	—	—
20 to 24 years old.....	1,975	247	86	389	760	390	68	12
25 years old and over.....	9,940	2,775	662	1,415	2,813	1,259	634	361
25 to 29 years old.....	2,044	327	90	353	701	342	165	65
30 to 34 years old.....	1,741	359	74	243	538	305	150	70
35 to 39 years old.....	1,553	372	71	217	495	229	97	73
40 to 49 years old.....	1,957	519	124	282	553	215	106	79
50 to 59 years old.....	1,322	496	132	180	297	98	70	50
60 to 69 years old.....	852	376	98	118	156	55	31	17
70 years old and over.....	571	324	93	42	74	18	15	8

<sup>1</sup> Civilian noninstitutional population.  
<sup>2</sup> Includes persons of Hispanic origin.  
<sup>3</sup> Persons of Hispanic origin may be of any race.  
 — Data not applicable or available.

tion, they are included in the table to permit various types of aggregations. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished data. (This table was prepared December 1988.)

NOTE.—Data are based on sample surveys of the noninstitutional population. Although cells with fewer than 75,000 people are subject to relatively wide sampling varia-

**Table 10.—Number of persons age 18 and over who hold a bachelor's or higher degree, by field of study, sex, race, and age: Spring 1984**

[Numbers in thousands]

Field of study	Total	Sex		Race		Age					
		Men	Women	White	Black	18 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old	65 years old and over
1	2	3	4	5	6	7	8	9	10	11	12
<b>Total population, 18 and over</b> .....	<b>170,232</b>	<b>80,834</b>	<b>89,398</b>	<b>147,147</b>	<b>18,475</b>	<b>28,484</b>	<b>40,474</b>	<b>30,480</b>	<b>22,264</b>	<b>22,060</b>	<b>26,458</b>
Number of persons with bachelor's or higher degree....	26,381	14,711	11,870	24,038	1,334	2,036	8,595	7,057	3,474	2,812	2,401
Percent of population.....	15.5	18.2	13.1	16.3	7.2	7.1	21.2	23.2	15.8	12.7	9.1
Agriculture and forestry .....	427	389	38	419	—	22	155	101	45	70	34
Biology .....	820	322	298	558	21	62	271	117	77	53	38
Business and management.....	4,482	3,348	1,118	4,058	238	504	1,490	1,303	581	385	198
Economics.....	462	391	71	403	23	43	150	118	72	53	24
Education .....	5,297	1,514	3,783	4,890	347	155	1,486	1,899	743	568	667
Engineering .....	2,178	2,000	178	1,952	72	286	591	477	322	317	182
English and journalism.....	1,029	408	623	975	35	97	285	213	148	145	144
Home economics .....	368	21	345	330	23	9	110	66	25	90	65
Law.....	828	777	151	860	45	24	273	335	139	93	64
Liberal arts and humanities.....	2,371	979	1,392	2,215	73	235	784	517	288	227	323
Mathematics and statistics.....	541	351	190	488	33	35	200	128	90	82	28
Medicine and dentistry.....	872	707	165	776	32	22	269	251	107	140	81
Nursing, pharmacy, and health technologies .....	1,151	184	957	997	57	79	433	281	168	110	78
Physical and earth sciences .....	741	553	188	669	17	60	235	189	113	66	78
Police science and law enforcement.....	154	113	41	140	14	15	59	71	—	10	—
Psychology .....	749	294	455	707	27	89	281	198	89	59	53
Religion and theology .....	467	402	85	445	18	17	114	77	103	59	96
Social sciences.....	1,764	840	924	1,560	156	134	731	486	143	158	113
Vocational and technical studies.....	157	142	15	138	15	13	69	26	21	18	10
Other fields.....	1,647	970	677	1,458	88	155	629	402	204	131	126

Percentage distribution of degree holders, by field

Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture and forestry .....	1.8	2.8	0.3	1.7	—	1.1	1.8	1.4	1.3	2.5	1.4
Biology .....	2.4	2.2	2.3	2.3	1.8	3.0	3.2	1.7	2.2	1.9	1.8
Business and management.....	18.9	22.7	9.8	18.9	17.8	24.8	17.3	18.5	16.7	13.7	8.2
Economics.....	1.8	2	0.8	1.7	1.7	2.1	1.7	1.7	2.1	1.9	1.0
Education .....	20.1	10.3	32.4	20.3	26.0	7.8	17.1	24.1	21.4	20.1	27.8
Engineering .....	8.2	13.8	1.5	8.1	5.4	14.0	8.9	8.8	9.3	11.3	7.8
English and journalism.....	3.9	2.8	5.3	4.1	2.8	4.8	3.3	3.0	4.2	5.2	6.0
Home economics .....	1.4	0.1	3.0	1.4	1.7	0.4	1.3	0.9	0.7	3.2	2.7
Law.....	3.5	5.3	1.3	3.8	3.4	1.2	3.2	4.7	4.0	3.3	2.7
Liberal arts and humanities.....	9.0	6.7	11.9	9.2	5.5	11.5	9.1	7.3	8.2	8.1	13.5
Mathematics and statistics.....	2.1	2.4	1.8	2.0	2.5	1.7	2.3	1.8	2.8	2.2	1.1
Medicine and dentistry .....	3.3	4.8	1.4	3.2	2.4	1.1	3.1	3.8	3.1	5.0	3.4
Nursing, pharmacy, and health technologies .....	4.4	1.3	8.2	4.1	4.3	3.9	5.0	4.0	4.8	3.9	3.2
Physical and earth sciences .....	2.8	3.8	1.8	2.8	1.3	2.9	2.7	2.7	3.3	2.3	3.2
Police science and law enforcement.....	0.8	0.8	0.4	0.8	1.0	0.7	0.7	1.0	—	0.4	—
Psychology .....	2.8	2.0	3.9	2.9	2.0	3.4	3.3	2.8	2.8	2.1	2.2
Religion and theology .....	1.8	2.7	0.8	1.9	1.3	0.8	1.3	1.1	3.0	2.1	4.0
Social sciences.....	8.7	5.7	7.9	8.5	11.7	8.8	8.5	8.9	4.1	5.8	4.7
Vocational and technical studies.....	0.8	1.0	0.1	0.6	1.1	0.8	0.8	0.4	0.8	0.6	0.4
Other fields.....	8.2	6.6	5.8	8.1	6.8	7.8	7.3	5.7	5.9	4.7	5.2

—Data not available or not applicable.

NOTE.—Data are based on sample surveys of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Series P-70, No. 11, "Educational Background and Economic Status: Spring 1984."* (This table was prepared October 1987.)

**Table 11.—Highest educational level and degree earned by persons age 18 and over, by sex, race, and age: Spring 1984**

[Numbers in thousands]

Sex, race, and age	Total	Not high school graduate	High school graduate only	Some college, no degree	Vocational	Associate degree	Bachelor's degree	Master's degree	Professional degree	Doctor's degree
1	2	3	4	5	6	7	8	9	10	11
<b>Total population, 18 and over</b> .....	<b>170,232</b>	<b>44,324</b>	<b>60,358</b>	<b>30,301</b>	<b>3,105</b>	<b>5,768</b>	<b>18,069</b>	<b>5,795</b>	<b>1,744</b>	<b>768</b>
Men .....	80,834	20,448	28,407	15,444	1,023	2,804	9,581	3,110	1,432	585
Women .....	89,398	23,876	33,951	14,857	2,082	2,964	8,488	2,685	312	183
<b>White, total</b> .....	<b>147,147</b>	<b>35,855</b>	<b>53,129</b>	<b>26,255</b>	<b>2,769</b>	<b>5,108</b>	<b>16,339</b>	<b>5,353</b>	<b>1,634</b>	<b>705</b>
Men .....	70,278	16,606	23,270	13,444	919	2,498	8,703	2,923	1,355	558
Women .....	76,871	19,249	29,859	12,811	1,850	2,610	7,636	2,430	279	147
<b>Black, total</b> .....	<b>18,475</b>	<b>7,133</b>	<b>6,043</b>	<b>3,229</b>	<b>254</b>	<b>482</b>	<b>963</b>	<b>286</b>	<b>53</b>	<b>32</b>
Men .....	8,274	3,263	2,569	1,589	70	197	416	101	35	14
Women .....	10,201	3,870	3,454	1,640	184	285	547	185	18	18
<b>Age</b>										
18 to 24 years old .....	28,494	5,346	11,048	8,898	389	978	1,968	63	—	5
25 to 34 years old .....	40,474	5,770	14,973	8,231	803	2,099	6,353	1,585	509	147
35 to 44 years old .....	30,480	5,067	10,883	5,428	678	1,366	4,318	1,947	538	255
45 to 54 years old .....	22,264	5,893	8,959	2,832	455	662	2,109	993	249	123
55 to 64 years old .....	22,060	7,977	7,789	2,875	385	422	1,750	681	256	125
65 years old and over .....	26,458	14,281	6,706	2,436	391	241	1,570	528	193	114

Percentage distribution, by highest degree earned

<b>Total population, 18 and over</b> .....	<b>100.0</b>	<b>26.0</b>	<b>35.5</b>	<b>17.8</b>	<b>1.8</b>	<b>3.4</b>	<b>10.6</b>	<b>3.4</b>	<b>1.0</b>	<b>0.5</b>
Men .....	100.0	25.3	32.7	19.1	1.3	3.5	11.9	3.8	1.8	0.7
Women .....	100.0	26.7	38.0	16.6	2.3	3.3	9.5	3.0	0.3	0.2
<b>White, total</b> .....	<b>100.0</b>	<b>24.4</b>	<b>36.1</b>	<b>17.8</b>	<b>1.9</b>	<b>3.5</b>	<b>11.1</b>	<b>3.6</b>	<b>1.1</b>	<b>0.5</b>
Men .....	100.0	23.6	33.1	19.1	1.3	3.8	12.4	4.2	1.9	0.8
Women .....	100.0	25.0	38.8	16.7	2.4	3.4	9.9	3.2	0.4	0.2
<b>Black, total</b> .....	<b>100.0</b>	<b>38.8</b>	<b>32.7</b>	<b>17.5</b>	<b>1.4</b>	<b>2.6</b>	<b>5.2</b>	<b>1.5</b>	<b>0.3</b>	<b>0.2</b>
Men .....	100.0	39.4	31.3	19.2	0.8	2.4	5.0	1.2	0.4	0.2
Women .....	100.0	37.9	33.9	16.1	1.8	2.8	5.4	1.8	0.2	0.2
<b>Age</b>										
18 to 24 years old .....	100.0	18.6	38.8	30.5	1.4	3.4	6.9	0.2	( <sup>1</sup> )	( <sup>1</sup> )
25 to 34 years old .....	100.0	14.3	37.0	20.3	2.0	5.2	15.7	3.9	1.3	0.4
35 to 44 years old .....	100.0	16.6	35.7	17.8	2.2	4.5	14.2	6.4	1.8	0.8
45 to 54 years old .....	100.0	26.4	40.2	12.7	2.0	3.0	9.5	4.5	1.1	0.6
55 to 64 years old .....	100.0	36.2	35.3	12.1	1.7	1.9	7.9	3.1	1.2	0.6
65 years old and over .....	100.0	54.0	25.3	9.2	1.5	0.8	5.9	2.0	0.7	0.4

<sup>1</sup> Less than .05 percent.

—Data not available or not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-70, No. 11, "Educational Background and Economic Status: Spring 1984." (This table was prepared October 1987.)

NOTE.—Data are based on sample surveys of the civilian noninstitutional population. Because of rounding, details may not add to totals.

Table 12.—Years of school completed by persons age 25 and over, by State: April 1980

State	Number of persons 25 years old and over (in thousands)	Percent of population completing at least—			
		High school		College	
		1 to 3 years	4 years	1 to 3 years	4 years or more
1	2	3	4	5	6
United States.....	132,836	81.7	66.5	31.9	16.2
Alabama.....	2,217	75.0	56.5	24.7	12.2
Alaska.....	211	91.0	82.5	43.7	21.1
Arizona.....	1,559	85.0	72.4	38.0	17.4
Arkansas.....	1,337	73.2	55.5	22.3	10.8
California.....	14,044	85.8	73.5	42.0	19.8
Colorado.....	1,664	89.4	78.8	44.1	23.0
Connecticut.....	1,900	83.7	70.3	35.9	20.7
Delaware.....	345	85.2	68.8	32.4	17.5
District of Columbia.....	399	83.0	67.1	41.5	27.5
Florida.....	6,250	82.4	66.7	31.8	14.9
Georgia.....	3,086	78.3	56.4	27.9	14.8
Hawaii.....	548	83.8	73.8	38.8	20.3
Idaho.....	514	87.4	73.7	37.2	15.8
Illinois.....	8,879	81.5	66.5	31.4	16.2
Indiana.....	3,136	83.4	66.4	24.8	12.5
Iowa.....	1,700	83.3	71.5	28.6	13.9
Kansas.....	1,388	85.4	73.3	34.2	17.0
Kentucky.....	2,087	68.7	53.1	21.8	11.1
Louisiana.....	2,281	75.1	57.7	26.7	13.9
Maine.....	662	83.4	68.7	29.4	14.4
Maryland.....	2,499	83.5	67.4	34.9	20.4
Massachusetts.....	3,463	85.6	72.2	35.8	20.0
Michigan.....	5,254	84.9	68.0	30.0	14.3
Minnesota.....	2,348	83.3	73.1	34.5	17.4
Mississippi.....	1,368	73.0	54.8	25.6	12.3
Missouri.....	2,919	78.3	63.5	27.2	13.9
Montana.....	451	85.7	74.4	36.5	17.5
Nebraska.....	912	84.9	73.4	32.8	15.5
Nevada.....	480	90.4	75.5	35.1	14.4
New Hampshire.....	542	85.3	72.3	35.1	16.2
New Jersey.....	4,504	82.3	67.4	31.5	16.3
New Mexico.....	707	82.3	68.9	34.7	17.6
New York.....	10,721	81.7	66.3	32.2	17.9
North Carolina.....	3,403	75.4	54.8	27.0	13.2
North Dakota.....	365	75.2	66.4	35.1	14.6
Ohio.....	8,292	84.6	67.0	28.5	13.7
Oklahoma.....	1,770	81.8	66.0	31.2	15.1
Oregon.....	1,580	88.5	75.8	38.5	17.9
Pennsylvania.....	7,240	81.6	64.7	24.3	13.6
Rhode Island.....	575	79.3	61.1	28.3	15.4
South Carolina.....	1,733	74.3	53.7	26.7	13.4
South Dakota.....	390	78.0	67.9	31.7	14.0
Tennessee.....	2,892	72.3	56.2	24.5	12.6
Texas.....	7,944	79.3	62.6	33.8	16.9
Utah.....	705	93.0	80.0	44.1	19.9
Vermont.....	295	83.3	71.0	34.7	19.0
Virginia.....	3,133	78.4	62.4	34.0	19.1
Washington.....	2,439	89.7	77.6	40.2	19.0
West Virginia.....	1,147	72.0	56.0	20.4	10.4
Wisconsin.....	2,705	82.0	69.6	29.2	14.8
Wyoming.....	255	90.0	77.9	37.9	17.2

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1986*. (This table was prepared September 1986.)

**Table 13.—Years of school completed by persons age 25 and over in the 15 largest States and the 15 largest metropolitan areas: March 1987**

State	Percent completing—			Metropolitan area <sup>1</sup>	Percent completing—		
	Less than 4 years of high school	4 years of high school or more	4 years of college or more		Less than 4 years of high school	4 years of high school or more	4 years of college or more
1	2	3	4	5	6	7	8
United States <sup>2</sup> .....	24.4	75.8	19.9				
California.....	21.1	78.9	23.5	Atlanta, Georgia.....	20.3	79.7	26.9
Florida.....	22.9	77.1	19.7	Baltimore, Maryland.....	27.5	72.5	20.7
Georgia.....	28.8	71.2	19.1	Boston, Massachusetts.....	16.0	84.0	33.2
Illinois.....	23.8	78.4	20.2	Chicago, Illinois.....	22.8	77.2	24.2
Indiana.....	24.0	78.0	13.3	Dallas, Texas.....	18.8	81.2	28.0
Massachusetts.....	19.8	80.4	26.5	Detroit, Michigan.....	26.5	73.5	17.8
Michigan.....	24.5	75.5	18.5	Houston, Texas.....	20.4	79.6	32.4
Missouri.....	21.9	78.1	17.9	Los Angeles/Long Beach, California.....	25.0	75.0	21.4
New Jersey.....	23.1	78.9	23.3	Minneapolis/St. Paul, Minnesota.....	12.9	87.1	25.7
New York.....	25.0	75.0	23.2	Nassau/Suffolk, New York.....	15.2	84.8	27.3
North Carolina.....	32.2	67.8	18.6	New York, New York.....	29.7	70.3	25.0
Ohio.....	24.4	75.6	15.0	Philadelphia, Pennsylvania.....	23.2	73.8	20.0
Pennsylvania.....	24.5	75.5	17.2	Pittsburgh, Pennsylvania.....	22.9	77.1	14.8
Texas.....	28.0	72.0	19.8	St. Louis, MO/IL.....	20.2	79.8	21.7
Virginia.....	27.7	72.3	23.5	Washington, DC/MD/VA.....	12.0	88.0	37.5

<sup>1</sup> Standard Metropolitan Statistical Area.

<sup>2</sup> Includes data for all States and the District of Columbia.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Series P-20, No. 426, "Educational Attainment in the United States: March 1987 and 1986."* (This table was prepared October 1988.)

**Table 14.—Estimates of resident population, by age group: July 1, 1960 to July 1, 1988**

[In thousands]

Year	Total, all ages	Total, 3 to 34 years	3 and 4 years	5 and 6 years	7 to 13 years	14 to 17 years	18 and 19 years	20 and 21 years	22 to 24 years	25 to 29 years	30 to 34 years
1	2	3	4	5	6	7	8	9	10	11	12
1960.....	179,979	90,722	8,083	7,811	25,155	11,211	4,886	4,443	6,425	10,823	11,905
1961.....	182,992	92,597	8,207	7,924	25,293	12,046	5,411	4,635	6,587	10,756	11,738
1962.....	185,771	94,398	8,190	8,108	25,790	12,751	5,617	4,943	6,710	10,740	11,547
1963.....	188,483	96,275	8,152	8,251	26,328	13,492	5,461	5,467	6,930	10,848	11,348
1964.....	191,141	98,281	8,208	8,233	27,011	14,284	5,429	5,665	7,258	11,051	11,144
1965.....	193,526	100,210	8,190	8,190	27,563	14,148	6,450	5,503	7,902	11,226	11,040
1966.....	195,578	101,993	8,031	8,251	28,032	14,398	7,183	5,417	8,196	11,521	10,982
1967.....	197,457	103,635	7,888	8,237	28,392	14,727	8,928	6,289	8,278	11,943	10,953
1968.....	199,399	105,363	7,645	8,074	28,732	15,170	6,988	6,972	8,062	12,624	11,076
1969.....	201,385	106,931	7,253	7,930	28,907	15,549	7,119	6,787	8,960	13,119	11,297
1970.....	203,984	108,653	8,982	7,703	28,969	15,921	7,410	6,850	9,728	13,604	11,506
1971.....	206,827	110,482	8,805	7,344	28,892	16,326	7,644	7,106	10,596	13,927	11,842
1972.....	209,284	112,287	8,789	7,051	28,628	16,637	7,854	7,447	10,418	15,142	12,321
1973.....	211,357	113,954	8,938	8,888	28,159	16,864	8,044	7,658	10,815	15,664	13,094
1974.....	213,342	115,641	7,117	8,864	27,599	17,033	8,196	7,893	10,864	16,428	13,644
1975.....	215,465	117,008	8,912	7,014	28,904	17,125	8,418	8,069	11,228	17,183	14,131
1976.....	217,563	118,073	8,437	7,194	28,321	17,117	8,604	8,240	11,554	18,177	14,428
1977.....	219,760	118,853	8,190	8,978	25,878	17,042	8,813	8,456	11,856	18,180	15,661
1978.....	222,095	119,414	8,208	8,499	25,593	18,944	8,817	8,628	12,120	18,585	16,216
1979.....	224,567	120,128	8,252	8,258	25,174	18,810	8,698	8,653	12,443	19,077	16,961
1980.....	227,255	121,148	8,389	6,293	24,803	18,140	8,713	8,664	12,716	19,697	17,754
1981.....	229,637	122,057	6,551	6,327	24,428	15,598	8,553	8,723	12,992	20,200	18,786
1982.....	231,998	121,917	8,689	6,429	24,184	15,041	8,425	8,700	12,867	20,753	18,806
1983.....	234,284	122,180	8,924	6,606	23,803	14,720	8,204	8,551	12,938	21,202	19,211
1984.....	236,477	122,428	7,108	8,742	23,495	14,704	7,818	8,424	12,903	21,535	19,666
1985.....	238,736	122,714	7,212	8,978	23,135	14,865	7,500	8,186	12,814	21,756	20,269
1986.....	241,107	122,934	7,275	7,160	23,190	14,797	7,322	7,808	12,603	22,005	20,773
1987.....	243,419	122,937	7,228	7,263	23,580	14,467	7,315	7,491	12,300	21,979	21,333
1988.....	245,807	123,009	7,282	7,331	24,075	13,982	7,480	7,319	11,665	21,877	21,796

NOTE.—Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Series P-26, No. 519, No. 917, No. 1003, No. 1022 and No. 1045.* (This table was prepared March 1990.)

Table 15.—Estimates of school-age<sup>1</sup> resident population, by race and sex: July 1, 1960 to July 1, 1988

[In thousands]

Year	Total			White <sup>2</sup>			Black <sup>2</sup>			Other races <sup>2</sup>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
1960.....	44,176	22,437	21,739	36,306	19,532	16,832	5,368	2,677	2,890	446	228	217
1961.....	45,263	22,995	22,269	39,220	19,975	19,246	5,575	2,782	2,792	489	238	232
1962.....	46,648	23,706	22,941	40,352	20,580	19,791	5,802	2,897	2,906	496	251	244
1963.....	48,070	24,438	23,633	41,524	21,164	20,361	6,025	3,009	3,016	520	264	257
1964.....	49,509	25,174	24,336	42,692	21,765	20,929	6,272	3,135	3,137	545	275	270
1965.....	49,900	25,377	24,522	42,891	21,872	21,019	6,440	3,220	3,221	567	285	281
1966.....	50,681	25,784	24,898	43,489	22,176	21,293	6,619	3,306	3,311	584	300	295
1967.....	51,357	26,135	25,224	43,969	22,438	21,529	6,768	3,383	3,384	622	314	310
1968.....	51,974	26,456	25,517	44,422	22,677	21,744	6,903	3,453	3,450	649	325	323
1969.....	52,386	26,675	25,711	44,697	22,826	21,871	7,018	3,511	3,505	673	338	336
1970.....	52,593	26,793	25,801	44,783	22,877	21,906	7,108	3,561	3,547	703	355	349
1971.....	52,562	26,790	25,782	44,644	22,809	21,834	7,182	3,600	3,583	737	371	365
1972.....	52,316	26,658	25,658	44,336	22,655	21,681	7,211	3,615	3,596	768	388	380
1973.....	51,910	26,456	25,455	43,898	22,434	21,464	7,213	3,617	3,596	799	405	394
1974.....	51,498	26,249	25,249	43,454	22,210	21,244	7,213	3,618	3,596	830	420	409
1975.....	51,044	26,022	25,022	42,950	21,956	20,994	7,199	3,611	3,588	895	456	440
1976.....	50,633	25,822	24,811	42,477	21,721	20,755	7,208	3,617	3,591	948	483	465
1977.....	49,897	25,456	24,441	41,737	21,350	20,386	7,187	3,600	3,568	994	506	467
1978.....	49,038	25,024	24,013	40,883	20,919	19,964	7,118	3,576	3,540	1,039	530	509
1979.....	48,041	24,524	23,517	39,910	20,427	19,484	7,037	3,538	3,498	1,094	560	536
1980.....	47,235	24,138	23,098	39,001	19,981	19,021	6,996	3,524	3,473	1,238	633	605
1981.....	46,352	23,695	22,658	38,118	19,532	18,566	6,924	3,491	3,433	1,309	671	636
1982.....	45,655	23,347	22,308	37,400	19,169	18,232	6,879	3,473	1,123	1,374	706	669
1983.....	45,130	23,069	22,041	36,859	18,899	17,960	6,841	3,457	3,385	1,430	733	697
1984.....	44,942	23,000	21,942	36,597	18,770	17,827	6,848	3,463	3,384	1,498	787	731
1985.....	44,975	23,026	21,949	36,503	18,727	17,776	6,898	3,492	3,405	1,575	806	769
1986.....	45,148	23,120	22,028	36,531	18,746	17,786	6,957	3,527	3,430	1,660	846	812
1987.....	45,291	23,196	22,093	36,530	18,747	17,781	7,023	3,564	3,460	1,740	887	852
1988.....	45,388	23,253	22,135	36,475	18,722	17,752	7,091	3,601	3,490	1,823	929	894

<sup>1</sup> Includes persons 5 to 17 years of age.<sup>2</sup> Includes persons of Hispanic origin.

NOTE.—Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, No. 519, No. 917, No. 1000, No. 1022 and No. 1045. (This table was prepared March 1990.)

Table 16.—Estimated total and school-age populations, by State<sup>1</sup>: 1970 to 1988

[In thousands]

State	1970 <sup>2</sup>		1980 <sup>3</sup>		1985 <sup>3</sup>		1986 <sup>3</sup>		1987 <sup>3</sup>		1988 <sup>3</sup>	
	Total, all ages	5- to 17-year-olds										
1	2	3	4	5	6	7	8	9	10	11	12	13
United States .....	203,302	52,540	226,546	47,407	238,736	44,975	241,107	45,148	243,419	45,291	245,807	45,389
Alabama .....	3,444	934	3,894	868	4,021	815	4,051	820	4,084	821	4,102	819
Alaska .....	303	88	402	92	521	108	531	111	524	111	524	110
Arizona .....	1,775	468	2,718	578	3,181	604	3,280	620	3,400	643	3,489	653
Arkansas .....	1,923	498	2,286	496	2,380	472	2,371	472	2,388	475	2,395	476
California .....	3,971	4,999	23,668	4,681	28,353	4,754	26,997	4,675	27,853	4,999	28,314	5,113
Colorado .....	2,210	589	2,890	592	3,232	584	3,265	599	3,293	605	3,301	605
Connecticut .....	3,032	768	3,108	838	3,175	554	3,194	549	3,212	543	3,233	538
Delaware .....	548	148	594	125	626	118	637	117	648	118	660	116
District of Columbia .....	757	164	636	109	623	90	625	91	621	90	617	91
Florida .....	6,791	1,609	9,748	1,789	11,387	1,802	11,688	1,849	12,022	1,892	12,335	1,947
Georgia .....	4,588	1,223	5,463	1,231	5,975	1,224	6,101	1,245	6,227	1,261	6,342	1,280
Hawaii .....	770	204	965	198	1,050	195	1,065	196	1,082	197	1,098	198
Idaho .....	713	200	944	213	1,005	223	1,003	223	1,000	223	1,003	223
Illinois .....	11,110	2,859	11,427	2,401	11,539	2,192	11,553	2,168	11,584	2,174	11,614	2,144
Indiana .....	5,195	1,386	5,490	1,200	5,500	1,093	5,503	1,084	5,530	1,080	5,556	1,072
Iowa .....	2,925	743	2,914	604	2,873	545	2,840	534	2,823	526	2,834	523
Kansas .....	2,249	573	2,364	468	2,448	451	2,459	453	2,475	458	2,495	462
Kentucky .....	3,221	844	3,661	900	3,724	750	3,722	745	3,723	738	3,727	728
Louisiana .....	3,645	1,041	4,206	969	4,484	940	4,497	941	4,448	931	4,408	924
Maine .....	984	260	1,125	243	1,164	221	1,171	219	1,186	219	1,205	220
Maryland .....	3,924	1,038	4,217	895	4,391	791	4,461	768	4,538	791	4,622	801
Massachusetts .....	5,689	1,407	5,737	1,153	5,823	978	5,835	960	5,856	947	5,889	932
Michigan .....	8,982	2,450	9,262	2,067	9,088	1,826	9,143	1,810	9,205	1,795	9,240	1,776
Minnesota .....	3,206	1,051	4,076	865	4,191	789	4,213	786	4,244	788	4,307	795
Mississippi .....	2,217	635	2,521	599	2,813	582	2,824	584	2,824	580	2,820	574
Missouri .....	4,878	1,183	4,917	1,008	5,036	938	5,066	939	5,107	942	5,141	942
Montana .....	684	177	787	167	825	164	817	182	809	160	805	159
Nebraska .....	1,485	389	1,570	324	1,605	303	1,598	303	1,584	302	1,602	303
Nevada .....	489	127	600	160	639	166	666	189	1,006	175	1,054	184
New Hampshire .....	738	189	921	196	998	134	1,027	187	1,056	190	1,085	184
New Jersey .....	7,171	1,797	7,385	1,528	7,568	1,347	7,825	1,332	7,874	1,318	7,721	1,302
New Mexico .....	1,017	311	1,303	303	1,450	303	1,477	308	1,486	312	1,507	315
New York .....	18,241	4,358	17,558	3,552	17,787	3,184	17,805	3,147	17,835	3,112	17,909	3,081
North Carolina .....	5,084	1,323	5,882	1,254	6,258	1,191	6,327	1,192	6,409	1,189	6,489	1,187
North Dakota .....	818	175	853	138	885	133	876	132	871	132	867	131
Ohio .....	10,657	2,820	10,798	2,307	10,774	2,095	10,778	2,076	10,818	2,064	10,855	2,049
Oklahoma .....	2,559	640	3,025	622	3,302	628	3,300	632	3,259	627	3,242	635
Oregon .....	2,092	534	2,633	525	2,688	499	2,703	498	2,723	496	2,767	496
Pennsylvania .....	11,801	2,925	11,864	2,378	11,865	2,097	11,895	2,082	11,942	2,068	12,001	2,057
Rhode Island .....	950	225	947	186	967	185	975	184	988	184	993	184
South Carolina .....	2,591	720	3,122	703	3,333	677	3,381	682	3,425	685	3,470	680
South Dakota .....	666	187	891	147	708	137	708	138	709	138	713	140
Tennessee .....	3,926	1,002	4,591	972	4,766	922	4,800	923	4,855	923	4,895	921
Texas .....	11,199	3,002	14,229	3,137	16,382	3,382	16,682	3,440	16,781	3,488	16,841	3,498
Utah .....	1,059	312	1,461	350	1,644	419	1,664	431	1,680	445	1,690	452
Vermont .....	445	118	511	109	535	101	540	100	547	101	557	101
Virginia .....	4,651	1,197	5,347	1,114	5,704	1,030	5,798	1,031	5,914	1,039	6,015	1,040
Washington .....	3,413	881	4,132	826	4,407	813	4,481	817	4,542	827	4,648	842
West Virginia .....	1,744	442	1,950	414	1,936	388	1,917	382	1,898	373	1,878	364
Wisconsin .....	4,418	1,203	4,706	1,011	4,775	917	4,784	914	4,807	913	4,855	916
Wyoming .....	332	92	470	101	509	106	507	107	490	105	479	102

<sup>1</sup> Beginning in 1980, includes Armed Forces residing in each State.<sup>2</sup> As of April 1.<sup>3</sup> Estimates as of July 1.

NOTE.—Because of rounding, details may not add to totals. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Population Estimates*, unpublished tabulations. (This table was prepared April 1990.)

Table 17.—Families, by family status and presence of own children under 18: 1970 to 1988

Family status	1970	1980	1985	1986	1987	1988	Change, 1970 to 1980	Change, 1980 to 1988
1	2	3	4	5	6	7	8	9
In thousands							Percent change	
All families.....	51,456	59,550	62,706	63,558	64,491	65,133	15.7	9.4
Married-couple family.....	44,728	49,112	50,350	50,933	51,537	51,809	9.8	5.5
No own children under 18.....	19,196	24,151	26,140	26,304	26,892	27,209	25.0	12.7
With own children under 18.....	25,532	24,961	24,210	24,630	24,645	24,600	-2.2	-1.4
One own child under 18.....	8,163	9,671	9,640	9,658	10,032	9,904	18.5	2.4
Two own children under 18.....	8,045	9,488	9,456	9,580	9,606	9,576	17.9	0.9
Three or more own children under 18.....	9,325	5,802	5,115	5,182	5,006	5,120	-37.8	-11.6
Other family, male householder, no spouse present.....	1,228	1,733	2,228	2,414	2,510	2,715	41.1	56.7
No own children under 18.....	887	1,117	1,331	1,479	1,554	1,669	25.9	49.4
With own children under 18.....	341	616	896	935	955	1,047	80.6	70.0
One own child under 18.....	179	374	584	600	608	657	108.9	75.7
Two own children under 18.....	87	165	213	260	257	296	89.7	79.4
Three or more own children under 18.....	75	77	100	75	90	94	2.7	22.1
Other family, female householder, no spouse present.....	5,500	8,705	10,129	10,211	10,445	10,608	56.3	21.9
No own children under 18.....	2,642	3,261	4,123	4,108	4,147	4,335	23.4	32.9
With own children under 18.....	2,858	5,445	6,006	6,105	6,297	6,273	60.5	15.2
One own child under 18.....	1,008	2,398	2,895	2,857	3,079	3,017	137.9	25.6
Two own children under 18.....	810	1,817	1,977	2,081	2,072	2,039	124.3	12.2
Three or more own children under 18.....	1,040	1,230	1,144	1,186	1,147	1,217	18.3	-1.1
Percent of all families							Change in percentage points	
All families.....	100.0	100.0	100.0	100.0	100.0	100.0	—	—
Married-couple family.....	86.9	82.5	80.3	80.1	79.9	79.5	-4.5	-2.9
No own children under 18.....	37.3	40.6	41.7	41.4	41.7	41.8	3.3	1.2
With own children under 18.....	49.6	41.9	38.6	38.8	38.2	37.6	-7.7	-4.1
One own child under 18.....	15.9	16.2	15.4	15.5	15.6	15.2	0.4	-1.0
Two own children under 18.....	15.6	15.9	15.1	15.1	14.9	14.7	0.3	-1.2
Three or more own children under 18.....	18.1	9.7	8.2	8.2	7.8	7.9	-8.4	-1.9
Other family, male householder, no spouse present <sup>1</sup> .....	2.4	2.9	3.6	3.8	3.9	4.2	0.5	1.3
No own children under 18.....	1.7	1.9	2.1	2.3	2.4	2.6	0.2	0.7
With own children under 18.....	0.7	1.0	1.4	1.5	1.5	1.6	0.4	0.6
One own child under 18.....	0.3	0.8	0.9	0.9	0.9	1.0	0.3	0.4
Two own children under 18.....	0.2	0.3	0.3	0.4	0.4	0.5	0.1	0.2
Three or more own children under 18.....	0.1	0.1	0.2	0.1	0.1	0.1	( <sup>1</sup> )	( <sup>1</sup> )
Other family, female householder, no spouse present.....	10.7	14.6	16.2	16.1	16.2	16.3	3.9	1.7
No own children under 18.....	5.1	5.5	6.8	6.5	6.4	6.7	0.3	1.2
With own children under 18.....	5.6	9.1	9.8	9.6	9.8	9.6	3.6	0.5
One own child under 18.....	2.0	4.0	4.6	4.5	4.6	4.6	2.1	0.6
Two own children under 18.....	1.6	3.1	3.2	3.2	3.2	3.1	1.5	0.1
Three or more own children under 18.....	2.0	2.1	1.8	1.9	1.8	1.9	( <sup>1</sup> )	-0.2

<sup>1</sup> Less than .05 percent.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 411, 419, 424, and 432. (This table was prepared December 1988.)

Table 18.—Characteristics of families with own children under 18, by family status and race/ethnicity: 1988

(In thousands)

Family characteristics	All races				White <sup>2</sup>				Black <sup>2</sup>				Hispanic origin <sup>3</sup>			
	Total	Married-couple families	Other families:		Total	Married-couple families	Other families:		Total	Married-couple families	Other families:		Total	Married-couple families	Other families:	
			Male householder, no spouse present	Female householder, no spouse present			Male householder, no spouse present	Female householder, no spouse present			Male householder, no spouse present	Female householder, no spouse present			Male householder, no spouse present	Female householder, no spouse present
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total families.....	65,133	51,809	2,715	10,608	56,044	46,644	2,165	7,235	7,177	3,692	421	3,074	4,588	3,204	312	1,072
Total families with own children under 18.....	31,920	24,600	1,047	6,273	26,616	21,699	652	4,066	4,195	2,016	160	2,020	2,991	2,123	114	754
Percent of all families.....	49.0	47.5	38.8	59.1	47.5	46.5	39.4	56.2	58.5	54.8	36.0	65.7	65.2	66.3	36.5	70.3
Families with—																
1 child under 18.....	13,578	9,904	657	3,017	11,299	6,708	527	2,063	1,803	836	104	863	1,047	690	71	286
2 children under 18.....	11,911	9,576	296	2,039	10,217	6,603	249	1,365	1,338	675	41	622	1,080	793	26	261
3 children under 18.....	4,581	3,682	75	824	3,728	3,205	59	464	655	319	13	323	557	420	17	121
4 children under 18.....	1,304	1,021	13	270	973	839	13	120	273	130	—	143	196	143	1	59
5 children under 18.....	342	257	4	61	262	216	4	40	69	26	—	41	74	50	—	24
6 or more under 18.....	204	160	2	42	139	125	—	14	57	26	1	28	37	27	—	9
Total own children under 18.....	57,824	45,342	1,576	10,906	48,000	39,915	1,280	6,805	7,780	3,744	250	3,785	6,254	4,516	180	1,557
Average number of children per family with children.....	1.81	1.84	1.51	1.74	1.80	1.84	1.50	1.67	1.85	1.86	1.57	1.67	2.09	2.13	1.59	2.06
Total families with own children under 6.....	14,856	11,915	347	2,394	12,247	10,486	274	1,486	1,881	972	66	843	1,811	1,198	52	361
Percent of all families.....	22.5	23.0	12.6	22.8	21.9	22.5	12.7	20.5	26.2	26.4	15.7	27.4	35.1	37.4	16.7	33.7
Families with—																
1 child under 6.....	8,948	7,975	269	1,704	6,910	6,987	210	1,113	1,260	660	52	548	1,090	610	38	242
2 children under 6.....	3,949	3,340	62	547	3,332	2,984	52	295	497	253	10	235	410	311	6	91
3 children under 6.....	650	516	15	116	541	466	11	63	67	35	4	48	93	68	6	20
4 or more under 6.....	109	82	1	27	65	50	1	15	37	24	—	12	16	9	1	6
Total own children under 6.....	19,656	16,106	454	3,096	16,557	14,275	358	1,924	2,400	1,229	69	1,083	2,298	1,694	77	526
Average number of children per family with children.....	1.34	1.35	1.31	1.29	1.35	1.36	1.31	1.29	1.28	1.26	—	1.28	1.43	1.41	—	1.46
Total families with own children under 3.....	6,691	7,251	199	1,241	7,276	6,374	151	750	1,098	596	41	461	304	667	33	204
Percent of all families.....	13.3	14.0	7.3	11.7	13.0	13.7	7.0	10.4	15.3	16.2	9.7	15.0	19.7	20.6	10.8	19.0
Families with—																
1 child under 3.....	7,523	6,303	171	1,048	6,312	5,534	131	647	931	516	34	361	751	551	26	175
2 children under 3.....	1,098	896	25	177	919	803	16	98	150	72	6	72	134	103	5	27
3 or more under 3.....	70	52	3	15	45	37	2	6	17	6	1	6	19	14	2	3
Total own children under 3.....	9,779	6,151	241	1,387	6,264	7,223	161	860	1,157	614	53	469	1,108	620	45	243
Average number of children per family with children.....	1.13	1.12	1.21	1.12	1.14	1.13	1.19	1.15	1.05	1.02	—	1.06	1.23	1.23	—	1.19

<sup>1</sup> Race of family is defined as race of head of household.<sup>2</sup> Includes persons of Hispanic origin.<sup>3</sup> Persons of Hispanic origin may be of any race.

—Data not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 437. (This table was prepared November 1989.)

NOTE.—Averages and percents are only shown when the base is 75,000 or greater. Even though the standard errors are large, smaller estimated numbers are shown to permit users to combine categories in various ways. Because of rounding, details may not add to totals.

Table 19.—Poverty status of persons, families, and children under 18, by race/ethnicity: 1959 to 1988

Year and race/ ethnicity	Number below the poverty level, in thousands						Percent below the poverty level					
	All persons	In all families			In families with female householder, no husband present		All persons	In all families			In families with female householder, no husband present	
		Total	House- holder	Related children under 18	Total	Related children under 18		Total	House- holder	Related children under 18	Total	Related children under 18
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>All races</b>												
1959.....	39,490	34,562	8,320	17,208	7,014	4,145	22.4	20.8	18.5	28.9	49.4	72.2
1960.....	39,851	34,925	8,243	17,288	7,247	4,095	22.2	20.7	18.1	28.5	48.9	68.4
1965.....	33,185	28,358	8,721	14,398	7,524	4,562	17.3	15.8	13.9	20.7	48.0	64.2
1966.....	28,510	23,809	5,784	12,148	6,861	4,262	14.7	13.1	11.8	17.4	39.8	58.2
1970.....	25,420	20,330	5,260	10,235	7,503	4,689	12.8	10.9	10.1	14.9	38.1	53.0
1971.....	25,559	20,405	5,303	10,344	7,787	4,850	12.5	10.8	10.0	15.1	38.7	53.1
1972.....	24,480	19,577	5,075	10,082	8,114	5,094	11.9	10.3	9.3	14.9	38.2	53.1
1973.....	22,973	18,289	4,828	9,453	8,178	5,171	11.1	9.7	8.8	14.2	37.5	52.1
1974.....	23,370	18,917	4,922	9,967	8,462	5,381	11.2	9.9	8.8	15.1	38.5	51.5
1975.....	25,877	20,789	5,450	10,882	8,846	5,597	12.3	10.9	9.7	18.8	37.5	52.7
1976.....	24,675	19,832	5,311	10,081	9,029	5,583	11.8	10.3	9.4	15.8	37.3	52.0
1977.....	24,720	19,505	5,311	10,028	9,205	5,858	11.8	10.2	9.3	18.0	38.2	50.3
1978.....	24,497	19,082	5,280	9,722	9,269	5,687	11.4	10.0	9.1	15.7	35.8	50.8
1979.....	26,072	19,984	5,481	9,993	9,400	5,835	11.7	10.2	9.2	18.0	34.9	48.6
1980.....	29,272	22,601	6,217	11,114	10,120	5,868	13.0	11.5	10.3	17.9	36.7	50.8
1981.....	31,822	24,850	6,851	12,068	11,051	6,305	14.0	12.5	11.2	19.5	38.7	52.3
1982.....	34,398	27,349	7,512	13,139	11,701	6,896	15.0	13.8	12.2	21.3	40.8	56.0
1983.....	35,303	27,933	7,847	13,427	12,072	6,747	15.2	13.9	12.3	21.8	40.2	55.4
1984.....	33,700	26,458	7,277	12,929	11,831	6,772	14.4	13.1	11.8	21.0	38.4	54.0
1985.....	33,084	25,729	7,223	12,483	11,600	6,718	14.0	12.8	11.4	20.1	37.8	53.8
1986.....	32,370	24,754	7,023	12,257	11,944	6,943	13.8	12.0	10.9	19.8	38.3	54.4
1987.....	32,341	24,840	7,005	12,391	12,278	7,074	13.4	12.0	10.7	19.9	38.3	54.7
1988.....	31,878	24,173	6,878	12,058	12,103	—	13.1	11.6	10.4	19.2	37.4	—
<b>White<sup>1</sup></b>												
1960.....	28,309	24,262	8,115	11,229	4,286	2,357	17.8	18.2	14.9	20.0	39.0	59.9
1965.....	22,486	18,508	4,824	8,595	4,092	2,321	13.3	11.7	11.1	14.4	35.4	52.9
1970.....	17,484	13,323	3,708	6,138	3,781	2,247	9.9	8.1	8.0	10.5	28.4	43.1
1975.....	17,770	13,799	3,838	6,748	4,577	2,813	9.7	8.3	7.7	12.5	29.4	44.2
1980.....	19,899	14,587	4,195	8,817	4,940	2,813	10.2	8.8	8.0	13.4	28.0	41.8
1981.....	21,553	16,127	4,870	7,429	5,600	3,120	11.1	9.5	8.8	14.7	29.8	42.8
1982.....	23,517	18,015	5,118	8,292	5,888	3,249	12.0	10.8	9.8	18.5	30.9	48.5
1983.....	23,984	18,377	5,220	8,534	6,017	3,388	12.1	10.7	9.7	17.0	31.2	47.1
1984.....	22,955	17,299	4,925	8,088	5,868	3,377	11.5	10.1	9.1	18.1	29.7	45.9
1985.....	22,860	17,125	4,983	7,838	5,990	3,372	11.4	9.9	9.1	15.8	29.8	45.2
1986.....	22,183	16,393	4,811	7,714	6,171	3,522	11.0	9.4	8.8	15.3	30.8	46.3
1987.....	21,249	15,643	4,567	7,448	6,041	3,474	10.4	8.9	8.1	14.8	29.7	45.8
1988.....	20,786	15,045	4,471	7,140	6,005	—	10.1	8.8	7.9	14.1	28.3	—
<b>Black<sup>1</sup></b>												
1959.....	9,927	9,112	1,880	5,022	2,418	1,475	55.1	54.9	48.1	65.5	70.8	81.8
1966.....	8,867	8,090	1,820	4,774	3,160	2,107	41.8	40.9	35.5	50.8	65.3	76.6
1970.....	7,548	6,683	1,481	3,922	3,656	2,383	33.5	32.2	29.5	41.5	58.7	67.7
1975.....	7,545	6,533	1,513	3,884	4,168	2,724	31.3	30.1	27.1	41.4	54.3	66.0
1980.....	8,579	7,190	1,828	3,906	4,984	2,944	32.5	31.1	28.9	42.1	53.4	64.8
1981.....	9,173	7,780	1,972	4,170	5,222	3,051	34.2	33.2	30.8	44.9	56.7	67.7
1982.....	9,897	8,355	2,158	4,388	5,898	3,289	35.8	34.9	33.0	47.3	58.8	70.7
1983.....	9,882	8,376	2,181	4,273	5,736	3,187	35.7	34.7	32.3	48.2	57.0	68.3
1984.....	9,490	8,104	2,094	4,320	5,666	3,234	33.8	33.2	30.9	48.2	54.8	66.2
1985.....	8,926	7,504	1,983	4,057	5,342	3,181	31.3	30.5	28.7	43.1	53.2	66.9
1986.....	8,983	7,401	1,987	4,037	5,473	3,251	31.1	29.7	28.0	42.7	53.8	67.1
1987.....	9,577	7,901	2,117	4,287	5,862	3,394	32.8	31.4	29.4	44.9	54.3	68.3
1988.....	9,428	7,718	2,090	4,213	5,872	—	31.8	30.3	28.2	43.5	52.1	—
<b>Hispanic origin<sup>2</sup></b>												
1975.....	2,991	2,755	827	1,819	1,053	694	28.9	28.3	25.1	33.1	57.2	68.4
1980.....	3,491	3,143	751	1,718	1,319	809	25.7	25.1	23.2	33.0	54.5	65.0
1981.....	3,713	3,349	792	1,874	1,485	909	26.5	25.9	24.0	35.4	55.9	67.3
1982.....	4,301	3,865	918	2,117	1,601	990	29.9	29.2	27.2	38.9	60.1	71.8
1983.....	4,633	4,113	981	2,251	1,870	1,018	28.0	27.3	25.9	37.7	55.1	70.8
1984.....	4,806	4,192	991	2,317	1,764	1,093	28.4	27.4	25.2	38.7	56.2	71.0
1985.....	5,236	4,605	1,074	2,512	1,983	1,247	29.0	28.3	25.5	39.8	55.7	72.4
1986.....	5,117	4,469	1,085	2,413	1,921	1,194	27.3	26.5	24.7	37.1	52.9	66.7
1987.....	5,442	4,781	1,168	2,626	2,060	1,241	28.1	27.6	25.5	39.2	55.7	70.1
1988.....	5,379	4,721	1,141	2,598	2,074	—	28.8	28.1	23.7	37.8	55.1	—

<sup>1</sup> Includes persons of Hispanic origin.<sup>2</sup> Persons of Hispanic origin may be of any race.

NOTE.—1987 figures are revised from previously published data.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-60, No. 166. (This table was prepared May 1990.)

**Table 20.—Average grade that the public would give the schools in their community and in the Nation at large: 1974 to 1989**

Year	All adults		No children in school		Public school parents		Private school parents	
	Nation	Local community	Nation	Local community	Nation	Local community	Nation	Local community
1	2	3	4	5	6	7	8	9
1974	—	2.63	—	2.57	—	2.60	—	2.15
1975	—	2.38	—	2.31	—	2.49	—	1.81
1976	—	2.38	—	2.34	—	2.48	—	2.22
1977	—	2.33	—	2.25	—	2.59	—	2.05
1978	—	2.21	—	2.11	—	2.47	—	1.69
1979	—	2.21	—	2.15	—	2.38	—	1.88
1980	—	2.26	—	—	—	—	—	—
1981	1.94	2.20	—	2.12	—	2.36	—	1.88
1982	2.01	2.24	2.04	2.18	2.01	2.35	2.02	2.20
1983	1.91	2.12	1.92	2.10	1.92	2.31	1.62	1.89
1984	2.09	2.38	2.11	2.30	2.11	2.49	2.04	2.17
1985	2.14	2.39	2.16	2.36	2.20	2.44	1.93	2.00
1986	2.13	2.36	—	2.29	—	2.55	—	2.14
1987	2.18	2.44	2.20	2.38	2.22	2.61	2.03	2.01
1988	2.08	2.35	2.02	2.32	2.13	2.48	2.00	2.13
1989	2.01	2.35	1.99	2.27	2.06	2.56	1.93	2.12

—Data not available.

SOURCE: "The Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, various years. (This table was prepared November 1989.)

NOTE.—Average based on a scale where A=4, B=3, C=2, D=1, and F=0.

**Table 21.—Items most frequently cited by the general public as the chief problems facing the local public schools: 1970 to 1989**

Problems	Percent											
	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1	2	3	4	5	6	7	8	9	10	11	12	13
Use of drugs	11	9	14	15	20	18	18	18	26	30	32	43
Lack of discipline	18	23	26	23	27	25	27	25	24	22	19	19
Lack of financial support	17	14	10	12	22	13	14	9	11	14	12	13
Getting good teachers	12	11	6	11	10	8	14	10	6	9	11	7
Poor curriculum/standards	6	5	11	14	11	14	15	11	8	8	11	6
Large schools/overcrowding	—	10	7	5	4	3	4	5	5	6	6	6
Moral standards	—	—	—	1	2	4	1	2	5	7	6	3
Parents' lack of interest	3	2	6	5	5	6	5	3	4	6	7	6
Pupils' lack of interest/truancy	—	3	5	4	5	5	4	5	3	6	5	3
Drinking/alcoholism	—	—	2	2	3	3	4	3	5	6	5	4
Low teacher pay	—	—	—	—	—	—	4	2	3	5	4	4
Integration/busing	17	15	10	11	6	5	6	4	3	4	4	4
Teachers' lack of interest	—	—	6	4	7	8	5	4	4	5	3	4
Lack of proper facilities	11	3	2	2	2	1	2	1	1	2	1	1

—Data not available.

SOURCE: "The 20th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, various years. (This table was prepared November 1989.)

**Table 22.—Parental involvement in 8th graders' school-related activities, by selected parental characteristics: 1988**

Characteristics of parents	Percent of parents <sup>1</sup> who talk with child regularly about			Percent of parents <sup>1</sup> who report family rules about			Percent of parents <sup>1</sup> who report that they			Percent of parents <sup>1</sup> who have contacted school about child's	
	Current school experiences	High school plans	Plans after high school	Number of hours of television watched on school days	Doing homework	Maintaining certain grade average	Never or seldom help with homework	Belong to a parent-teacher organization	Attend the parent-teacher organization meeting	Academic performance	Academic program
1	2	3	4	5	6	7	8	9	10	11	12
<b>Total</b> .....	<b>79.4</b>	<b>47.1</b>	<b>38.3</b>	<b>61.7</b>	<b>92.0</b>	<b>72.7</b>	<b>29.4</b>	<b>31.9</b>	<b>36.2</b>	<b>52.5</b>	<b>34.8</b>
<b>Race/ethnicity</b>											
Asian/Pacific Islander.....	59.8	41.7	38.5	87.1	89.3	74.7	42.8	29.4	41.2	36.0	29.4
Hispanic.....	87.1	52.7	44.8	68.7	92.3	79.8	44.7	15.5	43.0	48.3	34.5
Black, non-Hispanic.....	75.0	57.8	51.4	75.3	95.5	82.3	31.4	30.4	47.8	52.1	34.2
White, non-Hispanic.....	82.3	46.0	35.4	59.5	91.4	70.1	28.8	34.3	33.3	53.7	35.1
American Indian/Alaskan Native.....	72.5	44.8	39.9	82.9	95.9	75.7	35.5	18.8	35.0	52.5	42.5
<b>Socioeconomic status <sup>2</sup></b>											
Lower quartile.....	66.3	43.0	33.5	64.0	92.2	74.2	41.7	12.2	29.2	38.1	24.2
Middle two quartiles.....	80.7	48.5	38.4	60.8	93.0	74.9	27.5	29.8	35.2	54.1	34.8
Highest quartile.....	89.0	52.7	42.9	61.8	89.9	68.9	21.9	54.0	44.4	61.9	44.1
<b>Highest education level of parents</b>											
<b>Two-parent families</b>											
Neither completed high school.....	60.0	40.7	29.8	34.0	92.8	75.2	47.8	10.8	32.7	32.3	21.2
One did not complete high school.....	72.9	45.7	34.7	61.8	92.8	74.8	33.7	15.4	28.7	42.8	28.8
Both complete high school.....	81.9	48.0	37.7	81.3	93.3	75.5	28.8	30.8	35.8	53.8	35.1
One graduated college <sup>3</sup> .....	87.2	51.8	42.4	81.1	91.5	89.9	21.8	48.8	42.7	60.9	41.1
Both graduated college.....	89.5	52.3	40.8	83.0	88.1	81.1	20.5	60.7	48.9	81.5	46.4
<b>Single-parent families (female)</b>											
Did not complete high school.....	61.0	47.1	34.8	64.3	91.2	73.2	50.3	9.7	25.1	33.9	19.0
Completed high school.....	77.0	48.1	42.1	82.5	92.7	75.1	33.8	24.8	33.0	53.5	32.7
Graduated college.....	84.0	51.8	44.8	80.1	87.0	66.3	28.3	48.7	43.9	67.8	45.8
<b>Family composition</b>											
Two-parent family.....	81.0	47.4	38.0	81.7	92.2	72.8	27.8	34.2	37.3	52.9	35.7
One-parent family.....	74.2	47.0	40.2	82.1	91.2	73.3	38.2	23.8	32.0	52.0	35.0

<sup>1</sup> The respondent was the parent most knowledgeable about the child's education. The responding parent reported on their own and their spouse's activities.

<sup>2</sup> Socioeconomic status was measured by a composite score on parental education and occupations, and family income.

<sup>3</sup> Includes a small number of cases where one parent was a high school dropout.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *National Education Longitudinal Study of 1988, "Base Year Parent Survey."* (This table was prepared July 1990.)

**Table 23.—Beliefs held by teachers about what activities and programs would help to improve education: 1989**

Selected activities and programs	Percent of teachers			
	Help a lot	Help some	Not help much	Not help at all
1	2	3	4	5
Develop non-traditional approaches to education.....	40	51	6	2
Increase the number of students studying computer literacy and foreign languages.....	38	50	10	3
Restructure classes on the basis of proficiency instead of age.....	39	42	12	7
Allow parents and students to choose schools.....	15	38	24	22
Establish magnet or regional schools with specialized curricula.....	32	52	10	5

SOURCE: Metropolitan Life/Louis Harris Associates, Inc., *The American Teacher, 1989.* (This table was prepared November 1989.)

**Table 24.—Rating of school problems by teachers and students: 1988**

Selected problems	Percent of teachers who say problem is "very serious" at their school						Percent of students who say they know 10 or more students involved in each problem
	Total	Inner city	Urban	Suburban	Small town	Rural	
1	2	3	4	5	6	7	8
The number of students requiring constant discipline.....	14	27	9	11	12	10	30
The number of students who lack basic skills (Students' item: can't read).....	16	38	16	12	14	13	5
The number of teenage pregnancies <sup>1</sup> .....	12	28	9	5	13	12	9
The number of students drinking alcohol <sup>2</sup> .....	33	32	20	24	38	38	47
The number of students using drugs <sup>2</sup> .....	14	26	11	14	12	15	25
The number of incidents involving violence in school <sup>2</sup> .....	4	10	4	3	5	—	—
Have threatened or become violent with other students.....	—	—	—	—	—	—	23
Have threatened or become violent with teachers.....	—	—	—	—	—	—	5
The number of dropouts <sup>1</sup> .....	9	30	11	6	6	9	9

<sup>1</sup> Asked of junior high and high school students and teachers only.  
<sup>2</sup> Asked of all students and junior high and high school teachers.  
 —Data not available.

SOURCE: Metropolitan Life/Louis Harris and Associates, Inc., *The American Teacher*, 1988. (This table was prepared May 1989.)

**Table 25.—Percentage of households contributing to education and other charitable organizations and average annual donation, by type of charity: 1987**

Type of charity	Percentage of total households <sup>1</sup>	Average annual contribution	
		Per contributing household	Per total households
1	2	3	4
Religion.....	52.5	\$715	\$375
Health.....	23.9	130	31
Human services.....	23.9	210	50
Youth development.....	18.5	88	16
Education.....	15.1	293	44
Environment.....	10.8	87	9
Arts, culture, and humanities.....	6.0	260	21
Public and societal benefit.....	6.5	153	10
Private and community foundations.....	4.8	145	7
International, foreign.....	4.2	281	12
Other.....	1.3	(?)	10

<sup>1</sup> Percents do not total 100 because of respondents giving to more than one type of charity.  
<sup>2</sup> Too few cases to report.

SOURCE: Independent Sector, The Gallup Organization, *Giving and Volunteering in the United States, 1988*. (This table was prepared December 1988.)

**Table 26.—Volunteer workers for schools and other organizations, by selected characteristics:  
Year ending May 1989**

Selected characteristics of volunteers	Number of volunteers (in thousands)	Percent distribution by type of organization							
		Total	School or other educational institution	Church or other religious organization	Civic or political organization	Hospital or other health organization	Social or welfare organization	Sports or recreational organization	Other organization
1	2	3	4	5	6	7	8	9	10
<b>Total</b> .....	<b>38,042</b>	<b>100.0</b>	<b>15.1</b>	<b>37.4</b>	<b>13.2</b>	<b>10.4</b>	<b>9.9</b>	<b>7.8</b>	<b>6.3</b>
Men .....	18,661	100.0	10.5	35.9	17.2	7.0	10.1	11.8	7.5
Women .....	21,361	100.0	18.8	38.5	10.1	13.1	9.7	4.6	5.3
<b>Race/ethnicity</b>									
White <sup>1</sup> .....	34,823	100.0	15.1	36.6	13.5	10.7	9.8	8.0	6.3
Black <sup>1</sup> .....	2,505	100.0	12.4	50.4	9.8	7.0	10.4	4.6	5.6
Hispanic <sup>2</sup> .....	1,269	100.0	18.3	42.2	9.6	8.5	8.9	6.9	5.6
<b>Age</b>									
16 to 19 years .....	1,902	100.0	26.8	34.4	8.9	9.2	7.0	8.2	5.5
20 to 24 years .....	2,064	100.0	16.5	30.5	12.7	11.9	11.6	8.0	6.6
25 to 34 years .....	8,660	100.0	18.3	34.9	13.3	9.1	9.3	8.9	6.1
35 to 44 years .....	10,337	100.0	20.3	33.1	12.6	7.4	8.5	12.1	6.1
45 to 54 years .....	5,670	100.0	11.8	40.6	15.1	10.1	8.8	7.1	6.3
55 to 64 years .....	4,455	100.0	6.7	45.7	16.1	12.4	10.9	2.5	7
65 years and over .....	4,834	100.0	4.3	43.3	11.1	17.8	14.5	1.8	12
<b>Educational attainment <sup>3</sup></b>									
Less than 4 years of high school .....	2,939	100.0	8.8	46.4	10.0	10.0	13.1	4.8	7.0
4 years of high school .....	11,105	100.0	12.5	41.5	11.2	11.1	8.8	8.2	6.7
1 to 3 years of college .....	7,572	100.0	14.7	36.8	13.3	10.8	10.1	8.0	6.3
4 years of college or more .....	12,459	100.0	17.4	32.9	16.4	9.7	10.1	7.8	5.7
<b>Marital status</b>									
Single, never married .....	6,327	100.0	16.8	29.3	14.0	10.9	12.4	7.6	7.3
Married, spouse present .....	26,344	100.0	15.2	40.4	13.2	9.0	8.4	8.4	5.4
Married, spouse absent .....	765	100.0	17.8	29.4	11.6	13.2	12.5	5.0	10.5
Divorced .....	2,510	100.0	12.6	25.1	15.1	15.0	15.0	8.2	9.0
Widowed .....	2,096	100.0	5.9	41.2	8.1	20.8	13.9	1.3	8.9

<sup>1</sup> Includes persons of Hispanic origin.

<sup>2</sup> Persons of Hispanic origin may be of any race.

<sup>3</sup> Data relate to persons 25 years old and over.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, News release, "Thirty-Eight Million Persons Do Volunteer Work." (This table was prepared April 1990.)

**Table 27.—Total expenditures of educational institutions related to the gross national product, by level of institution: 1959-60 to 1989-90**

Year	Gross national product (in billions)	School year	Total expenditures for education (amounts in millions)					
			All educational institutions		All elementary and secondary schools		All colleges and universities	
			Amount	As a percent of gross national product	Amount	As a percent of gross national product	Amount	As a percent of gross national product
1	2	3	4	5	6	7	8	9
1959	\$495.8	1959-60	\$23,860	4.8	\$18,713	3.4	\$7,147	1.4
1961	533.8	1961-62	28,503	5.3	19,673	3.7	8,830	1.7
1963	606.9	1963-64	31,440	5.7	22,825	3.8	11,615	1.9
1965	705.1	1965-66	43,882	6.2	28,048	4.0	15,834	2.2
1967	816.4	1967-68	55,852	6.8	35,077	4.3	20,575	2.5
1969	963.9	1969-70	68,459	7.1	43,183	4.5	25,276	2.6
1970	1,015.5	1970-71	75,741	7.5	48,200	4.7	27,541	2.7
1971	1,102.7	1971-72	80,872	7.3	50,950	4.6	29,722	2.7
1972	1,212.8	1972-73	86,875	7.2	54,952	4.5	31,923	2.8
1973	1,359.3	1973-74	95,398	7.0	60,370	4.4	35,026	2.6
1974	1,472.8	1974-75	108,884	7.4	68,848	4.7	39,818	2.7
1975	1,598.4	1975-76	118,708	7.4	75,101	4.7	43,605	2.7
1976	1,792.8	1976-77	128,417	7.1	79,194	4.4	47,223	2.8
1977	1,990.5	1977-78	137,042	6.9	85,544	4.3	50,498	2.5
1978	2,249.7	1978-79	148,308	6.6	93,012	4.1	55,298	2.5
1979	2,506.2	1979-80	165,827	6.6	103,182	4.1	62,485	2.5
1980	2,732.0	1980-81	182,849	6.7	112,325	4.1	70,524	2.6
1981	3,052.6	1981-82	197,801	6.5	120,488	3.9	77,315	2.5
1982	3,186.0	1982-83	212,081	6.7	128,725	4.1	83,358	2.6
1983	3,405.7	1983-84	228,597	6.7	139,006	4.1	89,597	2.6
1984	3,772.2	1984-85	247,657	6.6	149,400	4.0	98,257	2.6
1985	4,014.9	1985-86	269,485	6.7	181,800	4.0	107,685	2.7
1986	4,231.6	1986-87	291,823	6.9	175,200	4.1	118,623	2.8
1987	4,524.3	<sup>1</sup> 1987-88	313,800	6.9	187,900	4.2	125,700	2.8
1988	4,880.8	<sup>2</sup> 1988-89	337,000	6.9	201,100	4.1	135,900	2.8
1989	5,234.0	<sup>2</sup> 1989-90	358,700	6.9	215,500	4.1	143,200	2.7

<sup>1</sup> Preliminary.<sup>2</sup> Estimated.

NOTE.—Total expenditures for public elementary and secondary schools include current expenditures, interest on school debt, and capital outlay. Data for private elementary and secondary schools are estimated. Total expenditures for colleges and universities include current-fund expenditures and additions to plant value. Excludes expenditures of noncollegiate postsecondary institutions. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Revenues and Expenditures for Public Elementary and Secondary Education; Financial Statistics of Institutions of Higher Education*, Common Core of Data survey, and "Financial Statistics of Institutions of Higher Education" survey, and unpublished data; and Council of Economic Advisers, *Economic Indicators*. (This table was prepared July 1990.)

**Table 28.—Total expenditures of educational institutions, by level and control of institution: 1899–1900 to 1989–90**

[In millions]

School year	Total	Elementary and secondary schools			Colleges and universities		
		Total	Public	Private <sup>1</sup>	Total	Public	Private
1	2	3	4	5	6	7	8
1899-1900.....	—	—	\$215	—	—	—	—
1909-10.....	—	—	426	—	—	—	—
1919-20.....	—	—	1,036	—	—	—	—
1929-30.....	—	—	2,317	—	\$632	\$292	\$341
1939-40.....	—	—	2,344	—	758	392	367
1949-50.....	\$8,911	\$6,249	5,838	\$411	2,662	1,430	1,233
1951-52.....	10,735	7,861	7,344	517	2,674	1,565	1,309
1953-54.....	13,147	9,733	9,092	641	3,414	1,912	1,502
1955-56.....	15,907	11,727	10,955	772	4,180	2,348	1,832
1957-58.....	20,055	14,525	13,569	956	5,530	3,237	2,293
1959-60.....	23,860	16,713	15,613	1,100	7,147	3,904	3,244
1961-62.....	28,503	19,673	18,373	1,300	8,830	4,919	3,911
1963-64.....	34,440	22,925	21,325	1,500	11,615	6,558	5,057
1965-66.....	43,682	28,048	26,248	1,800	15,634	9,047	6,588
1967-68.....	55,852	35,077	32,977	2,100	20,575	12,750	7,824
1969-70.....	68,459	43,183	40,683	2,500	25,276	16,234	9,041
1970-71.....	75,741	48,200	45,500	2,700	27,541	18,028	9,513
1971-72.....	80,672	50,950	48,050	2,900	29,722	19,538	10,184
1972-73.....	86,875	54,952	51,852	3,100	31,923	21,144	10,779
1973-74.....	95,396	60,370	58,970	3,400	35,026	23,542	11,484
1974-75.....	108,664	68,846	64,846	4,000	39,818	26,966	12,852
1975-76.....	118,706	75,101	70,901	4,500	43,605	29,736	13,669
1976-77.....	126,417	79,184	74,184	5,000	47,223	31,997	15,226
1977-78.....	137,042	86,544	80,844	5,700	50,498	34,031	16,467
1978-79.....	148,308	93,012	86,712	6,300	55,296	37,110	18,187
1979-80.....	185,827	103,182	95,962	7,200	62,465	41,434	21,031
1980-81.....	182,849	112,325	104,125	8,200	70,524	46,559	23,965
1981-82.....	197,801	120,486	111,186	9,300	77,315	50,813	26,502
1982-83.....	212,081	128,725	118,425	10,300	83,356	54,338	29,018
1983-84.....	228,597	139,000	127,500	11,500	89,597	58,124	31,473
1984-85.....	247,857	149,400	137,000	12,400	96,257	63,704	34,553
1985-86.....	269,485	181,800	148,600	13,200	107,685	70,069	37,616
1986-87.....	291,823	175,200	160,900	14,300	116,823	75,010	41,613
1987-88 <sup>1</sup> .....	313,800	187,900	172,800	15,100	125,700	80,900	44,800
1988-89 <sup>2</sup> .....	337,000	201,100	185,300	15,800	135,900	87,500	46,400
1989-90 <sup>2</sup> .....	358,700	215,500	198,800	16,900	143,200	92,200	51,000

<sup>1</sup> Estimated.<sup>2</sup> Preliminary.

—Data not available.

NOTE.—Total expenditures for public elementary and secondary schools include current expenditures, interest on school debt, and capital outlay. Data for private elementary and secondary schools are estimated. Total expenditures for colleges and universities include current-fund expenditures and additions to plant value. Excludes expenditures of

noncollegiate postsecondary institutions. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Revenue and Expenditures for Public Elementary and Secondary Education; Financial Statistics of Institutions of Higher Education*, "Common Core of Data" survey, and "Financial Statistics of Institutions of Higher Education" survey. (This table was prepared July 1990.)

**Table 29.—Estimated total expenditures of educational institutions, by level, control of institution, and source of funds: 1975-76 to 1986-87**

(In billions)

Level and control of institution and source of funds	1975-76		1979-80		1983-84		1984-85		1985-86		1986-87	
	Amount	Per-cent										
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>All levels</b>												
<b>Total public and private.....</b>	<b>\$118.7</b>	<b>100.0</b>	<b>\$185.8</b>	<b>100.0</b>	<b>\$228.8</b>	<b>100.0</b>	<b>\$247.7</b>	<b>100.0</b>	<b>\$269.5</b>	<b>100.0</b>	<b>\$291.8</b>	<b>100.0</b>
Federal.....	13.4	11.3	18.9	11.4	19.7	8.6	21.3	8.6	23.5	8.7	25.2	8.6
State.....	45.0	37.9	64.3	38.8	87.0	38.1	96.1	38.8	105.4	39.1	113.4	38.9
Local.....	34.5	29.0	43.3	26.1	60.1	26.3	63.3	25.6	67.8	25.1	73.4	25.2
All other.....	25.9	21.8	39.1	23.6	61.8	27.0	66.9	27.0	72.8	27.0	79.8	27.3
<b>Total public.....</b>	<b>100.3</b>	<b>100.0</b>	<b>137.4</b>	<b>100.0</b>	<b>185.6</b>	<b>100.0</b>	<b>200.7</b>	<b>100.0</b>	<b>218.7</b>	<b>100.0</b>	<b>235.9</b>	<b>100.0</b>
Federal.....	10.7	10.7	14.8	10.8	14.8	8.0	15.8	7.9	17.3	7.9	18.1	7.7
State.....	44.7	44.5	63.9	46.5	86.4	46.8	95.5	47.8	104.7	47.9	112.5	47.7
Local.....	34.4	34.2	43.1	31.4	59.9	32.3	63.1	31.4	67.5	30.9	73.2	31.0
All other.....	10.6	10.6	15.6	11.3	24.6	13.2	26.3	13.1	29.1	13.3	32.2	13.6
<b>Total private.....</b>	<b>18.4</b>	<b>100.0</b>	<b>28.2</b>	<b>100.0</b>	<b>43.0</b>	<b>100.0</b>	<b>47.0</b>	<b>100.0</b>	<b>50.8</b>	<b>100.0</b>	<b>55.9</b>	<b>100.0</b>
Federal.....	2.7	14.5	4.1	14.5	4.9	11.5	5.5	11.7	6.2	12.2	7.1	12.7
State.....	0.3	1.7	0.4	1.8	0.8	1.3	0.7	1.4	0.7	1.4	0.8	1.7
Local.....	0.1	0.7	0.2	0.8	0.2	0.5	0.2	0.5	0.2	0.5	0.3	0.5
All other.....	15.3	83.1	23.5	83.4	37.2	86.7	40.6	86.4	43.6	85.9	47.6	85.2
<b>Elementary and secondary schools</b>												
<b>Total public and private.....</b>	<b>75.1</b>	<b>100.0</b>	<b>103.2</b>	<b>100.0</b>	<b>139.0</b>	<b>100.0</b>	<b>149.4</b>	<b>100.0</b>	<b>161.8</b>	<b>100.0</b>	<b>175.2</b>	<b>100.0</b>
Federal.....	6.3	8.4	9.4	9.1	6.7	6.2	9.1	6.1	9.9	6.1	10.3	5.0
State.....	31.4	41.8	44.7	43.3	60.7	43.8	66.6	44.7	73.2	45.2	79.7	45.5
Local.....	32.7	43.5	41.6	40.3	57.8	41.8	60.8	40.7	65.0	40.2	70.4	40.2
All other.....	4.7	6.3	7.5	7.3	11.9	8.5	12.6	8.8	13.6	8.4	14.8	8.4
<b>Total public.....</b>	<b>70.8</b>	<b>100.0</b>	<b>96.0</b>	<b>100.0</b>	<b>127.5</b>	<b>100.0</b>	<b>137.0</b>	<b>100.0</b>	<b>148.8</b>	<b>100.0</b>	<b>160.9</b>	<b>100.0</b>
Federal.....	6.3	8.9	9.4	9.8	6.7	6.8	9.1	6.8	9.9	6.7	10.3	6.4
State.....	31.4	44.5	44.7	46.6	60.7	47.8	66.6	48.7	73.2	49.3	79.7	49.5
Local.....	32.7	46.3	41.6	43.3	57.8	45.3	60.8	44.3	65.0	43.8	70.4	43.8
All other.....	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.5	0.3
<b>Total private<sup>1</sup>.....</b>	<b>4.5</b>	<b>100.0</b>	<b>7.2</b>	<b>100.0</b>	<b>11.5</b>	<b>100.0</b>	<b>12.4</b>	<b>100.0</b>	<b>13.2</b>	<b>100.0</b>	<b>14.3</b>	<b>100.0</b>
All other.....	4.5	100.0	7.2	100.0	11.5	100.0	12.4	100.0	13.2	100.0	14.3	100.0
<b>Institutions of higher education</b>												
<b>Total public and private.....</b>	<b>43.6</b>	<b>100.0</b>	<b>62.5</b>	<b>100.0</b>	<b>89.8</b>	<b>100.0</b>	<b>98.3</b>	<b>100.0</b>	<b>107.7</b>	<b>100.0</b>	<b>116.8</b>	<b>100.0</b>
Federal.....	7.1	16.3	9.5	15.2	11.0	12.3	12.2	12.4	13.6	12.6	14.9	12.8
State.....	13.6	31.1	19.8	31.4	26.3	29.4	29.4	29.9	32.2	29.9	33.7	28.9
Local.....	1.8	4.1	1.7	2.7	2.3	2.6	2.5	2.6	2.7	2.5	3.0	2.6
All other.....	21.1	48.5	31.6	50.8	49.9	55.7	54.1	55.1	59.1	54.9	65.0	55.7
<b>Total public.....</b>	<b>29.7</b>	<b>100.0</b>	<b>41.4</b>	<b>100.0</b>	<b>58.1</b>	<b>100.0</b>	<b>63.7</b>	<b>100.0</b>	<b>70.1</b>	<b>100.0</b>	<b>75.0</b>	<b>100.0</b>
Federal.....	4.4	14.9	5.4	13.1	6.1	10.5	6.7	10.6	7.4	10.5	7.8	10.4
State.....	13.3	44.8	19.2	46.3	25.7	44.3	28.7	45.1	31.5	45.0	32.8	43.7
Local.....	1.7	5.6	1.5	3.7	2.1	3.8	2.3	3.6	2.5	3.6	2.7	3.8
All other.....	10.4	34.9	15.3	36.9	24.2	41.6	25.9	40.7	28.7	40.9	31.7	42.2
<b>Total private.....</b>	<b>13.9</b>	<b>100.0</b>	<b>21.0</b>	<b>100.0</b>	<b>31.5</b>	<b>100.0</b>	<b>34.6</b>	<b>100.0</b>	<b>37.6</b>	<b>100.0</b>	<b>41.8</b>	<b>100.0</b>
Federal.....	2.7	19.2	4.1	19.4	4.9	15.7	5.5	15.9	6.2	16.5	7.1	17.0
State.....	0.3	2.3	0.4	2.1	0.6	1.8	0.7	1.9	0.7	1.9	0.9	2.2
Local.....	0.1	0.9	0.2	0.8	0.2	0.7	0.2	0.6	0.2	0.6	0.3	0.7
All other.....	10.8	77.6	16.3	77.7	25.7	81.6	28.2	81.6	30.4	80.9	33.3	80.1

<sup>1</sup> Some private elementary and secondary school revenues come from Federal, State, and local sources. However, comprehensive data are not available to delineate the sources of revenues for private schools.

NOTE—Estimates of expenditures by source of funds are derived from data collected on revenue sources. Federally supported student aid that goes to higher education institutions through students' tuition payments is shown under "All other" rather than "Federal." Such payments would add substantial amounts and several percentage points to the Federal share. Other Federal programs, not included in this table because they do

not support regular educational institutions, would increase the Federal share even further. Typical examples of these payments would be Federal support for libraries and museums. Additionally, the Federal contribution to education through tax expenditures is not reflected in this table. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data and "Financial Statistics of Institutions of Higher Education" surveys, Integrated Postsecondary Education Data System (IPEDS) "Finance" survey, and unpublished data. This table was prepared July 1990.)

**Table 30.—Governmental expenditures, by level of government and function: 1970-71 to 1987-88**

Expenditure, by function	All governments <sup>1</sup>					Federal Government				State and local governments <sup>2</sup>			
	1970-71	1975-76	1980-81	1986-87	1987-88	1970-71	1975-76	1980-81	1987-88	1970-71	1975-76	1980-81	1987-88
1	2	3	4	5	6	7	8	9	10	11	12	13	14
In millions													
General expenditure .....	\$301,096	\$476,146	\$827,877	\$1,374,297	\$1,461,856	\$150,422	\$220,595	\$422,301	\$978,523	\$150,874	\$256,731	\$407,449	\$704,697
Selected Federal programs													
National defense and international relations .....	80,910	100,414	174,564	319,064	329,993	80,910	100,414	174,564	329,993	—	—	—	—
Postal service .....	6,683	13,748	20,466	32,243	33,892	6,683	13,748	20,466	33,892	—	—	—	—
Space research and technology .....	3,334	3,691	5,523	7,450	8,866	3,334	3,691	5,523	8,866	—	—	—	—
Education and libraries .....	64,042	106,255	156,012	244,325	260,736	4,629	9,039	12,408	34,138	60,174	98,465	147,649	246,184
Social services and income maintenance													
Public welfare .....	20,446	45,129	74,643	106,277	115,125	2,220	13,694	22,395	79,909	18,226	32,604	54,121	89,101
Hospitals and health .....	14,835	27,570	47,378	72,489	78,789	3,630	6,884	11,277	22,261	11,205	20,688	36,101	61,940
Social insurance administration .....	2,031	3,468	5,075	6,775	7,168	1,086	1,892	2,799	6,917	945	1,576	2,276	2,853
Transportation .....	23,722	29,646	46,578	66,237	70,536	4,062	3,533	7,724	21,577	19,819	26,447	39,231	63,861
Public safety													
Police protection .....	5,706	10,735	16,851	26,720	30,934	478	1,204	1,904	4,954	5,228	9,531	14,947	26,277
Correction .....	1,979	4,004	7,806	17,561	20,131	94	220	413	1,258	1,885	3,784	7,393	18,963
Environment and housing													
Natural resources .....	13,740	16,958	43,599	92,801	90,119	10,658	12,296	38,896	82,034	3,082	4,662	6,175	10,238
Housing and community development .....	4,467	5,435	13,894	21,304	25,212	1,913	2,284	6,808	23,405	2,554	3,151	7,086	13,243
Governmental administration													
Financial administration .....	3,612	6,574	10,944	18,667	20,454	1,341	2,614	3,714	6,865	2,271	3,960	7,230	13,569
General control <sup>3</sup> .....	3,567	6,777	11,514	25,459	27,656	540	1,066	1,973	3,826	4,432	8,268	12,771	23,830
Interest on general debt .....	21,688	39,575	97,641	187,971	202,437	16,599	29,306	80,510	158,119	5,089	10,269	17,131	44,318
Other and unallocable .....	28,334	56,167	93,389	128,936	139,811	10,245	18,710	30,927	60,509	15,764	33,328	55,338	90,500

Percentage distribution

	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General expenditure .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Selected Federal programs													
National defense and international relations .....	26.9	21.1	21.1	23.2	22.6	53.8	45.5	41.3	37.6	—	—	—	—
Postal service .....	2.9	2.9	2.5	2.3	2.3	5.8	6.2	4.8	3.9	—	—	—	—
Space research and technology .....	1.1	0.8	0.7	0.5	0.6	2.2	1.7	1.3	1.0	—	—	—	—
Education and libraries .....	21.3	22.3	19.1	17.8	17.8	3.1	4.1	2.9	3.9	39.9	38.4	36.2	34.9
Social services and income maintenance													
Public welfare .....	6.8	9.5	9.0	7.7	7.9	1.5	6.2	5.3	9.1	12.1	12.7	13.3	12.6
Hospitals and health .....	4.9	5.8	5.7	5.3	5.4	2.4	3.1	2.7	2.5	7.4	8.1	8.9	8.8
Social insurance administration .....	0.7	0.7	0.6	0.5	0.5	0.7	0.9	0.7	0.8	0.6	0.6	0.6	0.4
Transportation .....	7.9	6.2	5.6	4.8	4.8	2.7	1.6	1.8	2.5	13.2	10.3	9.6	9.1
Public safety													
Police protection .....	1.9	2.3	2.0	2.1	2.1	0.3	0.5	0.5	0.6	3.5	3.7	3.7	3.7
Correction .....	0.7	0.8	0.9	1.3	1.4	0.1	0.1	0.1	0.1	1.3	1.5	1.8	2.7
Environment and housing													
Natural resources .....	4.6	3.6	5.3	6.8	6.2	7.1	5.6	9.2	9.3	2.0	1.8	1.5	1.5
Housing and community development .....	1.5	1.1	1.7	1.6	1.7	1.3	1.0	1.6	2.7	1.7	1.2	1.7	1.9
Governmental administration													
Financial administration .....	1.2	1.4	1.3	1.4	1.4	0.9	1.2	0.9	0.8	1.5	1.5	1.8	1.9
General control <sup>3</sup> .....	1.2	1.4	1.4	1.9	1.9	0.4	0.5	0.5	0.4	2.9	3.2	3.1	3.4
Interest on general debt .....	7.2	8.3	11.8	13.7	13.8	11.0	13.3	19.1	18.0	3.4	4.0	4.2	6.3
Other and unallocable .....	9.4	11.8	11.3	9.2	9.6	6.8	8.5	7.3	6.9	10.5	13.0	13.6	12.8

<sup>1</sup> Excludes duplicative intergovernmental transactions.

<sup>2</sup> General expenditures include expenditures to the Federal Government (\$2,106,000 in 1985-86), which are excluded from direct general expenditures.

<sup>3</sup> Includes judicial and legal expenditures and expenditures on general and public buildings and other governmental administration.

—Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Governmental Finances*, various years. (This table was prepared June 1990.)

**Table 31.—Direct general expenditures of State and local governments for all functions and for education, by level and State: 1987-88**

[In millions]

State	Total direct general expenditures <sup>1</sup>	Education expenditures							
		Total	Elementary and secondary education			Higher education			
			Total	Current expenditure	Capital outlay	Total	Current expenditure	Capital outlay	Other education <sup>2</sup>
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>\$702,239.4</b>	<b>\$242,683.4</b>	<b>\$169,694.2</b>	<b>\$157,662.3</b>	<b>\$12,131.9</b>	<b>\$82,687.7</b>	<b>\$68,290.7</b>	<b>\$6,397.0</b>	<b>\$10,301.5</b>
Alabama.....	9,149.2	3,518.5	1,891.1	1,713.4	177.7	1,122.9	982.6	140.4	504.4
Alaska.....	5,002.3	1,140.8	869.9	754.7	115.3	230.8	212.0	18.7	40.1
Arizona.....	10,398.2	3,935.5	2,620.2	2,139.6	486.6	1,194.6	1,035.0	159.6	120.7
Arkansas.....	4,666.5	1,958.9	1,321.5	1,145.2	176.3	492.6	450.6	42.0	144.7
California.....	91,728.7	28,558.2	18,880.8	18,203.5	657.3	8,640.5	8,251.8	588.7	856.8
Colorado.....	9,537.3	3,522.8	2,452.4	2,204.4	248.1	1,003.5	900.3	103.2	66.9
Connecticut.....	10,552.9	3,283.3	2,501.6	2,374.7	126.9	585.5	527.2	58.3	196.2
Delaware.....	2,174.1	804.4	489.2	454.3	15.0	273.6	262.6	11.1	81.6
District of Columbia.....	3,569.2	603.0	516.8	472.1	44.7	86.2	78.9	7.3	—
Florida.....	31,513.6	9,977.4	7,598.4	6,809.9	788.4	1,836.8	1,719.0	117.8	542.2
Georgia.....	16,460.1	5,775.9	4,353.8	3,809.1	544.7	1,233.8	1,070.3	163.5	188.3
Hawaii.....	3,261.6	882.9	563.1	482.7	80.4	302.7	266.2	36.5	17.0
Idaho.....	2,232.5	821.2	548.6	507.5	41.1	240.9	225.5	15.4	31.7
Illinois.....	30,328.7	10,269.3	7,123.5	6,579.8	543.7	2,618.1	2,215.1	403.0	547.7
Indiana.....	12,747.8	5,364.9	3,499.0	3,242.2	256.8	1,574.8	1,371.5	203.4	291.1
Iowa.....	7,510.7	3,036.9	1,858.0	1,765.8	92.2	1,066.7	943.8	123.1	112.2
Kansas.....	6,393.1	2,467.6	1,666.0	1,565.3	100.7	750.0	710.8	39.2	51.6
Kentucky.....	6,465.4	2,999.9	1,859.4	1,731.8	127.6	884.5	804.0	80.5	256.0
Louisiana.....	11,131.4	3,383.2	2,240.8	2,073.8	167.0	999.6	875.5	94.0	172.9
Maine.....	3,244.5	1,137.8	818.9	741.3	77.6	269.9	241.9	28.1	48.9
Maryland.....	13,648.1	4,613.0	3,173.4	2,920.4	253.0	1,239.8	1,073.8	166.0	199.9
Massachusetts.....	19,353.0	5,432.6	4,023.3	3,646.0	177.3	1,114.0	1,022.2	91.8	295.3
Michigan.....	28,649.9	10,985.3	7,238.0	6,958.4	379.7	3,462.6	2,772.8	689.8	284.7
Minnesota.....	14,946.5	5,047.4	3,439.3	3,162.3	277.0	1,406.8	1,272.5	134.3	201.4
Mississippi.....	5,881.1	2,208.2	1,456.7	1,336.2	120.5	634.0	588.8	45.2	117.5
Missouri.....	10,995.5	4,268.1	3,050.6	2,838.9	211.7	1,084.1	904.3	179.8	133.3
Montana.....	2,265.1	864.4	631.5	600.3	31.2	179.6	165.6	14.0	53.2
Nebraska.....	4,159.9	1,623.6	1,083.4	1,019.3	64.1	482.4	420.3	62.1	57.8
Nevada.....	3,089.8	915.4	650.1	573.9	76.2	234.7	190.6	44.1	30.6
New Hampshire.....	2,648.7	966.3	732.3	640.0	92.3	199.6	199	0.5	34.3
New Jersey.....	25,452.9	8,347.7	6,395.9	6,085.4	310.5	1,683.4	1,445.1	218.4	288.4
New Mexico.....	4,280.8	1,574.1	1,034.3	904.8	129.5	488.9	450.4	38.5	50.9
New York.....	75,225.0	21,732.0	16,726.9	15,915.5	811.3	3,929.3	3,630.0	299.3	1,075.9
North Carolina.....	14,734.7	6,178.9	3,951.3	3,648.1	303.2	1,995.3	1,744.7	250.6	230.2
North Dakota.....	1,948.2	740.8	440.8	411.1	29.7	273.6	250.0	23.8	26.1
Ohio.....	28,003.6	10,185.6	7,527.7	7,157.5	370.2	2,450.3	2,214.4	235.9	207.5
Oklahoma.....	7,480.8	2,817.5	1,899.2	1,679.1	220.1	836.9	781.9	55.0	81.5
Oregon.....	8,194.0	3,115.2	2,158.0	2,064.9	71.1	877.3	786.7	90.7	81.9
Pennsylvania.....	30,215.3	10,850.2	8,387.2	7,780.3	606.8	1,613.0	1,475.7	137.3	850.1
Rhode Island.....	3,034.5	975.8	649.4	626.2	23.2	229.1	220.1	9.0	97.3
South Carolina.....	7,957.5	3,244.7	2,180.4	1,975.0	205.4	877.1	806.0	71.1	167.3
South Dakota.....	1,679.2	594.8	436.6	411.5	25.1	134.1	124.3	9.8	24.2
Tennessee.....	10,972.4	3,626.2	2,327.4	2,142.0	185.3	1,056.2	1,014.2	42.0	244.6
Texas.....	41,401.8	16,577.9	11,713.3	10,698.7	1,014.6	4,518.2	4,035.4	462.9	346.3
Utah.....	4,283.7	1,830.2	1,126.9	1,032.5	94.4	597.5	563.7	33.8	105.9
Vermont.....	1,631.2	677.4	426.1	418.0	8.2	208.1	187.9	20.2	43.2
Virginia.....	15,864.3	6,110.7	4,207.6	3,847.4	360.3	1,689.0	1,504.4	184.6	214.0
Washington.....	13,333.7	5,067.4	3,454.8	2,933.2	521.6	1,428.5	1,273.4	155.1	164.1
West Virginia.....	4,281.0	1,627.2	1,185.8	1,100.1	85.7	355.6	337.8	17.8	85.9
Wisconsin.....	14,309.3	5,658.8	3,817.7	3,667.1	150.6	1,651.7	1,511.0	140.7	189.4
Wyoming.....	2,049.8	763.7	537.4	483.3	54.1	196.5	179.3	19.2	27.8

<sup>1</sup> Includes State and local government expenditures for education services, social services and income maintenance, transportation, public safety, environment and housing, governmental administration, interest on general debt, and other general expenditures.

<sup>2</sup> Includes State education administration and services, tuition grants, fellowships, aid to private schools, and special programs. Capital expenditures for other education are included under elementary and secondary.

—Data not applicable or not available.

NOTE.—Current expenditure data in this table differ from figures appearing in other tables because of slightly varying definitions used in the ?UGovernmental Finances? and Common Core of Data surveys. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Governmental Finances in 1987-88*. (This table was prepared February 1990.)

**Table 32.—Direct general expenditures per capita of State and local governments for all functions and for education, by level and State: 1987-88**

State	Total, all direct general expenditures per capita <sup>1</sup>	Education expenditures per capita							
		Total		Elementary and secondary education		Higher education		Other education <sup>2</sup>	
		Amount	As a percent of all functions	Amount	As a percent of all functions	Amount	As a percent of all functions	Amount	As a percent of all functions
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>\$2,856.67</b>	<b>\$987.29</b>	<b>34.6</b>	<b>\$690.36</b>	<b>24.2</b>	<b>\$255.03</b>	<b>8.9</b>	<b>\$41.91</b>	<b>1.5</b>
Alabama.....	2,230.43	857.74	38.5	481.01	20.7	273.76	12.3	122.98	5.5
Alaska.....	9,546.42	2,177.13	22.8	1,680.20	17.4	440.39	4.6	76.54	0.8
Arizona.....	2,980.29	1,127.98	37.8	750.99	25.2	342.40	11.5	34.80	1.2
Arkansas.....	1,948.45	817.90	42.0	551.79	28.3	205.68	10.6	60.49	3.1
California.....	3,239.70	1,008.62	31.1	666.13	20.6	312.23	9.6	30.26	0.9
Colorado.....	2,689.23	1,067.19	39.7	742.94	25.7	304.00	10.5	20.25	0.7
Connecticut.....	3,264.12	1,015.57	31.1	773.76	23.7	181.10	5.5	60.89	1.9
Delaware.....	3,294.16	1,218.83	37.0	710.94	21.6	414.60	12.6	93.29	2.8
District of Columbia.....	5,784.71	977.32	16.9	697.60	14.5	139.73	2.4	—	—
Florida.....	2,554.81	808.87	31.7	618.00	24.1	146.91	5.8	43.96	1.7
Georgia.....	2,595.42	910.74	35.1	686.50	26.5	184.55	7.5	29.69	1.1
Hawaii.....	2,970.49	804.06	27.1	512.65	17.3	275.70	9.3	15.52	0.5
Idaho.....	2,225.78	818.74	36.8	546.94	24.6	240.18	10.8	31.82	1.4
Illinois.....	2,811.39	885.94	33.9	613.35	23.5	225.43	8.0	47.16	1.8
Indiana.....	2,294.42	865.60	42.1	629.76	27.4	283.45	12.4	52.39	2.3
Iowa.....	2,850.23	1,071.58	40.4	655.60	24.7	376.40	14.2	39.58	1.5
Kansas.....	2,562.35	989.03	38.6	667.73	26.1	300.60	11.7	20.70	0.8
Kentucky.....	2,271.37	804.92	35.4	496.91	22.0	237.32	10.4	68.89	3.0
Louisiana.....	2,525.27	787.52	30.4	506.34	20.1	219.95	8.7	39.23	1.6
Maine.....	2,692.51	944.19	35.1	679.58	25.2	224.00	8.3	40.62	1.5
Maryland.....	2,952.86	908.06	33.8	696.58	23.3	268.24	9.1	43.24	1.5
Massachusetts.....	3,288.29	922.50	28.1	683.19	20.8	189.17	5.8	50.14	1.5
Michigan.....	3,122.26	1,189.88	38.1	763.34	25.1	374.74	12.0	30.81	1.0
Minnesota.....	3,470.29	1,171.91	33.8	796.53	23.0	326.62	9.4	46.75	1.3
Mississippi.....	2,244.71	842.81	37.5	555.96	24.8	241.99	10.8	44.84	2.0
Missouri.....	2,138.80	630.21	38.8	593.39	27.7	210.88	9.9	25.94	1.2
Montana.....	2,613.77	1,073.75	38.2	764.52	27.9	223.14	7.9	66.09	2.3
Nebraska.....	2,598.87	1,013.51	39.0	676.31	26.0	301.10	11.6	36.10	1.4
Nevada.....	2,931.45	868.47	29.6	616.76	21.0	222.71	7.6	29.01	1.0
New Hampshire.....	2,441.16	890.58	36.5	674.92	27.6	184.01	7.5	31.65	1.3
New Jersey.....	3,296.58	1,081.17	32.8	626.36	25.1	215.44	6.5	37.36	1.1
New Mexico.....	2,840.58	1,044.52	36.8	666.33	24.2	324.41	11.4	33.78	1.2
New York.....	4,200.40	1,213.47	28.9	933.99	22.2	219.40	5.2	60.07	1.4
North Carolina.....	2,270.71	951.90	41.9	606.93	26.8	307.49	13.5	35.48	1.8
North Dakota.....	2,920.91	1,110.58	38.0	660.90	22.6	410.53	14.1	39.16	1.3
Ohio.....	2,579.79	936.33	36.4	693.48	26.9	225.73	8.7	19.12	0.7
Oklahoma.....	2,307.46	869.07	37.7	585.80	25.4	258.14	11.2	25.14	1.1
Oregon.....	2,961.95	1,125.84	38.0	779.16	26.3	317.07	10.7	29.59	1.0
Pennsylvania.....	2,517.73	904.11	35.9	696.67	27.6	134.40	5.3	70.83	2.8
Rhode Island.....	3,055.87	982.71	32.2	654.01	21.4	230.70	7.5	96.00	3.2
South Carolina.....	2,293.23	935.08	40.8	626.36	27.4	252.76	11.0	53.97	2.4
South Dakota.....	2,355.19	834.28	35.4	612.34	26.0	188.04	8.0	33.89	1.4
Tennessee.....	2,241.55	741.20	33.1	475.45	21.2	215.77	9.6	49.97	2.2
Texas.....	2,458.40	984.38	40.0	695.52	28.3	268.29	10.9	20.56	0.8
Utah.....	2,534.72	1,082.66	42.7	666.79	26.3	353.53	13.9	62.64	2.5
Vermont.....	2,926.47	1,216.11	41.5	765.08	26.1	373.56	12.8	77.48	2.6
Virginia.....	2,637.46	1,015.91	38.5	699.52	26.5	280.80	10.6	35.59	1.3
Washington.....	2,868.70	1,090.24	38.0	743.28	25.9	307.35	10.7	39.61	1.4
West Virginia.....	2,281.99	867.40	38.0	632.07	27.7	189.54	8.3	45.80	2.0
Wisconsin.....	2,947.33	1,185.58	39.5	786.34	26.7	340.21	11.5	39.01	1.3
Wyoming.....	4,279.36	1,594.44	37.3	1,121.92	26.2	414.46	9.7	58.06	1.4

<sup>1</sup> Includes State and local government expenditures for education services, social services and income maintenance, transportation, public safety, environment and housing, governmental administration, interest on general debt, and other general expenditures.

<sup>2</sup> Includes State education administration and services, tuition grants, fellowships, aid to private schools, and special programs.

—Data not applicable or not available.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Governmental Finances in 1987-88*. (This table was prepared March 1990.)

**Table 33.—Gross national product, State and local expenditures, personal income, disposable personal income, median family income, and population: 1929 to 1989**

Year	Gross national product, in billions		State and local expenditures <sup>1</sup> in millions		Personal income, in billions	Disposable personal income, in billions of 1982 dollars	Disposable personal income per capita		Median family income	Population in thousands <sup>2</sup>
	Current dollars	Constant 1982 dollars	All general expenditures	Education expenditures			Current dollars	Constant 1982 dollars		
1	2	3	4	5	6	7	8	9	10	11
1929.....	\$103.9	\$709.6	—	—	\$84.3	\$498.6	\$671	\$4,091	—	121,878
1933.....	56.0	498.5	—	—	46.3	370.8	357	2,950	—	125,600
1939.....	91.3	718.6	—	—	72.1	499.5	532	3,812	—	131,028
1940.....	100.4	772.9	\$9,229	\$2,638	77.6	530.7	588	4,017	—	132,122
1941.....	125.5	909.4	—	—	95.2	604.1	689	4,528	—	133,402
1942.....	159.0	1,080.3	9,190	2,586	122.4	693.0	863	5,138	—	134,660
1943.....	192.7	1,276.2	—	—	150.7	721.4	972	5,276	—	136,739
1944.....	211.4	1,380.6	8,883	2,793	164.5	749.3	1,052	5,414	—	138,397
1945.....	213.4	1,354.8	—	—	170.0	739.5	1,066	5,285	—	139,928
1946.....	212.4	1,096.9	11,028	3,356	177.6	723.3	1,124	5,115	—	141,389
1947.....	235.2	1,066.7	—	—	190.2	694.8	1,171	4,820	\$3,031	144,126
1948.....	281.6	1,108.7	17,684	5,379	209.2	733.1	1,283	5,000	3,187	146,631
1949.....	280.4	1,109.0	—	—	206.4	733.2	1,260	4,915	3,107	149,188
1950.....	288.3	1,203.7	22,787	7,177	228.1	781.8	1,368	5,220	3,319	151,684
1951.....	333.4	1,328.2	—	—	256.5	819.0	1,475	5,308	3,709	154,267
1952.....	351.6	1,380.0	26,098	8,318	273.8	844.3	1,528	5,379	3,690	156,954
1953.....	371.8	1,435.3	27,910	9,390	290.5	880.0	1,599	5,515	4,242	159,565
1954.....	372.5	1,418.2	30,701	10,557	293.0	894.0	1,604	5,505	4,167	162,391
1955.....	405.9	1,484.9	33,724	11,907	314.2	944.5	1,687	5,714	4,416	165,275
1956.....	428.2	1,525.8	36,711	13,220	337.2	989.4	1,769	5,881	4,780	166,221
1957.....	451.0	1,551.1	40,375	14,134	356.3	1,012.1	1,833	5,909	4,966	171,274
1958.....	456.8	1,539.2	44,851	15,919	367.1	1,026.8	1,865	5,908	5,067	174,141
1959.....	495.8	1,829.1	48,887	17,283	390.7	1,067.2	1,946	6,027	5,417	177,073
1960.....	515.3	1,665.3	51,876	18,719	408.4	1,091.1	1,986	6,036	5,620	180,780
1961.....	533.8	1,708.7	56,201	20,574	426.0	1,123.2	2,034	6,113	5,735	183,742
1962.....	574.8	1,799.4	60,206	22,216	453.2	1,170.2	2,123	6,271	5,956	186,590
1963.....	606.9	1,873.3	63,977	23,729	478.3	1,207.3	2,197	6,378	6,249	189,300
1964.....	649.8	1,973.3	69,302	26,286	510.2	1,291.0	2,352	6,727	6,589	191,927
1965.....	705.1	2,087.6	74,878	28,583	552.0	1,365.7	2,505	7,027	6,957	194,347
1966.....	772.0	2,208.3	82,843	33,287	600.8	1,431.3	2,875	7,280	7,532	196,599
1967.....	818.4	2,271.4	93,350	37,919	644.5	1,493.2	2,926	7,513	7,933	198,752
1968.....	992.7	2,385.8	102,411	41,158	707.2	1,551.3	3,037	7,728	8,632	200,745
1969.....	983.9	2,423.3	116,728	47,238	772.9	1,599.9	3,239	7,891	9,433	202,736
1970.....	1,015.5	2,416.2	131,332	52,718	831.8	1,668.1	3,489	8,134	9,667	205,089
1971.....	1,102.7	2,484.8	150,874	59,413	894.0	1,726.4	3,740	8,322	10,285	207,692
1972.....	1,212.8	2,608.5	168,550	65,814	981.6	1,797.4	4,000	8,562	11,116	209,924
1973.....	1,359.3	2,744.1	181,357	69,714	1,101.7	1,916.3	4,441	9,042	12,051	211,939
1974.....	1,472.8	2,726.3	198,959	75,833	1,210.1	1,896.6	4,855	8,867	12,902	213,898
1975.....	1,596.4	2,695.0	230,721	87,858	1,313.4	1,931.7	5,291	8,944	13,719	215,931
1976.....	1,782.8	2,826.7	256,731	97,218	1,451.4	2,001.0	5,744	9,175	14,958	218,066
1977.....	1,990.5	2,958.6	274,215	102,780	1,607.5	2,066.6	6,262	9,381	16,009	220,289
1978.....	2,249.7	3,115.2	296,983	110,768	1,812.4	2,167.4	6,968	9,735	17,640	222,629
1979.....	2,506.2	3,192.4	327,517	119,448	2,034.0	2,212.8	7,662	9,829	19,587	225,106
1980.....	2,732.0	3,187.1	369,086	133,211	2,258.5	2,214.3	8,421	9,722	21,023	227,754
1981.....	3,052.8	3,248.8	407,449	145,784	2,520.9	2,246.8	9,243	9,769	22,388	230,182
1982.....	3,166.0	3,166.0	436,896	154,282	2,670.8	2,261.5	9,724	9,724	23,433	232,549
1983.....	3,405.7	3,279.1	466,421	163,678	2,838.8	2,331.9	10,340	9,930	24,874	234,629
1984.....	3,772.2	3,501.4	505,008	176,108	3,108.7	2,469.8	11,257	10,419	26,433	237,051
1985.....	4,014.9	3,618.7	553,899	192,683	3,325.3	2,542.8	11,861	10,625	27,735	239,322
1986.....	4,231.6	3,717.9	605,623	210,819	3,526.2	2,635.3	12,469	10,905	29,458	241,660
1987.....	4,524.3	3,853.7	656,064	226,658	3,777.6	2,676.8	13,140	10,970	30,853	243,965
1988.....	4,860.6	4,024.4	704,897	242,683	4,084.5	2,793.2	14,118	11,337	32,191	246,378
1989.....	5,233.2	4,142.6	—	—	4,426.7	2,906.7	15,191	11,681	—	248,830

<sup>1</sup> Data for years prior to 1963 include expenditures for government fiscal years ending during that particular calendar year. Data for 1963 and later years are the aggregations of expenditures for government fiscal years which ended on June 30 of the stated year. General expenditures exclude expenditures of publicly owned utilities and liquor stores, and of insurance-trust activities. Intergovernmental payments between State and local governments are excluded. Payments to the Federal Government are included.

<sup>2</sup> Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1960. Annual data are for July 1 through 1959 and are averages of quarterly data beginning 1959. Quarterly data are averages for the period.

<sup>3</sup> Revised methodology.

—Data not available.

NOTE.—Some data have been revised from previously published figures.

SOURCE: Executive Office of the President, *Economic Report of the President, 1990*; and Council of Economic Advisers, *Economic Indicators, January 1990*. (This table was prepared March 1990.)

**Table 34.—Gross national product price deflator, Consumer Price Index, education price indexes, and Federal budget composite deflator: 1919 to 1990**

Calendar year			School year				Federal fiscal year	
Year	GNP implicit price deflator	Consumer Price Index <sup>1</sup>	Year	Consumer Price Index <sup>2</sup>	Elementary/Secondary Price Index	Higher Education Price Index	Year	Federal budget composite deflator
1	2	3	4	5	6	7	8	9
1919	—	17.3	1919-20	19.1	—	—	1919	—
1929	14.8	17.1	1929-30	17.1	—	—	1929	—
1934	—	13.4	1934-35	13.8	—	—	1934	—
1939	12.7	13.9	1939-40	14.0	—	—	1939	—
1940	13.0	14.0	1940-41	14.2	—	—	1940	0.1138
1941	13.8	14.7	1941-42	15.8	—	—	1941	0.1213
1942	14.7	18.3	1942-43	18.9	—	—	1942	0.1349
1943	15.1	17.3	1943-44	17.4	—	—	1943	0.1482
1944	15.3	17.8	1944-45	17.8	—	—	1944	0.1431
1945	15.7	18.0	1945-48	18.2	—	—	1945	0.1388
1948	19.4	19.5	1940-47	21.2	—	—	1948	0.1330
1947	22.1	22.3	1947-48	23.3	—	—	1947	0.1621
1948	23.8	24.1	1948-49	24.1	—	—	1948	0.1881
1949	23.5	23.8	1949-50	23.7	—	—	1949	0.1918
1950	23.9	24.1	1950-51	25.1	—	—	1950	0.1930
1951	25.1	26.0	1951-52	26.3	—	—	1951	0.1818
1952	25.5	26.5	1952-53	26.7	—	—	1952	0.1938
1953	25.9	26.7	1953-54	26.9	—	—	1953	0.2071
1954	26.3	26.9	1954-55	26.8	—	—	1954	0.2141
1955	27.2	26.8	1955-56	26.9	—	—	1955	0.2200
1956	28.1	27.2	1956-57	27.7	—	—	1956	0.2307
1957	29.1	28.1	1957-58	28.8	—	—	1957	0.2402
1958	29.7	26.9	1958-59	29.0	—	—	1958	0.2553
1959	30.4	29.1	1959-60	29.4	—	—	1959	0.2655
1960	30.9	29.8	1960-61	29.8	—	25.1	1960	0.2708
1961	31.2	29.9	1961-62	30.1	—	26.1	1961	0.2758
1962	31.9	30.2	1962-63	30.4	—	27.1	1962	0.2784
1963	32.4	30.8	1963-64	30.8	—	28.1	1963	0.2894
1964	32.9	31.0	1964-65	31.2	—	29.3	1964	0.2942
1965	33.8	31.5	1965-66	31.9	—	30.8	1965	0.2998
1966	35.0	32.4	1966-67	32.9	—	32.4	1966	0.3120
1967	35.9	33.4	1967-68	34.0	—	34.3	1967	0.3224
1968	37.7	34.8	1968-69	35.7	—	36.7	1968	0.3390
1969	39.8	36.7	1969-70	37.8	—	39.2	1969	0.3598
1970	42.0	38.8	1970-71	39.7	—	41.8	1970	0.3841
1971	44.4	40.5	1971-72	41.2	—	44.0	1971	0.4128
1972	48.5	41.8	1972-73	42.8	—	48.3	1972	0.4372
1973	49.5	44.4	1973-74	48.8	—	49.8	1973	0.4658
1974	54.0	49.3	1974-75	51.8	51.8	53.8	1974	0.5095
1975	59.3	53.8	1975-76	55.5	56.1	57.4	1975	0.5671
1976	63.1	58.9	1976-77	58.7	59.9	61.1	1976	0.6298
1977	67.3	60.8	1977-78	62.6	64.0	65.2	1977	0.6572
1978	72.2	65.2	1978-79	68.5	69.9	70.2	1978	0.7034
1979	78.8	72.6	1979-80	77.8	76.3	77.2	1979	0.7626
1980	85.7	82.4	1980-81	86.6	85.5	85.5	1980	0.8453
1981	94.0	90.9	1981-82	94.1	93.8	94.0	1981	0.9335
1982	100.0	96.5	1982-83	98.2	100.0	100.0	1982	1.0000
1983	103.9	99.8	1983-84	101.8	105.9	105.4	1983	1.0430
1984	107.7	103.9	1984-85	105.8	113.4	111.8	1984	1.0808
1985	110.9	107.8	1985-86	108.8	120.0	116.3	1985	1.1138
1986	113.8	109.8	1986-87	111.2	125.7	120.9	1986	1.1408
1987	117.4	113.6	1987-88	115.8	132.3	126.3	1987	1.1699
1988	121.3	118.3	1988-89	121.2	—	—	1988	1.2097
1989	128.3	124.0	1989-90	127.0	—	—	1989	1.2597
1990	—	—	1990-91	—	—	—	1990	1.3124

<sup>1</sup> Index for urban wage earners and clerical workers through 1977; 1978 and later figures are for all urban consumers.

<sup>2</sup> Consumer price index adjusted to a school-year basis (July through June).

—Data not available.

NOTE.—Some data have been revised from previously published figures.

SOURCE: Council of Economic Advisers, Economic Indicators, January 1990; U.S. Department of Education, National Institute of Education, Inflation Measures for Schools and Colleges; U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index; Research Associates of Washington, "Higher Education Prices and Price Indexes: 1988 Update" and "School Price Index: 1988 Update;" and U.S. Office of Management and Budget, Budget of the U.S. Government, Fiscal Year 1991. (This table was prepared July 1990.)

## CHAPTER 2

# Elementary and Secondary Education

This chapter contains a variety of statistics on public and private elementary and secondary education. These data are derived from surveys conducted by the National Center for Education Statistics (NCES) and other public and private organizations.

The Center conducts annual surveys of public schools and periodic surveys of teacher characteristics and private schools. The Common Core of Data is an administrative records survey of public elementary and secondary schools and school districts. Each State provides summary data on enrollment, staff, revenues, and expenditures. In addition, listings and selected statistics of school districts and schools are obtained. National and State summary statistics from the Common Core of Data have been published annually in the Digest, and in a series of reports and bulletins.

The Center has released data from a new "Schools and Staffing" survey system, which contains comparative statistics on public and private schools as well as detailed information on teacher and school characteristics. This new survey system will provide more information on the finances of elementary and secondary schools and will allow cross comparisons of teacher and school characteristics. The Center has reported periodically on preprimary education and on offerings and enrollments in high school subjects. The most recent statistics in these areas are summarized in the tables which follow.

This chapter of the Digest also makes use of data on student achievement from the National Assessment of Educational Progress; on public school enrollment by race or ethnicity from the Office for Civil Rights, U.S. Department of Education; on the characteristics, subjects taught, and average salaries of public school teachers from the National Education Association and the American Federation of Teachers; on private school enrollment from the National Catholic Educational Association; on mandatory ages of attendance, graduation requirements, and minimum competency testing for students and teachers from the Education Commission of the States; on the Scholastic Aptitude Test scores of college-bound high school seniors from the College Entrance Examination Board; and on the proportion of high school graduates going to college from the Bureau of Labor Statistics.

Additional information on public school libraries and the use of microcomputers in public and private schools is tabulated in chapter 7. Comparisons of the income and employment of high school graduates and dropouts, and college enrollment of high school graduates are in chapter 3. Tabulations of international data are in chapter 6. Further information on survey methodologies is in the "Guide to Sources" in the appendix and in the publications cited in the table source notes.

## Highlights

- In fall 1985, public elementary and secondary school enrollments increased for the first time since 1971. Enrollment has continued to rise, resulting in an increase of 3 percent from 1985 to 1989. (Tables 3 and 37)
- In contrast to the declining elementary and secondary school enrollments during the 1970s and early 1980s, preprimary education enrollment grew substantially. Between 1970 and 1980, preprimary enrollment of 3- to 5-year-olds rose by 19 percent; between 1980 to 1989, it increased an additional 24 percent. An important feature of the increasing participation of young children in preprimary schools is the high proportion in full-day programs. In 1989 about 37 percent of the children attended school all day compared with 32 percent in 1980. (Table 44)
- Despite drops in total elementary and secondary school enrollment during the late 1970s and early 1980s, increasing numbers of children were served in programs for the handicapped. In 1976-77, 8 percent of children were served in these programs compared with 11 percent in 1988-89. Most of this increase may be attributed to the proportion of children who were identified as learning disabled, which rose from less than 2 percent of all children in 1976-77 to 5 percent of all children in 1988-89. (Table 46)
- Of the 307,000 full-time and part-time private school teachers in 1987-88, about 78 percent were women. About 55 percent of the private school teachers were under age 40, and 34 percent had a master's degree or above. In contrast,

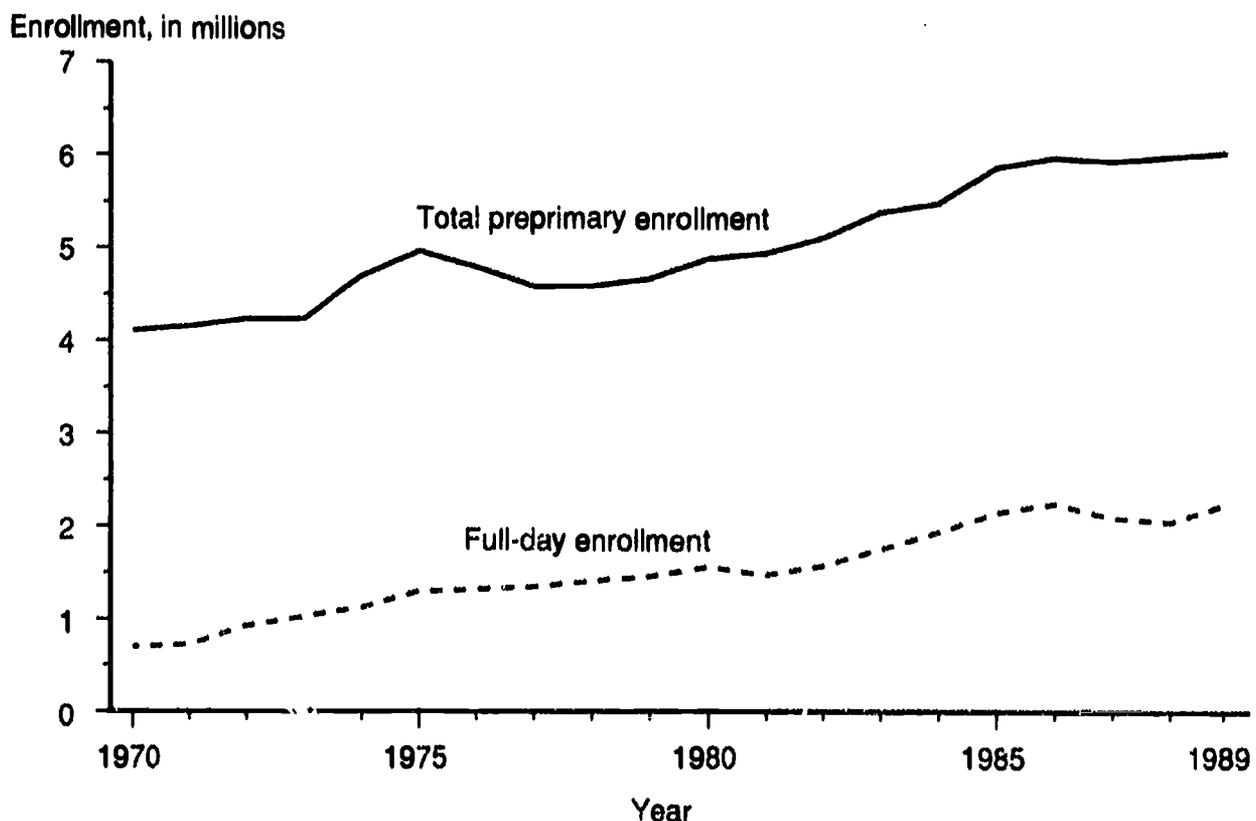
70 percent of public school teachers were women, 48 percent were under 40, and more than 47 percent had a master's degree or above. (Table 61)

- Schools with religious orientation charged significantly lower tuition than independent schools. In 1987-88, about 6 percent of Catholic schools and 11 percent of schools with other religious orientations charged more than \$2,500 tuition, compared with 58 percent of the independent private schools. The mean tuition paid by students at Catholic elementary schools was \$1,002 compared to \$1,589 at other religiously oriented schools, and \$3,144 at independent schools. Mean tuition paid by secondary school students was substantially higher, averaging \$2,042 at Catholic schools, \$3,071 at other religiously oriented schools, and \$6,324 at independent schools. (Table 55)
- During the 1970s and early 1980s, public school enrollment decreased, while the number of teachers increased. As a result, the pupil-teacher ratio declined markedly. Between 1970 and 1980, the pupil-teacher ratio for public schools fell from 22.3 to 18.7. After 1980, the number of pupils per teacher continued downward, reaching 17.2 in 1989. (Table 58)
- In general, public school teachers have higher salaries than private school teachers. In 1987-88, the average base salary for public school teachers was \$26,231 compared with \$16,562 for private school teachers. (Table 69)
- The average salary for public school teachers has grown rapidly in recent years, reaching \$31,304 in 1989-90. After adjustment for inflation, teachers' salaries rose 21 percent between 1980-81 and 1989-90, recouping the losses in purchasing power suffered during the 1970s. (Table 71)
- Teachers have expressed more satisfaction with their jobs in recent years. About 86 percent felt satisfied with their jobs in 1989 compared with 81 percent in 1984. (Table 70)
- The number of non teaching staff employed by public schools has grown at a faster rate than the number of pupils and teachers. In 1969-70, there were 13.5 pupils per staff member (total staff) compared with 9.2 pupils per staff member in 1988. During the same time period, the proportion of the total staff who were teachers declined from 60 percent to 53 percent. In 1987-88, the number of pupils per staff member at private schools was 9.9, approximately the same as for public schools. (Tables 54 and 76)
- Comparisons of the number of public and private high school graduates with the 17- and 18-year-old population show that the proportion of young people graduating from high school has not increased over the past 20 years. At its highest point in 1968-69, there were 77.1 graduates for every 100 persons 17 or 18 years of age. This ratio declined during the 1970s, falling to a low point of 71.4 in 1979-80. The ratio has risen slightly since then, reaching 74.1 in 1988-89. (Table 94)
- Students at ages 9, 13, and 17 were reading better in 1988 than they were in 1971, but most of the improvement occurred during the 1970s. Improvements in the achievement of minority students between 1971 and 1988 have reduced the gap between their performance and that of other students. (Tables 101 and 105)
- Student achievement in science rose between 1976-77 and 1985-86 for 9- and 13-year-olds, but showed no significant change for 17-year-olds. Between 1976-77 and 1985-86, the proportion of 9-year-olds who could understand simple scientific principles rose slightly, from 68 to 71 percent. The proportion of 13-year-olds who could apply scientific information rose from 49 percent to 53 percent. (Table 115)
- Results from the 1988 assessment of history proficiency showed that large numbers of students had some command of basic history facts, but their interpretative skills were relatively weak. Among 12th graders, 89 percent knew beginning historical information, but only 5 percent demonstrated an ability to interpret historical information. (Table 111)
- Results from a national assessment of mathematics achievement found that performance on basic skills improved between 1977-78 and 1985-86, but performance on more advanced operations remained the same or deteriorated. Between 1977-78 and 1985-86, the proportion of 13-year-olds who could perform basic operations rose from 65 percent to 73 percent, but the proportion who could perform moderately complex procedures declined from 18 to 16 percent. Similarly, the proportion of 17-year-olds who could perform basic operations rose from 92 percent to 96 percent, while the proportion who could perform multi-step problems declined from 7 to 6 percent. (Table 114)
- Between 1978-79 and 1988-89, mathematics SAT scores increased by 9 points, while verbal scores remained relatively stable. However, considerable difference existed among students from different racial/ethnic groups. Between 1978-79 and 1988-89, combined mathematics and verbal scores for white students rose by only 10 points compared with an increase of 49 points for black students

and 31 points for Mexican-American students. (Tables 119 and 120)

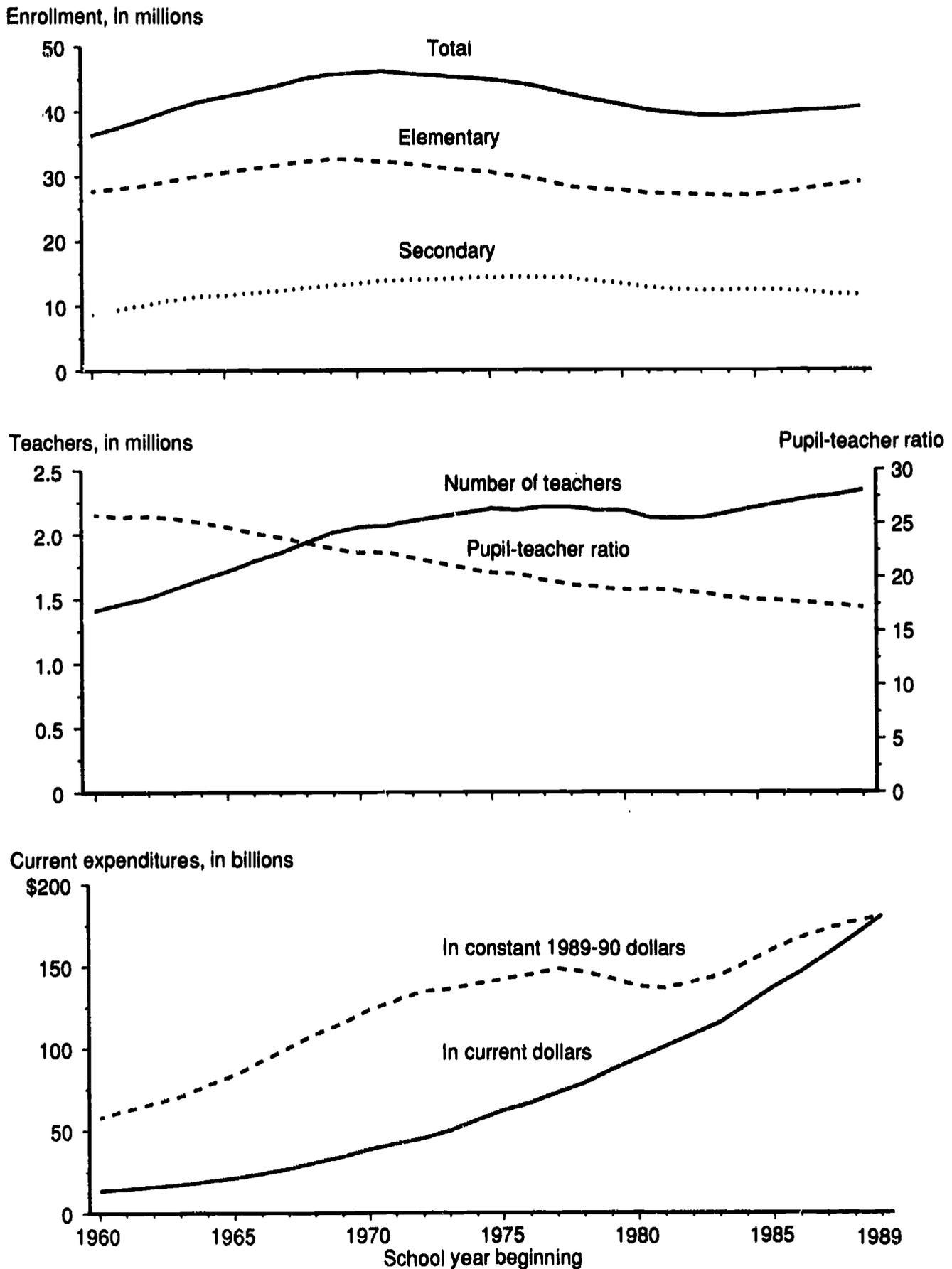
- The average number of science and mathematics courses completed by high school graduates increased substantially between 1982 and 1987. The mean number of mathematics courses (Carnegie units) completed in high school rose from 2.5 in 1982 to 3.0 in 1987, and the number of science courses rose from 2.2 to 2.6. As a result of the increased course load, the proportion of students completing the recommendations of the National Commission on Excellence (4 units of English; 3 units of social studies; 3 units of science; 3 units of mathematics; and .5 units of computer science) rose from 2.7 percent in 1982 to 13.6 percent in 1987. (Table 126)
- The average number of courses in vocational areas completed by all students dropped slightly, from 4.0 units in 1982 to 3.6 units in 1987. This decline was caused by a shift of students from vocational to non-vocational programs. Since the average number of units completed by vocational and academic program students remained stable or increased slightly between 1982 and 1987. (Table 127)
- Eighth-grade students at Catholic and other private schools were more likely to say that they "get along well with teachers" than students at public schools. Students at private schools were also more likely to feel that "rules for behavior are strict" than students at public schools. (Table 132)
- The proportion of public and private high school seniors who had ever used an illicit drug rose from 55 percent in 1975 to 66 percent in 1981. After 1981, the proportion of seniors who had ever used drugs fell, reaching 57 percent in 1987. Also, the proportion of high school seniors who have used cocaine fell from 17 percent in 1985 to 12 percent in 1988. Alcohol remains the most often used drug. The proportion of seniors using alcohol within the previous 30 days declined from 72 percent in 1980 to 60 percent in 1989. (Table 138)
- States are the most important funding source for public elementary and secondary schools. In 1987-88, 50 percent of all revenues came from State sources, 44 percent came from local sources, and 6 percent came from the Federal Government. (Table 147)
- The expenditure per student in public schools has risen significantly in recent years, even after allowing for inflation. In 1988-89, the average current expenditure per student in average daily attendance was \$4,495. After adjustment for inflation, this represents an increase of 28 percent since 1980-81. (Table 154)

**Figure 7.—Preprimary enrollment of 3- to 5-year olds, by attendance status: October 1970 to October 1989**



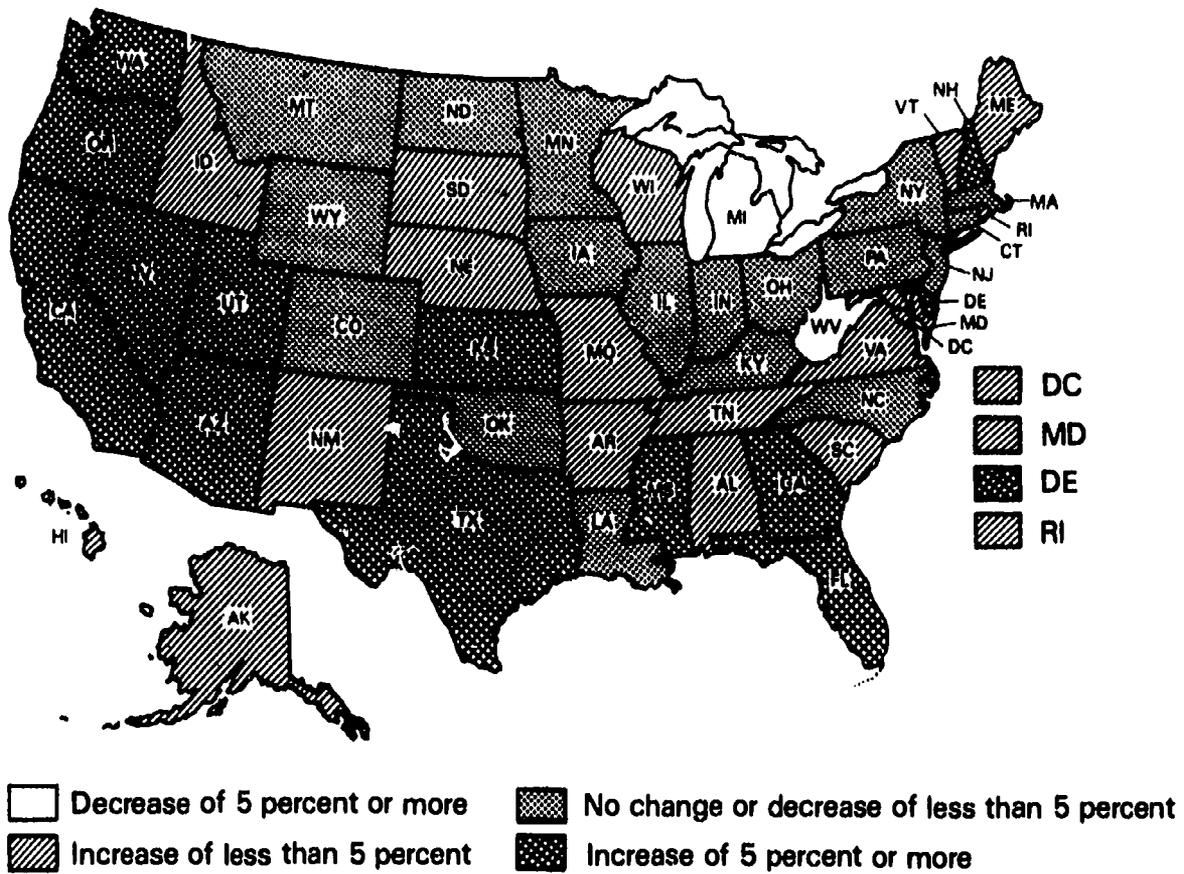
SOURCE: U.S. Department of Education, National Center for Education Statistics, *Preprimary Enrollment*, various years; and U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished data.

**Figure 8.—Enrollment, number of teachers, pupil-teacher ratios, and expenditures in public schools: 1960-61 to 1989-90**



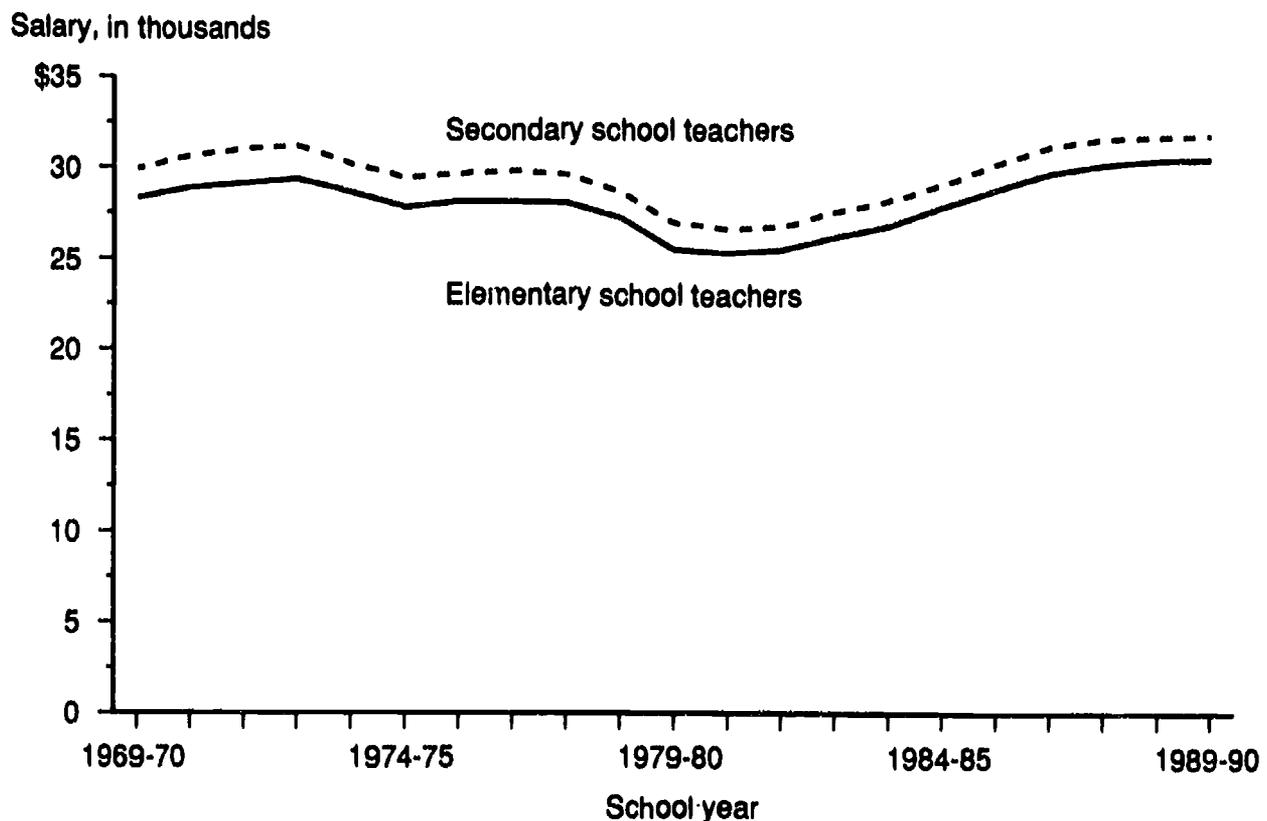
SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistic of Public Elementary and Secondary School Systems; Revenues and Expenditures for Public Elementary and Secondary School Systems; Revenues and Expenditures for Public Elementary and Secondary Education*; and Common Core of Data surveys.

**Figure 9.—Percentage change in public elementary and secondary enrollment, by State: Fall 1984 to fall 1989**



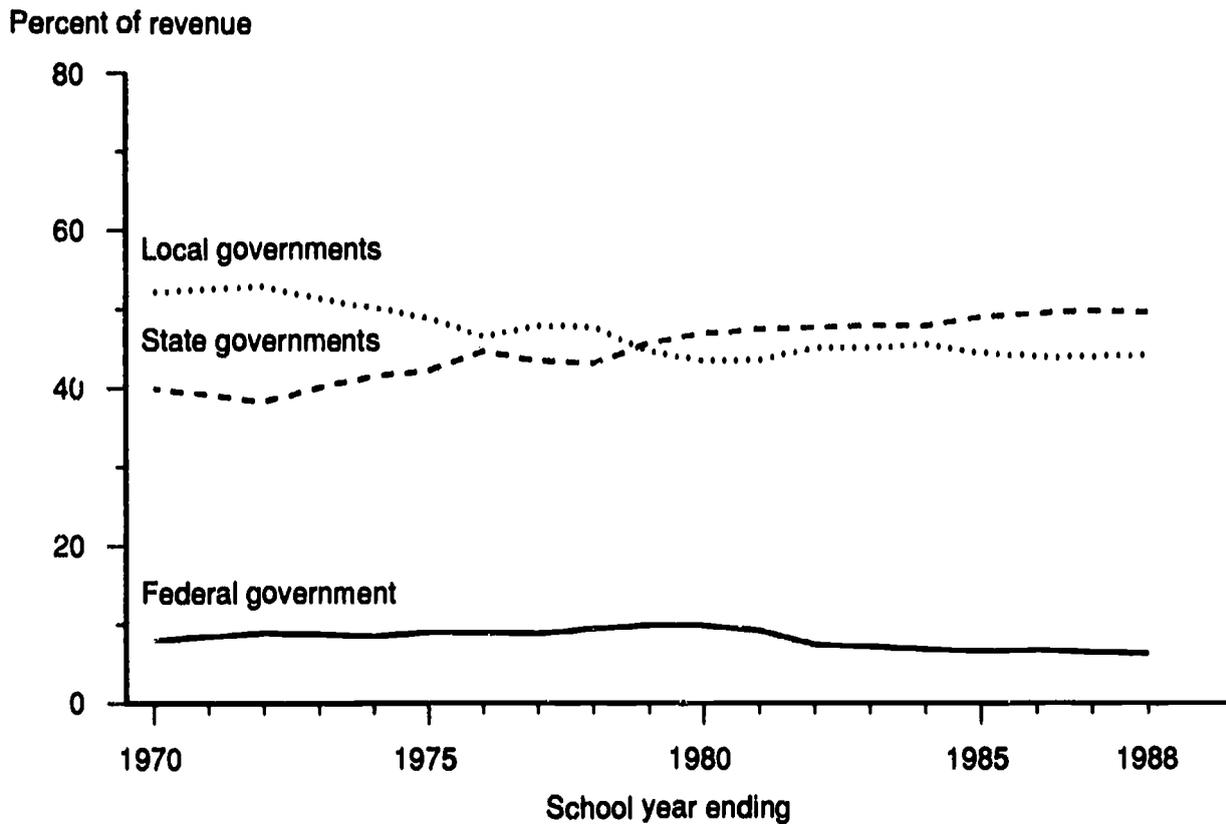
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data surveys.

**Figure 10.—Average annual salary for public elementary and secondary school teachers: 1969-70 to 1989-90 [In constant 1989-90 dollars]**



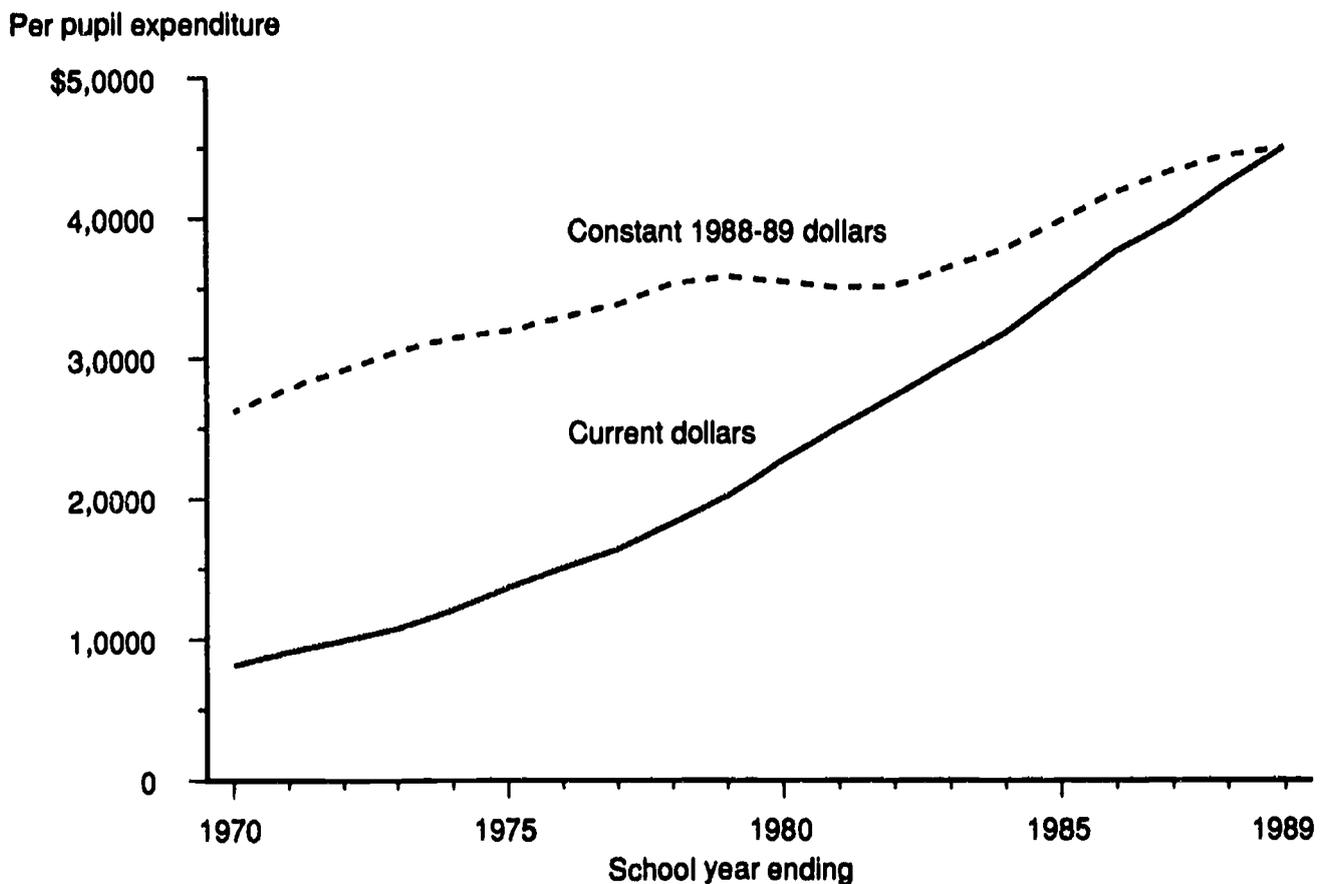
SOURCE: National Education Association, annual *Estimates of School Statistics*, (Latest edition 1989-90. Copyright ©1989 by the National Education Association. All rights reserved.)

**Figure 11.—Sources of revenue for public elementary and secondary schools: 1969-70 to 1987-88**



SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Revenues and Expenditures for Public Elementary and Secondary Education*; and Common Core of Data surveys.

**Figure 12.—Current expenditure per student in average daily attendance in public elementary and secondary schools: 1969-70 to 1988-89**



SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistic of Public Elementary and Secondary School Systems; Revenues and Expenditures for Public Elementary and Secondary Education*; and Common Core of Data surveys.

**Table 35.—Historical summary of public elementary and secondary school statistics: 1869-70 to 1987-88**

Item	1869-70	1879-80	1889-90	1899-1900	1909-10	1919-20	1929-30	1939-40	1949-50	1959-60	1969-70	1979-80	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Population, pupils, and instructional staff</b>														
Total population, <sup>1</sup> in thousands .....	39,818	50,156	62,948	75,995	90,492	104,512	121,770	130,880	148,665	179,323	201,385	224,567	241,107	243,419
Population aged 5-17 years, <sup>1</sup> in thousands .....	12,055	15,066	18,543	21,573	24,009	27,558	31,417	30,150	30,166	43,881	52,386	48,041	45,146	45,291
Percent of total population 5-17 .....	30.3	30.0	29.5	28.4	26.5	26.4	25.8	23.0	20.3	24.5	25.8	21.4	18.7	18.6
<b>Total enrollment in elementary and secondary schools, in thousands .....</b>														
Kindergarten and grades 1-8, in thousands .....	6,872	9,867	12,723	15,503	17,814	21,578	25,678	25,434	25,112	36,087	<sup>2</sup> 45,819	<sup>2</sup> 41,645	<sup>2</sup> 39,753	<sup>2</sup> 40,008
Grades 9-12, in thousands .....	8,792	9,757	12,520	14,984	16,899	19,378	21,279	18,833	19,387	27,602	<sup>2</sup> 32,597	<sup>2</sup> 27,931	<sup>2</sup> 27,419	<sup>2</sup> 27,930
	<sup>3</sup> 80	110	203	519	915	2,200	4,399	6,601	5,725	8,485	<sup>2</sup> 13,022	<sup>2</sup> 13,714	<sup>2</sup> 12,334	<sup>2</sup> 12,078
<b>Enrollment as a percent of total population .....</b>														
Percent of population aged 5-17 enrolled .....	17.3	19.7	20.2	20.4	19.7	20.6	21.1	19.4	18.9	20.1	22.4	18.5	16.5	16.4
Percent of population aged 5-17 enrolled .....	57.0	65.5	68.8	71.9	74.2	78.3	81.7	84.4	83.2	82.2	86.9	86.7	88.1	88.3
Percent of total enrollment in high schools (grades 9-12 and postgraduate) .....	1.2	1.1	1.8	3.3	5.1	10.2	17.1	26.0	22.7	23.5	28.5	32.9	31.0	30.2
High school graduates, in thousands .....	—	—	22	82	111	231	592	1,143	1,063	1,827	2,589	2,748	2,434	2,500
<b>Average daily attendance, in thousands .....</b>														
Total number of days attended by pupils enrolled, in millions .....	1,077	8,144	8,154	10,633	12,827	18,150	21,285	22,042	22,284	32,477	41,934	38,289	36,804	37,051
Percent of enrolled pupils attending daily .....	539	801	1,098	1,535	2,011	2,815	3,673	3,858	3,964	5,782	7,501	<sup>4</sup> 6,835	—	—
Average length of school term, in days .....	59.3	62.3	64.1	66.8	72.1	74.8	82.8	86.7	88.7	90.0	90.4	<sup>4</sup> 90.1	—	—
Average number of days attended per pupil .....	132.2	130.3	134.7	144.3	157.5	161.9	172.7	175.0	177.9	178.0	178.9	<sup>4</sup> 178.5	—	—
	78.4	81.1	86.3	99.0	113	121.2	143	151.7	157.9	160.2	181.7	<sup>4</sup> 160.8	—	—
<b>Total instructional staff, in thousands .....</b>														
Supervisors, in thousands .....	—	—	—	—	—	878	880	912	962	1,464	2,253	2,441	—	—
Principals, in thousands .....	—	—	—	—	—	7	7	5	9	14	32	<sup>4</sup> 35	—	—
Teachers, librarians, and other nonsupervisor instructional staff, <sup>5</sup> in thousands .....	—	—	—	—	—	14	31	32	39	64	91	106	—	—
Men, in thousands .....	201	267	364	423	523	657	843	875	914	1,397	2,131	2,300	2,361	2,398
Women, in thousands .....	78	123	128	127	110	93	140	195	195	<sup>4</sup> 402	<sup>4</sup> 891	<sup>4</sup> 782	—	—
Percent men .....	123	164	238	296	413	585	703	681	719	<sup>4</sup> 985	<sup>4</sup> 1,440	<sup>4</sup> 1,518	—	—
	38.7	42.8	34.5	29.9	21.1	14.1	18.6	22.2	21.3	<sup>4</sup> 29.0	<sup>4</sup> 32.4	<sup>4</sup> 34.0	—	—

Amounts in millions of current dollars

Finance	1869-70	1879-80	1889-90	1899-1900	1909-10	1919-20	1929-30	1939-40	1949-50	1959-60	1969-70	1979-80	1986-87	1987-88
<b>Total revenue receipts from .....</b>														
Federal Government .....	—	—	\$143	\$220	\$433	\$970	\$2,089	\$2,261	\$5,437	\$14,747	\$40,267	\$96,881	\$158,524	\$189,851
State governments .....	—	—	—	—	—	2	7	40	156	652	3,220	9,504	10,146	10,720
Local sources, including intermediate .....	—	—	—	—	—	160	354	684	2,166	5,768	16,063	45,349	78,830	84,042
Percent of revenue receipts from .....	—	—	—	—	—	808	1,728	1,536	3,116	8,327	20,985	42,029	89,547	74,689
Federal Government .....	—	—	—	—	—	0.3	0.4	1.8	2.9	4.4	8.0	9.8	6.4	6.3
State governments .....	—	—	—	—	—	18.5	18.9	30.3	39.8	39.1	39.9	46.8	49.7	49.5
Local sources, including intermediate .....	—	—	—	—	—	83.2	82.7	68.0	57.3	56.5	52.1	43.4	43.9	44.1
<b>Total expenditures for public schools .....</b>														
Current expenditures .....	\$63	\$78	\$141	\$215	\$426	\$1,036	\$2,317	\$2,344	\$5,838	\$15,613	\$40,683	\$95,962	<sup>4</sup> \$160,900	<sup>4</sup> \$172,000
Capital outlay .....	—	—	114	180	356	861	1,844	1,942	4,687	<sup>6</sup> 12,329	<sup>6</sup> 34,218	<sup>6</sup> 88,984	<sup>6</sup> 146,365	<sup>6</sup> 157,222
Interest on school debt .....	—	—	26	35	70	154	371	258	1,014	2,662	4,659	8,506	—	—
Other expenditures <sup>7</sup> .....	—	—	—	—	—	18	93	131	101	490	1,171	1,874	—	—
	—	—	—	—	—	3	10	13	36	133	636	<sup>4</sup> 598	—	—
<b>Percent of total expenditures devoted to .....</b>														
Current expenditures .....	—	—	81.3	83.5	83.6	83.1	79.6	82.8	80.3	<sup>6</sup> 79.0	<sup>6</sup> 84.1	<sup>6</sup> 90.6	—	—
Capital outlay .....	—	—	18.7	16.5	16.4	14.8	18.0	11.0	17.4	17.0	11.5	6.8	—	—
Interest on school debt .....	—	—	—	—	—	1.8	4.0	5.8	1.7	3.1	2.9	2.0	—	—
Other expenditures <sup>7</sup> .....	—	—	—	—	—	0.3	0.4	0.6	0.6	0.8	1.8	<sup>6</sup> 0.6	—	—

**Table 35.—Historical summary of public elementary and secondary school statistics: 1869-70 to 1987-88—Continued**

Item	1869-70	1878-80	1889-90	1899-1900	1909-10	1919-20	1929-30	1939-40	1949-50	1959-60	1969-70	1979-80	1986-87	1987-88	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Amounts in current dollars															
Annual salary of instructional staff <sup>9</sup> .....	\$189	\$195	\$252	\$325	\$485	\$871	\$1,420	\$1,441	\$3,010	\$5,174	\$8,840	<sup>10</sup> \$16,715	<sup>10</sup> \$27,641	<sup>10</sup> \$29,177	
Personal income <sup>1</sup> per member of labor force <sup>1</sup> .....	—	—	—	—	—	—	1,634	1,356	3,400	5,413	8,750	19,087	29,468	31,065	
Total school expenditures per capita of total population.....	1.59	1.56	2.23	2.83	4.71	9.91	19.03	17.91	39	87	202	427	4 667	4 707	
National income <sup>1</sup> per capita.....	—	—	—	—	—	—	667	587	1,520	2,272	3,829	9,117	14,154	15,058	
Current expenditure <sup>11</sup> per pupil in A.D.A. <sup>12</sup> .....	—	—	<sup>13</sup> 13.99	<sup>13</sup> 16.87	<sup>13</sup> 27.85	53.32	86.70	88.09	209	375	816	2,272	3,970	4,243	
Total expenditure <sup>14</sup> per pupil in A.D.A.....	15.55	12.71	17.23	20.21	33.23	64.16	108.49	106.74	159	472	955	2,506	4 4,365	4 4,642	
National income per pupil in A.D.A.....	—	—	—	—	—	—	3,845	3,502	10,312	12,547	18,656	53,470	92,573	98,929	
Current expenditure per day <sup>15</sup> per pupil in A.D.A.....	—	—	<sup>13</sup> 0.10	<sup>13</sup> 0.12	<sup>13</sup> 0.18	0.33	0.50	0.50	1.17	2.11	4.56	12.73	—	—	
Total expenditure per day per pupil in A.D.A.....	0.12	0.10	0.13	0.14	0.21	0.40	0.83	0.60	1.46	2.85	5.34	13.95	—	—	
Amounts in constant 1986-87 dollars															
Annual salary of instructional staff <sup>9</sup> .....	—	—	—	—	—	—	\$5,294	\$9,610	\$11,945	\$14,723	\$20,398	\$27,108	<sup>10</sup> \$24,942	<sup>10</sup> \$28,766	<sup>10</sup> \$29,177
Personal income <sup>1</sup> per member of labor force <sup>1</sup> .....	—	—	—	—	—	—	—	11,058	11,240	16,631	21,341	26,833	28,481	30,720	31,065
Total school expenditures per capita of total population.....	—	—	—	—	—	—	60	129	148	192	343	620	638	4 695	4 707
National income <sup>1</sup> per capita.....	—	—	—	—	—	—	—	4,514	4,866	7,435	8,957	11,742	13,604	14,740	15,058
Current expenditure <sup>11</sup> per pupil in A.D.A. <sup>12</sup> .....	—	—	—	—	—	—	324	587	730	1,021	1,479	2,502	3,390	4,135	4,243
Total expenditure <sup>14</sup> per pupil in A.D.A.....	—	—	—	—	—	—	390	734	877	777	1,862	2,929	3,740	4 4,546	4 4,642
National income per pupil in A.D.A.....	—	—	—	—	—	—	—	26,022	29,029	50,440	49,466	57,211	79,786	96,409	98,929
Current expenditure per day <sup>15</sup> per pupil in A.D.A.....	—	—	—	—	—	—	2.01	3.38	4.14	5.72	8.32	13.98	19.00	—	—
Total expenditure per day per pupil in A.D.A.....	—	—	—	—	—	—	2.43	4.26	4.97	7.14	10.45	18.38	20.82	—	—

<sup>1</sup> Data on population and labor force are from the Bureau of the Census, and data on personal income and national income are from the Bureau of Economic Analysis, U.S. Department of Commerce. Population data through 1959-60 are based on total population from the decennial census. Beginning in 1969-70, population data are resident population, excluding armed forces overseas, as of July 1.

<sup>2</sup> Fall enrollment.  
<sup>3</sup> Data for 1870-71.

<sup>4</sup> Estimated by the National Center for Education Statistics.  
<sup>5</sup> Prior to 1919-20, data are for the number of different persons employed rather than number of positions.  
<sup>6</sup> Because of the modification of the scope of "current expenditures for elementary and secondary schools," data for 1959-60 and later years are not entirely comparable with prior years.

<sup>7</sup> Includes summer schools, community colleges, and adult education. Beginning in 1959-60, also includes community services, formerly classified with "current expenditures for elementary and secondary schools."  
<sup>8</sup> Excludes community colleges and adult education.  
<sup>9</sup> Average includes supervisors, principals, teachers, and other nonsupervisory instructional staff.  
<sup>10</sup> Estimated by the National Education Association.

<sup>11</sup> Excludes current expenditures not allocable to pupil costs.  
<sup>12</sup> "A.D.A." means average daily attendance in elementary and secondary schools.  
<sup>13</sup> Includes interest on school debt.  
<sup>14</sup> The expenditure figure used here is the sum of current expenditures allocable to pupil costs, capital outlays, and interest on school debt.  
<sup>15</sup> Per-day rates derived by dividing annual rates by average length of term.  
 —Data not reported.

NOTE.—Kindergarten enrollment includes a relatively small number of nursery school pupils. Because of rounding, details may not add to totals. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistics of Public Elementary and Secondary School Systems; Revenues and Expenditures for Public Elementary and Secondary Education, FY 1980*; Common Core of Data survey; and Council of Economic Advisors, *Economic Indicators*. (This table was prepared March 1990.)

Table 36.—Enrollment in public elementary and secondary schools, by grade: Fall 1974 to fall 1988

Grade	Fall 1974	Fall 1975	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Fall 1983	Fall 1984	Fall 1985	Fall 1986	Fall 1987	Fall 1988
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Numbers in thousands															
All grades .....	45,053	44,791	44,317	43,577	42,550	41,645	40,918	40,022	39,566	39,252	39,206	39,422	39,753	40,008	40,192
Elementary .....	30,921	30,487	30,006	29,336	28,425	27,931	27,677	27,270	27,158	26,979	26,901	27,030	27,419	27,930	28,501
Kindergarten <sup>1</sup> .....	2,784	2,945	2,919	2,742	2,652	2,675	2,689	2,687	2,645	2,859	3,010	3,192	3,310	3,387	3,433
1st grade .....	3,200	3,236	3,330	3,295	3,062	2,938	2,894	2,951	2,937	3,080	3,113	3,239	3,358	3,407	3,460
2nd grade .....	3,107	3,027	3,084	3,199	3,148	2,898	2,800	2,782	2,790	2,781	2,904	2,941	3,054	3,173	3,223
3rd grade .....	3,171	3,038	2,986	3,060	3,158	3,096	2,908	2,806	2,763	2,772	2,765	2,895	2,933	3,046	3,167
4th grade .....	3,345	3,112	3,024	2,979	3,046	3,130	3,115	2,916	2,798	2,758	2,772	2,771	2,896	2,938	3,051
5th grade .....	3,510	3,281	3,115	3,019	2,990	3,055	3,130	3,127	2,912	2,798	2,761	2,778	2,775	2,901	2,945
6th grade .....	3,559	3,478	3,297	3,111	3,036	2,999	3,038	3,180	3,142	2,928	2,831	2,789	2,808	2,811	2,937
7th grade .....	3,711	3,619	3,576	3,384	3,226	3,128	3,087	3,183	3,288	3,247	3,036	2,938	2,899	2,910	2,905
8th grade .....	3,708	3,636	3,581	3,533	3,355	3,168	3,091	3,059	3,123	3,222	3,186	2,982	2,870	2,839	2,853
Elementary ungraded .....	307	567	534	524	760	848	924	576	560	533	524	507	516	519	525
Elementary special education .....	519	548	561	490	( <sup>2</sup> )										
Secondary .....	14,132	14,304	14,310	14,240	14,125	13,714	13,242	12,752	12,407	12,274	12,306	12,392	12,334	12,078	11,892
9th grade .....	3,832	3,679	3,823	3,779	3,726	3,518	3,380	3,286	3,248	3,330	3,440	3,439	3,256	3,143	3,107
10th grade .....	3,675	3,723	3,737	3,686	3,610	3,527	3,375	3,218	3,137	3,103	3,145	3,230	3,215	3,020	2,896
11th grade .....	3,301	3,354	3,373	3,388	3,312	3,241	3,195	3,039	2,917	2,861	2,819	2,866	2,954	2,936	2,750
12th grade .....	2,952	2,986	3,015	3,026	3,023	2,969	2,925	2,907	2,787	2,676	2,599	2,550	2,601	2,681	2,651
Postgraduate .....	14	23	23	13	( <sup>3</sup> )										
Secondary ungraded .....	63	63	84	145	454	462	366	302	316	302	304	307	309	288	288
Secondary special education .....	296	278	254	203	( <sup>3</sup> )										
Percent															
All grades .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary .....	68.6	68.1	67.7	67.3	66.8	67.1	67.6	68.1	68.6	68.7	68.6	68.6	69.0	69.8	70.9
Kindergarten <sup>1</sup> .....	6.2	6.6	6.6	6.3	6.2	6.4	6.6	6.7	7.2	7.3	7.7	8.1	8.3	8.5	8.5
1st grade .....	7.1	7.2	7.5	7.6	7.2	7.1	7.1	7.4	7.4	7.8	7.9	8.2	8.4	8.5	8.6
2nd grade .....	6.9	6.8	7.0	7.3	7.4	7.0	6.8	7.0	7.1	7.1	7.4	7.5	7.7	7.9	8.0
3rd grade .....	7.0	6.8	6.7	7.0	7.4	7.4	7.1	7.0	7.0	7.1	7.1	7.3	7.4	7.6	7.9
4th grade .....	7.4	6.9	6.8	6.8	7.2	7.5	7.6	7.3	7.1	7.0	7.1	7.0	7.3	7.3	7.6
5th grade .....	7.8	7.3	7.0	6.9	7.0	7.3	7.8	7.8	7.4	7.1	7.0	7.0	7.0	7.2	7.3
6th grade .....	7.9	7.8	7.4	7.1	7.1	7.2	7.4	7.9	7.9	7.5	7.2	7.1	7.1	7.0	7.3
7th grade .....	8.2	8.1	8.1	7.8	7.6	7.5	7.5	8.0	8.3	8.3	7.7	7.5	7.3	7.3	7.2
8th grade .....	8.2	8.1	8.1	8.1	7.9	7.6	7.6	7.6	7.9	8.2	8.1	7.8	7.2	7.1	7.1
Elementary ungraded .....	0.7	1.3	1.2	1.2	1.8	2.0	2.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
Elementary special education .....	1.2	1.2	1.3	1.1	( <sup>4</sup> )										
Secondary .....	31.3	31.9	32.3	32.6	33.2	32.9	32.4	31.9	31.4	31.3	31.4	31.4	31.0	30.2	29.1
9th grade .....	8.5	8.7	8.6	8.7	8.8	8.4	8.3	8.2	8.2	8.5	8.8	8.7	8.2	7.9	7.7
10th grade .....	8.2	8.3	8.4	8.5	8.5	8.5	8.2	8.0	7.9	7.9	8.0	8.2	8.1	7.5	7.2
11th grade .....	7.3	7.5	7.6	7.6	7.8	7.8	7.6	7.6	7.4	7.3	7.2	7.3	7.4	7.3	6.8
12th grade .....	6.6	6.7	6.6	6.9	7.1	7.1	7.1	7.3	7.0	6.8	6.6	6.5	6.5	6.7	6.6
Postgraduate .....	( <sup>4</sup> )	0.1	0.1	( <sup>4</sup> )											
Secondary ungraded .....	0.1	0.1	0.2	0.3	1.1	1.1	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
Secondary special education .....	0.7	0.6	0.6	0.5	( <sup>4</sup> )										

<sup>1</sup>Includes a relatively small number of prekindergarten pupils.

<sup>2</sup>Included in "elementary ungraded."

<sup>3</sup>Included in "secondary ungraded."

<sup>4</sup>Less than 0.05 percent.

NOTE.—Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary School Systems*; and Common Core of Data survey. (This table was prepared March 1990.)

Table 37.—Enrollment in public elementary and secondary schools, by level and State: Fall 1981 to fall 1989

State or other area	Fall 1981	Fall 1982	Fall 1983	Fall 1984		Fall 1985			
	Total	Total	Total	Total	Kindergarten through 6 <sup>2</sup>	Grades 9 to 12	Total	Kindergarten through grade 8 <sup>2</sup>	Grades 9 to 12
1	2	3	4	5	6	7	8	9	10
United States.....	40,021,850	39,565,810	39,252,308	39,208,252	29,900,641	12,307,611	39,422,051	27,030,262	12,391,789
Alabama.....	743,448	724,037	721,901	712,586	514,355	199,231	730,480	517,991	213,099
Alaska <sup>2</sup> .....	90,858	89,413	98,206	104,599	75,206	29,393	107,345	77,211	30,134
Arizona.....	507,199	510,298	508,682	530,062	373,235	156,627	548,252	386,057	162,195
Arkansas.....	437,121	432,585	432,120	432,668	304,518	126,150	433,410	303,536	129,874
California.....	4,046,158	4,065,486	4,089,017	4,151,110	2,845,962	1,305,148	4,255,554	2,926,705	1,328,849
Colorado.....	544,174	545,209	542,196	545,427	376,216	169,211	550,642	376,735	171,907
Connecticut <sup>2</sup> .....	505,366	466,470	477,565	468,145	323,391	144,754	462,026	321,203	140,823
Delaware.....	95,072	92,648	91,406	91,767	61,961	23,808	92,901	63,082	29,819
District of Columbia.....	94,975	91,105	88,843	87,397	62,608	24,589	87,092	62,464	24,568
Florida.....	1,487,721	1,484,734	1,495,543	1,524,107	1,061,736	482,371	1,562,283	1,086,250	476,033
Georgia.....	1,056,117	1,053,689	1,050,859	1,082,315	745,837	316,478	1,079,594	756,752	322,842
Hawaii.....	162,805	162,024	162,241	163,860	111,650	52,210	164,169	111,564	52,606
Idaho.....	204,524	202,973	206,352	208,860	148,937	59,143	208,669	149,380	59,289
Illinois.....	1,924,084	1,880,289	1,853,316	1,834,355	1,254,477	579,678	1,826,478	1,246,496	579,982
Indiana.....	1,025,172	999,542	984,384	972,659	661,779	310,880	966,106	654,061	312,045
Iowa.....	516,216	504,983	497,287	491,011	328,635	162,178	485,332	324,332	161,300
Kansas.....	409,909	407,074	405,222	405,347	282,162	123,165	410,229	285,671	124,558
Kentucky.....	658,350	651,084	647,414	644,421	451,111	193,310	643,833	448,768	195,065
Louisiana.....	782,053	784,027	800,193	800,941	576,911	222,030	788,349	573,068	215,281
Maine.....	218,293	211,986	209,753	207,537	142,178	65,361	206,101	140,413	65,688
Maryland.....	721,841	699,201	683,491	673,840	446,244	227,596	671,560	448,321	225,239
Massachusetts.....	847,037	906,984	876,844	859,391	566,028	293,363	844,330	559,057	285,273
Michigan.....	1,724,767	1,674,697	1,635,963	1,609,446	1,090,362	519,086	1,602,747	1,085,582	517,165
Minnesota.....	733,741	715,190	705,236	701,697	464,107	237,590	705,140	467,957	237,183
Mississippi.....	471,815	468,294	467,744	466,058	325,454	140,604	471,195	329,961	141,214
Missouri.....	616,705	602,535	795,453	793,793	545,062	248,731	795,107	544,197	250,910
Montana.....	153,435	152,335	153,646	154,412	108,796	45,618	153,869	107,918	45,951
Nebraska.....	273,340	269,009	266,998	271,599	184,618	60,961	265,619	184,296	61,523
Nevada.....	151,339	151,104	150,442	151,633	104,963	46,670	154,946	107,070	47,676
New Hampshire.....	163,827	160,197	159,030	158,614	105,525	53,089	160,974	106,912	54,062
New Jersey.....	1,199,843	1,172,520	1,147,841	1,129,223	747,182	382,041	1,116,194	740,497	375,697
New Mexico.....	268,091	268,632	269,711	272,478	194,928	77,550	277,551	187,479	90,072
New York.....	2,760,774	2,716,676	2,674,616	2,645,811	1,712,219	933,592	2,621,376	1,703,430	917,946
North Carolina.....	1,106,960	1,096,815	1,089,606	1,088,724	755,313	333,411	1,086,165	749,451	336,714
North Dakota.....	117,706	117,078	117,213	118,711	83,635	35,078	116,570	83,702	34,868
Ohio.....	1,698,501	1,660,245	1,627,300	1,605,440	1,220,019	585,421	1,793,965	1,206,174	587,791
Oklahoma.....	582,572	593,625	591,389	589,690	416,664	173,026	592,327	414,279	178,048
Oregon.....	457,165	448,184	447,109	448,884	305,628	141,256	447,527	305,416	142,109
Pennsylvania.....	1,839,015	1,783,969	1,737,952	1,701,860	1,102,776	599,104	1,693,221	1,092,556	590,663
Rhode Island.....	143,414	139,959	136,412	134,610	69,710	44,900	132,849	69,971	43,976
South Carolina.....	609,156	606,516	604,553	602,716	422,417	180,301	606,643	424,125	182,516
South Dakota.....	125,657	123,697	123,060	123,314	66,724	36,590	124,291	67,644	36,647
Tennessee.....	838,297	826,264	822,057	817,212	581,452	235,760	813,753	574,517	239,236
Texas.....	2,935,547	2,965,659	2,969,796	3,040,305	2,186,511	651,794	3,131,705	2,260,679	871,026
Utah.....	355,554	370,183	376,206	390,141	289,340	100,601	403,395	296,760	104,635
Vermont.....	93,183	91,454	90,416	90,089	62,738	27,351	90,157	62,703	27,454
Virginia.....	969,548	975,727	966,110	965,222	667,215	296,007	966,104	665,151	302,953
Washington.....	750,188	739,215	736,239	741,177	502,392	236,765	749,706	506,990	242,616
West Virginia.....	377,772	375,115	371,251	362,941	255,112	107,629	357,923	249,034	108,889
Wisconsin.....	804,262	784,630	774,646	787,542	497,175	270,367	768,234	501,402	266,832
Wyoming.....	99,541	101,665	99,254	101,261	73,049	29,212	102,779	73,966	28,791
Outlying areas									
American Samoa.....	9,696	—	10,124	—	—	—	—	—	—
Guam.....	25,084	25,676	26,249	—	—	—	26,043	19,266	6,777
Northern Marianas.....	5,300	—	4,499	4,841	3,531	1,310	—	—	—
Puerto Rico.....	721,419	708,794	701,925	692,923	512,205	180,716	686,914	507,973	178,941
Trust Territory of the Pacific.....	—	—	39,623	—	—	—	—	—	—
Virgin Islands.....	25,525	25,699	26,126	26,122	19,131	6,991	25,446	16,690	6,756

Table 37.—Enrollment in public elementary and secondary schools, by level and State: Fall 1981 to fall 1989—Continued

State or other area	Fall 1986			Fall 1987			Fall 1988			Estimated fall 1989 <sup>1</sup>
	Total	Kindergarten through grade 8 <sup>2</sup>	Grades 9 to 12	Total	Kindergarten through 8 <sup>2</sup>	Grades 9 to 12	Total	Kindergarten through grade 8 <sup>2</sup>	Grades 9 to 12	Total
I	11	12	13	14	15	16	17	18	19	20
<b>United States.....</b>	<b>39,783,172</b>	<b>27,418,687</b>	<b>12,334,485</b>	<b>40,007,948</b>	<b>27,830,278</b>	<b>12,077,668</b>	<b>40,192,388</b>	<b>28,500,728</b>	<b>11,891,660</b>	<b>40,808,342</b>
Alabama.....	733,735	518,982	214,753	729,234	521,004	208,230	724,751	521,650	203,101	728,254
Alaska <sup>3</sup> .....	107,848	77,908	29,942	105,878	76,894	28,984	108,481	78,518	27,963	109,028
Arizona.....	534,538	371,419	163,119	572,421	412,501	159,920	574,890	417,579	157,311	597,101
Arkansas.....	437,438	306,851	130,587	437,038	307,248	129,788	436,387	309,268	127,119	449,108
California.....	4,377,989	3,045,684	1,332,305	4,489,322	3,172,094	1,317,228	4,818,120	3,317,194	1,300,926	5,079,934
Colorado.....	558,415	388,304	172,111	560,238	391,988	168,250	560,081	399,853	160,228	526,680
Connecticut <sup>4</sup> .....	488,847	321,823	147,024	485,485	326,250	139,215	483,488	331,397	132,091	483,600
Delaware.....	94,410	64,807	29,603	95,659	66,714	28,945	96,878	68,886	27,992	97,608
District of Columbia.....	85,812	62,458	23,158	88,435	62,857	23,578	84,792	62,334	22,458	88,000
Florida.....	1,607,320	1,120,938	489,382	1,684,774	1,171,809	492,965	1,720,930	1,232,007	488,923	1,772,558
Georgia.....	1,098,425	777,991	318,434	1,110,947	795,032	315,915	1,107,994	807,864	300,130	1,128,111
Hawaii.....	184,840	113,258	51,384	188,180	115,854	50,306	187,488	118,848	48,840	189,193
Idaho.....	208,391	149,813	58,778	212,444	153,358	59,088	214,815	155,505	59,110	212,550
Illinois.....	1,825,185	1,249,340	575,845	1,811,448	1,251,790	559,656	1,794,918	1,259,124	535,792	1,745,985
Indiana.....	868,780	653,813	313,187	864,129	658,658	305,473	860,994	667,847	293,347	858,350
Iowa.....	481,288	323,538	157,750	480,828	328,438	152,390	478,200	333,988	144,212	478,734
Kansas.....	418,091	291,584	124,527	421,112	298,518	122,598	426,598	308,751	119,845	430,362
Kentucky.....	642,778	448,901	195,877	642,698	449,033	193,663	637,827	451,805	185,822	630,688
Louisiana.....	795,188	580,771	214,417	793,093	582,742	210,351	788,683	581,095	205,588	780,183
Maine.....	211,752	143,871	68,081	211,817	145,499	68,318	212,902	148,904	63,998	213,388
Maryland.....	675,747	458,045	219,702	683,797	472,909	210,888	688,947	489,115	199,832	688,808
Massachusetts.....	833,918	559,418	274,500	825,320	565,042	260,278	823,428	577,795	245,633	818,347
Michigan.....	1,597,154	1,089,757	507,397	1,593,287	1,097,004	492,283	1,582,785	1,113,595	469,190	1,500,000
Minnesota.....	711,134	479,130	232,004	721,481	498,553	224,928	728,950	511,279	215,671	692,100
Mississippi.....	498,639	356,052	142,587	505,550	364,129	141,421	503,328	367,593	135,733	450,772
Missouri.....	800,608	549,348	251,258	802,060	557,073	244,987	808,839	587,880	238,779	807,934
Montana.....	153,327	107,572	45,755	152,207	108,017	44,190	152,191	109,528	42,665	150,593
Nebraska.....	287,139	185,282	81,857	288,100	188,168	79,934	289,434	191,302	78,132	270,388
Nevada.....	181,239	112,184	49,075	188,353	119,077	49,278	178,474	127,414	49,060	188,834
New Hampshire.....	183,717	109,948	53,769	186,045	114,098	51,947	189,413	119,785	49,828	187,388
New Jersey.....	1,107,487	742,324	385,143	1,092,982	747,402	345,580	1,080,871	755,073	325,798	1,078,006
New Mexico.....	281,943	191,037	90,906	287,229	195,413	91,818	292,425	200,129	92,298	284,438
New York.....	2,807,719	1,713,465	894,254	2,594,078	1,735,527	858,543	2,573,715	1,780,598	813,119	2,572,500
North Carolina.....	1,085,248	748,451	338,797	1,085,978	753,505	332,381	1,083,158	781,089	322,067	1,078,153
North Dakota.....	118,703	83,920	34,773	119,004	84,379	34,625	118,809	85,182	33,627	117,134
Ohio.....	1,793,598	1,208,110	585,398	1,783,431	1,219,978	573,453	1,778,544	1,229,384	548,160	1,765,300
Oklahoma.....	593,183	417,287	175,808	584,212	410,995	173,217	580,428	413,858	168,770	580,000
Oregon.....	449,307	308,527	140,780	455,895	317,920	137,975	461,752	328,228	133,528	472,394
Pennsylvania.....	1,874,181	1,098,115	578,048	1,863,542	1,111,171	557,371	1,859,714	1,132,831	527,883	1,854,480
Rhode Island.....	134,890	91,984	42,728	134,800	93,623	41,177	134,347	95,265	39,082	135,035
South Carolina.....	611,829	427,751	183,878	614,921	431,505	183,338	615,774	437,828	177,948	618,179
South Dakota.....	125,458	89,373	36,085	126,817	91,362	35,455	128,910	92,558	34,354	127,115
Tennessee.....	618,073	577,045	241,028	623,783	582,432	241,351	621,580	585,972	235,808	630,860
Texas.....	3,209,515	2,317,454	892,061	3,236,787	2,350,858	885,931	3,283,707	2,392,079	891,628	3,309,000
Utah.....	415,994	308,389	107,805	423,388	313,953	109,433	431,119	319,423	111,696	435,782
Vermont.....	92,112	63,392	28,720	92,755	65,012	27,743	93,484	66,745	28,719	94,470
Virginia.....	975,135	673,237	301,898	979,417	685,172	294,245	982,393	699,084	283,329	985,749
Washington.....	781,428	521,333	240,095	775,755	540,982	234,819	790,918	563,100	227,813	809,727
West Virginia.....	351,837	243,538	108,299	344,238	238,811	107,310	335,912	231,819	104,093	328,089
Wisconsin.....	787,819	509,584	258,235	772,363	521,811	250,830	774,657	535,215	239,842	777,359
Wyoming.....	170,955	72,239	28,718	170,455	71,111	28,088	170,793	70,415	27,378	171,135
<b>Outlying areas</b>										
American Samoa.....	11,055	8,133	2,922	11,248	8,313	2,935	11,784	8,911	2,863	—
Guam.....	25,876	18,522	7,154	25,938	18,713	7,223	26,041	18,859	7,382	—
Northern Marianas.....	—	—	—	5,819	4,424	1,395	6,079	4,699	1,380	—
Puerto Rico.....	379,489	503,012	178,477	672,837	498,853	173,984	681,693	491,836	189,857	—
Trust Territory of the Pacific.....	—	—	—	—	—	—	—	—	—	—
Virgin Islands.....	24,435	17,778	6,657	24,020	17,131	6,889	23,492	17,102	6,390	—

<sup>1</sup> Data estimated by State education agencies.  
<sup>2</sup> Includes a relatively small number of prekindergarten students.  
<sup>3</sup> Includes imputation for nonreporting States.  
<sup>4</sup> Actual data.  
<sup>5</sup> Beginning in 1983, data include students enrolled in public schools on Federal bases and other special arrangements.  
<sup>6</sup> Beginning in 1986, data include State vocational/technical schools.

<sup>7</sup> Data estimated by NCEES.  
 —Data not available.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared January 1990.)

Table 38.—Enrollment in public elementary and secondary schools, by grade and State: Fall 1968

State or other area	Total, all levels	Prekindergarten through grade 8 and elementary unclassified							
		Total	Prekindergarten <sup>1</sup>	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
1	2	3	4	5	6	7	8	9	10
<b>United States</b> .....	<b>40,192,366</b>	<b>28,570,726</b>	<b>224,711</b>	<b>3,206,369</b>	<b>3,480,098</b>	<b>3,223,436</b>	<b>3,167,158</b>	<b>3,050,833</b>	<b>2,945,376</b>
Alabama.....	724,751	521,650	—	54,265	61,324	58,390	62,462	57,531	57,035
Alaska.....	106,481	76,518	1,747	8,637	10,468	9,433	8,905	6,517	8,151
Arizona.....	574,890	417,579	607	48,132	54,869	48,451	47,970	45,518	43,713
Arkansas.....	436,387	309,268	—	34,023	36,493	34,935	34,851	33,777	32,648
California.....	4,616,120	3,317,194	—	403,237	409,608	385,936	370,676	352,076	339,997
Colorado.....	560,081	399,653	2,396	46,599	49,844	47,005	45,202	43,381	41,272
Connecticut.....	463,488	331,397	3,911	38,890	40,917	38,759	35,335	34,359	33,212
Delaware.....	96,878	68,686	293	7,676	9,109	8,199	7,428	7,592	7,072
District of Columbia.....	84,792	62,334	3,570	6,292	7,614	7,002	6,536	6,242	5,669
Florida.....	1,720,930	1,232,007	8,317	153,773	152,910	141,231	136,584	132,484	124,846
Georgia.....	1,107,994	807,864	—	96,054	97,079	94,513	94,992	88,314	85,155
Hawaii.....	187,488	118,648	261	14,091	14,280	13,796	13,428	12,654	12,075
Idaho.....	214,815	155,505	—	16,925	18,517	17,637	17,757	17,534	16,996
Illinois.....	1,794,916	1,259,124	26,945	128,748	139,972	136,281	139,960	133,592	127,458
Indiana.....	960,984	667,647	814	71,250	81,616	74,717	74,344	71,757	70,788
Iowa.....	476,200	333,988	3,334	39,067	38,197	37,623	37,112	35,491	34,172
Kansas.....	426,596	306,751	1,043	36,471	37,173	35,397	34,209	32,345	31,119
Kentucky.....	337,827	451,805	—	48,112	53,831	50,263	50,578	49,133	48,288
Louisiana.....	786,683	581,095	1,235	67,051	71,130	64,420	64,673	63,614	61,006
Maine.....	212,902	148,904	1,781	17,394	16,704	16,609	15,759	15,693	15,389
Maryland.....	668,947	489,115	10,882	53,667	61,032	56,492	54,629	52,046	49,418
Massachusetts.....	823,428	577,795	6,017	69,572	70,859	64,684	62,404	60,342	58,619
Michigan.....	1,592,795	1,113,595	9,549	138,772	128,366	119,621	117,170	113,658	110,733
Minnesota.....	726,950	511,279	5,827	61,442	62,115	59,960	58,329	55,459	53,457
Mississippi.....	503,326	367,593	172	37,653	45,268	42,369	41,239	39,649	38,627
Missouri.....	806,639	567,860	—	65,867	65,599	63,562	64,499	63,096	61,446
Montana.....	152,191	109,526	268	12,583	13,491	12,550	12,272	11,724	11,821
Nebraska.....	269,434	191,302	1,509	22,838	23,002	22,463	21,904	20,746	20,077
Nevada.....	176,474	127,414	—	14,546	16,391	15,395	14,804	13,969	13,242
New Hampshire.....	169,413	119,765	—	7,364	16,635	14,776	13,749	13,069	12,625
New Jersey.....	1,080,671	755,073	6,195	79,662	87,426	80,904	79,521	78,262	76,102
New Mexico.....	292,425	200,129	—	23,517	25,906	24,069	23,180	21,602	21,206
New York.....	2,573,715	1,760,596	25,005	165,771	211,203	194,350	186,854	183,779	176,457
North Carolina.....	1,083,156	761,069	1,540	84,738	87,610	82,867	83,087	81,174	79,940
North Dakota.....	116,809	85,182	633	10,232	10,497	9,963	9,475	9,202	9,020
Ohio.....	1,776,544	1,229,384	—	132,736	149,661	142,038	140,143	135,733	130,433
Oklahoma.....	580,426	413,656	2,967	47,328	56,649	48,787	45,532	43,540	42,540
Oregon.....	481,752	328,226	1,265	32,246	40,413	37,137	36,374	36,978	35,958
Pennsylvania.....	1,659,714	1,132,631	—	124,878	138,266	126,746	123,106	119,150	115,468
Rhode Island.....	134,347	95,265	358	9,979	12,733	10,734	10,336	9,813	9,503
South Carolina.....	615,774	437,826	—	41,433	56,673	50,341	50,365	49,024	47,704
South Dakota.....	126,910	92,556	376	10,655	11,454	10,795	10,640	10,137	9,496
Tennessee.....	821,580	585,972	—	62,118	72,103	64,181	63,350	63,206	61,447
Texas.....	3,283,707	2,362,678	77,548	251,418	295,811	271,568	266,065	255,932	246,934
Utah.....	431,119	319,423	1,568	35,242	37,350	36,625	37,498	36,190	32,918
Vermont.....	93,464	66,745	—	6,232	6,607	7,776	7,463	7,256	6,991
Virginia.....	962,393	699,064	1,810	80,731	81,510	78,780	78,531	73,540	70,604
Washington.....	790,918	563,100	3,078	65,647	70,615	66,394	64,597	62,240	59,602
West Virginia.....	335,912	231,819	654	23,567	25,694	24,463	24,673	23,792	25,013
Wisconsin.....	774,667	535,215	11,502	62,754	62,459	60,142	59,390	56,814	54,375
Wyoming.....	97,793	70,415	—	8,306	8,825	8,059	8,176	8,007	7,333
<b>Outlying areas</b>									
American Samoa.....	11,764	8,911	1,354	910	922	823	651	788	804
Guam.....	26,041	18,659	366	2,203	2,307	2,164	2,056	2,012	1,969
Northern Marianas.....	6,079	4,899	—	529	535	500	505	457	484
Puerto Rico.....	661,693	491,636	—	30,788	59,817	56,489	56,489	58,148	57,846
Virgin Islands.....	2,492	17,102	—	1,760	1,672	1,919	1,621	1,730	1,794

Table 38.—Enrollment in public elementary and secondary schools, by grade and State: Fall 1988—Continued

State or other area	Prekindergarten through grade 6 and elementary unclassified				Grades 9 through 12 and secondary unclassified					
	Grade 6	Grade 7	Grade 8	Elementary unclassified	Total	Grade 9	Grade 10	Grade 11	Grade 12	Secondary unclassified
	11	12	13	14	15	16	17	18	19	20
<b>United States ..</b>	<b>2,936,637</b>	<b>2,905,238</b>	<b>2,853,164</b>	<b>525,440</b>	<b>11,891,660</b>	<b>3,107,297</b>	<b>2,895,570</b>	<b>2,749,803</b>	<b>2,650,630</b>	<b>288,360</b>
Alabama.....	57,592	57,769	55,262	—	203,101	58,543	51,114	47,673	45,571	—
Alaska.....	7,826	7,650	7,184	—	27,963	7,468	7,065	6,559	6,651	—
Arizona.....	42,508	41,345	39,317	5,149	157,311	43,002	39,886	37,050	36,962	411
Arkansas.....	32,865	33,580	33,461	2,635	127,119	33,009	32,169	30,746	30,074	1,121
California.....	335,443	330,437	316,856	70,726	1,300,926	356,732	338,671	313,962	257,450	33,691
Colorado.....	40,698	40,163	39,524	3,789	160,228	41,348	39,484	38,619	37,538	3,061
Connecticut.....	32,536	31,960	31,863	11,653	132,091	34,505	32,593	32,052	32,927	14
Delaware.....	6,965	7,095	6,857	—	27,792	7,651	7,082	6,272	6,607	—
District of Columbia.....	5,434	5,930	5,342	2,703	22,458	5,390	5,927	4,951	4,346	1,844
Florida.....	126,533	127,685	127,642	—	486,923	144,216	130,426	114,622	99,659	—
Georgia.....	84,951	84,317	82,489	—	300,130	80,718	76,139	67,373	65,902	—
Hawaii.....	11,938	11,176	10,715	4,232	48,840	11,727	11,147	10,945	10,039	4,982
Idaho.....	16,688	16,367	15,776	1,308	59,110	15,710	14,692	14,014	13,943	751
Illinois.....	127,603	124,146	121,610	52,589	535,792	130,730	128,478	121,207	120,267	35,112
Indiana.....	70,693	70,744	71,967	6,757	293,347	74,505	71,412	69,609	69,641	7,960
Iowa.....	33,747	32,966	33,186	9,093	144,212	33,373	32,229	34,204	36,157	6,249
Kansas.....	31,087	30,402	29,543	7,962	119,645	29,962	29,326	26,867	26,763	2,885
Kentucky.....	46,574	47,516	46,143	9,369	165,622	48,563	46,075	44,841	42,362	3,961
Louisiana.....	60,410	61,479	54,975	10,900	205,588	60,966	52,671	46,123	41,604	4,024
Maine.....	15,060	14,923	15,261	2,331	63,998	16,255	15,736	15,462	15,662	883
Maryland.....	50,235	47,803	46,782	6,129	199,832	52,169	47,541	46,285	47,248	6,569
Massachusetts.....	58,162	58,134	58,141	10,461	245,633	63,606	61,174	60,265	60,568	—
Michigan.....	108,696	107,727	109,134	49,971	469,190	123,745	112,605	108,749	107,398	16,693
Minnesota.....	51,647	51,559	51,484	—	215,071	51,806	52,006	53,522	58,335	—
Mississippi.....	38,790	38,611	36,129	6,666	135,733	36,909	33,692	30,389	29,129	5,614
Missouri.....	60,775	59,236	58,880	4,698	238,779	63,567	59,696	57,377	56,216	1,919
Montana.....	11,452	11,143	10,769	1,653	42,665	10,585	10,267	10,294	10,958	561
Nebraska.....	19,657	19,243	19,661	—	78,132	19,567	19,029	19,572	19,964	—
Nevada.....	13,129	12,743	12,310	885	49,060	12,463	12,454	12,199	11,916	28
New Hampshire.....	12,390	12,144	12,131	2,900	49,628	13,230	11,969	12,219	11,676	332
New Jersey.....	75,836	74,256	73,694	43,223	325,796	79,266	75,651	75,390	78,033	17,256
New Mexico.....	20,638	19,960	19,939	—	92,296	21,672	20,136	17,765	16,915	15,608
New York.....	176,061	180,283	172,302	68,531	613,119	202,096	191,947	187,652	181,593	69,629
North Carolina.....	61,612	60,065	62,566	15,570	322,067	69,256	63,514	75,722	73,595	—
North Dakota.....	6,890	6,741	6,469	—	33,627	6,505	6,470	6,219	6,433	—
Ohio.....	130,444	130,631	131,165	—	549,160	144,343	134,124	133,497	137,196	—
Oklahoma.....	42,803	41,397	39,041	5,074	166,770	42,824	41,321	40,412	40,073	2,140
Oregon.....	35,699	35,017	34,398	2,521	133,526	34,447	33,336	32,461	32,320	942
Pennsylvania.....	115,934	117,340	117,664	34,357	527,083	127,405	124,642	123,717	124,572	26,547
Rhode Island.....	9,467	9,449	9,375	3,538	39,062	10,421	9,706	9,195	9,117	621
South Carolina.....	46,577	46,969	46,720	—	177,946	52,635	45,669	40,096	39,348	—
South Dakota.....	9,466	9,470	9,000	1,047	34,364	6,517	6,251	6,546	6,665	353
Tennessee.....	61,703	61,699	60,330	15,835	235,606	65,659	60,465	55,784	53,700	—
Texas.....	246,410	243,066	237,367	—	691,626	264,600	223,162	202,104	201,762	—
Utah.....	34,446	32,833	29,977	4,776	111,696	28,695	26,023	25,965	25,911	2,602
Vermont.....	6,665	6,754	6,799	—	26,719	6,357	5,956	5,969	6,229	2,206
Virginia.....	71,354	69,696	70,402	26,106	283,329	77,510	71,117	66,522	66,064	116
Washington.....	59,064	56,146	55,717	—	227,816	56,313	56,037	55,647	57,921	—
West Virginia.....	25,434	26,014	25,547	6,748	104,093	26,038	25,045	24,015	23,486	5,507
Wisconsin.....	53,897	51,647	52,690	9,155	239,642	59,077	56,555	57,650	60,725	3,435
Wyoming.....	7,441	7,108	7,156	—	27,376	6,941	6,900	6,691	753	93
<b>Outlying areas</b>										
American Samoa.....	838	836	785	—	2,653	752	679	695	654	73
Guam.....	1,904	1,880	1,798	—	7,362	2,716	1,849	1,594	1,099	124
Northern Marianas.....	459	449	421	360	1,380	426	345	326	281	—
Puerto Rico.....	55,279	57,349	50,127	9,504	169,857	46,330	44,705	39,591	35,307	3,824
Virgin Islands.....	1,715	2,222	1,653	616	6,390	1,659	1,637	1,446	1,200	446

<sup>1</sup> The U.S. total represents an undercount because prekindergarten enrollment data are not reported by many States.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared March 1990.)

Table 39.—Enrollment in public elementary and secondary schools, by grade and State: Fall 1987

State or other area	Total, all levels	Prekindergarten through grade 8 and elementary unclassified							
		Total	Prekindergarten <sup>1</sup>	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
1	2	3	4	5	6	7	8	9	10
<b>United States</b> .....	<b>40,007,946</b>	<b>27,930,278</b>	<b>191,669</b>	<b>3,195,533</b>	<b>3,407,072</b>	<b>3,172,777</b>	<b>3,046,374</b>	<b>2,937,696</b>	<b>2,900,568</b>
Alabama.....	729,234	521,004	—	54,454	62,293	59,813	60,235	56,671	56,996
Alaska.....	105,678	78,894	—	9,759	10,567	9,186	8,645	8,273	7,995
Arizona <sup>2</sup> .....	572,421	412,501	—	49,192	53,295	48,711	45,990	44,032	43,353
Arkansas.....	437,038	307,243	—	33,895	37,225	35,263	33,693	32,468	32,686
California.....	4,489,322	3,172,094	—	392,112	393,533	366,813	347,207	335,078	330,395
Colorado.....	560,236	391,986	2,333	47,065	49,274	48,132	43,793	41,406	40,805
Connecticut.....	485,485	326,250	3,830	38,426	39,627	35,361	33,953	32,469	31,966
Delaware.....	95,659	66,714	281	7,772	9,103	7,941	7,455	7,027	6,766
District of Columbia.....	66,435	62,857	3,436	8,579	7,587	7,033	6,448	6,055	5,803
Florida.....	1,664,774	1,171,809	5,939	145,384	143,854	130,833	127,904	121,543	120,423
Georgia.....	1,110,947	795,032	—	92,592	97,353	92,812	89,630	83,226	82,210
Hawaii.....	166,160	115,854	250	13,888	13,975	13,562	12,875	12,162	12,057
Idaho.....	212,444	153,356	—	17,354	18,287	17,947	17,563	16,968	16,633
Illinois.....	1,811,448	1,251,790	24,541	131,000	142,819	142,121	135,186	128,340	127,887
Indiana.....	964,129	658,856	801	71,405	80,991	74,714	71,854	70,400	69,421
Iowa.....	480,826	328,436	1,068	39,608	38,817	37,512	35,536	34,301	33,828
Kansas.....	421,112	298,516	641	36,335	37,130	34,366	32,290	31,106	30,824
Kentucky.....	642,896	449,033	—	49,208	54,536	51,388	49,491	48,448	48,325
Louisiana.....	793,093	582,742	1,305	70,222	71,582	66,241	64,517	62,411	61,005
Maine.....	211,817	145,499	1,820	18,988	18,227	15,792	15,496	15,165	14,812
Maryland.....	683,797	472,909	10,032	53,148	58,466	54,096	51,826	49,555	48,477
Massachusetts.....	825,320	565,042	4,783	67,138	69,099	62,840	59,939	58,163	57,445
Michigan.....	1,589,287	1,097,004	4,128	139,822	126,381	118,541	114,723	110,254	107,676
Minnesota.....	721,481	496,553	5,893	82,391	81,291	57,906	55,082	52,781	51,167
Mississippi.....	505,550	364,129	154	37,766	46,425	42,079	39,859	39,223	39,598
Missouri.....	802,060	557,073	—	82,141	65,757	64,455	62,849	61,263	60,078
Montana.....	152,207	108,017	96	12,720	13,272	12,637	11,801	11,734	11,507
Nebraska.....	268,100	188,166	1,478	23,255	23,198	22,052	20,714	20,057	19,544
Nevada.....	168,353	119,077	—	13,859	15,550	14,246	13,303	12,771	12,583
New Hampshire.....	166,045	114,098	—	5,991	18,085	13,457	12,826	12,215	11,946
New Jersey.....	1,092,982	747,402	8,320	78,991	85,932	80,847	78,772	76,156	75,682
New Mexico.....	287,229	195,413	—	23,411	25,364	23,560	21,726	21,293	20,548
New York.....	2,594,070	1,735,527	20,821	183,910	207,689	192,401	183,326	181,309	174,289
North Carolina.....	1,085,978	753,595	833	84,705	85,622	82,943	81,002	79,536	80,164
North Dakota.....	119,004	84,379	530	10,193	10,581	9,801	9,366	9,189	9,023
Ohio.....	1,793,431	1,219,978	—	141,049	151,204	141,458	136,024	130,374	129,788
Oklahoma.....	584,212	410,995	2,382	48,529	54,941	48,889	44,161	43,254	42,910
Oregon.....	455,895	317,6	1,514	30,899	36,242	35,881	36,829	35,330	35,419
Pennsylvania.....	1,868,542	1,111,171	—	124,471	136,411	123,292	118,902	114,588	112,801
Rhode Island.....	134,800	93,623	303	10,103	12,439	10,440	9,815	9,449	9,417
South Carolina.....	814,921	431,585	—	41,725	55,812	50,052	48,256	47,256	47,544
South Dakota.....	126,817	91,382	367	11,185	11,312	10,853	10,251	9,702	9,524
Tennessee.....	823,783	582,432	—	82,046	71,358	63,160	62,962	61,272	61,386
Texas.....	3,236,787	2,350,856	70,739	258,953	291,838	267,937	255,260	247,433	242,202
Utah.....	423,386	313,953	—	37,235	37,239	37,933	36,575	33,159	34,640
Vermont.....	92,755	65,012	—	7,867	8,390	7,560	7,211	6,969	6,846
Virginia.....	979,417	685,172	1,798	78,874	79,758	75,993	73,733	70,388	69,674
Washington.....	775,755	540,936	2,071	64,898	68,313	63,718	61,217	59,413	58,016
West Virginia.....	344,236	238,926	508	24,829	26,420	25,487	24,154	25,515	25,707
Wisconsin.....	772,363	521,533	11,074	82,509	62,247	59,136	56,361	53,926	53,006
Wyoming.....	98,455	70,369	—	8,516	8,811	8,424	8,168	7,539	7,521
<b>Outlying areas</b>									
American Samoa.....	11,248	8,313	1,123	757	825	850	804	768	826
Guam.....	25,936	18,713	379	2,204	2,255	2,089	2,081	2,019	2,038
Northern Marianas.....	5,819	4,424	—	457	506	525	486	439	456
Puerto Rico.....	672,837	496,853	—	31,244	61,602	57,865	57,536	58,984	58,432
Virgin Islands.....	24,020	17,131	—	1,805	1,892	1,850	1,804	1,817	1,810

Table 39.—Enrollment in public elementary and secondary schools, by grade and State: Fall 1987—Continued

State or other area	Prekindergarten through grade 8 and elementary unclassified				Grades 9 through 12 and secondary unclassified					
	Grade 6	Grade 7	Grade 8	Elementary unclassified	Total	Grade 9	Grade 10	Grade 11	Grade 12	Secondary unclassified
1	11	12	13	14	15	16	17	18	19	20
<b>United States ...</b>	<b>2,811,047</b>	<b>2,910,432</b>	<b>2,838,513</b>	<b>518,667</b>	<b>12,077,688</b>	<b>3,143,179</b>	<b>3,020,018</b>	<b>2,935,626</b>	<b>2,880,843</b>	<b>298,002</b>
Alabama.....	55,025	59,245	56,472	—	208,230	59,460	53,174	49,834	45,742	—
Alaska.....	7,580	7,411	7,278	—	28,984	7,549	7,181	7,094	7,160	—
Arizona <sup>2</sup> .....	41,104	41,305	40,289	5,270	159,920	43,183	40,840	38,951	36,513	433
Arkansas.....	32,110	33,743	33,810	2,555	129,788	33,489	33,337	32,348	29,499	1,117
California.....	319,886	321,898	311,579	53,993	1,317,228	345,654	345,144	332,980	266,028	27,422
Colorado.....	39,318	39,752	38,541	3,569	168,250	42,018	41,889	42,008	39,231	3,106
Connecticut.....	30,877	31,984	31,729	15,988	139,215	34,707	34,202	35,480	34,805	21
Delaware.....	8,570	7,068	6,711	—	28,945	7,684	7,578	8,818	8,867	—
District of Columbia.....	5,303	5,987	5,710	2,916	23,578	5,665	5,650	5,391	4,808	2,068
Florida.....	119,972	127,935	128,022	—	492,965	142,768	135,151	117,937	97,109	—
Georgia.....	80,579	83,067	80,797	12,768	315,915	93,881	75,198	73,904	65,703	7,231
Hawaii.....	11,526	10,707	10,865	3,987	50,306	11,791	11,454	11,821	10,478	4,964
Idaho.....	15,948	15,806	15,503	1,347	59,088	15,000	14,772	14,647	13,868	783
Illinois.....	122,444	124,138	121,278	52,336	559,656	133,306	135,447	131,210	123,049	36,644
Indiana.....	68,011	72,199	70,202	8,058	305,473	77,718	75,198	74,403	69,631	8,327
Iowa.....	32,340	33,383	31,815	10,228	152,390	33,298	35,298	36,907	36,965	9,926
Kansas.....	29,580	29,932	29,038	7,272	122,596	30,098	30,489	30,448	28,792	2,789
Kentucky.....	46,836	47,250	44,841	9,114	193,663	51,188	49,605	47,244	41,586	4,040
Louisiana.....	58,878	60,828	54,841	10,914	210,351	61,718	55,124	48,855	42,745	4,111
Maine.....	14,598	15,330	15,204	2,289	68,318	18,851	18,647	18,541	15,567	912
Maryland.....	48,532	48,134	46,717	5,928	210,888	53,370	51,297	50,624	48,642	8,955
Massachusetts.....	56,480	58,873	59,272	11,410	260,278	65,364	65,339	65,354	64,221	—
Michigan.....	105,680	110,795	110,862	48,372	492,283	126,279	119,680	118,153	111,128	17,045
Minnesota.....	49,044	51,353	49,865	—	224,928	51,900	54,804	58,859	59,565	—
Mississippi.....	36,424	38,710	35,503	8,388	141,421	38,370	35,224	31,641	30,281	5,705
Missouri.....	57,812	60,007	58,423	4,488	244,987	64,700	62,280	61,232	54,936	1,839
Montana.....	11,060	10,930	10,588	1,872	44,190	10,820	10,773	11,245	10,906	596
Nebraska.....	18,879	19,881	19,138	—	79,934	19,123	20,374	20,890	19,747	—
Nevada.....	11,929	11,988	11,908	942	49,278	12,112	12,508	13,020	11,604	32
New Hampshire.....	11,540	12,189	12,584	3,485	51,947	13,208	13,120	12,955	12,228	440
New Jersey.....	73,335	75,804	74,848	40,715	345,580	81,639	80,864	83,009	82,853	17,415
New Mexico.....	19,826	20,290	19,595	—	91,818	21,818	20,032	18,435	18,948	14,585
New York.....	172,021	180,815	171,808	87,138	658,543	207,361	203,499	201,482	172,904	73,297
North Carolina.....	77,844	83,391	83,024	14,531	332,381	91,845	87,173	81,024	72,339	—
North Dakota.....	8,542	8,684	8,470	—	34,825	8,735	8,559	8,627	8,704	—
Ohio.....	128,543	133,478	130,062	—	573,453	148,565	142,339	145,422	137,127	—
Oklahoma.....	41,240	39,999	41,852	5,018	173,217	43,738	43,859	43,056	40,552	2,212
Oregon.....	34,120	34,310	33,160	2,816	137,975	34,338	34,589	34,530	33,495	1,043
Pennsylvania.....	110,500	118,333	118,544	33,359	557,371	133,428	133,449	131,877	130,830	27,789
Rhode Island.....	9,022	9,633	9,543	3,459	41,177	10,712	10,311	9,993	9,558	603
South Carolina.....	45,984	47,749	47,407	—	183,338	54,003	47,599	43,138	38,596	—
South Dakota.....	9,262	9,249	8,573	1,104	35,455	8,481	8,789	8,987	8,829	389
Tennessee.....	58,730	62,973	61,192	17,353	241,351	66,160	62,961	59,011	53,219	—
Texas.....	237,889	244,307	234,498	—	885,931	264,328	228,118	210,751	182,734	—
Utah.....	32,967	30,331	29,148	4,728	109,433	28,117	26,792	26,884	25,078	2,764
Vermont.....	8,692	8,781	8,686	—	27,743	8,439	8,314	8,473	6,380	2,137
Virginia.....	87,629	70,181	71,870	25,304	294,245	79,449	73,855	71,400	66,422	119
Washington.....	54,536	55,398	54,358	—	234,819	58,149	58,120	60,073	58,477	—
West Virginia.....	24,787	26,998	26,164	6,577	107,310	27,171	26,230	25,193	23,296	5,420
Wisconsin.....	49,624	52,662	51,784	9,000	250,830	59,832	60,960	63,059	63,351	3,628
Wyoming.....	7,115	7,312	6,964	—	28,088	7,009	7,057	7,162	6,741	117
<b>Outlying areas</b>										
American Samoa.....	832	787	721	—	2,935	715	756	736	647	81
Guam.....	1,905	1,817	1,918	—	7,223	2,567	1,797	1,607	1,107	145
Northern Marianas.....	497	404	441	213	1,395	377	373	323	322	—
Puerto Rico.....	55,899	56,726	51,246	9,517	173,984	45,838	46,887	42,185	35,105	3,969
Virgin Islands.....	1,652	2,213	1,826	662	8,689	1,975	1,729	1,364	1,305	516

<sup>1</sup> The U.S. total represents an undercount because prekindergarten enrollment data are not reported by many States.

<sup>2</sup> Data represent a count as of the 40th day of the term rather than the 100th day as reported in previous years. The 40th-day counts tend to be slightly lower than 100th-day counts.

—Data not reported or not applicable.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared March 1990.)

Table 40.—Enrollment in public elementary and secondary schools, by grade and State: Fall 1986

State or other area	Total, all levels	Prekindergarten through grade 5 and elementary unclassified							
		Total	Prekindergarten <sup>1</sup>	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>39,753,172</b>	<b>27,418,667</b>	<b>193,187</b>	<b>3,126,595</b>	<b>3,357,849</b>	<b>3,054,039</b>	<b>2,933,018</b>	<b>2,895,932</b>	<b>2,774,856</b>
Alabama.....	739,735	518,142	—	53,872	64,231	57,357	58,682	58,939	53,877
Alaska.....	107,848	77,906	—	10,334	10,821	9,080	8,881	8,708	7,375
Arizona <sup>2</sup> .....	534,538	371,419	—	43,759	48,250	42,764	40,831	40,187	37,402
Arkansas.....	437,438	306,851	—	34,070	37,490	34,501	32,880	32,799	32,189
California.....	4,377,989	3,045,684	—	380,608	374,272	343,780	330,354	325,902	314,258
Colorado.....	558,415	386,304	2,227	45,843	48,078	44,239	41,771	41,114	39,908
Connecticut.....	469,847	321,823	3,820	37,432	38,828	34,357	32,722	31,912	30,914
Delaware.....	94,410	64,807	286	7,898	9,014	7,582	6,851	6,820	6,422
District of Columbia.....	85,812	62,458	3,405	6,548	7,845	7,098	6,458	6,200	5,595
Florida.....	1,607,320	1,120,938	4,287	134,732	133,743	123,061	117,387	117,394	114,901
Georgia.....	1,096,425	777,991	—	88,748	97,804	88,941	85,014	81,587	78,928
Hawaii.....	184,840	113,258	304	13,842	13,779	13,092	12,355	12,148	11,744
Idaho.....	208,391	149,813	—	18,848	18,528	17,879	17,018	16,872	15,859
Illinois.....	1,825,185	1,249,340	25,111	134,370	149,921	137,427	129,502	128,759	122,708
Indiana.....	968,780	653,813	662	70,824	80,854	71,790	70,057	68,759	66,194
Iowa.....	461,288	323,536	981	40,195	39,140	36,095	34,555	33,904	32,379
Kansas.....	416,091	291,564	495	36,358	36,182	32,650	31,138	30,998	29,293
Kentucky.....	642,778	446,901	—	48,578	55,793	50,334	48,705	48,508	46,205
Louisiana.....	795,188	580,771	1,287	68,148	73,190	66,232	63,108	62,325	58,588
Maine.....	211,752	143,871	889	17,040	17,483	15,865	15,230	14,898	14,425
Maryland.....	875,747	458,045	9,381	50,505	55,915	51,198	48,875	48,378	44,985
Massachusetts.....	833,918	559,418	3,702	66,595	67,360	60,682	58,117	57,235	55,965
Michigan.....	1,597,154	1,089,757	8,448	135,089	125,573	118,232	111,043	107,851	103,942
Minnesota.....	711,134	479,130	6,008	60,893	59,083	54,315	52,093	50,287	48,318
Mississippi.....	498,839	358,052	110	33,418	48,900	40,521	39,123	40,142	38,893
Missouri.....	800,806	549,348	—	62,575	65,801	62,393	60,345	58,984	55,749
Montana.....	153,327	107,572	138	12,823	13,422	12,127	11,928	11,684	11,168
Nebraska.....	267,139	185,282	1,487	23,355	22,859	21,000	20,094	19,799	18,804
Nevada.....	181,239	112,164	—	13,202	14,511	13,022	12,280	12,135	11,561
New Hampshire.....	163,717	109,948	—	5,812	17,054	12,601	12,028	11,831	11,201
New Jersey.....	1,107,467	742,324	8,054	78,251	84,901	78,591	76,200	75,927	73,334
New Mexico.....	281,943	191,037	—	23,108	24,880	22,337	21,405	20,828	19,541
New York.....	2,607,719	1,713,485	18,783	181,684	204,405	187,764	181,399	178,888	169,759
North Carolina.....	1,085,248	748,451	778	81,093	88,020	80,915	79,583	78,886	76,379
North Dakota.....	118,703	83,930	609	10,128	10,438	9,825	9,344	9,243	8,668
Ohio.....	1,793,508	1,208,110	—	141,823	150,467	138,708	130,138	128,943	125,599
Oklahoma.....	593,183	417,287	2,495	52,321	54,598	45,908	44,540	43,781	41,784
Oregon.....	449,307	308,527	1,817	26,878	37,519	36,440	34,954	34,841	33,595
Pennsylvania.....	1,874,181	1,098,115	—	124,171	132,931	119,948	114,179	112,088	108,589
Rhode Island.....	134,690	91,964	372	9,834	12,081	9,999	9,452	9,318	9,018
South Carolina.....	811,829	427,751	—	41,415	55,229	48,298	46,798	46,874	45,115
South Dakota.....	125,458	89,373	925	11,124	11,422	10,333	9,774	9,564	9,209
Tennessee.....	818,073	577,045	992	81,359	67,741	63,015	61,090	61,142	58,334
Texas.....	3,209,515	2,317,454	62,804	248,828	291,251	259,702	249,382	245,742	236,437
Utah.....	415,994	308,389	—	37,468	38,813	37,007	33,551	35,182	33,273
Vermont.....	92,112	63,392	281	7,198	8,131	7,278	6,992	6,730	6,610
Virginia.....	975,135	673,237	1,482	75,204	80,288	73,265	70,095	69,422	66,259
Washington.....	781,428	521,333	1,996	62,897	65,799	60,442	57,484	56,847	53,611
West Virginia.....	351,837	243,538	501	25,821	27,567	24,731	26,027	26,266	25,105
Wisconsin.....	787,819	509,584	10,710	82,635	81,098	58,272	53,332	52,659	48,842
Wyoming.....	100,955	72,239	—	9,075	9,313	8,652	7,878	7,848	7,477
<b>Outlying areas</b>									
American Samoa.....	11,055	8,133	1,189	638	849	785	780	831	843
Guam.....	25,878	18,522	385	2,157	2,225	2,114	2,039	2,065	1,988
Puerto Rico.....	879,489	503,012	—	31,163	63,123	59,059	58,804	59,981	58,393
Virgin Islands.....	24,435	17,778	—	1,791	1,983	1,918	1,874	1,843	1,824

Table 40.—Enrollment in public elementary and secondary schools, by grade and State: Fall 1988—Continued

State or other area	Prekindergarten through grade 8 and elementary unclassified				Grades 9 through 12 and secondary unclassified					
	Grade 6	Grade 7	Grade 8	Elementary unclassified	Total	Grade 9	Grade 10	Grade 11	Grade 12	Secondary unclassified
1	11	12	13	14	15	16	17	18	19	20
<b>United States.....</b>	<b>2,905,770</b>	<b>2,899,352</b>	<b>2,899,754</b>	<b>516,235</b>	<b>12,334,485</b>	<b>3,256,407</b>	<b>3,214,941</b>	<b>2,953,561</b>	<b>2,600,513</b>	<b>309,090</b>
Alabama.....	56,059	60,804	57,261	—	214,753	62,612	56,014	50,731	45,396	—
Alaska.....	7,580	7,516	7,313	—	29,942	7,872	7,894	7,423	6,753	—
Arizona <sup>1</sup> .....	37,587	38,364	39,060	4,206	163,119	44,263	43,003	39,665	35,777	391
Arkansas.....	32,307	34,341	34,053	2,221	130,587	34,501	35,025	31,354	28,729	978
California.....	308,676	312,983	304,767	50,062	1,332,305	348,672	363,756	341,809	251,281	26,767
Colorado.....	39,878	39,895	40,066	3,285	172,111	44,478	44,794	42,543	37,327	2,969
Connecticut.....	31,309	32,112	32,229	16,590	147,024	37,191	37,775	37,293	34,742	23
Delaware.....	6,591	6,865	6,880	—	29,603	8,103	8,145	6,734	6,621	—
District of Columbia.....	5,322	6,303	6,085	1,601	23,156	5,884	6,193	5,706	4,230	1,143
Florida.....	118,947	130,072	126,414	—	486,382	145,470	136,424	114,825	89,663	—
Georgia.....	81,027	81,996	83,280	12,668	318,434	90,274	83,611	72,877	64,282	7,390
Hawaii.....	10,994	10,667	10,818	3,915	51,384	11,896	12,258	11,858	10,281	5,091
Idaho.....	15,499	15,661	14,958	1,095	58,778	15,080	15,389	14,496	13,164	649
Illinois.....	122,637	123,647	123,175	52,083	575,645	141,211	144,222	133,117	119,627	37,668
Indiana.....	68,165	70,049	71,842	14,617	313,187	79,787	78,522	73,522	66,764	14,572
Iowa.....	32,778	32,174	32,088	9,247	157,750	36,316	38,047	37,707	36,222	9,458
Kansas.....	29,015	29,193	29,040	7,222	124,527	30,940	32,346	30,163	28,218	2,860
Kentucky.....	46,211	45,499	47,108	8,960	195,877	55,038	51,772	48,040	38,991	4,036
Louisiana.....	58,014	60,567	58,538	12,730	214,417	63,616	55,460	47,672	42,746	4,923
Maine.....	14,968	15,330	15,789	2,177	88,081	17,829	17,766	16,394	15,182	910
Maryland.....	46,081	47,826	47,315	5,806	219,702	57,118	56,031	51,660	47,584	7,109
Massachusetts.....	57,152	60,234	61,328	11,048	274,500	70,205	70,855	69,623	63,817	—
Michigan.....	108,323	111,973	113,235	48,048	507,397	133,290	129,147	121,612	105,620	17,728
Minnesota.....	48,681	49,789	49,703	—	232,004	54,693	59,579	59,914	57,818	—
Mississippi.....	36,482	37,698	37,060	7,755	142,587	39,196	36,608	32,734	26,405	5,444
Missouri.....	57,275	58,891	58,861	6,680	251,258	67,105	65,771	59,943	54,738	3,701
Montana.....	10,994	10,780	10,877	1,731	45,755	11,249	11,897	11,297	10,661	641
Nebraska.....	19,572	19,338	18,974	—	81,857	20,650	21,532	20,298	19,377	—
Nevada.....	11,203	11,825	11,740	885	49,075	12,273	13,299	12,448	11,023	32
New Hampshire.....	11,458	12,556	12,405	3,202	53,769	14,547	13,982	13,165	11,641	434
New Jersey.....	75,123	76,814	78,245	39,684	365,143	87,477	89,290	86,333	81,696	18,147
New Mexico.....	19,652	19,835	19,651	—	90,906	21,820	20,551	18,563	16,794	13,178
New York.....	171,644	180,834	174,025	64,300	894,254	220,033	227,779	200,730	171,545	74,167
North Carolina.....	80,185	84,775	85,446	13,591	336,797	95,311	93,087	79,490	69,939	—
North Dakota.....	8,478	8,662	8,739	—	34,773	8,733	8,679	8,957	6,204	—
Ohio.....	128,725	132,181	133,448	—	585,398	154,659	153,511	144,266	132,962	—
Oklahoma.....	40,479	42,881	42,731	5,791	175,896	45,930	46,210	42,597	38,606	2,553
Oregon.....	33,724	33,152	33,068	2,819	140,780	35,552	36,757	35,364	32,009	1,096
Pennsylvania.....	111,931	119,215	121,509	33,554	576,046	139,761	142,565	137,798	126,701	29,221
Rhode Island.....	8,996	9,801	9,665	3,228	42,726	11,291	11,050	10,451	9,396	538
South Carolina.....	46,254	48,907	48,661	—	183,878	55,468	50,193	42,133	36,064	—
South Dakota.....	8,931	8,646	8,518	926	36,085	8,929	9,402	9,069	8,346	339
Tennessee.....	58,261	63,660	62,213	18,038	241,028	67,900	65,455	57,726	49,945	—
Texas.....	240,049	248,668	236,791	—	892,081	269,256	235,943	199,583	187,279	—
Utah.....	30,504	29,519	28,311	4,763	107,905	26,935	27,696	26,402	23,762	2,768
Vermont.....	6,682	6,711	6,783	—	26,720	6,665	6,818	6,692	6,158	2,367
Virginia.....	67,255	71,181	73,489	25,337	301,898	82,294	78,806	72,570	68,104	124
Washington.....	53,757	54,323	54,167	—	240,095	59,514	63,047	60,844	56,690	—
West Virginia.....	25,537	27,963	27,392	8,828	106,299	28,278	27,311	24,499	22,845	5,366
Wisconsin.....	50,419	51,592	52,335	9,892	256,235	61,791	65,680	65,524	61,122	4,116
Wyoming.....	7,417	7,332	7,247	—	28,716	7,411	7,602	7,155	6,429	119
<b>Outlying areas</b>										
American Samoa.....	810	718	692	—	2,922	790	758	699	606	67
Guam.....	1,814	1,888	1,847	—	7,154	2,693	1,754	1,253	1,104	360
Puerto Rico.....	54,670	57,499	50,997	9,323	176,477	48,012	48,655	42,059	33,640	3,911
Virgin Islands.....	1,807	2,443	1,664	651	6,857	2,166	1,474	1,376	1,148	473

<sup>1</sup> The U.S. total represents an undercount because prekindergarten enrollment data are not reported by many States.

<sup>2</sup> Data represent a count as of the 40th day of the term rather than the 100th day as reported in previous years. The 40th-day counts tend to be slightly lower than 100th-day counts.

—Data not reported or not applicable.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared March 1990.)

**Table 41.—Membership and attendance in public elementary and secondary schools, by State: 1980-81, 1986-87, and 1987-88**

State	1980-81			1986-87			1987-88		
	Estimated average daily membership (ADM)	Average daily attendance (ADA)	ADA as a percent of ADM	Estimated average daily membership (ADM) <sup>1</sup>	Average daily attendance (ADA)	ADA as a percent of ADM	Estimated average daily membership (ADM) <sup>1</sup>	Average daily attendance (ADA)	ADA as a percent of ADM
1	2	3	4	5	6	7	8	9	10
United States ...	<sup>2</sup> 40,256,675	37,703,744	93.7	—	36,863,867	—	—	37,060,707	—
Alabama.....	741,534	701,925	94.7	727,190	690,256	94.9	727,253	689,340	94.8
Alaska.....	86,604	83,745	96.7	103,118	96,004	93.1	101,144	94,917	93.8
Arizona.....	491,812	476,149	96.8	547,448	518,277	94.7	566,098	534,812	94.5
Arkansas.....	441,432	417,080	94.5	431,915	409,388	94.8	431,925	405,196	93.8
California.....	—	4,014,917	—	—	4,429,792	—	—	4,531,459	—
Colorado.....	527,721	508,750	96.4	535,134	513,587	96.0	534,783	514,838	96.3
Connecticut.....	534,400	501,085	93.8	462,300	444,285	96.1	487,300	441,150	94.4
Delaware.....	97,713	89,609	91.7	93,008	86,855	93.2	94,398	87,821	93.0
District of Columbia.....	96,871	85,773	88.8	84,608	78,822	90.8	85,499	79,801	93.3
Florida.....	1,510,225	<sup>3</sup> 1,389,487	92.0	1,812,051	1,489,148	92.4	1,664,999	1,536,866	92.3
Georgia.....	1,046,400	988,812	94.5	1,050,704	1,023,127	97.4	1,078,730	1,033,459	95.8
Hawaii.....	182,666	151,713	93.3	163,686	152,287	93.0	165,856	155,220	93.6
Idaho.....	203,250	190,144	93.8	—	198,449	—	—	199,563	—
Illinois.....	1,878,358	1,785,357	94.1	1,707,551	1,574,126	92.2	1,701,834	1,584,745	93.1
Indiana.....	984,492	944,424	95.0	947,000	873,733	92.3	933,359	877,942	94.1
Iowa.....	524,800	501,403	95.5	474,378	453,150	95.5	473,537	450,858	95.2
Kansas.....	384,870	374,451	97.3	393,218	378,073	96.1	399,666	384,660	96.2
Kentucky.....	859,950	814,878	93.1	811,643	579,220	94.7	812,105	578,550	94.5
Louisiana.....	773,000	715,844	92.8	772,710	736,474	95.3	754,300	729,492	96.7
Maine.....	220,000	207,554	94.3	204,722	197,539	96.5	205,414	197,225	96.0
Maryland.....	725,818	684,866	91.8	668,878	595,618	89.0	680,095	601,415	88.4
Massachusetts.....	1,020,382	350,875	93.2	<sup>2</sup> —	727,680	—	—	749,030	—
Michigan.....	—	1,711,139	—	—	1,478,471	—	—	1,473,542	—
Minnesota.....	750,073	710,838	94.8	708,117	674,245	95.2	716,120	679,729	94.9
Mississippi.....	471,100	448,515	94.2	496,241	473,424	95.4	502,554	479,402	95.4
Missouri.....	831,448	756,538	91.0	—	724,710	—	—	725,661	—
Montana.....	148,300	141,641	95.5	148,183	139,199	95.2	145,981	139,018	95.2
Nebraska.....	274,830	283,797	96.0	263,588	252,457	95.8	264,218	252,399	95.5
Nevada.....	141,925	136,481	97.8	157,864	149,136	94.5	165,218	153,252	92.8
New Hampshire.....	182,856	150,318	92.4	156,974	149,963	95.5	158,788	152,000	95.7
New Jersey.....	1,285,089	1,121,272	88.8	1,100,500	1,024,811	93.1	1,065,800	1,008,749	92.9
New Mexico.....	271,198	240,498	88.7	268,785	243,340	90.5	272,656	248,231	91.0
New York.....	2,808,160	2,475,055	88.1	2,533,700	2,266,283	89.4	2,518,000	2,247,568	89.3
North Carolina.....	1,123,506	1,055,851	94.0	1,073,524	1,020,702	95.1	1,073,763	1,018,742	94.7
North Dakota.....	118,418	<sup>3</sup> 111,759	96.0	117,981	109,074	92.5	118,376	109,512	92.5
Ohio.....	1,948,800	1,801,914	92.5	1,778,100	1,664,709	93.7	1,772,217	1,612,592	91.0
Oklahoma.....	574,000	542,800	94.6	582,227	550,949	94.8	578,100	547,149	94.6
Oregon.....	449,925	417,009	92.7	442,900	402,855	91.0	449,300	406,054	90.4
Pennsylvania.....	1,897,000	1,754,782	92.5	1,844,100	1,554,642	94.6	1,834,400	1,539,310	94.2
Rhode Island.....	142,457	135,086	94.8	132,715	122,024	91.9	135,365	124,559	92.0
South Carolina.....	601,708	580,132	96.4	587,866	564,508	96.0	591,500	567,091	95.9
South Dakota.....	127,068	121,663	95.7	123,000	118,902	96.7	124,893	119,868	96.0
Tennessee.....	857,373	797,237	93.0	813,578	766,521	94.2	816,676	766,651	93.9
Texas.....	2,794,871	2,647,288	94.7	—	2,977,783	—	—	2,891,242	—
Utah.....	340,927	323,048	94.8	408,521	388,306	94.8	419,827	397,214	94.6
Vermont.....	95,940	90,884	94.7	91,431	85,985	94.0	90,900	87,760	96.5
Virginia.....	1,000,378	936,794	93.8	966,178	911,261	94.3	971,062	914,354	94.2
Washington.....	751,287	704,855	93.8	756,317	708,584	93.7	771,297	721,952	93.6
West Virginia.....	—	351,823	—	—	324,791	—	—	319,330	—
Wisconsin.....	771,485	743,505	96.4	727,850	682,560	93.8	735,501	696,963	95.0
Wyoming.....	—	91,381	—	101,098	94,176	93.2	97,517	92,434	94.8

<sup>1</sup> Data compiled by the National Education Association.

<sup>2</sup> Total includes estimates for nonreporting States.

<sup>3</sup> Data estimated by State education agencies.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and National Education Association, *Estimates of School Statistics, 1980-89* (Copyright © 1989 by the National Education Association. All rights reserved.) (This table was prepared July 1990.)

**Table 42.—Average daily attendance in public elementary and secondary schools, by State: 1969-70 to 1987-88**

State	1969-70	1975-76	1979-80	1980-81	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10
<b>United States ...</b>	<b>41,934,376</b>	<b>41,299,720</b>	<b>39,288,911</b>	<b>37,703,744</b>	<b>36,362,978</b>	<b>35,404,261</b>	<b>36,523,103</b>	<b>36,863,867</b>	<b>37,050,707</b>
Alabama.....	777,123	718,371	711,432	701,925	679,742	684,211	686,718	690,256	689,340
Alaska.....	72,489	81,564	79,945	83,745	80,264	96,257	98,535	96,004	94,917
Arizona.....	391,526	455,892	481,905	478,149	482,185	477,520	494,504	518,277	534,812
Arkansas.....	414,158	428,720	423,810	417,080	404,282	405,077	408,601	409,388	405,196
California <sup>2</sup> .....	4,418,423	4,366,817	4,044,736	4,014,917	4,086,300	4,139,461	4,245,090	4,429,792	4,531,459
Colorado.....	500,388	527,434	513,475	508,750	503,162	505,321	507,878	513,587	514,838
Connecticut.....	616,881	596,175	507,382	501,085	452,061	448,981	452,058	444,265	441,150
Delaware.....	120,819	118,553	94,058	89,609	84,119	84,407	84,936	86,855	87,821
District of Columbia.....	136,600	119,255	91,578	85,773	77,859	78,023	78,241	78,822	79,801
Florida.....	1,312,893	1,435,570	1,464,461	1,389,487	1,388,717	1,418,104	1,442,921	1,489,148	1,536,866
Georgia.....	1,019,427	998,898	989,433	988,812	978,530	989,713	1,004,799	1,023,127	1,033,459
Hawaii.....	168,140	182,903	151,563	151,713	150,137	150,572	151,174	152,267	155,220
Idaho.....	170,920	182,215	189,199	180,144	184,533	187,902	198,141	196,449	199,583
Illinois.....	2,084,844	1,990,158	1,770,435	1,765,357	1,818,711	1,600,380	1,604,265	1,574,128	1,584,745
Indiana.....	1,111,043	1,049,889	993,444	944,424	893,464	883,592	870,383	873,733	877,942
Iowa.....	824,403	574,773	510,081	501,403	487,985	461,392	454,341	453,150	450,858
Kansas.....	419,022	419,022	382,019	374,451	368,354	369,524	371,655	378,073	384,660
Kentucky.....	647,970	822,484	819,868	814,878	585,861	579,441	577,190	579,226	578,550
Louisiana.....	778,555	788,097	727,601	715,844	724,153	732,864	732,230	736,474	729,492
Maine.....	225,148	227,841	211,400	207,554	200,159	198,125	198,358	197,539	197,225
Maryland.....	785,989	793,848	686,336	664,866	602,077	596,478	592,383	595,818	601,415
Massachusetts.....	1,056,207	1,070,538	935,960	950,875	806,193	779,889	745,991	727,680	749,030
Michigan.....	1,991,235	1,971,774	1,758,427	1,711,139	1,514,871	1,490,452	1,481,068	1,478,471	1,473,542
Minnesota.....	864,585	827,239	748,608	710,836	663,780	669,930	669,385	674,245	679,729
Mississippi.....	524,623	479,078	454,401	446,515	437,790	435,587	448,117	473,424	479,402
Missouri.....	906,132	864,958	777,269	756,536	715,182	712,197	714,230	724,710	725,861
Montana.....	162,664	156,473	144,608	141,641	139,387	139,905	138,829	139,199	139,018
Nebraska.....	314,518	296,915	270,524	263,797	252,484	250,647	250,975	252,457	252,369
Nevada.....	113,421	128,106	134,995	138,481	139,115	140,402	143,941	149,136	153,252
New Hampshire.....	140,203	159,836	154,187	150,316	144,733	144,655	147,561	149,983	152,000
New Jersey.....	1,322,124	1,310,042	1,140,111	1,121,272	1,037,865	1,043,047	1,029,797	1,024,811	1,008,749
New Mexico.....	259,997	256,764	253,453	240,496	246,451	248,758	252,892	243,340	248,231
New York.....	3,099,192	3,012,893	2,530,289	2,475,055	2,321,800	2,309,189	2,278,842	2,266,293	2,247,588
North Carolina.....	1,104,295	1,120,207	1,072,150	1,055,851	1,022,138	1,018,795	1,014,795	1,020,702	1,016,742
North Dakota.....	141,961	126,277	118,986	111,759	111,630	109,427	108,947	109,074	109,512
Ohio.....	2,246,282	2,103,243	1,849,283	1,801,914	1,893,851	1,875,530	1,860,718	1,864,709	1,812,592
Oklahoma.....	560,993	558,528	548,065	542,800	553,236	552,835	553,370	550,949	547,149
Oregon.....	436,736	425,126	418,593	417,009	401,398	401,154	401,476	402,855	406,054
Pennsylvania.....	2,169,225	2,064,312	1,808,630	1,754,782	1,601,944	1,571,831	1,560,746	1,554,642	1,539,310
Rhode Island.....	183,205	158,752	139,195	135,096	123,501	122,853	122,109	122,024	124,559
South Carolina.....	600,292	591,900	569,812	580,132	602,183	559,340	558,716	564,508	567,091
South Dakota.....	158,543	141,120	124,934	121,663	117,192	117,137	118,269	118,902	119,868
Tennessee.....	836,010	826,335	806,696	797,237	774,348	769,662	782,225	766,521	766,651
Texas.....	2,432,420	2,549,517	2,608,817	2,647,288	2,745,339	2,879,823	2,823,741	2,977,783	2,991,242
Utah.....	287,405	289,171	312,813	323,048	356,072	366,574	379,249	386,306	397,214
Vermont.....	97,772	98,015	95,045	90,884	86,404	85,734	85,875	85,985	87,760
Virginia.....	995,580	1,018,034	955,105	938,794	900,378	901,994	904,347	911,261	914,364
Washington.....	784,735	723,063	710,929	704,655	685,068	688,759	696,372	706,584	721,952
West Virginia.....	372,278	366,395	353,264	351,823	343,320	336,196	330,145	324,791	319,330
Wisconsin.....	880,606	858,407	770,554	743,505	699,069	696,071	694,351	682,560	696,963
Wyoming.....	81,293	82,147	89,471	91,381	93,604	94,583	95,547	94,178	92,434
<b>Outlying areas</b>									
American Samoa.....	—	7,461	—	—	—	10,580	10,816	10,559	10,579
Guam.....	20,315	26,318	—	22,343	—	23,632	23,220	23,409	23,172
Northern Marianas.....	—	—	—	—	—	5,548	4,921	5,071	5,851
Puerto Rico.....	—	669,400	656,709	671,661	—	649,851	636,268	629,922	621,731
Virgin Islands.....	—	21,793	—	23,312	—	—	23,811	22,814	22,103

<sup>1</sup> Revised from previously published data.

<sup>2</sup> Data for California are not strictly comparable with those for other States because California's attendance figures include excused absences.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Revenues and Expenditures for Public Elementary and Secondary Education, Statistics of State School Systems*; and Common Core of Data survey. (This table was prepared January 1990.)

Table 43.—Enrollment in public elementary and secondary schools, by race or ethnicity and State: Fall 1986

State	Percent of enrollment, by race or ethnicity					
	Total	White <sup>1</sup>	Black <sup>1</sup>	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native
1	2	3	4	5	6	7
United States .....	100.0	70.4	16.1	9.9	2.8	0.9
Alabama.....	100.0	62.0	37.0	0.1	0.4	0.5
Alaska.....	100.0	65.7	4.3	1.7	3.3	25.1
Arizona.....	100.0	62.2	4.0	28.4	1.3	6.1
Arkansas.....	100.0	74.7	24.2	0.4	0.8	0.2
California.....	100.0	53.7	9.0	27.5	9.1	0.7
Colorado.....	100.0	78.7	4.5	13.7	2.0	1.0
Connecticut.....	100.0	77.2	12.1	8.9	1.5	0.2
Delaware.....	100.0	68.3	27.7	2.5	1.4	0.2
District of Columbia.....	100.0	4.0	91.1	3.9	0.9	0.1
Florida.....	100.0	85.4	23.7	9.5	1.2	0.2
Georgia.....	100.0	60.7	37.9	0.6	0.8	( <sup>2</sup> )
Hawaii.....	100.0	23.5	2.3	2.2	71.7	0.3
Idaho.....	100.0	92.8	0.3	4.9	0.8	1.3
Illinois.....	100.0	69.8	18.7	9.2	2.3	0.1
Indiana.....	100.0	88.7	9.0	1.7	0.5	0.1
Iowa.....	100.0	94.8	3.0	0.9	1.2	0.3
Kansas.....	100.0	85.8	7.8	4.4	1.9	0.8
Kentucky.....	100.0	99.2	10.2	0.1	0.5	0.0
Louisiana.....	100.0	58.5	41.3	0.8	1.1	0.3
Maine.....	100.0	98.3	0.5	0.2	0.8	0.2
Maryland.....	100.0	59.7	35.3	1.7	3.1	0.2
Massachusetts.....	100.0	83.7	7.4	6.0	2.8	0.1
Michigan.....	100.0	78.4	19.8	1.8	1.2	0.8
Minnesota.....	100.0	93.9	2.1	0.9	1.7	1.5
Mississippi.....	100.0	43.9	55.5	0.1	0.4	0.1
Missouri.....	100.0	82.4	14.9	0.7	0.8	0.2
Montana.....	100.0	92.7	0.3	0.9	0.5	5.5
Nebraska.....	100.0	91.4	4.4	2.4	0.8	1.0
Nevada.....	100.0	77.4	9.6	7.5	3.2	2.3
New Hampshire.....	100.0	98.0	0.7	0.5	0.8	0.1
New Jersey.....	100.0	89.1	17.4	10.7	2.7	0.1
New Mexico.....	100.0	43.1	2.3	45.1	0.8	8.7
New York.....	100.0	68.4	18.5	12.3	2.7	0.2
North Carolina.....	100.0	68.4	28.9	0.4	0.8	1.7
North Dakota.....	100.0	92.4	0.8	1.1	0.8	5.0
Ohio.....	100.0	83.1	15.0	1.0	0.7	0.1
Oklahoma.....	100.0	79.0	7.8	1.8	1.0	10.6
Oregon.....	100.0	89.8	2.2	3.9	2.4	1.7
Pennsylvania.....	100.0	84.4	12.8	1.8	1.2	0.1
Rhode Island.....	100.0	87.9	5.8	3.7	2.4	0.3
South Carolina.....	100.0	54.8	44.5	0.2	0.8	0.1
South Dakota.....	100.0	90.8	0.5	0.8	0.7	7.8
Tennessee.....	100.0	78.5	22.8	0.2	0.8	( <sup>2</sup> )
Texas.....	100.0	51.0	14.4	32.5	2.0	0.2
Utah.....	100.0	83.7	0.4	3.0	1.5	1.5
Vermont.....	100.0	98.4	0.3	0.2	0.8	0.6
Virginia.....	100.0	72.8	23.7	1.0	2.8	0.1
Washington.....	100.0	84.5	4.2	3.8	5.1	2.3
West Virginia.....	100.0	95.9	3.7	0.1	0.3	0.0
Wisconsin.....	100.0	86.8	8.9	1.9	1.7	1.0
Wyoming.....	100.0	90.7	0.9	5.9	0.8	1.9

<sup>1</sup> Excludes persons of Hispanic origin.<sup>2</sup> Less than 0.05 percent.

NOTE.—The above tabulation was derived from a sample survey of public school districts from the 1986 Elementary and Secondary School Civil Rights Survey. State estimates may differ from other data sources because of variations in survey methodology. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Office for Civil Rights, 1986 State Summaries of Elementary and Secondary School Civil Rights Survey. (This table was prepared July 1989.)

**Table 44.—Enrollment of 3-, 4-, and 5-year-old children in preprimary programs, by level and control of program and by attendance status: October 1965 to October 1989**

[In thousands]

Year and age	Total population, 3 to 5 years old	Enrollment by level and control						Enrollment by attendance		
		Total	Percentage enrolled	Nursery school		Kindergarten		Full-day	Part-day	Percent full-day
				Public	Private	Public	Private			
1	2	3	4	5	6	7	8	9	10	11
<b>Total, 3 to 5 years old</b>										
1965.....	2,549	3,407	27.1	127	393	2,291	596	—	—	—
1970.....	10,949	4,104	37.5	332	762	2,496	511	698	3,405	17.0
1975.....	10,185	4,955	48.7	570	1,174	2,682	528	1,295	3,659	26.1
1977.....	9,249	4,577	49.5	557	1,054	2,474	492	1,348	3,229	29.5
1979.....	9,119	4,664	51.1	633	1,228	2,361	421	1,454	3,210	31.2
1980.....	9,284	4,678	52.5	628	1,353	2,438	459	1,551	3,327	31.8
1981.....	9,421	4,937	52.4	—	—	—	—	1,472	3,465	29.8
1982.....	9,873	5,105	51.7	729	1,423	2,459	494	1,574	3,531	30.6
1983.....	10,254	5,384	52.5	609	1,538	2,416	623	—	—	—
1984.....	10,612	5,460	51.6	742	1,593	2,668	476	1,929	3,550	35.2
1985.....	10,733	5,665	54.6	846	1,631	2,647	541	2,144	3,722	36.6
1986.....	10,666	5,971	55.0	929	1,715	2,659	567	2,241	3,730	37.5
1987.....	10,872	5,931	54.6	619	1,736	2,642	534	2,090	3,841	35.2
1988.....	10,993	5,978	54.4	951	1,770	2,675	481	2,044	3,935	34.2
1989.....	11,039	6,026	54.6	930	1,894	2,704	497	2,238	3,789	37.1
<b>3 years old</b>										
1965.....	4,149	203	4.9	41	153	5	4	—	—	—
1970.....	3,516	454	12.9	110	322	12	10	142	312	31.3
1975.....	3,177	683	21.5	179	474	11	18	259	423	37.9
1977.....	2,978	645	21.7	164	431	14	16	211	434	32.7
1979.....	3,025	746	24.7	216	509	16	5	305	441	40.9
1980.....	3,143	857	27.3	221	604	16	17	321	536	37.5
1981.....	3,266	891	27.3	—	—	—	—	279	612	31.3
1982.....	3,387	928	27.4	312	578	27	10	280	648	30.2
1983.....	3,574	1,004	28.1	314	631	21	39	—	—	—
1984.....	3,609	1,004	27.8	295	658	30	22	401	603	39.9
1985.....	3,594	1,035	28.8	278	679	52	26	350	685	33.8
1986.....	3,607	1,041	28.9	257	737	26	21	399	642	36.3
1987.....	3,589	1,022	28.6	264	703	24	31	378	644	37.0
1988.....	3,719	1,027	27.6	298	676	24	26	369	658	35.9
1989.....	3,713	1,005	27.1	277	707	3	18	390	615	36.8
<b>4 years old</b>										
1965.....	4,238	683	16.1	68	213	284	118	—	—	—
1970.....	3,620	1,007	27.8	176	395	318	117	230	776	22.8
1975.....	3,499	1,418	40.5	332	644	313	129	411	1,008	29.0
1977.....	3,061	1,280	42.1	321	570	270	128	429	861	33.3
1979.....	3,070	1,393	45.4	359	664	247	123	421	972	30.2
1980.....	3,072	1,423	46.3	363	701	239	120	467	956	32.8
1981.....	2,985	1,442	48.3	—	—	—	—	431	1,011	29.9
1982.....	3,271	1,496	45.7	377	781	225	113	442	1,054	29.5
1983.....	3,414	1,619	47.4	402	813	231	173	—	—	—
1984.....	3,579	1,603	44.8	376	860	257	110	521	1,082	32.5
1985.....	3,598	1,768	49.1	496	859	276	135	643	1,123	36.4
1986.....	3,616	1,772	49.0	498	903	257	115	622	1,150	35.1
1987.....	3,597	1,717	47.7	431	881	280	125	548	1,169	31.9
1988.....	3,598	1,768	49.1	481	922	261	104	519	1,249	29.4
1989.....	3,692	1,882	51.0	524	1,055	202	100	592	1,290	31.4
<b>5 years old</b>										
1965.....	4,162	2,521	60.6	18	27	2,002	474	—	—	—
1970.....	3,814	2,643	69.3	45	45	2,168	384	326	2,317	12.3
1975.....	3,509	2,854	81.3	59	57	2,358	381	625	2,228	21.9
1977.....	3,210	2,642	82.3	52	53	2,189	347	708	1,934	26.8
1979.....	3,024	2,525	83.5	58	56	2,119	293	728	1,797	28.8
1980.....	3,089	2,598	84.7	44	48	2,183	322	763	1,835	29.4
1981.....	3,170	2,604	82.1	—	—	—	—	762	1,842	29.3
1982.....	3,215	2,681	83.4	40	64	2,207	370	852	1,829	31.8
1983.....	3,266	2,761	84.5	93	94	2,164	410	—	—	—
1984.....	3,423	2,872	83.9	72	76	2,381	344	1,007	1,865	35.1
1985.....	3,542	3,065	86.5	73	94	2,519	379	1,151	1,914	37.8
1986.....	3,643	3,157	86.7	75	75	2,576	432	1,220	1,937	36.6
1987.....	3,706	3,192	86.1	124	152	2,538	378	1,163	2,028	36.4
1988.....	3,678	3,184	86.8	72	170	2,590	351	1,155	2,028	36.3
1989.....	3,633	3,139	86.4	129	132	2,499	378	1,255	1,883	40.0

—Data not available.

NOTE.—Data are based on sample surveys of the civilian noninstitutional population. Although cells with fewer than 75,000 children are subject to wide sampling variation, they are included in the table to permit various types of aggregations. Enrollment data for 5-year-olds include only those students in preprimary programs. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Preprimary Enrollment*, various years; and U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished data. (This table was prepared April 1990.)

**Table 45.—Public school pupils transported at public expense and current expenditures for transportation: 1929-30 to 1987-88**

School year	Average daily attendance, all students <sup>1</sup>	Pupils transported at public expense		Expenditures for transportation	
		Number	Percent of total	Total <sup>2</sup> (in thousands)	Average for pupil transported
1	2	3	4	5	6
1929-30.....	25,878,015	1,902,828	7.4	\$54,823	\$29
1931-32.....	26,275,441	2,419,173	9.2	58,078	24
1933-34.....	26,434,193	2,794,724	10.6	53,908	19
1935-36.....	26,367,098	3,250,658	12.3	62,653	19
1937-38.....	25,975,108	3,789,242	14.5	75,637	20
1939-40.....	25,433,542	4,144,161	16.3	83,283	20
1941-42.....	24,562,473	4,503,081	18.3	92,922	21
1943-44.....	23,266,818	4,512,412	19.4	107,754	24
1945-46.....	23,299,941	5,056,966	21.7	129,756	26
1947-48.....	23,944,532	5,854,041	24.4	176,265	30
1949-50.....	25,111,427	6,947,384	27.7	214,504	31
1951-52.....	26,562,664	7,697,130	29.0	268,827	35
1953-54.....	25,643,871	8,411,719	32.8	307,437	37
1955-56.....	27,740,149	9,695,819	35.0	353,972	37
1957-58.....	29,722,275	10,861,689	36.5	418,491	38
1959-60.....	32,477,440	12,225,142	37.6	486,338	40
1961-62.....	34,692,340	13,222,667	38.1	576,361	44
1963-64.....	37,405,058	14,475,778	38.7	673,845	47
1965-66.....	39,154,497	15,536,587	39.7	787,358	51
1967-68.....	40,827,965	17,130,873	42.0	981,006	57
1969-70.....	41,934,376	18,198,577	43.4	1,218,557	67
1971-72.....	42,254,272	19,474,355	46.1	1,507,830	77
1973-74.....	41,438,054	21,347,039	51.5	1,858,141	87
1975-76.....	41,269,720	21,772,483	52.8	2,377,313	109
1977-78.....	40,079,590	<sup>3</sup> 21,800,000	54.4	2,731,041	126
1979-80.....	38,266,911	21,713,515	56.7	3,833,145	177
1980-81.....	37,703,744	<sup>3</sup> 22,272,000	59.1	<sup>3</sup> 4,408,000	198
1981-82.....	37,094,652	<sup>3</sup> 22,246,000	60.0	<sup>3</sup> 4,793,000	215
1982-83.....	36,635,868	<sup>3</sup> 22,199,000	60.6	<sup>3</sup> 5,000,000	225
1983-84.....	36,362,978	<sup>3</sup> 22,031,000	60.6	<sup>3</sup> 5,284,000	240
1984-85.....	36,404,261	<sup>3</sup> 22,320,000	61.3	<sup>3</sup> 5,722,000	256
1985-86.....	36,523,103	<sup>3</sup> 22,041,000	60.3	<sup>3</sup> 6,123,000	278
1986-87.....	36,863,967	<sup>3</sup> 22,397,000	60.8	<sup>3</sup> 6,551,000	292
1987-88.....	37,050,707	<sup>3</sup> 22,157,000	59.8	<sup>3</sup> 6,799,000	307

<sup>1</sup> Pupil transportation data through 1951-52 are based on enrollment; data for 1953-54 and subsequent years are based on average daily attendance.

<sup>2</sup> Excludes capital outlay for years through 1979-80. Beginning in 1980-81, total transportation figures include capital outlay.

<sup>3</sup> Estimate based on data appearing in December-January issues of *School Bus Fleet*.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems: Revenue and Expenditures for Public Elementary and Secondary Education*, and unpublished data; and *School Bus Fleet*, © by Bobbit Publishing Co. December-January issues. (This table was prepared March 1990.)

**Table 46.—Children 0 to 21 years old served in federally-supported special education programs, by type of handicap: 1976-77 to 1988-89**

Type of handicap	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Number served, <sup>1</sup> in thousands													
All conditions .....	3,692	3,751	3,889	4,005	4,142	4,198	4,255	4,298	4,315	4,317	4,374	4,447	4,544
Learning disabled.....	796	904	1,130	1,278	1,462	1,622	1,741	1,806	1,832	1,862	1,914	1,928	1,987
Speech impaired.....	1,302	1,223	1,214	1,186	1,168	1,135	1,131	1,128	1,126	1,125	1,136	953	967
Mentally retarded.....	959	933	901	869	829	786	757	727	694	660	643	582	584
Seriously emotionally disturbed.....	283	288	300	329	346	339	352	361	372	375	383	373	378
Hard of hearing and deaf.....	87	85	85	80	79	75	73	72	69	66	65	56	56
Orthopedically handicapped.....	87	87	70	66	58	58	57	56	56	57	57	47	47
Other health impaired.....	141	135	105	106	98	79	50	53	68	57	52	45	49
Visually handicapped.....	38	35	32	31	31	29	28	29	28	27	26	22	23
Multihandicapped.....	—	—	50	60	68	71	63	65	69	68	97	77	85
Deaf-blind.....	—	—	2	2	3	2	2	2	2	2	2	1	2
Preschool handicapped <sup>2</sup> .....	( <sup>3</sup> )	363	394										
Percentage distribution of children served													
All conditions .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Learning disabled.....	21.8	25.7	29.1	31.9	35.3	38.6	40.9	42.0	42.4	43.1	43.8	43.4	43.8
Speech impaired.....	35.3	32.8	31.2	29.8	28.2	27.0	26.8	26.2	26.1	26.1	26.0	21.4	21.1
Mentally retarded.....	26.0	24.9	23.2	21.7	20.0	18.7	17.8	18.9	18.1	15.3	14.7	13.1	12.7
Seriously emotionally disturbed.....	7.7	7.7	7.7	8.2	8.4	8.1	8.3	8.4	8.8	8.7	8.8	8.4	8.3
Hard of hearing and deaf.....	2.4	2.3	2.2	2.0	1.9	1.8	1.7	1.7	1.8	1.5	1.5	1.3	1.3
Orthopedically handicapped.....	2.4	2.3	1.8	1.8	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.1	1.1
Other health impaired.....	3.8	3.8	2.7	2.8	2.4	1.9	1.2	1.2	1.8	1.3	1.2	1.0	1.0
Visually handicapped.....	1.0	0.9	0.8	0.8	0.7	0.8	0.8	0.5	0.5				
Multihandicapped.....	—	0.7	0.7	0.7	0.7	0.8	0.8	0.5	0.5				
Deaf-blind.....	—	—	1.3	1.5	1.8	1.7	1.5	1.5	1.8	2.0	2.2	1.7	1.8
Preschool handicapped <sup>2</sup> .....	( <sup>3</sup> )	8.2	8.7										
Number served as a percent of total enrollment <sup>4</sup>													
All conditions .....	8.33	8.61	9.14	9.62	10.12	10.48	10.75	10.95	11.00	10.95	11.00	11.11	11.30
Learning disabled.....	1.80	2.21	2.66	3.06	3.57	4.05	4.40	4.60	4.87	4.72	4.81	4.82	4.94
Speech impaired.....	2.94	2.81	2.85	2.85	2.85	2.84	2.86	2.87	2.87	2.85	2.86	2.38	2.41
Mentally retarded.....	2.16	2.14	2.12	2.09	2.03	1.96	1.91	1.85	1.77	1.68	1.82	1.45	1.40
Seriously emotionally disturbed.....	0.64	0.66	0.71	0.79	0.85	0.85	0.89	0.92	0.95	0.95	0.96	0.93	0.94
Hard of hearing and deaf.....	0.20	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.17	0.18	0.14	0.14
Orthopedically handicapped.....	0.20	0.20	0.18	0.18	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.12	0.12
Other health impaired.....	0.32	0.31	0.25	0.25	0.24	0.20	0.13	0.13	0.17	0.14	0.13	0.11	0.11
Visually handicapped.....	0.09	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.06
Multihandicapped.....	—	—	0.12	0.14	0.17	0.18	0.18	0.17	0.17	0.22	0.24	0.19	0.21
Deaf-blind.....	—	—	0.01	0.01	0.01	( <sup>5</sup> )	0.01	0.01	( <sup>5</sup> )	0.01	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Preschool handicapped <sup>2</sup> .....	( <sup>3</sup> )	0.91	0.98										

<sup>1</sup> Includes students served under Chapter I and Education of the Handicapped Act (EHA).

<sup>2</sup> Includes preschool children 3-5 years served under the EHA and 0-5 years served under Chapter I.

<sup>3</sup> Prior to 1987-88, these students were included in the counts by handicapping condition. Beginning in 1987-88, States are no longer required to report preschool handicapped students (0-5 years) by handicapping condition.

<sup>4</sup> Less than .05.

<sup>5</sup> Based on the enrollment in public schools, kindergarten through 12th grade, including a relatively small number of prekindergarten students.

<sup>6</sup> Less than .005.

—Data not available.

NOTE.—Counts are based on reports from the 50 States and District of Columbia only (i.e., figures from U.S. territories are not included). Increases since 1987-88 are due in part to new legislation enacted Fall 1986, which mandates public school special education services for all handicapped children ages 3 through 5 by the 1990-91 school year. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, *Annual Report to Congress on the Implementation of The Education of the Handicapped Act*, various years; National Center for Education Statistics, Common Core of Data survey. (This table was prepared March 1990.)

**Table 47.—Percentage distribution of handicapped persons 6 to 21 years old receiving special education services, by educational environment:1987-88**

Type of handicap	All environments	Regular class	Resource room	Separate class	Public separate school facility	Private separate school facility	Public residential facility	Private residential facility	Home-bound/hospital environment
1	2	3	4	5	6	7	8	9	10
<b>All conditions</b> .....	100.0	29.1	40.0	24.7	3.5	1.4	0.5	0.3	0.7
Learning disabled.....	100.0	17.8	59.0	21.8	0.9	0.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Speech impaired.....	100.0	74.9	19.7	3.8	0.3	1.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Mentally retarded.....	100.0	5.8	23.5	57.9	10.3	1.1	0.8	( <sup>1</sup> )	( <sup>1</sup> )
Seriously emotionally disturbed.....	100.0	12.8	32.9	34.5	9.0	5.4	1.8	1.7	2.2
Hard of hearing and deaf..	100.0	30.5	1.9	43.4	8.8	4.5	9.0	1.2	0.2
Orthopedically handicapped.....	100.0	27.7	18.0	32.0	10.8	2.5	0.4	( <sup>1</sup> )	8.2
Other health impaired.....	100.0	30.8	20.8	18.7	7.8	1.7	0.4	0.4	19.5
Visually handicapped.....	100.0	37.9	25.2	21.0	3.8	1.7	8.8	1.3	0.4
Multihandicapped.....	100.0	6.5	13.8	46.8	20.7	7.1	2.7	1.3	1.8
Deaf-blind.....	100.0	8.9	8.3	38.8	18.8	2.8	22.8	3.0	1.0

<sup>1</sup> Less than .05 percent.

NOTE.—This table reflects a compilation of data reported by the States. There are some reporting variations, e.g., estimated or incomplete data and nonstandard definitions, from State to State. Data exclude U.S. Territories and schools operated by the Bureau of Indian Affairs. Data for 3 to 5 year old children are no longer collected by type of handicap. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, *Twelfth Annual Report to Congress on the Implementation of The Education of the Handicapped Act, 1989*. (This table was prepared April 1990.)

**Table 48.—Number of children 3-5 years old served under The Education of the Handicapped Act, by State: 1986-87, 1987-88, and 1988-89**

State	1986-87	1987-88	1988-89	Percent change 1986-87 to 1988-89	State	1986-87	1987-88	1988-89	Percent change 1986-87 to 1988-89
1	2	3	4	5	1	2	3	4	5
<b>United States</b> .....	263,168	284,568	317,687	20.7					
Alabama.....	2,666	8,987	8,243	209.2	Missouri.....	5,297	4,836	4,307	-18.7
Alaska.....	787	981	1,145	49.3	Montana.....	1,404	1,420	1,358	-3.3
Arizona.....	2,623	2,752	3,063	18.8	Nebraska.....	2,750	2,666	2,666	-3.1
Arkansas.....	2,505	2,534	3,101	23.8	Nevada.....	844	871	955	13.2
California.....	23,700	29,138	33,341	40.7	New Hampshire.....	1,105	1,118	1,187	7.4
Colorado.....	1,489	2,126	2,824	78.2	New Jersey.....	12,506	13,095	13,552	8.4
Connecticut.....	4,506	4,793	4,589	1.8	New Mexico.....	1,249	1,268	1,583	26.7
Delaware.....	709	822	845	19.2	New York.....	5,410	3,265	16,640	207.5
District of Columbia.....	370	398	301	-18.8	North Carolina.....	5,541	8,682	7,928	43.1
Florida.....	8,847	10,487	11,412	27.8	North Dakota.....	1,008	1,021	1,123	11.4
Georgia.....	4,442	4,981	8,295	41.7	Ohio.....	7,205	7,359	7,326	1.7
Hawaii.....	581	621	879	18.9	Oklahoma.....	5,635	5,398	5,317	-5.8
Idaho.....	1,270	974	1,138	-10.4	Oregon.....	1,177	1,297	1,205	2.4
Illinois.....	22,078	19,964	19,163	-13.2	Pennsylvania.....	7,134	9,533	13,339	87.0
Indiana.....	5,099	5,046	4,660	-8.8	Rhode Island.....	1,200	1,390	1,451	20.9
Iowa.....	4,929	5,072	5,137	4.2	South Carolina.....	5,871	8,973	7,334	29.3
Kansas.....	2,801	2,855	2,987	5.9	South Dakota.....	1,813	1,844	1,858	2.5
Kentucky.....	4,343	8,861	7,735	78.1	Tennessee.....	8,748	8,548	8,937	2.8
Louisiana.....	5,130	5,162	5,750	12.1	Texas.....	20,137	20,989	21,471	8.0
Maine.....	2,148	2,665	2,756	28.3	Utah.....	2,093	2,158	2,358	12.7
Maryland.....	5,971	6,150	6,423	7.8	Vermont.....	487	500	541	11.1
Massachusetts.....	8,041	8,034	9,455	17.8	Virginia.....	8,944	8,987	9,053	1.2
Michigan.....	12,517	12,268	13,133	4.9	Washington.....	8,562	7,259	8,262	25.8
Minnesota.....	8,731	8,934	8,443	-3.3	West Virginia.....	2,813	2,749	2,882	-4.7
Mississippi.....	2,841	4,854	5,060	78.1	Wisconsin.....	8,934	9,274	9,341	4.8
					Wyoming.....	301	417	465	54.5

NOTE.—The Education of the Handicapped Act was amended in October 1986 to extend the right to a free and appropriate education to handicapped children ages 3 through 5 years. The States have until the 1990-91 school year to fully implement the law. As of January 1990, 31 states and the District of Columbia guaranteed a free appropriate public education to handicapped children age 3 or younger, and 19 more

states will have fully operative programs, as mandated by Congress, by 1991 school year.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, *Twelfth Annual Report to Congress on the Implementation of The Education of the Handicapped Act*. (This table was prepared May 1990.)

**Table 49.—State legislation on gifted and talented programs and number and percentage of students receiving services in public elementary and secondary schools, by State: 1986-87**

State	State-mandated gifted and talented programs	Discretionary State-supported gifted and talented programs	Gifted and talented students receiving services	Gifted and talented students as a percent of enrollment	State	State-mandated gifted and talented programs	Discretionary State-supported gifted and talented programs	Gifted and talented students receiving services	Gifted and talented students as a percent of enrollment
1	2	3	4	5	1	2	3	4	5
Alabama.....	X		18,834	<sup>1</sup> 2.3	Montana.....		X	<sup>2</sup> 4,500	2.9
Alaska.....	X		<sup>2</sup> 3,854	<sup>3</sup> 3.7	Nebraska.....		X	<sup>2</sup> 19,000	7.1
Arizona.....	X		<sup>2</sup> 20,000	<sup>3</sup> 3.4	Nevada.....		X	5,321	3.3
Arkansas.....	X		<sup>2</sup> 19,928	4.8	New Hampshire.....			—	—
California.....		X	219,073	5.1	New Jersey.....		X	111,190	9.9
Colorado.....	X		—		New Mexico.....	X		<sup>2</sup> 5,063	<sup>1</sup> 1.8
Connecticut.....	( <sup>4</sup> )		<sup>2</sup> 19,000	4.1	New York.....	X		<sup>2</sup> 125,000	4.6
Delaware.....	( <sup>5</sup> )		3,815	4.1	North Carolina.....	X		62,329	4.5
Florida.....	X		47,463	3.0	North Dakota.....		X	1,365	0.7
Georgia.....	X		38,000	<sup>1</sup> 3.5	Ohio.....		X	<sup>2</sup> 50,000	2.8
Hawaii.....			<sup>2</sup> 15,193	9.2	Oklahoma.....	X		38,084	6.4
Idaho.....	X		<sup>3</sup> 2,510	1.2	Oregon.....		X	15,338	3.6
Illinois.....		X	<sup>2</sup> 86,000	4.0	Pennsylvania.....	X		<sup>2</sup> 78,000	14.7
Indiana.....		X	<sup>2</sup> 27,800	2.9	Rhode Island.....		X	<sup>2</sup> 5,200	3.9
Iowa.....	X		<sup>2</sup> 8,600	1.8	South Carolina.....	X		35,264	5.8
Kansas.....	X		<sup>2</sup> 11,786	3.0	South Dakota.....	X		<sup>2</sup> 4,791	3.8
Kentucky.....	X		<sup>2</sup> 25,000	<sup>1</sup> 3.9	Tennessee.....	X		13,852	1.7
Louisiana.....	X		<sup>2</sup> 14,000	1.9	Texas.....		X	113,000	<sup>1</sup> 3.5
Maine.....	X		—		Utah.....		X	22,000	5.5
Maryland.....		X	<sup>2</sup> 54,000	8.1	Vermont.....			—	—
Massachusetts.....		X	—		Virginia.....	X		<sup>6</sup> 81,741	8.5
Michigan.....		X	119,708	7.5	Washington.....		X	21,708	2.9
Minnesota.....		X	55,171	7.9	West Virginia.....	X		10,787	3.1
Mississippi.....		X	14,145	2.8	Wisconsin.....	X		—	—
Missouri.....		X	<sup>2</sup> 18,000	2.0	Wyoming.....		X	<sup>2</sup> 2,700	2

<sup>1</sup> Percent based on enrollment figures collected by the National Center for Education Statistics.

<sup>2</sup> Estimated by reporting State.

<sup>3</sup> Data for 1985-86.

<sup>4</sup> Legislation only mandates that all gifted and talented students be identified.

<sup>5</sup> Delaware does not have a State mandate for services to gifted and talented students, but it has gifted programs in all districts.

<sup>6</sup> Fiscal year 1986.

X=Indicates that legislation has been passed.

—Data not available.

NOTE.—The District of Columbia was not included in the survey.

SOURCE: Council of State Directors of Programs for the Gifted, *The 1987 State of the States Gifted and Talented Education Report*. (This table was prepared November 1987.)

**Table 50.—Enrollment in grades 9 to 12 in public and private schools compared with population 14 to 17 years of age: 1889-90 to fall 1988**

[Numbers in thousands]

Year	Enrollment, grades 9 to 12 <sup>1</sup>			Population 14 to 17 years of age <sup>3</sup>	Enrollment as a percent of population 14 to 17 years of age
	All schools	Public schools	Private schools <sup>2</sup>		
1	2	3	4	5	6
1889-90.....	298	203	95	5,355	5.6
1899-1900.....	630	519	111	6,152	10.2
1909-10.....	1,032	915	117	7,220	14.3
1919-20.....	2,414	2,200	214	7,736	31.2
1929-30.....	4,741	4,399	<sup>4</sup> 341	9,341	50.7
1939-40.....	7,059	6,601	<sup>5</sup> 458	9,720	72.6
1949-50.....	6,397	5,725	672	8,405	76.1
1951-52.....	6,538	5,882	656	8,516	76.8
1953-54.....	7,038	6,290	747	8,861	79.4
1955-56.....	7,698	6,873	823	9,207	83.6
1957-58.....	8,790	7,860	931	10,139	86.7
Fall 1959.....	9,306	8,271	1,035	11,155	83.4
Fall 1961.....	10,489	9,369	1,120	12,046	87.1
Fall 1963.....	12,170	10,883	1,287	13,492	90.2
Fall 1965.....	13,010	11,610	1,400	14,146	92.0
Fall 1966.....	13,294	11,894	1,400	14,398	92.3
Fall 1967.....	13,650	12,250	1,400	14,727	92.7
Fall 1968.....	14,118	12,718	1,400	15,170	93.1
Fall 1969.....	14,322	13,022	1,300	15,549	92.1
Fall 1970.....	14,643	13,332	1,311	15,921	92.0
Fall 1971.....	15,116	13,816	<sup>6</sup> 1,300	16,326	92.6
Fall 1972.....	15,213	13,913	<sup>6</sup> 1,300	16,637	91.4
Fall 1973.....	15,377	14,077	<sup>6</sup> 1,300	16,864	91.2
Fall 1974.....	15,432	14,132	<sup>6</sup> 1,300	17,033	90.6
Fall 1975.....	15,604	14,304	<sup>6</sup> 1,300	17,125	91.1
Fall 1976.....	15,671	14,311	1,360	17,117	91.6
Fall 1977.....	15,600	14,240	1,359	17,042	91.5
Fall 1978.....	15,576	14,223	1,353	16,944	91.9
Fall 1979.....	15,014	13,714	<sup>6</sup> 1,300	16,610	90.4
Fall 1980.....	14,581	13,242	1,339	16,140	90.3
Fall 1981.....	14,152	12,752	<sup>6</sup> 1,400	15,539	90.7
Fall 1982.....	13,807	12,407	<sup>6</sup> 1,400	15,040	91.8
Fall 1983.....	13,674	12,274	<sup>6</sup> 1,400	14,720	92.9
Fall 1984.....	13,708	12,308	<sup>6</sup> 1,400	14,705	93.2
Fall 1985.....	13,754	12,392	1,362	14,865	92.5
Fall 1986.....	13,670	12,334	<sup>6</sup> 1,336	14,797	92.4
Fall 1987.....	13,325	12,078	1,247	14,467	92.1
Fall 1988.....	12,898	11,692	<sup>6</sup> 1,206	13,982	92.2

<sup>1</sup> Includes a relatively small number of secondary ungraded and postgraduate students.

<sup>2</sup> Data for most years are partly estimated.

<sup>3</sup> Data for 1890 through 1950 and for 1980 are from the decennial censuses of population. The other figures are Bureau of the Census estimates as of July 1 preceding the opening of the school year.

<sup>4</sup> Data are for 1927-28.

<sup>5</sup> Data are for 1940-41.

<sup>6</sup> Estimated.

NOTE.—Includes enrollment in public schools that are a part of State and local school systems and also in most nonprofit-making private schools, both religiously affili-

ated and nonsectarian. Excludes enrollment in subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools. Because of rounding, details may not add to totals. Some figures have been revised from previously published data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistics of Public Elementary and Secondary School Systems; Statistics of Nonpublic Elementary and Secondary Schools; Common Core of Data survey; and Projections of Education Statistics to 2000*. (This table was prepared July 1990.)

**Table 51.—Enrollment in foreign language courses compared with enrollment in grades 9 to 12 of public secondary schools: Fall 1948 to fall 1985**

[In thousands]

Language	Fall 1948	Fall 1960	Fall 1965	Fall 1968	Fall 1970	Fall 1974	Fall 1976	Fall 1978	Fall 1982	Fall 1985	Percent change in enrollment	
											1965 to 1976	1976 to 1985
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total enrollment, grades 9 to 12</b> .....	1 5,602	6,589	11,610	12,718	13,332	14,132	14,310	14,125	12,486	12,460	23.3	-12.9
<b>All foreign languages</b> <sup>2</sup>												
Number enrolled.....	1,170	2,522	3,659	3,890	3,779	3,295	3,174	3,200	2,910	4,029	-13.3	26.9
Percent of all students.....	20.9	29.4	31.5	30.6	28.3	23.3	22.2	22.7	23.3	32.2	—	—
<b>Modern foreign languages</b>												
Number enrolled.....	741	1,867	3,068	3,518	3,514	3,127	3,023	3,048	2,740	3,852	-1.4	27.4
Percent of all students.....	13.2	21.7	26.4	27.7	26.4	22.1	21.1	21.6	21.9	30.9	—	—
<b>Spanish</b>												
Number enrolled.....	443	933	1,427	1,698	1,811	1,678	1,717	1,631	1,563	2,334	20.3	35.9
Percent of all students.....	7.9	10.9	12.3	13.4	13.6	11.9	12.0	11.5	12.5	18.7	—	—
<b>French</b>												
Number enrolled.....	254	744	1,251	1,328	1,231	978	888	856	858	1,134	-29.0	27.7
Percent of all students.....	4.5	8.7	10.8	10.4	9.2	6.9	6.2	6.1	6.9	9.1	—	—
<b>German</b>												
Number enrolled.....	43	151	328	423	411	393	353	331	267	312	7.5	-11.5
Percent of all students.....	0.8	1.8	2.8	3.3	3.1	2.8	2.5	2.3	2.1	2.5	—	—
<b>Russian</b>												
Number enrolled.....	—	10	27	24	20	15	11	9	6	6	-57.9	-46.7
Percent of all students.....	—	0.1	0.2	0.2	0.2	0.1	0.1	0.1	( <sup>3</sup> )	( <sup>3</sup> )	—	—
<b>Italian</b>												
Number enrolled.....	—	20	25	27	27	40	46	46	44	47	80.7	3.1
Percent of all students.....	—	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	—	—
<b>Other modern foreign languages</b> <sup>4</sup>												
Number enrolled.....	1	9	9	18	15	23	9	176	3	18	-9.0	—
Percent of all students.....	( <sup>3</sup> )	0.1	0.1	0.1	0.1	0.2	0.1	1.2	( <sup>3</sup> )	0.1	—	—
<b>Latin</b>												
Number enrolled.....	429	655	591	372	265	167	150	152	170	177	-74.6	17.6
Percent of all students.....	7.7	7.6	5.1	2.9	2.0	1.2	1.1	1.1	1.4	1.4	—	—

<sup>1</sup> Estimated.

<sup>2</sup> Includes enrollment in ancient Greek (not shown separately). Fewer than 1,000 students were enrolled in this language in each of the years shown.

<sup>3</sup> Less than 0.05 percent.

<sup>4</sup> Includes students enrolled in unspecified modern foreign languages. In 1978, a relatively large number of students were not identified by field of study.

—Data not reported, not available, or not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; American Council on the Teaching of Foreign Languages, "Report of Foreign Language Enrollment in Public Secondary Schools, Fall 1985." (This table was prepared October 1987.)

**Table 52.—Student participation in school programs and services, by control, level, and community type of school: 1987-88**

Control, level, and community type	Total students		Percent of students participating in program or service								
	Number	Percent distribution	Bilingual education	English as a second language	Remedial reading	Remedial mathematics	Programs for the handicapped	Programs for the gifted and talented	Vocational/technical programs	Diagnostic and prescriptive	Extended day
1	2	3	4	5	6	7	8	9	10	11	12
<b>Public total</b> .....	<b>39,911,968</b>	<b>100.00</b>	<b>2.77</b>	<b>2.61</b>	<b>10.77</b>	<b>7.14</b>	<b>7.17</b>	<b>6.50</b>	<b>11.97</b>	<b>10.78</b>	<b>1.31</b>
<b>School level</b>											
Elementary.....	23,947,579	60.00	3.71	3.15	12.40	7.24	7.00	6.20	2.55	11.13	1.80
Secondary.....	14,372,740	36.01	1.32	1.64	7.94	6.77	6.73	7.17	27.04	9.61	0.51
Combined.....	1,591,649	3.99	1.65	1.38	11.73	8.99	13.80	5.01	17.68	15.93	1.04
<b>Community type</b>											
Rural/farming.....	8,913,541	22.33	1.28	1.03	10.56	6.39	7.32	4.70	13.59	11.40	0.39
Small city/town.....	9,849,966	24.68	1.35	1.29	10.27	6.68	7.36	6.02	11.76	10.05	0.89
Suburban.....	8,744,360	21.91	1.73	2.21	8.40	5.52	6.99	7.41	10.71	10.78	1.25
Urban.....	12,129,222	30.39	5.63	4.96	13.01	9.21	7.02	7.62	12.01	10.84	2.37
Other.....	274,879	0.69	8.67	10.21	11.43	8.06	7.61	3.43	(1)	13.25	(1)
<b>Private total</b> .....	<b>5,479,368</b>	<b>100.00</b>	<b>1.72</b>	<b>1.12</b>	<b>6.31</b>	<b>4.37</b>	<b>2.12</b>	<b>6.85</b>	<b>1.74</b>	<b>7.60</b>	<b>6.95</b>
<b>School level</b>											
Elementary.....	3,174,760	56.94	1.88	0.78	6.41	4.16	0.84	5.56	0.39	7.36	9.38
Secondary.....	896,478	17.16	(1)	1.00	3.67	3.31	0.95	8.12	3.41	2.78	(1)
Combined.....	1,408,132	25.90	2.18	1.96	7.81	5.51	5.71	8.83	3.62	11.32	5.99
<b>Community type <sup>2</sup></b>											
Rural/farming.....	523,494	9.54	(1)	0.97	7.25	5.22	3.33	5.07	3.18	11.74	2.07
Small city/town.....	989,361	18.03	(1)	0.54	6.66	4.07	2.27	3.88	1.73	9.35	4.75
Suburban.....	1,446,736	26.04	0.50	0.77	5.68	3.93	1.75	8.79	1.07	6.30	6.79
Urban.....	2,504,081	46.09	0.93	1.38	6.17	4.36	2.00	7.32	1.32	6.81	8.96

<sup>1</sup> Too few sample cases (fewer than 30) for a reliable estimate.  
<sup>2</sup> Other types of communities are included in the totals but are not shown separately.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared April 1990.)

NOTE.—Students may participate in more than one program or service. Totals differ from data appearing in other tables because of varying survey processing procedures and time period coverages.

**Table 53.—Private elementary and secondary enrollment and schools, by selected characteristics: 1987-88**

Selected characteristics	Kindergarten through 12th grade enrollment <sup>1</sup>				Schools			
	Total	Catholic	Other religious	Non-sectarian	Total	Catholic	Other religious	Non-sectarian
1	2	3	4	5	6	7	8	9
<b>Total</b> .....	<b>5,479,368</b>	<b>2,901,809</b>	<b>1,714,852</b>	<b>662,707</b>	<b>26,607</b>	<b>9,527</b>	<b>12,132</b>	<b>5,148</b>
<b>School enrollment</b>								
Less than 150.....	841,262	177,719	449,991	213,552	13,122	1,820	8,058	3,245
150 to 299.....	1,744,413	938,072	559,389	246,952	8,125	4,225	2,697	1,203
300 to 499.....	1,291,757	837,426	318,467	135,864	3,454	2,211	868	374
500 to 749.....	784,027	467,333	189,850	127,044	1,319	801	315	203
750 or more.....	817,908	481,259	197,354	(2)	758	470	193	(2)
<b>Percent minority students</b>								
Less than 5%.....	2,432,130	1,258,384	873,632	300,114	12,435	4,309	6,766	1,360
5%, but less than 20%.....	1,573,610	766,996	503,369	303,245	7,436	2,306	3,275	1,855
20%, but less than 50%.....	671,945	380,109	152,504	139,333	3,239	1,177	1,045	1,017
50% or more.....	601,682	496,320	185,346	120,015	3,697	1,736	1,046	915
<b>Community type <sup>3</sup></b>								
Rural/farming.....	523,494	186,451	216,070	120,973	5,181	1,108	3,359	715
Small city/town.....	989,361	525,604	317,135	146,621	6,210	2,340	2,916	954
Suburban.....	1,446,736	786,635	429,390	230,711	5,257	1,925	2,137	1,194
Urban.....	2,504,081	1,401,756	751,986	350,339	10,150	4,141	3,717	2,292

<sup>1</sup> Only includes prekindergarten and kindergarten students that attend schools which offer first grade.

<sup>2</sup> Too few sample cases (fewer than 30) for reliable estimates.

<sup>3</sup> Other types of communities are included in the totals but are not shown separately.

NOTE.—Data are based upon a sample survey and may not be strictly comparable with data reported elsewhere. Includes only schools which offer first grade or above.

Because of rounding and missing values in cells with too few sample cases, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared July 1990.)

**Table 54.—Private elementary and secondary staff and student-staff ratios, by level and orientation of school: 1987-88**

Orientation and type of staff	Full-time equivalent staff				Students per full-time equivalent staff member			
	Total	Elementary	Secondary	Combined	Total	Elementary	Secondary	Combined
1	2	3	4	5	6	7	8	9
<b>Total.....</b>	<b>529,564</b>	<b>255,215</b>	<b>92,660</b>	<b>181,669</b>	<b>10.3</b>	<b>12.4</b>	<b>9.7</b>	<b>7.8</b>
<b>Principals and assistant principals.....</b>	<b>38,808</b>	<b>19,984</b>	<b>4,739</b>	<b>12,085</b>	<b>148.9</b>	<b>158.9</b>	<b>189.2</b>	<b>118.5</b>
<b>Teachers.....</b>	<b>352,648</b>	<b>172,306</b>	<b>83,980</b>	<b>118,362</b>	<b>15.5</b>	<b>18.4</b>	<b>14.0</b>	<b>12.1</b>
<b>Guidance counselors.....</b>	<b>8,514</b>	<b>1,728</b>	<b>3,737</b>	<b>3,049</b>	<b>643.5</b>	<b>1837.1</b>	<b>239.9</b>	<b>481.8</b>
<b>Librarians.....</b>	<b>11,911</b>	<b>5,984</b>	<b>2,432</b>	<b>3,495</b>	<b>480.0</b>	<b>530.5</b>	<b>388.7</b>	<b>402.9</b>
<b>Other professional staff.....</b>	<b>25,874</b>	<b>9,849</b>	<b>5,539</b>	<b>10,488</b>	<b>211.8</b>	<b>322.4</b>	<b>181.8</b>	<b>134.3</b>
<b>Teacher aides.....</b>	<b>40,188</b>	<b>22,787</b>	<b>1,027</b>	<b>18,374</b>	<b>138.3</b>	<b>139.3</b>	<b>872.8</b>	<b>86.0</b>
<b>Other noninstructional staff.....</b>	<b>53,820</b>	<b>22,578</b>	<b>11,204</b>	<b>19,838</b>	<b>102.2</b>	<b>140.8</b>	<b>80.0</b>	<b>71.0</b>
<b>Non-sectarian</b>								
<b>Total.....</b>	<b>138,907</b>	<b>38,824</b>	<b>18,368</b>	<b>83,714</b>	<b>8.2</b>	<b>8.0</b>	<b>4.4</b>	<b>5.8</b>
<b>Principals and assistant principals.....</b>	<b>8,893</b>	<b>3,571</b>	<b>782</b>	<b>4,340</b>	<b>99.2</b>	<b>86.7</b>	<b>91.4</b>	<b>111.0</b>
<b>Teachers.....</b>	<b>82,810</b>	<b>23,155</b>	<b>10,886</b>	<b>48,970</b>	<b>10.4</b>	<b>13.4</b>	<b>8.7</b>	<b>9.8</b>
<b>Guidance counselors.....</b>	<b>2,113</b>	<b>283</b>	<b>432</b>	<b>1,418</b>	<b>408.3</b>	<b>1178.2</b>	<b>185.6</b>	<b>339.8</b>
<b>Librarians.....</b>	<b>2,584</b>	<b>530</b>	<b>401</b>	<b>1,853</b>	<b>333.9</b>	<b>583.8</b>	<b>178.4</b>	<b>291.4</b>
<b>Other professional staff.....</b>	<b>10,138</b>	<b>2,559</b>	<b>1,541</b>	<b>8,038</b>	<b>85.1</b>	<b>121.0</b>	<b>48.4</b>	<b>79.8</b>
<b>Teacher aides.....</b>	<b>15,432</b>	<b>4,931</b>	<b>178</b>	<b>10,325</b>	<b>55.9</b>	<b>82.8</b>	<b>405.9</b>	<b>48.8</b>
<b>Other noninstructional staff.....</b>	<b>17,138</b>	<b>3,818</b>	<b>2,351</b>	<b>10,969</b>	<b>50.3</b>	<b>81.1</b>	<b>30.4</b>	<b>43.9</b>
<b>Catholic</b>								
<b>Total.....</b>	<b>205,363</b>	<b>135,739</b>	<b>81,925</b>	<b>7,899</b>	<b>14.1</b>	<b>15.4</b>	<b>11.8</b>	<b>9.5</b>
<b>Principals and assistant principals.....</b>	<b>11,915</b>	<b>8,512</b>	<b>2,985</b>	<b>418</b>	<b>243.5</b>	<b>248.3</b>	<b>245.2</b>	<b>174.9</b>
<b>Teachers.....</b>	<b>148,792</b>	<b>97,781</b>	<b>43,870</b>	<b>5,181</b>	<b>19.8</b>	<b>21.4</b>	<b>18.7</b>	<b>14.2</b>
<b>Guidance counselors.....</b>	<b>4,080</b>	<b>1,089</b>	<b>2,872</b>	<b>148</b>	<b>709.5</b>	<b>1961.0</b>	<b>254.8</b>	<b>493.7</b>
<b>Librarians.....</b>	<b>8,027</b>	<b>4,114</b>	<b>1,865</b>	<b>248</b>	<b>481.5</b>	<b>509.8</b>	<b>439.7</b>	<b>294.9</b>
<b>Other professional staff.....</b>	<b>8,002</b>	<b>4,813</b>	<b>3,073</b>	<b>318</b>	<b>382.8</b>	<b>454.5</b>	<b>238.2</b>	<b>231.8</b>
<b>Teacher aides.....</b>	<b>9,217</b>	<b>8,087</b>	<b>759</b>	<b>360</b>	<b>314.8</b>	<b>258.9</b>	<b>984.4</b>	<b>202.9</b>
<b>Other noninstructional staff.....</b>	<b>19,321</b>	<b>11,571</b>	<b>8,701</b>	<b>1,048</b>	<b>150.2</b>	<b>181.2</b>	<b>108.2</b>	<b>89.8</b>
<b>Other religious orientation</b>								
<b>Total.....</b>	<b>185,295</b>	<b>80,651</b>	<b>14,387</b>	<b>90,278</b>	<b>9.3</b>	<b>9.5</b>	<b>8.5</b>	<b>9.5</b>
<b>Principals and assistant principals.....</b>	<b>18,200</b>	<b>7,901</b>	<b>973</b>	<b>7,327</b>	<b>105.9</b>	<b>97.3</b>	<b>95.7</b>	<b>118.5</b>
<b>Teachers.....</b>	<b>123,048</b>	<b>51,390</b>	<b>9,425</b>	<b>82,231</b>	<b>13.9</b>	<b>15.0</b>	<b>9.9</b>	<b>13.7</b>
<b>Guidance counselors.....</b>	<b>2,312</b>	<b>386</b>	<b>433</b>	<b>1,483</b>	<b>741.7</b>	<b>1939.8</b>	<b>215.0</b>	<b>575.5</b>
<b>Librarians.....</b>	<b>3,300</b>	<b>1,339</b>	<b>388</b>	<b>1,594</b>	<b>518.7</b>	<b>573.7</b>	<b>254.0</b>	<b>535.4</b>
<b>Other professional staff.....</b>	<b>7,733</b>	<b>2,878</b>	<b>925</b>	<b>4,132</b>	<b>221.8</b>	<b>287.1</b>	<b>100.8</b>	<b>206.8</b>
<b>Teacher aides.....</b>	<b>15,539</b>	<b>9,758</b>	<b>92</b>	<b>5,688</b>	<b>110.4</b>	<b>78.7</b>	<b>1007.8</b>	<b>150.0</b>
<b>Other noninstructional staff.....</b>	<b>17,164</b>	<b>7,181</b>	<b>2,153</b>	<b>7,821</b>	<b>98.9</b>	<b>108.9</b>	<b>43.2</b>	<b>109.1</b>
<b>Unpaid volunteers<sup>1</sup>.....</b>	<b>280,919</b>	<b>212,829</b>	<b>33,583</b>	<b>44,507</b>	—	—	—	—
<b>Independent.....</b>	<b>31,224</b>	<b>14,519</b>	<b>682</b>	<b>18,022</b>	—	—	—	—
<b>Catholic.....</b>	<b>179,754</b>	<b>147,091</b>	<b>30,924</b>	<b>1,739</b>	—	—	—	—
<b>Other religious orientation.....</b>	<b>70,942</b>	<b>51,218</b>	<b>1,977</b>	<b>28,747</b>	—	—	—	—

<sup>1</sup> Data represent total number of volunteers rather than full-time equivalents.  
 —Data not applicable.

Because of rounding and missing values in cells with too few sample cases, details may not add to totals.

NOTE.—Data are based upon a sample survey and may not be strictly comparable with data reported elsewhere. Includes only schools which offer first grade or above.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared July 1990.)

**Table 55.—Private elementary and secondary enrollment and schools, by amount of tuition, level, and orientation of school: 1987-88**

Orientation and tuition	Kindergarten through 12th grade enrollment <sup>1</sup>				Schools				Average tuition paid by students			
	Total	Elementary	Secondary	Combined	Total	Elementary	Secondary	Combined	Total	Elementary	Secondary	Combined
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	<b>5,479,368</b>	<b>3,174,760</b>	<b>896,478</b>	<b>1,408,132</b>	<b>26,607</b>	<b>17,067</b>	<b>2,425</b>	<b>7,296</b>	<b>\$1,915</b>	<b>\$1,357</b>	<b>\$2,552</b>	<b>\$2,767</b>
Catholic.....	2,901,809	2,096,779	731,922	73,107	9,527	7,760	1,420	348	1,327	1,005	2,045	3,382
Less than \$1,000.....	1,230,392	1,186,981	( <sup>2</sup> )	( <sup>2</sup> )	4,860	4,819	( <sup>2</sup> )	( <sup>2</sup> )	—	—	—	—
\$1,000 to \$2,499.....	1,456,418	881,701	556,150	( <sup>2</sup> )	4,113	3,017	1,037	( <sup>2</sup> )	—	—	—	—
\$2,500 or more.....	214,998	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	554	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	—	—	—	—
Other religious.....	1,714,852	768,372	93,058	853,424	12,132	8,859	501	4,771	1,941	1,619	3,592	2,052
Less than \$1,000.....	283,399	169,785	( <sup>2</sup> )	110,896	4,407	2,794	( <sup>2</sup> )	1,601	—	—	—	—
\$1,000 to \$2,499.....	1,034,471	480,903	( <sup>2</sup> )	537,175	6,377	3,497	( <sup>2</sup> )	2,751	—	—	—	—
\$2,500 or more.....	396,984	117,704	74,027	205,253	1,347	568	360	419	—	—	—	—
Non-sectarian.....	862,707	309,609	71,498	481,601	5,148	2,468	504	2,177	3,839	3,091	8,391	3,941
Less than \$1,000.....	96,328	( <sup>2</sup> )	( <sup>2</sup> )	74,401	805	( <sup>2</sup> )	( <sup>2</sup> )	819	—	—	—	—
\$1,000 to \$2,499.....	214,168	73,424	( <sup>2</sup> )	140,434	1,388	838	( <sup>2</sup> )	520	—	—	—	—
\$2,500 or more.....	552,214	219,304	66,144	266,766	2,984	1,518	428	1,038	—	—	—	—

<sup>1</sup> Only includes prekindergarten and kindergarten students that attend schools which offer first grade.

<sup>2</sup> Too few sample cases (fewer than 30 schools) for reliable estimates.  
—Data not applicable.

NOTE.—Data are based upon a sample survey and may not be strictly comparable with data reported elsewhere. Includes preprimary enrollment for schools which offer

first grade or above. Because of rounding and missing values in cells with too few sample cases, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared July 1990.)

**Table 56.—Summary statistics on Catholic elementary and secondary schools, by level: 1919-20 to 1988-89**

School year	Number of schools			Enrollment			Instructional staff <sup>1</sup>		
	Total	Elementary	Secondary	Total	Elementary	Secondary	Total	Elementary	Secondary
1	2	3	4	5	6	7	8	9	10
1919-20.....	8,103	8,551	1,552	1,925,521	1,795,679	129,848	49,518	41,592	7,924
1929-30.....	10,048	7,923	2,123	2,464,467	2,222,598	241,869	72,552	58,245	14,307
1939-40.....	10,049	7,944	2,105	2,396,305	2,035,182	361,123	81,057	60,081	20,976
1949-50.....	10,778	8,589	2,189	3,066,287	2,560,815	505,572	94,295	66,525	27,770
Fall 1960.....	12,893	10,501	2,392	5,253,791	4,373,422	880,369	151,902	108,169	43,733
1969-70.....	11,771	9,895	2,078	4,658,098	3,607,168	1,050,930	<sup>2</sup> 195,400	<sup>2</sup> 133,200	<sup>2</sup> 62,200
1970-71.....	11,350	9,370	1,980	4,363,566	3,355,478	1,008,088	166,208	112,750	53,458
1974-75.....	10,127	8,437	1,690	3,504,000	2,602,000	902,000	150,179	100,011	50,168
1975-78.....	9,993	8,340	1,653	3,415,000	2,525,000	890,000	149,278	99,319	49,957
1979-80.....	9,640	8,100	1,540	3,139,000	2,293,000	846,000	147,294	97,724	49,570
1980-81.....	9,559	8,043	1,516	3,106,000	2,269,000	837,000	145,777	96,739	49,038
1981-82.....	9,494	7,995	1,498	3,094,000	2,266,000	828,000	146,172	96,847	49,325
1982-83.....	9,432	7,950	1,482	3,026,000	2,225,000	801,000	146,460	97,337	49,123
1983-84.....	9,380	7,917	1,463	2,989,000	2,179,000	790,000	148,913	98,591	48,322
1984-85.....	9,325	7,876	1,449	2,903,000	2,119,000	784,000	149,888	99,820	50,066
1985-86.....	9,220	7,790	1,430	2,821,000	2,061,000	760,000	148,594	96,741	49,853
1986-87.....	9,102	7,693	1,409	2,726,000	1,998,000	728,000	141,930	93,554	48,376
1987-88.....	8,992	7,601	1,391	2,623,000	1,942,000	681,000	139,867	93,199	46,668
1988-89.....	8,827	7,505	1,382	2,551,000	1,912,000	639,000	137,700	93,154	44,546

<sup>1</sup> Beginning in 1970-71, includes full-time teaching staff only.

<sup>2</sup> Includes estimates for the nonreporting schools.

NOTE.—Data reported by the National Catholic Educational Association and data reported by the National Center for Education Statistics are not directly comparable because survey procedures and definitions differ.

SOURCE: National Catholic Educational Association, *A Statistical Report on Catholic Elementary and Secondary Schools for the Years 1967-68 to 1986-87*, as compiled from the Official Catholic Directory (copyright © 1970 by the National Catholic Educational Association); *Catholic Schools in America* (1976 edition, copyright © 1976 by the Franklin Press); and *United States Catholic Elementary and Secondary Schools, 1986-1989* (copyright © 1989 by the National Catholic Educational Association. All rights reserved.) (This table was prepared March 1990.)

**Table 57.—Enrollment, teachers, and high school graduates in private elementary and secondary schools,<sup>1</sup> by State:  
Fall 1980 and 1979-80**

State	Enrollment, fall 1980			Teachers, fall 1980			High school graduates, 1979-80		
	Total	Catholic	Other private	Total	Catholic	Other private	Total	Catholic	Other private
1	2	3	4	5	6	7	8	9	10
<b>United States<sup>2</sup></b> .....	<b>4,961,755</b>	<b>3,139,209</b>	<b>1,823,546</b>	<b>277,419</b>	<b>143,827</b>	<b>133,586</b>	<b>294,536</b>	<b>192,476</b>	<b>102,060</b>
Alabama.....	82,669	14,720	47,949	3,625	668	2,957	3,877	668	3,209
Alaska.....	3,800	1,029	2,771	284	78	208	175	57	118
Arizona.....	40,261	16,306	21,955	2,291	778	1,513	1,802	992	810
Arkansas.....	18,423	7,223	11,200	1,119	378	743	1,114	493	621
California.....	513,709	282,890	251,019	26,913	10,097	16,816	24,882	15,910	8,952
Colorado.....	35,250	17,120	16,130	2,342	892	1,450	1,860	850	1,010
Connecticut.....	88,404	81,760	26,644	5,887	2,880	3,007	8,568	4,688	3,880
Delaware.....	23,374	14,725	6,649	1,361	668	693	1,466	1,080	386
District of Columbia.....	21,203	12,214	8,989	1,824	648	976	1,814	1,075	539
Florida.....	204,988	74,268	130,720	11,779	3,245	8,534	10,355	4,786	5,569
Georgia.....	82,505	13,297	89,208	5,302	817	4,685	5,272	641	4,431
Hawaii.....	37,147	15,059	22,088	2,051	826	1,425	2,828	921	1,707
Idaho.....	5,639	2,189	3,650	312	108	204	314	134	180
Illinois.....	349,463	276,240	71,223	17,126	12,075	5,051	20,338	17,684	2,654
Indiana.....	100,234	63,237	36,997	5,271	3,029	2,242	5,359	3,531	1,828
Iowa.....	55,227	44,790	10,437	3,059	2,405	854	3,837	3,307	530
Kansas.....	33,899	25,810	8,279	1,990	1,301	689	1,811	1,475	336
Kentucky.....	89,728	50,226	19,502	3,843	2,497	1,346	4,390	3,299	1,091
Louisiana.....	156,921	112,099	46,822	8,190	5,143	3,047	9,275	6,700	2,575
Maine.....	17,540	8,733	10,807	1,460	331	1,129	1,835	215	1,620
Maryland.....	106,447	66,168	38,279	8,541	3,442	3,099	8,851	4,645	2,206
Massachusetts.....	138,333	104,720	33,813	9,323	5,153	4,170	12,632	8,145	4,487
Michigan.....	211,871	129,982	81,879	10,050	5,517	4,533	13,063	8,296	4,767
Minnesota.....	68,966	64,418	24,548	4,878	3,264	1,612	4,403	3,004	1,399
Mississippi.....	50,118	11,342	36,774	3,032	605	2,427	3,722	572	3,150
Missouri.....	128,319	95,194	31,125	7,047	4,862	2,185	7,371	5,890	1,481
Montana.....	7,668	4,684	2,984	491	274	217	453	328	125
Nebraska.....	38,574	30,189	6,405	2,329	1,771	558	2,842	2,812	230
Nevada.....	8,589	4,305	2,294	318	171	145	299	288	11
New Hampshire.....	20,721	11,239	9,482	1,499	557	942	2,151	877	1,474
New Jersey.....	229,876	189,878	40,002	12,774	8,828	3,946	14,043	11,494	2,549
New Mexico.....	18,027	9,217	6,810	1,182	428	736	931	315	618
New York.....	579,870	425,981	153,689	31,818	18,285	13,333	32,366	24,643	7,723
North Carolina.....	58,078	9,323	48,755	3,919	417	3,502	2,781	310	2,471
North Dakota.....	10,659	8,230	2,429	645	479	166	714	575	139
Ohio.....	268,357	227,888	40,469	13,876	11,018	2,860	15,734	13,701	2,033
Oklahoma.....	18,335	7,391	6,954	1,126	403	723	1,035	491	544
Oregon.....	27,828	14,357	13,471	1,826	754	872	1,684	835	849
Pennsylvania.....	402,058	314,367	87,891	20,705	13,418	7,289	28,033	20,756	5,277
Rhode Island.....	29,875	25,015	4,860	1,748	1,132	616	2,102	1,685	417
South Carolina.....	49,819	7,555	42,064	3,218	367	2,851	2,893	332	2,361
South Dakota.....	10,898	8,892	4,016	815	437	378	639	400	239
Tennessee.....	71,817	15,185	56,432	4,823	817	3,806	5,228	1,241	3,985
Texas.....	148,534	79,766	68,768	9,242	4,185	5,077	7,089	3,929	3,160
Utah.....	5,555	3,055	2,500	309	121	188	479	210	269
Vermont.....	7,555	4,082	3,473	668	231	437	921	278	643
Virginia.....	75,069	23,060	52,009	5,208	1,135	4,073	4,473	1,252	3,221
Washington.....	55,950	27,356	28,584	3,168	1,285	1,903	3,097	1,566	1,531
West Virginia.....	12,608	8,466	4,142	742	487	275	850	597	253
Wisconsin.....	182,381	110,014	52,347	8,854	5,508	3,148	8,950	4,703	2,247
Wyoming.....	3,036	1,367	1,649	232	82	150	157	—	157

<sup>1</sup> Includes special education, vocational/technical, and alternative schools.

<sup>2</sup> Data represent an undercount of approximately 5 percent because some schools were not included in the survey universe.

—Data not available.

NOTE.—Tabulation includes only schools which offer first grade or above.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Private Elementary and Secondary School Universe" survey. (This table was prepared May 1986.)

Table 58.—Public and private elementary and secondary teachers and pupil-teacher ratios, by level: Fall 1955 to fall 1990

Year	Public and private elementary and secondary schools			Public elementary and secondary schools			Private elementary and secondary schools		
	Kindergarten to grade 12	Elementary	Secondary	Kindergarten to grade 12	Elementary	Secondary	Kindergarten to grade 12	Elementary	Secondary
1	2	3	4	5	6	7	8	9	10
Number of teachers, in thousands									
1955.....	1,286	827	459	1,141	733	408	145	194	151
1956.....	1,354	854	499	1,199	751	447	155	103	152
1957.....	1,424	898	528	1,259	786	473	185	112	153
1958.....	1,475	931	544	1,308	815	491	189	118	153
1959.....	1,531	952	580	1,355	832	524	178	120	156
1960.....	1,600	991	609	1,408	858	550	192	133	59
1961.....	1,643	992	651	1,461	889	592	182	123	159
1962.....	1,708	1,021	688	1,508	888	621	200	135	165
1963.....	1,790	1,050	739	1,578	908	669	212	142	170
1964.....	1,865	1,086	779	1,648	940	708	217	148	171
1965.....	1,933	1,112	822	1,710	965	746	223	147	78
1966.....	2,012	1,153	859	1,789	1,006	783	223	147	78
1967.....	2,079	1,188	891	1,855	1,040	815	224	148	78
1968.....	2,161	1,223	938	1,938	1,078	860	225	147	78
1969.....	2,242	1,258	985	2,013	1,107	907	229	151	78
1970.....	2,289	1,281	1,007	2,055	1,128	927	233	153	80
1971.....	2,293	1,283	1,030	2,063	1,111	952	230	152	78
1972.....	2,334	1,294	1,040	2,103	1,140	963	231	154	77
1973.....	2,369	1,308	1,063	2,133	1,149	984	236	157	79
1974.....	2,410	1,331	1,079	2,185	1,187	998	245	164	81
1975.....	2,451	1,352	1,099	2,196	1,180	1,018	255	172	83
1976.....	2,454	1,349	1,105	2,166	1,166	1,020	268	183	85
1977.....	2,488	1,375	1,113	2,209	1,185	1,024	279	190	89
1978.....	2,478	1,375	1,103	2,206	1,190	1,018	272	185	87
1979.....	2,459	1,378	1,081	2,183	1,190	993	278	188	88
1980.....	2,465	1,401	1,084	2,164	1,189	995	301	212	89
1981.....	2,438	1,380	1,057	2,125	1,159	965	313	221	92
1982.....	2,446	1,402	1,044	2,121	1,171	950	325	231	94
1983.....	2,483	1,418	1,045	2,126	1,178	948	337	240	97
1984.....	2,508	1,448	1,060	2,168	1,205	963	340	243	97
1985.....	2,550	1,483	1,067	2,207	1,237	970	343	248	97
1986.....	2,592	1,517	1,075	2,244	1,267	977	348	250	98
1987.....	2,632	1,555	1,077	2,279	1,297	982	353	257	95
1988 <sup>1</sup> .....	2,661	1,588	1,073	2,318	1,337	979	345	251	94
1989 <sup>2</sup> .....	2,737	1,607	1,130	2,360	1,332	1,028	377	275	102
1990 <sup>3</sup> .....	2,785	1,642	1,142	2,401	1,361	1,039	384	281	103
Pupil-teacher ratios									
1955.....	27.4	31.4	20.3	26.9	30.2	20.9	31.7	40.4	15.7
1956.....	27.0	30.7	20.8	26.5	29.8	21.2	31.8	38.8	17.3
1957.....	26.8	30.3	20.9	26.2	29.1	21.3	31.5	38.4	17.0
1958.....	26.8	30.0	21.4	26.1	28.7	21.7	32.5	38.8	18.9
1959.....	26.7	30.0	21.2	26.0	28.7	21.5	32.2	38.7	18.5
1960.....	26.4	29.4	21.4	25.8	28.4	21.7	30.7	38.4	18.8
1961.....	26.4	29.6	21.5	25.8	28.3	21.7	32.5	39.0	19.0
1962.....	26.3	29.5	21.4	25.7	28.5	21.7	30.5	38.3	18.5
1963.....	26.0	29.3	21.2	25.5	28.4	21.5	29.7	35.2	18.8
1964.....	25.8	28.7	21.2	25.1	27.9	21.5	29.0	34.2	18.3
1965.....	25.1	28.4	20.8	24.7	27.8	20.8	28.3	33.3	18.4
1966.....	24.5	27.7	20.2	24.1	26.9	20.3	27.8	32.7	18.4
1967.....	24.0	26.9	20.1	23.7	26.3	20.3	26.8	31.1	18.4
1968.....	23.5	26.0	20.2	23.2	25.4	20.4	25.8	29.9	17.9
1969.....	22.8	25.2	19.8	22.7	24.8	20.0	24.0	27.8	18.7
1970.....	22.4	24.8	19.8	22.3	24.4	19.9	23.0	26.5	18.4
1971.....	22.4	25.0	19.1	22.3	24.9	19.3	22.6	25.7	18.7
1972.....	21.7	24.0	19.0	21.8	24.0	19.1	21.8	24.0	18.9
1973.....	21.3	23.1	19.1	21.3	23.0	19.3	21.2	23.8	18.5
1974.....	20.8	22.8	18.5	20.8	22.8	18.7	20.4	22.6	18.0
1975.....	20.3	21.7	18.8	20.4	21.7	18.8	19.8	21.5	15.7
1976.....	20.2	21.7	18.3	20.3	21.8	18.5	19.3	20.9	15.8
1977.....	19.8	20.9	17.9	19.7	21.1	18.2	18.4	20.0	15.1
1978.....	19.2	20.9	17.1	19.3	21.0	17.3	18.7	20.2	15.8
1979.....	19.0	20.5	17.0	19.1	20.8	17.2	18.1	19.7	14.8
1980.....	18.6	20.1	18.8	18.7	20.4	18.8	17.7	18.8	15.0
1981.....	18.7	20.4	18.4	18.8	20.8	18.5	17.6	18.8	15.2
1982.....	18.5	20.0	18.4	18.7	20.3	18.8	17.2	18.2	14.9
1983.....	18.3	19.9	18.0	18.5	20.3	18.1	17.0	18.0	14.4
1984.....	17.9	19.8	15.8	18.1	20.0	15.7	18.8	17.7	14.4
1985.....	17.8	19.2	15.5	17.9	19.8	15.7	16.2	17.1	14.0
1986.....	17.4	18.8	15.8	17.7	19.1	18.0	15.7	16.3	13.6
1987.....	17.3	18.4	15.7	17.8	18.7	18.0	15.5	16.4	13.1
1988 <sup>1</sup> .....	17.1	17.9	15.8	17.4	18.3	18.1	15.2	16.1	12.8
1989 <sup>2</sup> .....	18.8	18.1	14.9	17.2	18.8	15.2	14.2	15.1	11.7
1990 <sup>3</sup> .....	18.6	18.0	14.8	17.0	18.8	14.9	14.0	15.0	11.4

<sup>1</sup> Estimated.<sup>2</sup> Preliminary.<sup>3</sup> Projected.

NOTE.—Data for teachers are expressed in full-time equivalents. Distribution of unclassified teachers by level is estimated. Distribution of elementary and secondary school teachers by level is determined by reporting units. Kindergarten includes a relatively small number of nursery school teachers and students. Some data have been re-

vised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools*; Common Core of Data survey and *Projections of Education Statistics*, unpublished tabulations. (This table was prepared July 1990.)

Table 59.—Public elementary and secondary teachers, by level and State: Fall 1984 to fall 1989

[In full-time equivalents]

State or other area	Number of teachers, fall 1984	Number of teachers, fall 1985	Number of teachers, fall 1986	Number of teachers, fall 1987 <sup>1</sup>				Number of teachers, fall 1988				Estimated number of teachers, 1989
				Total	Elementary	Secondary	Unclassified	Total	Elementary	Secondary	Unclassified	
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>United States</b> .....	<b>2,168,298</b>	<b>2,206,884</b>	<b>2,244,445</b>	<b>2,279,241</b>	<b>1,198,154</b>	<b>920,657</b>	<b>160,430</b>	<b>2,316,428</b>	<b>1,231,458</b>	<b>918,430</b>	<b>166,540</b>	<b>2,359,941</b>
Alabama.....	38,647	36,138	36,971	37,718	20,239	17,477	—	38,845	21,123	17,722	—	<sup>3</sup> 39,028
Alaska.....	8,127	8,814	8,448	6,113	3,011	2,990	112	8,272	3,266	2,263	743	6,482
Arizona.....	26,900	27,935	29,104	30,707	22,322	8,385	—	31,817	22,873	8,744	—	<sup>3</sup> 32,993
Arkansas.....	23,985	24,787	24,944	25,572	12,148	12,106	1,318	27,730	12,538	12,821	2,373	<sup>3</sup> 26,889
California.....	178,310	184,151	190,484	195,864	139,435	56,195	234	203,342	143,689	54,863	4,770	<sup>4</sup> 218,432
Colorado.....	28,824	29,894	30,704	31,168	15,506	15,662	—	31,398	15,769	15,829	—	<sup>3</sup> 31,600
Connecticut.....	32,818	32,903	34,252	35,050	12,374	18,900	5,778	35,502	12,705	18,775	8,022	35,900
Delaware.....	5,577	5,745	5,883	5,951	2,907	3,044	—	5,898	2,936	2,982	—	5,891
District of Columbia.....	5,889	8,137	5,984	8,232	2,665	2,565	1,002	8,394	2,946	2,591	857	8,874
Florida.....	86,284	88,973	91,969	95,857	41,738	37,470	18,651	100,370	43,485	38,511	18,374	104,084
Georgia.....	58,294	57,374	57,881	82,280	33,847	21,407	7,028	59,918	38,645	23,271	—	81,097
Hawaii.....	7,078	7,278	7,291	7,684	4,230	3,280	174	7,950	4,524	3,272	154	<sup>3</sup> 8,103
Idaho.....	10,147	10,255	10,234	10,258	5,337	4,814	107	10,425	5,493	4,828	104	10,500
Illinois.....	102,013	102,857	104,609	105,217	58,844	30,098	16,275	105,097	59,144	29,500	18,453	<sup>3</sup> 103,551
Indiana.....	51,308	51,978	52,898	53,749	25,804	23,899	4,246	54,029	26,166	23,431	4,432	54,825
Iowa.....	31,882	31,770	30,958	30,873	15,917	14,017	939	30,228	18,665	12,558	1,003	<sup>3</sup> 29,890
Kansas.....	26,331	26,888	27,064	27,317	13,911	10,598	2,808	28,122	14,356	10,851	2,915	28,403
Kentucky.....	32,850	33,506	34,507	35,239	23,350	11,889	—	35,788	23,877	11,911	—	36,200
Louisiana.....	42,180	42,809	42,929	42,920	23,815	12,512	8,793	43,203	23,443	11,933	7,827	45,213
Maine.....	13,281	14,226	13,885	14,204	9,188	5,018	—	14,593	9,542	5,051	—	<sup>4</sup> 14,815
Maryland.....	38,030	38,433	39,491	40,093	19,891	20,202	—	40,899	20,790	20,109	—	41,000
Massachusetts.....	56,504	58,845	58,066	59,517	19,873	32,574	7,270	60,068	20,368	32,247	7,455	<sup>3</sup> 58,718
Michigan.....	81,185	82,193	83,130	79,972	30,531	40,294	9,147	79,847	31,073	39,637	9,137	84,250
Minnesota.....	40,108	41,314	40,957	42,132	21,803	20,329	—	42,750	22,593	20,157	—	43,750
Mississippi.....	25,388	26,102	26,219	26,930	15,064	11,866	—	27,283	15,815	10,563	1,105	<sup>4</sup> 27,550
Missouri.....	47,366	48,170	48,902	49,632	25,242	23,512	878	50,893	25,993	23,769	931	51,000
Montana.....	9,597	9,705	9,818	9,859	8,564	3,095	—	9,826	8,011	2,859	756	<sup>3</sup> 9,715
Nebraska.....	17,856	17,867	17,748	17,713	9,605	8,108	—	18,003	9,989	8,014	—	<sup>3</sup> 18,339
Nevada.....	7,496	7,751	7,908	8,348	4,579	3,789	—	8,699	4,874	3,825	—	9,065
New Hampshire.....	10,065	10,104	10,300	10,363	6,257	4,106	—	10,442	6,685	3,757	—	10,817
New Jersey.....	73,774	74,236	75,558	78,335	39,130	29,433	9,772	79,898	42,027	28,764	8,907	81,092
New Mexico.....	14,538	14,781	14,878	15,175	8,502	4,388	2,287	15,770	8,978	4,320	2,474	15,399
New York.....	183,044	185,573	188,940	170,238	78,455	87,372	24,409	172,807	80,897	66,815	25,295	178,000
North Carolina.....	58,084	57,838	58,103	59,771	30,483	21,087	8,221	81,933	31,781	21,152	9,000	81,500
North Dakota.....	7,794	7,798	7,779	7,832	4,958	2,874	—	7,731	5,048	2,683	—	<sup>3</sup> 8,803
Ohio.....	98,061	98,264	98,894	99,708	54,687	45,021	—	101,105	55,781	45,344	—	100,500
Oklahoma.....	34,894	35,752	35,041	34,515	15,950	14,991	3,574	35,118	16,399	15,050	3,667	35,000
Oregon.....	24,444	24,805	24,815	24,911	13,929	10,193	789	25,147	14,308	10,052	787	<sup>3</sup> 25,857
Pennsylvania.....	101,484	101,665	102,993	103,307	44,837	47,305	11,185	104,379	46,071	48,988	11,320	104,100
Rhode Island.....	8,752	8,844	8,918	8,934	3,974	3,781	1,199	9,192	4,184	3,775	1,233	9,002
South Carolina.....	33,784	34,645	35,349	35,701	23,138	12,583	—	35,877	23,416	12,481	—	35,500
South Dakota.....	8,579	8,340	8,031	8,172	4,780	3,339	53	8,260	4,521	3,082	857	<sup>3</sup> 8,185
Tennessee.....	38,638	40,023	41,103	42,082	26,482	15,820	—	42,857	26,507	18,150	—	43,000
Texas.....	172,865	181,051	186,385	187,159	96,826	88,211	4,122	—	—	—	—	200,000
Utah.....	18,189	17,126	17,752	17,124	9,251	5,918	1,957	17,590	9,282	8,350	1,978	18,384
Vermont.....	6,327	6,397	—	8,856	2,878	2,964	818	8,852	3,175	3,194	483	<sup>3</sup> 8,950
Virginia.....	57,498	57,339	58,141	59,928	33,919	25,525	484	60,883	34,942	25,464	477	60,849
Washington.....	35,706	38,202	37,065	38,344	18,677	16,005	3,692	38,780	19,359	15,745	3,678	39,807
West Virginia.....	22,732	22,733	22,931	22,702	10,958	7,985	3,781	22,177	10,359	8,104	3,714	21,583
Wisconsin.....	47,082	48,482	47,039	47,721	28,344	18,854	2,523	48,541	28,483	17,638	2,420	<sup>4</sup> 49,326
Wyoming.....	7,191	7,296	7,201	6,798	2,427	3,491	880	8,893	2,404	3,437	852	<sup>4</sup> 8,734
<b>Outlying areas</b> .....												
American Samoa.....	—	—	—	856	444	179	33	874	432	196	46	—
Guam.....	—	1,329	1,430	1,407	705	875	27	1,403	704	878	21	—
Northern Marianas.....	310	—	—	305	202	103	—	334	198	122	14	—
Puerto Rico.....	32,520	32,683	32,381	33,069	17,814	13,314	1,941	33,357	18,043	13,379	1,935	—
Virgin Islands.....	1,665	1,631	1,606	1,590	788	688	114	1,597	784	688	125	—

<sup>1</sup> Data have been revised from previously published figures.<sup>2</sup> U.S. total includes imputation for nonreporting State or States.<sup>3</sup> Actual fall 1989 data.<sup>4</sup> Estimated by the National Center for Education Statistics.

—Data not available, not reported, or not applicable.

NOTE.—Distribution of elementary and secondary teachers determined by reporting units. Teachers reported in full-time equivalents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data surveys. (This table was prepared January 1990.)

**Table 60.—Teachers, enrollment, and pupil-teacher ratios in public elementary and secondary schools, by State:  
Fall 1985 to fall 1988**

State or other area	Pupil-teacher ratio, fall 1985	Fall 1986 <sup>1</sup>			Fall 1987 <sup>1</sup>			Fall 1988		
		Teachers	Enrollment	Pupil-teacher ratio	Teachers	Enrollment	Pupil-teacher ratio	Teachers	Enrollment	Pupil-teacher ratio
1	2	3	4	5	6	7	8	9	10	11
United States .....	17.9	<sup>2</sup> 2,244,445	39,753,172	<sup>2</sup> 17.7	2,279,241	40,007,946	17.6	<sup>2</sup> 2,316,428	40,192,386	<sup>2</sup> 17.4
Alabama .....	20.2	36,971	733,735	19.8	37,716	729,234	19.3	38,845	724,751	18.7
Alaska .....	15.6	8,448	107,848	16.7	6,113	105,878	17.3	6,272	106,481	17.0
Arizona .....	19.6	29,104	534,538	18.4	30,707	572,421	18.6	31,617	574,890	18.2
Arkansas .....	17.5	24,844	437,438	17.5	25,572	437,036	17.1	27,730	436,387	15.7
California .....	23.1	190,484	4,377,989	23.0	195,864	4,489,322	22.9	203,342	4,616,120	22.7
Colorado .....	18.4	30,704	558,415	18.2	31,168	560,236	18.0	31,398	560,081	17.8
Connecticut .....	14.0	34,252	468,847	13.7	35,050	465,465	13.3	35,502	463,488	13.1
Delaware .....	16.2	5,883	84,410	16.0	5,951	95,659	16.1	5,898	96,678	16.4
District of Columbia .....	14.2	5,984	85,612	14.3	6,232	86,435	13.9	6,394	84,792	13.3
Florida .....	17.6	91,969	1,607,320	17.5	95,857	1,664,774	17.4	100,370	1,720,930	17.1
Georgia .....	18.6	57,881	1,096,425	18.9	62,280	1,110,947	17.8	59,918	1,107,994	18.5
Hawaii .....	22.6	7,291	164,640	22.6	7,684	166,160	21.6	7,950	167,488	21.1
Idaho .....	20.3	10,234	208,391	20.4	10,258	212,444	20.7	10,425	214,615	20.6
Illinois .....	17.6	104,609	1,825,185	17.4	105,217	1,811,446	17.2	105,097	1,794,916	17.1
Indiana .....	18.8	52,896	966,780	18.3	53,749	964,129	17.9	54,029	960,994	17.3
Iowa .....	15.3	30,958	481,286	15.5	30,873	480,826	15.8	30,226	476,200	15.6
Kansas .....	15.4	27,064	416,091	15.4	27,317	421,112	15.4	26,122	426,596	15.2
Kentucky .....	19.2	34,507	642,778	18.8	35,239	642,896	18.2	35,768	637,827	17.8
Louisiana .....	18.5	42,929	795,188	18.5	42,920	793,093	18.5	43,203	786,683	16.2
Maine .....	14.5	13,685	211,752	15.5	14,204	211,817	14.9	14,593	212,902	14.6
Maryland .....	17.5	39,491	675,747	17.1	40,093	683,797	17.1	40,899	688,947	16.6
Massachusetts .....	14.9	58,066	833,918	14.4	59,517	825,320	13.9	60,068	823,428	13.7
Michigan .....	19.5	83,130	1,597,154	19.2	79,972	1,589,287	19.9	79,847	1,582,785	19.8
Minnesota .....	17.1	40,957	711,134	17.4	42,132	721,481	17.1	42,750	726,950	17.0
Mississippi .....	18.1	26,219	496,639	19.0	26,930	505,550	18.6	27,283	503,326	18.4
Missouri .....	18.5	48,902	800,606	18.4	49,632	802,060	18.2	50,893	806,639	15.9
Montana .....	15.9	9,818	153,327	15.6	9,859	152,207	15.8	9,626	152,191	15.6
Nebraska .....	15.0	17,748	267,139	15.1	17,713	268,100	15.1	18,003	269,434	15.0
Nevada .....	20.0	7,908	161,239	20.4	8,348	168,353	20.2	8,899	176,474	20.3
New Hampshire .....	15.9	10,300	163,717	15.9	10,363	166,045	16.0	10,442	169,413	13.2
New Jersey .....	15.0	75,558	1,107,487	14.7	78,335	1,092,982	14.0	79,898	1,090,871	13.6
New Mexico .....	18.6	14,678	261,943	19.0	15,175	267,229	18.9	15,770	292,425	18.5
New York .....	15.8	168,940	2,607,719	15.4	170,236	2,594,070	15.2	172,807	2,573,715	14.9
North Carolina .....	18.6	58,103	1,085,248	18.7	59,771	1,085,976	18.2	61,933	1,083,156	17.5
North Dakota .....	15.2	7,779	118,703	15.3	7,632	119,004	15.6	7,731	116,809	15.4
Ohio .....	18.3	98,894	1,793,508	18.1	99,708	1,793,431	18.0	101,105	1,778,544	17.6
Oklahoma .....	18.6	35,041	593,183	18.9	34,515	584,212	18.9	35,118	580,426	16.5
Oregon .....	18.2	24,615	449,307	18.3	24,911	455,895	18.3	25,147	461,752	18.4
Pennsylvania .....	18.6	102,993	1,874,161	18.3	103,307	1,868,542	18.2	104,379	1,859,714	15.9
Rhode Island .....	15.1	8,918	134,690	15.1	8,934	134,800	15.1	9,192	134,347	14.6
South Carolina .....	17.5	35,349	611,829	17.3	35,701	614,921	17.2	35,877	615,774	17.2
South Dakota .....	14.9	8,031	125,458	15.6	8,172	126,817	15.5	8,280	126,910	15.4
Tennessee .....	20.3	41,103	818,073	19.9	42,082	823,793	19.8	42,657	821,580	19.3
Texas .....	17.3	186,385	3,209,515	17.2	187,159	3,238,787	17.3	—	3,283,707	—
Utah .....	23.8	17,752	415,994	23.4	17,124	423,396	24.7	17,590	431,119	24.5
Vermont .....	14.1	—	92,112	—	8,656	92,755	13.9	6,852	93,464	13.6
Virginia .....	16.9	58,141	975,135	16.8	59,928	979,417	16.3	60,883	982,393	16.1
Washington .....	20.7	37,065	761,428	20.5	38,344	775,755	20.2	38,780	790,918	20.4
West Virginia .....	15.7	22,931	351,837	15.3	22,702	344,236	15.2	22,177	335,912	15.1
Wisconsin .....	16.5	47,039	767,619	16.3	47,721	772,363	16.2	48,541	774,957	16.0
Wyoming .....	14.1	7,201	100,955	14.0	6,798	98,455	14.5	6,693	97,793	14.6
<b>Outlying areas</b>										
American Samoa .....	—	—	11,055	—	856	11,248	17.1	674	11,764	17.5
Guam .....	19.6	1,430	25,876	18.0	1,407	25,936	18.4	1,403	26,041	18.6
Northern Marianas .....	—	—	—	—	305	5,819	19.1	334	6,079	18.2
Puerto Rico .....	21.0	32,361	679,489	21.0	33,069	672,837	20.3	33,357	661,693	19.6
Virgin Islands .....	15.6	1,606	24,435	15.2	1,590	24,020	15.1	1,597	23,492	14.7

<sup>1</sup> Some data have been revised from previously published figures.

<sup>2</sup> U.S. total includes imputation for nonreporting State.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data surveys. (This table was prepared March 1990.)

NOTE.—Teachers reported in full-time equivalents.

**Table 61.—Teachers in public and private elementary and secondary schools, by selected characteristics: 1987-88**

Selected characteristics	Total <sup>1</sup>	Percent of teachers, by highest degree earned						Percent of teachers, by years of full-time teaching experience			
		No degree	Associate	Bachelor's	Master's	Education specialist	Doctor's	Less than 3	3 to 9	10 to 20	Over 20
1	2	3	4	5	6	7	8	9	10	11	12
<b>Public schools</b>											
Total.....	2,323,204	0.2	0.4	52.2	40.0	6.3	0.9	8.0	26.0	44.5	21.4
Men.....	681,161	0.6	1.2	44.2	44.9	7.5	1.6	6.2	19.5	44.3	29.9
Women.....	1,631,168	( <sup>2</sup> )	0.1	55.5	37.9	5.7	0.6	6.7	28.6	44.6	17.6
<b>Race/ethnicity</b>											
White.....	1,994,369	0.2	0.4	52.1	40.3	6.2	0.8	6.0	26.6	44.4	21.0
Black.....	187,836	( <sup>2</sup> )	( <sup>2</sup> )	49.7	42.4	0.6	0.0	6.1	19.4	46.3	26.2
Hispanic.....	67,084	( <sup>2</sup> )	( <sup>2</sup> )	64.5	29.9	6.7	( <sup>2</sup> )	11.9	33.2	40.9	13.9
Asian or Pacific Islander.....	20,709	( <sup>2</sup> )	( <sup>2</sup> )	52.6	26.7	13.5	( <sup>2</sup> )	11.2	22.1	43.0	23.7
American Indian or Alaskan.....	23,998	( <sup>2</sup> )	( <sup>2</sup> )	50.1	40.5	7.5	( <sup>2</sup> )	5.7	24.3	49.7	20.2
<b>Age</b>											
Less than 30.....	310,901	( <sup>2</sup> )	( <sup>2</sup> )	62.9	15.4	1.1	( <sup>2</sup> )	36.5	63.2	( <sup>2</sup> )	( <sup>2</sup> )
30 to 39.....	813,204	( <sup>2</sup> )	0.3	53.3	40.6	5.2	0.5	6.0	33.6	60.2	( <sup>2</sup> )
40 to 49.....	752,301	0.2	0.5	44.2	46.0	7.6	1.3	2.3	14.0	55.0	28.6
50 or more.....	416,857	0.5	0.6	42.3	45.5	9.3	1.6	1.2	5.7	27.9	65.0
<b>Level</b>											
Elementary.....	1,181,576	( <sup>2</sup> )	( <sup>2</sup> )	56.6	36.9	5.6	0.6	8.4	27.4	44.3	19.6
Secondary.....	1,141,626	0.4	0.9	47.3	43.2	7.0	1.3	7.6	24.6	44.7	23.0
<b>Private schools</b>											
Total.....	307,131	2.9	1.5	61.3	29.7	2.9	1.7	16.4	37.4	29.8	13.5
Men.....	66,765	( <sup>2</sup> )	( <sup>2</sup> )	50.9	36.2	3.6	5.0	16.5	28.9	33.7	16.6
Women.....	239,975	3.2	1.7	64.2	27.4	2.7	0.8	16.4	39.8	26.8	12.1
<b>Race/ethnicity</b>											
White.....	261,152	2.9	1.3	61.2	30.3	2.7	1.6	16.4	37.7	30.2	13.8
Black.....	7,015	( <sup>2</sup> )	( <sup>2</sup> )	69.1	16.6	( <sup>2</sup> )	( <sup>2</sup> )	27.0	42.2	21.3	( <sup>2</sup> )
Hispanic.....	6,569	( <sup>2</sup> )	( <sup>2</sup> )	60.6	19.7	( <sup>2</sup> )	( <sup>2</sup> )	22.0	41.4	25.6	( <sup>2</sup> )
Asian or Pacific Islander.....	3,491	( <sup>2</sup> )	( <sup>2</sup> )	56.2	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
American Indian or Alaskan.....	2,747	( <sup>2</sup> )	( <sup>2</sup> )	93.7	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>Age</b>											
Less than 30.....	65,843	3.5	( <sup>2</sup> )	63.4	11.4	( <sup>2</sup> )	( <sup>2</sup> )	47.3	51.4	( <sup>2</sup> )	( <sup>2</sup> )
30 to 39.....	104,267	2.6	2.2	59.3	31.4	3.1	( <sup>2</sup> )	15.6	45.4	36.2	( <sup>2</sup> )
40 to 49.....	63,021	2.4	( <sup>2</sup> )	51.9	39.1	3.1	2.6	6.0	31.6	44.0	15.4
50 or more.....	49,376	3.3	( <sup>2</sup> )	52.4	34.7	5.1	( <sup>2</sup> )	4.0	11.1	27.5	56.6
<b>Level</b>											
Elementary.....	159,893	3.8	1.6	70.9	21.0	2.1	( <sup>2</sup> )	16.4	40.5	26.7	11.6
Secondary.....	147,236	1.9	1.1	50.9	39.2	3.7	3.1	16.5	34.0	31.0	15.4

<sup>1</sup> Total differs from data appearing in other tables because of varying survey processing procedures and time period coverages.

<sup>2</sup> Too few sample cases (fewer than 30) for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared June 1990.)

**Table 62.—Highest degree earned and number of years teaching experience for teachers in public elementary and secondary schools, by State: 1987-88**

Selected characteristics	Total <sup>1</sup>	Percent of teachers, by highest degree <sup>2</sup>				Percent of teachers, by years of full-time teaching experience			
		Bachelor's	Master's	Education specialist	Doctor's	Less than 3	3 to 9	10 to 20	Over 20
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>2,323,204</b>	<b>52.2</b>	<b>40.0</b>	<b>6.3</b>	<b>0.9</b>	<b>8.0</b>	<b>26.0</b>	<b>44.5</b>	<b>21.4</b>
Alabama.....	38,878	40.5	50.8	8.7	—	7.5	28.8	47.3	18.5
Alaska.....	6,911	59.2	35.7	—	—	7.4	29.7	52.8	10.1
Arizona.....	29,858	56.3	38.4	4.8	—	10.7	32.9	41.8	14.7
Arkansas.....	27,543	66.5	30.0	—	—	8.7	34.4	43.8	13.4
California.....	183,784	55.3	31.4	11.8	1.5	8.9	24.0	39.8	27.1
Colorado.....	31,754	50.4	43.8	—	—	7.7	28.5	44.8	18.8
Connecticut.....	34,137	22.7	58.4	16.8	—	—	21.9	45.8	26.5
Delaware.....	5,335	85.2	27.6	—	—	—	24.9	45.8	23.0
District of Columbia.....	5,198	43.0	44.0	—	—	—	—	43.2	38.0
Florida.....	89,562	58.7	36.1	3.2	—	10.9	29.0	43.7	18.3
Georgia.....	82,897	45.4	47.1	5.5	—	8.8	32.0	46.2	13.0
Hawaii.....	8,891	53.8	16.1	27.1	—	13.4	15.3	37.9	33.4
Idaho.....	10,805	72.4	22.0	—	—	10.3	32.5	44.9	12.2
Illinois.....	102,000	51.4	42.0	5.7	—	6.8	22.6	43.5	27.1
Indiana.....	55,972	15.1	79.0	5.0	—	7.0	23.5	46.1	23.4
Iowa.....	40,991	85.6	31.2	—	—	7.6	24.2	39.9	28.3
Kansas.....	30,207	53.3	42.9	—	—	8.2	31.8	42.8	17.8
Kentucky.....	38,830	23.7	50.3	24.2	—	7.5	25.3	47.5	19.8
Louisiana.....	39,387	53.8	30.7	13.8	—	7.3	28.0	46.8	17.9
Maine.....	15,329	68.8	26.7	—	—	8.8	27.3	44.8	19.1
Maryland.....	38,557	41.0	50.8	—	—	9.8	18.4	48.7	22.8
Massachusetts.....	62,020	48.5	44.0	7.3	—	5.9	21.4	48.9	23.7
Michigan.....	81,517	39.8	55.8	4.0	—	7.2	16.9	46.7	27.2
Minnesota.....	43,682	64.8	31.3	—	—	7.4	22.6	41.4	28.3
Mississippi.....	28,740	58.9	36.8	5.1	—	8.1	28.2	46.3	17.4
Missouri.....	53,426	52.1	41.8	3.8	—	8.0	30.2	43.1	18.7
Montana.....	13,418	75.8	20.8	—	—	8.8	30.6	44.0	18.8
Nebraska.....	22,703	81.5	34.5	—	—	8.8	28.8	43.0	19.8
Nevada.....	8,631	47.0	41.8	9.9	—	9.3	26.3	43.8	20.8
New Hampshire.....	10,770	65.2	27.9	—	—	9.1	32.8	43.5	14.3
New Jersey.....	82,344	57.8	32.4	8.1	—	8.3	21.8	46.0	24.0
New Mexico.....	15,429	47.4	46.7	—	—	7.7	29.8	45.0	17.6
New York.....	174,828	32.0	57.4	8.8	1.3	7.1	23.9	44.1	24.8
North Carolina.....	58,237	66.9	29.8	—	—	8.3	26.8	45.9	20.7
North Dakota.....	9,031	82.2	15.9	—	—	11.2	34.1	35.8	18.7
Ohio.....	103,358	54.9	39.7	3.4	—	8.2	22.8	47.8	21.2
Oklahoma.....	40,988	55.0	39.0	5.3	—	7.5	35.7	43.1	13.8
Oregon.....	25,422	53.9	39.1	8.9	—	10.8	28.5	41.4	19.0
Pennsylvania.....	100,453	47.7	43.5	6.9	—	5.1	17.2	51.1	26.5
Rhode Island.....	8,866	37.1	53.5	—	—	—	18.1	55.0	23.5
South Carolina.....	38,069	50.0	43.0	4.8	—	10.2	29.2	43.3	17.3
South Dakota.....	10,434	82.4	15.9	—	—	11.3	34.6	36.5	17.5
Tennessee.....	43,747	52.2	38.5	7.3	—	8.4	26.7	45.0	19.8
Texas.....	183,443	64.4	29.8	4.1	—	9.7	34.8	40.8	14.8
Utah.....	18,385	73.8	20.0	—	—	15.8	35.1	33.9	15.1
Vermont.....	8,935	57.5	39.4	—	—	10.9	28.7	43.7	18.2
Virginia.....	60,435	81.8	34.1	—	—	7.4	27.4	45.5	19.6
Washington.....	39,401	69.2	25.4	4.0	—	8.8	25.1	45.8	22.4
West Virginia.....	22,843	51.9	38.8	7.8	—	7.2	29.8	46.8	18.4
Wisconsin.....	57,458	83.2	32.8	3.8	—	8.8	24.9	43.1	25.0
Wyoming.....	7,644	70.7	27.1	—	—	—	32.3	43.6	17.5

<sup>1</sup> Total differs from data appearing in other tables because of varying survey processing procedures and time period coverages.

<sup>2</sup> Excludes teachers with less than a bachelor's degree.

—Too few sample cases (fewer than 30) for a reliable estimate.

NOTE.—Details may not add to totals due to rounding or missing values in cells with too few sample cases, or item nonresponse. Cell entries may be underestimates due to item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared April 1990.)

Table 63.—Selected characteristics of public school teachers: Spring 1961 to spring 1986

Item	1961	1966	1971	1976	1981	1986
1	2	3	4	5	6	7
<b>Number of teachers, in thousands</b> .....	<b>1,408</b>	<b>1,710</b>	<b>2,055</b>	<b>2,196</b>	<b>2,184</b>	<b>2,207</b>
<b>Sex (percent)</b>						
Men .....	31.3	31.1	34.9	32.9	33.1	31.2
Women .....	68.7	69.0	65.7	67.0	66.9	68.8
<b>Median age (years)</b>						
All teachers .....	41	36	35	33	37	41
Men .....	34	33	33	33	36	42
Women .....	46	40	37	33	36	41
<b>Race (percent)</b>						
White .....	—	—	66.3	90.6	91.6	69.6
Black .....	—	—	6.1	8.0	7.6	6.9
Other .....	—	—	3.6	1.2	0.7	3.4
<b>Marital status (percent)</b>						
Single .....	22.3	22.0	19.5	20.1	16.5	12.9
Married .....	68.0	69.1	71.9	71.3	73.0	75.7
Widowed, divorced, or separated .....	9.7	9.0	6.6	6.6	6.5	11.4
<b>Highest degree held (percent)</b>						
Less than bachelor's .....	14.6	7.0	2.9	0.9	0.4	0.3
Bachelor's .....	61.9	69.6	69.6	61.6	50.1	46.3
Master's or specialist degree .....	23.1	23.2	27.1	37.1	49.3	50.7
Doctor's .....	0.4	0.1	0.4	0.4	0.3	0.7
<b>College credits earned in last 3 years</b>						
Percent who earned credits .....	—	—	60.7	63.2	56.1	53.1
Mean number of credits earned <sup>1</sup> .....	—	—	14	—	9	4
<b>Median years of teaching experience</b> .....	<b>11</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>12</b>	<b>15</b>
<b>Teaching for first year (percent)</b> .....	<b>8.0</b>	<b>9.1</b>	<b>9.1</b>	<b>5.5</b>	<b>2.4</b>	<b>3.1</b>
<b>Average number of pupils per class</b>						
Elementary teachers, not departmentalized ..	29	26	27	25	25	24
Elementary teachers, departmentalized .....	—	—	25	23	22	—
Secondary teachers .....	28	26	27	25	23	25
Mean number of students taught per day by secondary teachers .....	136	132	134	126	116	94
<b>Average number of hours in required school day</b> .....	<b>7.4</b>	<b>7.3</b>	<b>7.3</b>	<b>7.3</b>	<b>7.3</b>	<b>7.3</b>
<b>Average number of hours per week spent on all teaching duties</b> .....						
All teachers .....	47	47	47	46	46	49
Elementary teachers .....	49	47	46	44	44	47
Secondary teachers .....	46	46	46	48	48	51
<b>Average number of days of classroom teaching in school year</b> .....	—	161	161	160	180	160
<b>Average number of nonteaching days in school year</b> .....	—	5	4	5	6	5
<b>Average annual salary as classroom teacher</b> .....	<sup>2</sup> \$5,264	\$6,253	\$9,261	\$12,005	\$17,209	\$24,504
<b>Total income, including spouse's (if married)</b> .....	—	—	\$15,021	\$19,957	\$29,631	\$43,413
<b>Willingness to teach again (percent)</b>						
Certainly would .....	49.9	52.6	44.9	37.5	21.8	22.7
Probably would .....	26.8	25.4	29.5	26.1	24.6	26.3
Chances about even .....	12.5	12.9	13.0	17.5	17.6	19.6
Probably would not .....	7.9	7.1	6.9	13.4	24.0	22.0
Certainly would not .....	2.6	2.0	3.7	5.6	12.0	9.3

<sup>1</sup> Measured in semester hours.<sup>2</sup> Includes extra pay for extra duties.

—Data not available.

NOTE.—Data are based upon sample surveys of public school teachers. Data differs

from figures appearing in other tables because of varying procedures and time period coverages. Because of rounding, percents may not add to 100.0.

SOURCE: National Education Association, *Status of the American Public School Teacher, 1985-86*. (Copyright © 1987 by the National Education Association. All rights reserved.) (This table was prepared July 1987.)

**Table 64.—Public secondary school teachers, by subject taught: Spring 1966 to spring 1986**

[Percentage distribution]

Teaching field in which largest portion of time was spent	1966	1971	1976	1981	1986
1	2	3	4	5	6
<b>Total secondary school teachers, in thousands.....</b>	<b>746</b>	<b>927</b>	<b>1,016</b>	<b>995</b>	<b>970</b>
All fields.....	100.0	100.0	100.0	100.0	100.0
Agriculture.....	1.6	0.6	0.6	1.1	0.6
Art.....	2.0	3.7	2.4	3.1	1.5
Business education.....	7.0	5.9	4.6	6.2	6.5
English.....	16.1	20.4	19.9	23.6	21.8
Foreign language.....	6.4	4.8	4.2	2.8	3.7
Health and physical education.....	6.9	6.3	7.9	6.5	5.6
Home economics.....	5.9	5.1	2.6	3.6	2.6
Industrial arts.....	5.1	6.2	3.9	5.2	2.2
Mathematics.....	13.9	14.4	18.2	15.3	19.2
Music.....	4.7	3.6	3.0	3.7	4.8
Science.....	10.8	10.6	13.1	12.1	11.0
Social studies.....	15.3	14.0	12.4	11.2	13.6
Special education.....	0.4	1.1	3.0	2.1	3.5
Other.....	1.9	1.0	4.0	3.3	3.4

NOTE.—Data are based upon sample surveys of public school teachers. Because of rounding, percents may not add to 100.0.

SOURCE: National Education Association, *Status of the American Public School Teacher, 1985-86*. (Copyright © 1987 by the National Education Association. All rights reserved.) (This table was prepared July 1987.)

**Table 65.—Teacher candidates' reasons for majoring in education and their perceptions of readiness to teach: Spring 1986**

Students' reasons for becoming teachers	Percent citing reason	Facet of teaching	Percent perceiving readiness
1	2	3	4
Helping children grow and learn.....	90	Use proper teaching methods.....	83
Seems to be challenging field.....	83	Plan instruction.....	62
Like work conditions (e.g., job market, calendar, security).....	54	Evaluate student learning.....	80
Inspired by favorite teachers.....	53	Responding to student differences.....	80
Sense of vocation and honor of teaching.....	52	Use materials properly.....	75
Could lead to other career.....	44	Develop materials.....	75
Could be admitted and would succeed.....	41	Work effectively with other teachers.....	74
Liked reputation of education campus.....	20	Diagnose learner needs.....	72
Friends are majoring in education.....	20	Manage classrooms.....	68
		Deal with misbehavior.....	56
		Develop curriculum.....	68
		Teach with computers.....	29

SOURCE: American Association of Colleges for Teacher Education, *Teaching Teachers: Facts and Figures, 1987*. (This table was prepared October 1988.)

**Table 66.—Selected characteristics of public school teachers' current teaching assignments,<sup>1</sup> by State: 1987**

State	Average number of students per class	Percent of teachers									Teaching subjects unqualified to teach
		Number of students per typical class			Feelings about most typical class size			Average number of hours per week spent on job <sup>2</sup>			
		19 or less	20 to 29	30 or more	Too large	About right	Too small	Less than 40	40 to 59	60 or more	
1	2	3	4	5	6	7	8	9	10	11	12
United States .....	23	20	64	16	36	62	1	11	78	11	20
Alabama .....	26	10	61	28	38	61	1	10	83	7	20
Alaska .....	21	33	60	7	25	74	2	6	80	15	29
Arizona .....	25	15	65	21	43	58	2	7	62	11	25
Arkansas .....	22	24	68	7	29	71	1	8	82	11	20
California .....	28	7	38	55	66	33	2	8	75	16	28
Colorado .....	23	21	69	11	31	67	2	9	78	13	23
Connecticut .....	20	40	60	0	26	74	0	21	72	7	15
Delaware .....	23	20	72	9	37	63	0	10	78	11	13
Florida .....	26	12	58	31	49	50	1	10	82	6	16
Georgia .....	25	11	74	16	37	63	1	6	80	14	24
Hawaii .....	26	12	61	28	55	44	1	14	72	14	29
Idaho .....	24	15	67	18	38	59	2	6	81	12	22
Illinois .....	23	24	59	16	31	67	2	10	76	14	18
Indiana .....	23	21	69	8	35	65	0	9	78	13	19
Iowa .....	21	36	58	7	20	79	1	7	78	15	18
Kansas .....	20	42	53	5	20	77	3	9	76	12	16
Kentucky .....	24	14	72	15	37	62	1	15	77	8	25
Louisiana .....	24	16	71	13	34	64	1	17	72	10	20
Maine .....	20	29	71	1	28	70	3	6	80	12	17
Maryland .....	25	11	66	23	41	59	1	7	79	15	20
Massachusetts .....	21	28	67	4	27	71	2	20	73	7	18
Michigan .....	25	11	66	22	47	52	1	14	79	7	22
Minnesota .....	25	13	69	18	44	55	1	8	81	11	25
Mississippi .....	24	12	71	17	32	66	2	10	81	9	17
Missouri .....	22	24	66	19	32	67	1	10	78	11	15
Montana .....	20	36	61	3	24	72	4	6	84	10	14
Nebraska .....	20	40	53	6	21	74	5	7	78	15	18
Nevada .....	26	13	61	27	48	50	2	13	76	11	20
New Hampshire .....	21	32	65	3	26	73	1	8	80	11	12
New Jersey .....	20	35	60	4	25	74	1	23	72	6	20
New Mexico .....	23	19	72	9	32	66	2	12	76	12	21
New York .....	22	23	69	8	31	67	2	19	72	9	14
North Carolina .....	25	7	83	10	47	53	1	5	82	13	20
North Dakota .....	19	45	51	4	19	74	7	9	78	13	18
Ohio .....	24	18	76	6	34	65	1	12	78	10	20
Oklahoma .....	21	34	59	6	25	72	3	10	77	13	21
Oregon .....	23	19	75	6	33	65	2	6	78	16	20
Pennsylvania .....	23	18	73	9	38	62	0	14	81	5	15
Rhode Island .....	22	20	78	2	33	66	0	28	70	2	16
South Carolina .....	23	20	73	6	29	70	2	11	80	9	17
South Dakota .....	19	42	55	3	20	77	3	6	77	15	21
Tennessee .....	25	12	65	23	53	45	1	9	80	11	19
Texas .....	22	28	61	11	24	74	1	6	79	16	19
Utah .....	28	6	49	45	58	41	1	10	79	11	30
Vermont .....	19	44	54	1	23	76	1	10	80	10	19
Virginia .....	22	21	71	8	33	67	1	9	80	11	22
Washington .....	25	13	68	19	44	54	2	6	83	10	30
West Virginia .....	21	26	71	4	20	78	2	12	75	12	23
Wisconsin .....	22	21	74	5	29	69	2	9	82	9	17
Wyoming .....	20	41	56	2	20	76	4	6	81	12	16

<sup>1</sup> As reported by the teachers.

<sup>2</sup> Includes time spent inside and outside of school.

SOURCE: The Carnegie Foundation for the Advancement of Teaching, *The Condition of Teaching: A State-by-State Analysis, 1988*. (This table was prepared January 1989.)

NOTE.—Because of rounding, details may not add to totals.

Table 67.—Percentage of teachers involved in making selected decisions, by State: 1987

State	Choosing textbooks	Shaping the curriculum	Tracking students into special classes	Setting promotion and retention policies	Deciding school budgets	Evaluating teacher performance	Selecting new teachers	Selecting new administrators
1	2	3	4	5	6	7	8	9
United States.....	79	63	45	34	20	10	7	7
Alabama.....	71	51	47	38	19	8	4	3
Alaska.....	79	68	55	45	24	13	8	7
Arizona.....	78	61	47	43	18	17	12	9
Arkansas.....	88	51	44	39	9	12	4	3
California.....	74	62	40	41	35	8	17	11
Colorado.....	83	70	55	38	36	14	20	11
Connecticut.....	73	68	47	33	22	13	7	10
Delaware.....	84	71	40	30	21	8	5	12
District of Columbia.....	—	—	—	—	—	—	—	—
Florida.....	84	42	39	21	20	6	5	3
Georgia.....	74	54	52	35	19	20	3	4
Hawaii.....	91	89	53	37	57	14	9	2
Idaho.....	83	67	48	34	17	7	13	8
Illinois.....	88	82	45	39	12	11	4	5
Indiana.....	90	71	45	35	13	7	5	5
Iowa.....	90	75	48	37	15	7	8	10
Kansas.....	90	78	48	37	13	10	5	4
Kentucky.....	85	64	53	45	18	13	3	8
Louisiana.....	63	40	38	27	10	8	1	6
Maine.....	89	82	60	47	29	14	18	14
Maryland.....	61	44	44	24	18	8	4	4
Massachusetts.....	78	71	48	29	29	11	8	13
Michigan.....	87	68	42	41	15	7	7	8
Minnesota.....	88	79	63	45	20	14	17	12
Mississippi.....	81	59	50	38	11	17	4	5
Missouri.....	85	69	42	35	18	8	5	5
Montana.....	90	78	55	44	17	7	7	5
Nebraska.....	87	75	54	32	19	9	5	6
Nevada.....	73	48	38	25	27	8	5	1
New Hampshire.....	79	78	58	42	32	11	20	19
New Jersey.....	73	66	40	33	11	8	2	5
New Mexico.....	88	87	43	34	15	8	4	4
New York.....	78	62	44	38	18	7	9	11
North Carolina.....	78	53	43	33	28	17	4	4
North Dakota.....	92	71	48	43	8	7	4	4
Ohio.....	84	70	40	29	14	11	5	5
Oklahoma.....	92	82	48	37	10	8	3	3
Oregon.....	87	72	58	41	29	10	20	13
Pennsylvania.....	84	74	38	33	14	7	5	9
Rhode Island.....	68	70	40	31	17	8	5	7
South Carolina.....	87	61	48	30	23	18	4	3
South Dakota.....	90	78	55	49	10	9	6	8
Tennessee.....	71	55	45	38	18	13	3	4
Texas.....	78	62	42	24	20	8	4	3
Utah.....	78	63	48	28	23	20	10	4
Vermont.....	93	85	58	50	39	18	17	20
Virginia.....	82	61	41	30	18	14	4	3
Washington.....	78	68	53	38	25	7	18	12
West Virginia.....	67	43	39	27	12	11	4	2
Wisconsin.....	87	77	51	34	29	9	7	8
Wyoming.....	89	81	57	39	34	8	18	14

—Data not available.

SOURCE: The Carnegie Foundation for the Advancement of Teaching, *Teacher Involvement in Decisionmaking: A State-by-State Profile, September 1988*. (This table was prepared October 1988.)

Table 68.—Percentage of teachers reporting various problems in their school, by State: 1987

State	Disruptive classroom behavior	Student absenteeism	Student apathy	Lack of parental support	Violence against students	Violence against teachers	Alcohol	Drugs other than alcohol	Abused/neglected students	Poor health among students
1	2	3	4	5	6	7	8	9	10	11
United States.....	87	83	86	90	44	24	49	54	89	69
Alabama.....	92	84	87	89	40	22	44	52	83	65
Alaska.....	87	80	84	90	34	17	53	60	92	74
Arizona.....	87	89	90	91	45	22	39	51	90	78
Arkansas.....	90	88	91	92	48	24	53	59	90	74
California.....	90	89	87	90	49	26	42	48	90	74
Colorado.....	88	88	89	90	48	22	51	56	90	74
Connecticut.....	84	75	83	85	42	23	44	48	86	59
Delaware.....	92	86	90	95	54	28	50	54	91	76
District of Columbia.....	—	—	—	—	—	—	—	—	—	—
Florida.....	92	89	92	94	58	38	45	57	88	73
Georgia.....	91	84	91	90	48	28	39	45	89	71
Hawaii.....	93	91	93	95	78	44	45	53	89	74
Idaho.....	88	87	91	92	42	21	55	56	92	72
Illinois.....	79	74	85	89	34	18	39	42	84	82
Indiana.....	89	84	89	91	41	19	51	59	89	71
Iowa.....	80	78	88	87	35	18	63	83	88	81
Kansas.....	81	78	87	88	33	18	52	53	88	87
Kentucky.....	88	86	89	89	38	23	35	45	90	74
Louisiana.....	85	82	89	88	43	29	38	45	83	87
Maine.....	85	79	84	88	32	13	45	48	96	75
Maryland.....	90	78	88	89	50	27	43	49	85	64
Massachusetts.....	84	82	85	85	48	28	56	82	86	63
Michigan.....	87	80	89	89	50	24	45	50	91	72
Minnesota.....	88	80	88	89	39	19	61	59	94	68
Mississippi.....	81	80	82	89	37	22	41	50	77	62
Missouri.....	90	87	89	92	45	24	58	58	90	76
Montana.....	78	77	88	88	32	19	58	55	88	64
Nebraska.....	83	75	88	88	38	18	62	55	88	63
Nevada.....	88	85	92	92	50	30	51	54	92	71
New Hampshire.....	87	78	82	88	38	18	49	50	92	89
New Jersey.....	87	71	83	85	41	21	42	45	81	54
New Mexico.....	83	89	90	89	43	23	58	85	90	71
New York.....	91	82	90	90	48	28	59	64	91	66
North Carolina.....	91	87	92	94	48	32	45	50	89	76
North Dakota.....	81	85	81	85	22	11	57	52	83	53
Ohio.....	87	80	90	90	48	24	55	58	92	71
Oklahoma.....	85	84	90	90	37	23	56	63	91	70
Oregon.....	86	83	88	90	42	15	48	54	93	77
Pennsylvania.....	84	83	89	89	45	25	57	60	89	68
Rhode Island.....	91	83	85	89	53	22	47	54	88	87
South Carolina.....	87	78	85	93	48	27	39	45	86	72
South Dakota.....	74	68	82	84	28	18	55	49	88	64
Tennessee.....	88	88	90	91	41	26	39	47	91	78
Texas.....	81	85	89	92	41	24	51	81	89	71
Utah.....	87	82	88	88	44	18	43	48	86	64
Vermont.....	88	77	83	88	38	14	54	58	95	77
Virginia.....	91	82	88	91	43	25	41	48	88	70
Washington.....	86	87	91	91	44	19	56	82	95	79
West Virginia.....	87	86	88	91	39	21	41	45	89	76
Wisconsin.....	84	78	86	91	39	24	57	55	93	66
Wyoming.....	79	78	83	87	25	10	40	41	89	66

—Data not available.

SOURCE: The Carnegie Foundation for the Advancement of Teaching, *The Condition of Teaching: A State-by-State Analysis, 1988*. (This table was prepared January 1989.)

**Table 69.—Average salaries for full-time teachers in public and private elementary and secondary schools, by selected characteristics: 1987-88**

Selected characteristics	Total earned income	Base salary	Number of full-time teachers	School year supplemental contract		Supplemental contract during summer		Number of teachers with nonschool employment		
				Number of teachers	Supplemental salary	Number of teachers	Supplemental salary	School year only	Summer only	All year
1	2	3	4	5	6	7	8	9	10	11
<b>Public schools</b>										
Total .....	\$28,189	\$26,231	2,118,253	705,223	\$2,134	361,360	\$1,810	121,894	182,185	207,823
Men.....	32,438	28,244	628,799	355,374	2,891	135,044	2,152	59,682	71,389	126,863
Women.....	26,345	25,350	1,478,641	368,186	1,820	225,321	1,368	61,889	90,235	80,392
<b>Race/ethnicity</b>										
White, non-Hispanic.....	28,228	26,264	1,810,496	626,388	2,018	303,418	1,713	107,050	140,849	183,921
Black, non-Hispanic.....	27,786	25,978	177,055	39,144	3,184	34,880	2,227	8,752	12,178	13,819
Hispanic.....	27,234	25,103	83,129	19,271	2,877	13,358	2,581	2,595	4,578	4,432
Asian or Pacific Islander.....	30,282	28,499	18,314	5,514	2,331	3,583	1,990	( <sup>1</sup> )	( <sup>1</sup> )	1,432
American Indian or Alaskan Native.....	28,614	26,160	21,702	7,979	3,889	3,783	2,824	( <sup>1</sup> )	1,939	2,355
<b>Age</b>										
Less than 30.....	21,228	19,257	284,016	117,832	1,881	54,067	1,880	18,178	52,888	35,282
30 to 39.....	28,359	24,447	735,299	260,051	2,127	132,525	1,781	40,452	54,132	71,856
40 to 49.....	30,635	28,556	686,838	231,417	2,142	122,413	1,779	43,900	38,565	71,582
50 or more.....	32,550	30,826	384,556	91,006	2,387	49,785	1,955	20,771	15,854	27,894
<b>Level</b>										
Elementary.....	26,660	25,578	1,067,475	206,247	1,818	155,180	1,646	44,222	66,852	68,818
Secondary.....	29,717	26,879	1,050,779	498,977	2,264	206,179	1,934	77,673	95,334	138,808
<b>Private schools</b>										
Total .....	18,318	16,562	250,524	48,559	2,026	39,231	2,163	18,048	29,708	29,999
Men.....	23,237	18,606	55,230	20,404	2,530	11,439	2,368	6,189	8,983	12,395
Women.....	16,924	15,693	195,065	28,156	1,662	27,792	2,079	11,857	20,725	17,605
<b>Race/ethnicity</b>										
White, non-Hispanic.....	16,244	16,521	228,429	45,357	2,035	34,054	2,124	18,859	27,592	28,292
Black, non-Hispanic.....	16,774	15,221	6,012	( <sup>1</sup> )	( <sup>1</sup> )	1,519	2,255	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Hispanic.....	18,380	18,385	8,157	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Asian or Pacific Islander.....	24,475	22,332	3,069	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
American Indian or Alaskan Native.....	20,217	18,325	2,468	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Age</b>										
Less than 30.....	15,708	13,755	58,179	13,330	1,289	11,064	1,922	3,270	14,605	11,512
30 to 39.....	18,340	16,719	83,101	17,520	1,862	14,057	2,328	5,865	9,870	10,139
40 to 49.....	20,044	18,271	66,312	12,864	2,507	9,497	2,389	5,133	3,340	6,105
50 or more.....	19,215	17,630	39,326	4,392	3,549	4,183	1,845	3,651	1,818	2,152
<b>Level</b>										
Elementary.....	18,122	14,957	138,230	13,183	1,828	16,494	2,234	7,999	18,801	12,292
Secondary.....	21,017	18,540	112,294	35,377	2,100	22,737	2,111	10,047	12,907	17,707

<sup>1</sup> Too few sample cases (fewer than 30) for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared July 1990.)

NOTE.—Details may not add to totals because of rounding or missing values in cells with too few cases or survey item nonresponse.

Table 70.—Job satisfaction of public school teachers: 1984 to 1989

Item	Percent of teachers					
	1984	1985	1986	1987	1988	1989
1	2	3	4	5	6	7
<b>Satisfaction with job as a teacher in public schools:</b>						
All teachers .....	100	—	100	100	100	100
Very satisfied .....	40	—	33	40	50	44
Somewhat satisfied .....	41	—	48	45	37	42
Somewhat dissatisfied .....	16	—	15	12	11	11
Very dissatisfied .....	2	—	4	2	2	3
Seriously considered leaving teaching to go into some other occupation .....	—	51	55	52	—	—
Likely to leave the teaching profession to go into some other occupation within the next 5 years .....	—	26	27	22	26	26

—Data not available.

SOURCE: Metropolitan Life/Louis Harris Associates, Inc., *The American Teacher*, 1989, copyrighted. (This table was prepared January 1990.)

NOTE.—Because of rounding, details may not add to totals.

Table 71.—Estimated average annual salary of teachers in public elementary and secondary schools: 1959-60 to 1989-90

School year	Current dollars			Constant 1989-90 dollars <sup>1</sup>		
	All teachers	Elementary teachers	Secondary teachers	All teachers	Elementary teachers	Secondary teachers
1	2	3	4	5	6	7
1959-60 .....	\$4,995	\$4,815	\$5,276	\$21,585	\$20,807	\$22,800
1961-62 .....	5,515	5,340	5,775	23,297	22,558	24,396
1963-64 .....	5,995	5,805	6,266	24,681	23,899	25,797
1965-66 .....	6,485	6,279	6,781	25,806	24,987	26,905
1967-68 .....	7,423	7,208	7,692	27,715	26,912	28,719
1969-70 .....	8,626	8,412	8,891	28,995	28,276	29,888
1970-71 .....	9,268	9,021	9,568	29,624	28,834	30,583
1971-72 .....	9,705	9,424	10,031	29,946	29,079	30,952
1972-73 .....	10,174	9,893	10,507	30,178	29,344	31,165
1973-74 .....	10,770	10,507	11,077	29,330	28,814	30,166
1974-75 .....	11,641	11,334	12,000	28,539	27,787	29,420
1975-76 .....	12,600	12,280	12,937	28,849	28,116	29,820
1976-77 .....	13,354	12,989	13,776	28,890	28,101	29,803
1977-78 .....	14,198	13,845	14,602	28,783	28,068	29,602
1978-79 .....	15,032	14,681	15,450	27,864	27,213	28,639
1979-80 .....	15,970	15,569	16,459	26,120	25,464	26,920
1980-81 .....	17,644	17,230	18,142	25,863	25,256	26,593
1981-82 .....	19,274	18,853	19,805	26,005	25,437	26,722
1982-83 .....	20,695	20,227	21,291	26,773	26,167	27,544
1983-84 .....	21,921	21,460	22,557	27,347	26,771	28,140
1984-85 .....	23,593	23,182	24,193	28,324	27,830	29,044
1985-86 .....	25,194	24,666	25,666	29,398	28,782	30,182
1986-87 .....	26,566	25,990	27,291	30,326	29,668	31,153
1987-88 .....	28,023	27,491	28,808	30,716	30,133	31,577
1988-89 .....	29,547	29,007	30,215	30,957	30,391	31,857
1989-90 .....	31,304	30,497	31,781	31,304	30,497	31,781

<sup>1</sup> Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor.SOURCE: National Education Association, *Estimates of School Statistics*; and unpublished data. (Latest edition 1989-90. Copyright © 1990 by the National Education Association. All rights reserved.) (This table was prepared June 1990.)

NOTE.—Some data have been revised from previously published figures.

**Table 72.—Estimated average annual salary of teachers in public elementary and secondary schools, by State:  
1969-70 to 1989-90**

State	Current dollars						Constant 1989-90 dollars <sup>1</sup>					Percent change 1970-80 to 1989-90 in constant dollars
	1969-70	1979-80	1985-86 <sup>2</sup>	1987-88 <sup>2</sup>	1988-89	1989-90	1969-70	1979-80	1985-88	1987-88	1988-89	
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>United States.....</b>	<b>\$8,626</b>	<b>\$15,970</b>	<b>\$25,194</b>	<b>\$28,023</b>	<b>\$29,547</b>	<b>\$31,304</b>	<b>\$28,995</b>	<b>\$26,120</b>	<b>\$29,398</b>	<b>\$30,716</b>	<b>\$30,957</b>	<b>19.8</b>
Alabama.....	6,818	13,060	23,090	23,320	25,190	25,500	22,918	21,361	26,943	25,581	26,392	19.4
Alaska.....	10,560	27,210	39,115	40,424	41,754	43,153	35,498	44,504	45,842	44,309	43,746	-3.0
Arizona.....	8,711	15,054	24,680	27,388	28,499	29,600	29,281	24,822	28,798	30,020	29,859	20.2
Arkansas.....	6,307	12,299	19,519	20,340	21,385	22,009	21,200	20,116	22,778	22,295	22,416	9.4
California.....	10,315	18,020	29,130	33,159	34,684	36,996	34,672	29,473	33,991	38,346	36,339	32.3
Colorado.....	7,781	16,205	25,892	28,851	29,558	30,700	26,087	26,505	30,213	31,405	30,968	15.8
Connecticut.....	9,202	16,229	26,810	33,487	37,343	40,496	31,133	26,544	31,050	36,705	39,125	52.6
Delaware.....	9,015	16,148	24,824	29,573	31,585	33,480	30,303	26,411	28,733	32,415	33,092	26.8
District of Columbia.....	10,285	22,190	33,211	34,705	36,290	36,450	34,571	36,294	38,753	38,040	38,022	0.4
Florida.....	8,412	14,149	22,250	25,198	26,974	28,525	28,276	23,142	25,963	27,820	28,261	23.3
Georgia.....	7,276	13,853	23,048	26,190	26,920	27,892	24,457	22,658	26,892	28,707	28,205	23.1
Hawaii.....	9,452	19,920	25,845	28,785	30,778	32,047	31,775	32,581	30,158	31,551	32,247	-1.6
Idaho.....	8,890	13,811	20,969	22,242	22,734	<sup>3</sup> 23,494	23,160	22,262	24,468	24,380	23,819	5.5
Illinois.....	9,589	17,601	26,897	29,663	31,145	33,014	32,165	26,788	31,385	32,514	32,831	14.7
Indiana.....	8,933	15,589	24,325	27,029	29,331	<sup>3</sup> 30,493	29,891	25,513	28,384	29,827	30,731	19.5
Iowa.....	8,355	15,203	21,690	24,842	25,778	26,747	28,084	24,866	25,309	27,229	27,008	7.6
Kansas.....	7,812	13,890	22,644	24,647	27,360	28,871	25,587	22,391	26,423	27,016	28,666	28.0
Kentucky.....	8,953	14,520	20,948	24,253	24,930	26,275	23,371	23,749	24,444	26,584	26,120	10.8
Louisiana.....	7,028	13,760	20,303	21,209	22,470	<sup>3</sup> 22,993	23,624	22,506	23,991	23,247	23,542	2.2
Maine.....	7,572	13,071	19,583	23,425	24,938	26,881	25,452	21,379	22,851	25,678	26,126	25.7
Maryland.....	9,383	17,558	26,800	30,933	33,895	36,092	31,540	28,718	31,272	33,906	35,512	25.7
Massachusetts.....	8,764	17,253	26,800	30,379	32,185	<sup>3</sup> 34,225	29,459	28,219	31,272	33,299	33,721	21.3
Michigan.....	9,826	19,683	30,067	33,151	34,419	<sup>3</sup> 36,010	33,029	32,160	35,084	36,337	36,061	12.0
Minnesota.....	8,658	15,912	27,360	29,900	30,660	32,190	29,103	26,025	31,925	32,774	32,123	23.7
Mississippi.....	5,798	11,850	18,472	20,562	22,578	24,363	19,489	19,382	21,554	22,538	23,855	25.7
Missouri.....	7,799	13,682	21,945	24,709	26,006	27,229	26,215	22,378	25,607	27,084	27,247	21.7
Montana.....	7,806	14,537	22,482	23,798	24,421	25,081	25,586	23,776	26,234	26,085	25,586	5.5
Nebraska.....	7,375	13,518	20,939	22,883	23,845	<sup>3</sup> 24,751	24,790	22,107	24,433	24,863	24,883	12.0
Nevada.....	9,215	18,295	25,610	27,600	28,840	30,587	30,975	26,652	29,883	30,252	30,216	14.8
New Hampshire.....	7,771	13,017	20,263	24,019	26,702	28,939	26,121	21,290	23,644	26,327	27,976	35.9
New Jersey.....	9,130	17,161	27,170	30,720	33,037	36,030	30,689	28,068	31,704	33,872	34,613	28.4
New Mexico.....	7,796	14,867	21,817	23,904	23,897	25,120	26,205	24,349	25,458	26,092	25,037	3.2
New York.....	10,336	19,812	30,490	34,500	36,854	38,800	34,743	32,404	35,578	37,816	38,403	19.7
North Carolina.....	7,494	14,117	22,340	24,900	25,738	27,814	25,190	23,089	26,068	27,293	26,966	20.5
North Dakota.....	8,896	13,283	20,816	21,660	22,243	23,018	22,508	21,893	24,290	23,742	23,311	6.1
Ohio.....	8,300	15,269	24,518	27,606	29,871	31,170	27,899	24,974	28,609	30,259	31,087	24.8
Oklahoma.....	8,882	13,107	21,419	21,630	22,370	23,070	23,133	21,438	24,993	23,709	23,437	7.6
Oregon.....	8,818	18,266	25,660	28,060	29,390	30,563	29,640	26,604	29,942	30,757	30,792	14.9
Pennsylvania.....	8,858	16,515	25,653	29,177	31,248	32,909	29,775	27,012	30,167	31,981	32,739	21.5
Rhode Island.....	8,776	16,002	28,470	32,858	34,233	36,057	29,499	29,444	34,388	36,016	36,867	22.5
South Carolina.....	6,927	13,063	21,595	24,728	25,823	27,078	23,284	21,366	25,198	27,104	26,846	26.7
South Dakota.....	8,403	12,348	18,095	19,756	20,530	21,300	21,523	20,196	21,114	21,857	21,510	5.5
Tennessee.....	7,050	13,972	21,384	23,785	25,619	27,052	23,898	22,852	24,952	26,071	26,841	18.4
Texas.....	7,255	14,132	24,463	25,558	26,527	27,502	24,387	23,114	26,545	28,014	27,793	19.0
Utah.....	7,644	14,909	22,603	22,572	22,852	23,852	25,894	24,385	26,375	24,741	23,942	-3.0
Vermont.....	7,968	12,484	20,796	24,519	27,092	28,798	26,783	20,419	24,266	26,875	28,385	41.0
Virginia.....	8,070	14,060	23,095	27,189	28,795	30,926	27,126	22,996	26,949	29,802	30,169	34.5
Washington.....	9,225	18,820	26,209	28,217	29,200	30,475	31,008	30,782	30,582	30,923	30,593	-1.0
West Virginia.....	7,850	13,710	20,627	21,736	21,904	22,842	25,714	22,424	24,069	23,825	22,949	1.9
Wisconsin.....	8,963	18,006	26,347	29,122	30,779	32,320	30,128	26,179	30,743	31,921	32,248	23.5
Wyoming.....	8,232	18,012	27,224	27,134	27,685	28,184	27,671	26,189	31,767	29,742	29,006	7.8

<sup>1</sup> Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Price index does not account for different rates of change in the cost of living among States.

<sup>2</sup> Data revised from previously published figures.

<sup>3</sup> Estimated by the National Education Association.

SOURCE: National Education Association, *Estimates of School Statistics*, and unpublished data. (Latest edition 1989-90. Copyright © 1990 by the National Education Association. All rights reserved.) (This table was prepared May 1990.)

Table 73.—Minimum and average teacher salaries, by State: 1987-88 and 1988-89

State	Minimum (beginning) salary 1987-88	Average salary 1987-88	Minimum (beginning) salary 1988-89	Average salary 1988-89	Minimum (beginning) salary as a percent of average salary, 1988-89	Percent change, 1987-88 to 1988-89	
						Minimum salary	Average salary
1	2	3	4	5	6	7	8
United States.....	\$18,517	\$26,071	\$19,596	\$26,629	66.1	5.8	5.5
Alabama.....	<sup>1</sup> 18,200	23,320	<sup>1</sup> 19,565	25,190	77.7	7.5	8.0
Alaska.....	26,880	41,190	<sup>1</sup> 27,310	41,832	65.9	1.8	1.8
Arizona.....	<sup>1</sup> 19,300	27,988	<sup>1</sup> 20,150	28,499	70.7	4.4	4.1
Arkansas.....	18,012	21,133	18,444	21,736	75.7	2.7	2.9
California.....	22,632	33,159	<sup>1</sup> 23,922	35,172	68.0	5.7	6.1
Colorado.....	18,813	28,851	17,375	29,557	58.8	3.3	3.2
Connecticut.....	20,712	33,776	22,276	37,659	59.2	7.8	11.5
Delaware.....	18,224	29,573	19,008	31,585	60.2	4.3	6.8
District of Columbia.....	19,116	34,705	21,357	36,787	58.1	11.7	8.0
Florida.....	19,300	25,198	<sup>1</sup> 20,450	26,971	75.8	6.0	7.0
Georgia.....	17,304	25,736	17,823	26,920	36.2	3.0	4.8
Hawaii.....	19,563	28,445	22,298	31,307	71.2	<sup>1</sup> 4.0	10.1
Idaho.....	14,793	22,242	15,252	22,732	67.1	3.1	2.2
Illinois.....	17,794	29,667	18,643	31,195	59.8	4.8	5.2
Indiana.....	17,085	27,028	<sup>2</sup> 18,452	29,189	63.3	8.0	7.9
Iowa.....	18,683	24,858	19,015	25,684	73.5	1.8	4.1
Kansas.....	17,377	24,647	18,315	25,992	70.5	5.4	5.5
Kentucky.....	18,150	24,253	18,672	24,920	68.9	3.2	2.8
Louisiana.....	14,966	21,209	<sup>2</sup> 15,648	22,469	69.8	4.8	5.9
Maine.....	15,762	23,425	18,603	24,938	68.8	5.3	6.5
Maryland.....	19,490	30,933	20,756	33,900	61.2	6.5	9.8
Massachusetts.....	<sup>1</sup> 18,900	30,379	<sup>1</sup> 20,150	32,200	62.8	8.3	6.0
Michigan.....	<sup>1</sup> 19,100	34,080	<sup>1</sup> 20,150	35,530	56.7	5.5	4.3
Minnesota.....	<sup>2</sup> 19,825	29,900	<sup>2</sup> 20,152	31,395	64.2	2.7	5.0
Mississippi.....	<sup>1</sup> 16,400	20,582	<sup>1</sup> 18,000	22,579	79.7	9.8	9.8
Missouri.....	17,105	24,709	18,620	25,981	71.7	8.9	5.1
Montana.....	<sup>1</sup> 17,000	23,774	<sup>2</sup> 17,000	24,421	69.8	( <sup>3</sup> )	2.7
Nebraska.....	15,587	22,683	<sup>2</sup> 18,722	23,845	70.1	7.3	5.1
Nevada.....	18,523	27,599	19,570	28,838	67.9	5.7	4.5
New Hampshire.....	<sup>1</sup> 17,300	24,018	<sup>1</sup> 19,000	26,703	71.2	9.8	11.2
New Jersey.....	19,900	30,778	21,250	32,882	64.7	6.8	6.8
New Mexico.....	17,789	23,958	19,016	24,554	77.4	7.0	2.5
New York.....	<sup>4</sup> 21,181	34,500	<sup>4</sup> 23,030	36,654	62.7	8.8	6.2
North Carolina.....	17,540	24,900	16,330	25,650	71.5	4.5	3.0
North Dakota.....	15,218	21,660	15,600	22,249	70.1	2.5	2.7
Ohio.....	18,374	27,608	17,041	29,166	58.4	4.1	5.7
Oklahoma.....	16,432	22,773	<sup>1</sup> 16,645	23,400	71.1	1.3	2.8
Oregon.....	<sup>6</sup> 18,022	28,060	<sup>2</sup> 18,915	29,385	64.4	5.0	4.7
Pennsylvania.....	<sup>1</sup> 18,400	29,177	<sup>1</sup> 20,050	31,248	64.2	9.0	7.1
Rhode Island.....	17,447	32,858	18,417	34,234	53.8	5.8	4.2
South Carolina.....	17,683	24,403	18,092	25,060	72.2	2.3	2.7
South Dakota.....	15,028	19,758	15,348	20,525	74.8	2.1	3.9
Tennessee.....	15,350	23,785	16,925	25,619	66.1	10.3	7.7
Texas.....	18,662	25,558	<sup>2</sup> 19,408	26,513	73.2	4.0	3.7
Utah.....	15,315	22,572	15,409	23,023	68.9	0.8	2.0
Vermont.....	14,996	24,507	16,392	26,819	61.1	9.3	9.4
Virginia.....	18,439	27,193	<sup>1</sup> 19,600	29,056	68.1	7.4	6.9
Washington.....	17,208	28,217	17,725	29,146	60.8	3.0	3.3
West Virginia.....	15,055	21,736	15,055	21,904	68.7	( <sup>3</sup> )	0.8
Wisconsin.....	<sup>1</sup> 17,362	29,206	19,235	31,046	62.0	10.8	6.3
Wyoming.....	18,890	27,141	19,078	27,689	68.9	1.0	2.0

<sup>1</sup> Estimated by the American Federation of Teachers. See NOTE.

<sup>2</sup> Preliminary or State estimate.

<sup>3</sup> No change.

<sup>4</sup> Median salary.

<sup>5</sup> Includes 5% pension pick-up.

NOTE.—Data in this table reflect results of surveys conducted by the American Federation of Teachers. Because of differing survey and estimation methods, these data are not entirely comparable with figures appearing in other tables.

SOURCE: American Federation of Teachers. *Survey and Analysis of Salary Trends, 1989*. (This table was prepared May 1990.)

Table 74.—Average annual salary of instructional staff<sup>1</sup> in public elementary and secondary schools, by State: 1939-40 to 1989-90

State or other area	Current dollars								Constant 1989-90 dollars <sup>2</sup>							
	1939-40	1949-50	1959-60	1969-70	1979-80	1987-88 <sup>3</sup>	1988-89 <sup>3</sup>	1989-90	1939-40	1949-50	1959-60	1969-70	1979-80	1987-88	1988-89	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
United States.....	\$1,441	\$3,010	\$5,174	\$8,840	\$16,715	\$29,231	<sup>4</sup> \$31,003	<sup>4</sup> \$32,574	\$13,093	\$16,138	\$22,359	\$29,714	\$27,339	\$32,040	\$32,482	
Alabama.....	744	2,111	4,002	6,954	13,338	24,210	26,150	26,700	8,760	11,318	17,294	23,375	21,815	26,537	27,398	
Alaska.....	—	—	6,859	10,993	27,697	41,531	<sup>4</sup> 42,818	<sup>4</sup> 43,500	—	—	29,640	36,951	45,301	45,522	44,861	
Arizona.....	1,544	3,556	5,590	8,975	18,180	30,550	31,985	<sup>4</sup> 33,592	14,023	19,065	24,156	30,168	26,464	33,486	33,511	
Arkansas.....	584	1,801	3,295	6,445	12,704	21,097	22,193	22,693	5,306	9,858	14,239	21,664	20,778	23,125	23,252	
California.....	2,351	—	<sup>4</sup> 6,800	9,960	18,626	34,304	35,882	37,640	21,361	—	28,521	33,546	30,464	37,601	37,594	
Colorado.....	1,393	2,821	4,997	7,900	18,840	29,626	34,918	<sup>4</sup> 35,586	12,657	15,125	21,594	26,555	27,543	32,473	36,584	
Connecticut.....	1,861	3,558	6,008	9,400	18,989	34,802	38,708	41,909	18,909	19,078	25,963	31,597	27,787	36,147	40,555	
Delaware.....	1,684	3,273	<sup>4</sup> 5,800	9,300	18,845	30,814	32,736	34,700	15,301	17,548	25,064	31,261	27,551	33,556	34,298	
District of Columbia.....	2,350	3,920	6,280	11,075	23,027	39,618	42,310	42,814	21,352	21,017	27,138	37,227	37,663	43,423	44,329	
Florida.....	1,012	2,958	5,060	8,600	14,875	27,052	28,897	<sup>4</sup> 30,197	9,195	15,859	21,953	28,908	24,329	29,652	30,066	
Georgia.....	770	1,963	<sup>6</sup> 3,904	7,372	14,547	27,606	<sup>4</sup> 29,752	<sup>4</sup> 31,685	8,996	10,525	16,871	24,780	23,793	30,259	31,172	
Hawaii.....	—	—	5,390	9,829	20,436	29,510	31,945	32,956	—	—	23,292	33,039	33,425	32,346	33,469	
Idaho.....	1,057	2,481	4,218	7,257	14,110	23,105	23,640	<sup>4</sup> 24,444	9,604	13,302	18,219	24,393	23,078	25,326	24,768	
Illinois.....	1,700	3,458	<sup>6</sup> 5,814	9,950	18,271	30,873	32,207	34,139	15,446	18,540	25,124	33,445	29,884	33,821	33,744	
Indiana.....	1,433	3,401	5,542	9,574	18,256	27,188	30,357	<sup>4</sup> 30,472	13,020	18,234	23,949	32,182	26,588	29,801	31,806	
Iowa.....	1,017	2,420	<sup>4</sup> 4,030	8,200	15,776	25,592	26,590	27,819	9,240	12,975	17,415	27,563	25,803	28,052	27,859	
Kansas.....	1,014	2,628	<sup>4</sup> 4,450	7,811	14,513	26,309	29,248	30,154	9,213	14,090	19,230	26,256	23,737	28,837	30,644	
Kentucky.....	826	1,936	3,327	7,624	15,350	25,327	26,026	27,431	7,505	10,360	14,377	25,627	25,106	27,761	27,268	
Louisiana.....	1,008	2,983	4,978	7,220	14,020	21,802	23,150	<sup>4</sup> 23,754	9,140	15,983	21,512	24,269	22,931	23,897	24,255	
Maine.....	894	2,115	3,694	6,059	13,743	24,161	25,779	27,829	8,123	11,339	15,983	27,089	22,478	26,483	27,009	
Maryland.....	1,842	3,594	5,557	9,885	18,308	31,932	35,072	37,515	14,919	19,269	24,014	33,227	29,944	35,001	36,746	
Massachusetts.....	2,037	3,338	<sup>7</sup> 5,545	9,175	18,900	35,327	37,898	<sup>4</sup> 40,377	18,508	17,896	23,962	30,840	30,912	38,722	39,706	
Michigan.....	1,578	3,420	5,654	10,125	20,682	33,151	<sup>4</sup> 35,741	<sup>4</sup> 37,286	14,319	18,336	24,433	34,034	33,827	36,337	37,446	
Minnesota.....	1,276	3,013	5,275	9,957	18,654	30,960	31,750	33,340	11,594	18,154	22,795	33,469	27,239	33,935	33,265	
Mississippi.....	559	1,416	3,314	6,012	12,274	21,175	23,297	25,156	5,079	7,592	14,321	20,208	20,075	23,210	24,409	
Missouri.....	1,159	2,581	4,536	8,091	14,543	25,666	27,020	28,381	10,531	13,838	19,602	27,197	23,786	28,133	28,309	
Montana.....	1,184	2,962	<sup>4</sup> 4,425	8,100	15,080	28,042	28,415	29,526	10,758	15,881	19,122	27,227	24,665	30,737	29,771	
Nebraska.....	829	2,292	3,878	7,855	14,236	24,100	25,335	<sup>4</sup> 26,198	7,532	12,288	18,750	26,403	23,284	26,418	26,544	
Nevada.....	1,557	3,209	5,693	9,689	17,290	28,860	30,150	31,810	14,147	17,205	24,602	32,568	28,279	31,634	31,589	
New Hampshire.....	1,258	2,712	4,455	8,018	13,508	24,890	<sup>4</sup> 27,448	<sup>4</sup> 28,958	11,430	14,540	19,252	26,951	22,093	27,083	28,758	
New Jersey.....	2,093	3,511	5,871	9,500	18,851	32,110	34,627	37,777	19,017	18,824	25,371	31,933	30,832	35,196	36,279	
New Mexico.....	1,144	3,215	5,382	8,125	15,406	24,797	25,003	25,988	10,394	17,237	23,258	27,311	25,198	27,180	26,196	
New York.....	2,604	3,706	6,537	10,200	20,400	35,400	38,100	40,300	23,660	19,869	28,249	34,286	33,366	38,802	39,918	
North Carolina.....	846	2,688	4,178	7,744	14,445	25,900	26,833	28,947	8,595	14,412	18,055	26,030	23,826	28,389	28,113	
North Dakota.....	745	2,324	3,895	8,900	13,684	22,370	22,994	23,788	8,769	12,460	15,967	23,193	22,381	24,520	24,091	
Ohio.....	1,587	3,088	5,124	8,594	16,100	29,322	30,934	32,380	14,419	18,556	22,143	28,887	26,333	32,140	32,410	
Oklahoma.....	1,014	2,736	4,659	7,139	13,500	22,400	23,200	23,944	9,213	14,669	20,133	23,997	22,080	24,553	24,307	
Oregon.....	1,333	3,323	5,535	9,200	18,996	29,300	30,680	31,887	12,111	17,818	23,919	30,924	27,786	32,118	32,144	
Pennsylvania.....	1,640	3,006	5,306	9,000	17,060	29,881	31,555	33,219	14,901	18,116	22,938	30,252	27,903	32,753	33,061	
Rhode Island.....	1,809	3,294	<sup>6</sup> 5,499	8,900	18,425	33,326	35,564	36,704	16,436	17,661	23,763	29,918	30,136	36,529	37,261	
South Carolina.....	743	1,891	3,450	7,000	13,870	25,808	26,782	28,266	8,751	10,116	14,909	23,529	22,358	28,069	28,039	
South Dakota.....	807	2,064	3,725	8,700	13,010	21,420	21,250	22,120	7,332	11,066	16,097	22,521	21,279	23,479	22,264	
Tennessee.....	862	2,302	3,929	7,290	14,193	24,536	26,512	27,949	7,832	12,342	16,979	24,504	23,214	26,894	27,777	
Texas.....	1,079	3,122	4,708	7,503	14,729	26,572	27,565	28,558	9,804	18,738	20,345	25,220	24,090	29,126	28,680	
Utah.....	1,394	3,103	5,096	8,049	17,403	23,855	23,955	24,783	12,666	16,637	22,022	27,056	26,464	25,928	25,096	
Vermont.....	961	2,348	4,486	8,225	13,300	25,525	<sup>4</sup> 27,265	<sup>4</sup> 29,159	8,913	12,589	19,299	27,647	21,753	27,978	28,566	
Virginia.....	899	2,328	4,312	8,200	14,655	27,833	29,667	31,862	8,168	12,481	18,834	27,563	23,969	30,506	31,063	
Washington.....	1,706	3,487	<sup>6</sup> 5,643	9,500	19,735	29,468	30,527	31,825	15,500	18,695	24,366	31,933	32,278	32,300	31,984	
West Virginia.....	1,170	2,425	3,952	7,850	14,395	22,711	22,897	23,842	10,830	13,001	17,078	26,387	23,544	24,894	23,990	

**Table 74.—Average annual salary of instructional staff <sup>1</sup> in public elementary and secondary schools, by State: 1939-40 to 1989-90—Continued**

State or other area	Current dollars								Constant 1989-90 dollars <sup>2</sup>							
	1939-40	1949-50	1959-60	1969-70	1979-80	1987-88 <sup>3</sup>	1988-89 <sup>3</sup>	1989-90	1939-40	1949-50	1959-60	1969-70	1979-80	1987-88	1988-89	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Wisconsin.....	1,379	3,007	* 4,870	9,150	16,335	30,958	32,500	<sup>4</sup> 33,788	12,529	16,122	21,045	30,756	26,717	33,933	34,051	
Wyoming.....	1,169	2,798	4,937	8,532	16,830	26,327	28,844	29,304	10,621	15,001	21,335	26,679	27,527	31,049	30,220	
<b>Outlying areas.....</b>																
American Samoa.....	—	—	852	5,130	—	—	—	—	—	—	3,682	17,244	—	—	—	
Guam.....	—	—	4,107	7,800	—	—	—	—	—	—	17,748	26,219	—	—	—	
Puerto Rico.....	—	—	<sup>10</sup> 2,360	—	—	—	—	—	—	—	10,198	—	—	—	—	
Virgin Islands.....	—	—	3,407	—	—	—	—	—	—	—	14,723	—	—	—	—	

<sup>1</sup> Includes supervisors, principals, classroom teachers, and other instructional staff.  
<sup>2</sup> Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Price index does not account for different rates of change in the cost of living among States.  
<sup>3</sup> Estimates revised from previously published data.  
<sup>4</sup> Estimated.  
<sup>5</sup> Excludes kindergarten teachers.  
<sup>6</sup> Includes administrators.  
<sup>7</sup> Includes clerical assistants to instructional personnel.

<sup>8</sup> Includes attendance personnel.  
<sup>9</sup> Excludes vocational schools not operated as part of the regular public school system.  
<sup>10</sup> Median salary.  
 —Data not available.  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; National Education Association, *Estimates of School Statistics*; and unpublished data. (Latest edition 1989-90. Copyright © 1990 by the National Education Association. All rights reserved.) (This table was prepared May 1990.)



**Table 75.—Average annual salary of instructional staff<sup>1</sup> in public elementary and secondary schools and average annual earnings of full-time employees in all industries: 1929-30 to 1989-90**

School year	Current dollars		Constant 1989-90 dollars <sup>2</sup>		
	Average salary of instructional staff	Earnings per full-time employee working for wages or salary <sup>3</sup>	Average salary of instructional staff	Earnings per full-time working for wages or salary	Ratio of instructional staff salary to salary for all full-time employees
1	2	3	4	5	6
1929-30	\$1,420	\$1,386	\$10,534	\$10,281	1.02
1931-32	1,417	1,198	12,480	10,551	1.18
1933-34	1,227	1,070	11,785	10,280	1.15
1935-36	1,283	1,160	11,855	10,718	1.11
1937-38	1,374	1,224	12,179	10,849	1.12
1939-40	1,441	1,282	13,093	11,848	1.12
1941-42	1,507	1,578	12,272	12,834	0.96
1943-44	1,728	2,030	12,592	14,792	0.85
1945-46	1,985	2,272	13,886	15,814	0.88
1947-48	2,639	2,692	14,381	14,670	0.98
1949-50	3,010	2,930	16,138	15,709	1.03
1951-52	3,450	3,322	16,667	16,049	1.04
1953-54	3,825	3,628	18,060	17,130	1.05
1955-56	4,156	3,924	19,830	18,534	1.06
1957-58	4,702	4,276	20,906	19,012	1.10
1959-60	5,174	4,632	22,359	20,017	1.12
1961-62	5,700	4,928	24,079	20,818	1.16
1963-64	6,240	5,373	25,690	22,120	1.18
1965-66	6,935	5,838	27,597	23,232	1.19
1967-68	7,630	6,444	28,466	24,060	1.18
1969-70	8,840	7,334	29,714	24,652	1.21
1970-71	9,698	7,815	30,993	24,979	1.24
1971-72	10,213	8,334	31,514	25,718	1.23
1972-73	10,634	8,658	31,542	26,274	1.20
1973-74	11,254	9,647	30,648	26,272	1.17
1974-75	12,167	10,420	29,829	25,546	1.17
1975-76	13,124	11,218	30,048	25,684	1.17
1976-77	13,840	11,991	29,942	25,941	1.15
1977-78	14,698	12,829	29,797	26,007	1.15
1978-79	15,764	13,651	29,221	25,675	1.14
1979-80	16,715	15,095	27,339	24,688	1.11
1980-81	18,404	16,495	26,977	24,178	1.12
1981-82	20,327	17,818	27,426	24,041	1.14
1982-83	21,641	18,883	27,997	24,428	1.15
1983-84	22,994	19,749	28,685	24,837	1.16
1984-85	24,757	20,628	28,721	24,762	1.20
1985-86	26,361	21,518	30,760	25,108	1.23
1986-87	27,707	22,437	31,626	25,612	1.23
1987-88	<sup>a</sup> 29,231	23,493	32,040	25,751	1.24
1988-89	<sup>b</sup> 31,003	—	32,482	—	—
1989-90	<sup>c</sup> 32,574	—	32,574	—	—

<sup>1</sup> Includes supervisors, principals, classroom teachers, and other instructional staff.

<sup>2</sup> Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor.

<sup>3</sup> Calendar-year data from the U.S. Department of Commerce have been converted to a school-year basis by averaging the two appropriate calendar years in each case.

<sup>4</sup> Data revised from previously published figures.

<sup>5</sup> Preliminary data.

—Data not available.

NOTE.—Some data revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; and unpublished data; National Education Association, *Estimates of School Statistics, 1989-90*, and unpublished data (Copyright © 1990 by the National Education Association. All rights reserved.); and U.S. Department of Commerce, *Survey of Current Business*, July issues. (This table was prepared May

Table 76.—Staff employed in public elementary and secondary school systems, by functional area: 1949-50 to fall 1988

Year	Total	School district administrative staff					Instructional staff								Support staff						
		Total	Inter-mediate district staff	School district superintendents	Assistants to superintendents	Supervisors of instruction	Total	Principals and assistant principals	Teachers	Teachers aides	Librarians	Guidance counselors	Psychological personnel	Other instructional staff	Total	Secretarial and clerical personnel	Transportation staff	Food service	Plant operation and maintenance	Health	Recreational and other staff
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1949-50....	1,300,031	33,842	5,843	18,025	( <sup>1</sup> )	9,774	983,110	43,137	913,871	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6,302	303,280	31,824	81,826	68,814	105,874	9,412	5,730
1959-60....	2,089,283	42,423	9,901	13,381	5,388	13,775	1,457,329	63,554	1,353,372	( <sup>2</sup> )	17,383	14,843	2,121	8,277	589,531	75,930	113,111	181,925	192,655	16,104	29,807
1969-70....	3,367,772	65,282	7,113	13,014	13,818	<sup>3</sup> 31,537	2,292,577	90,593	2,023,253	57,418	42,689	48,783	8,168	<sup>2</sup> 23,893	1,009,913	164,478	175,351	270,338	273,395	28,562	99,791
Fall 1980..	4,187,608	78,784	—	13,269	<sup>3</sup> 44,961	<sup>3</sup> 20,554	2,858,895	107,061	2,183,538	325,755	48,018	63,973	14,033	<sup>3</sup> 118,517	1,229,929	223,647	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	<sup>3</sup> 1,006,282
Fall 1984..	4,062,819	<sup>3</sup> 65,222	—	—	—	—	<sup>3</sup> 2,682,135	124,538	2,168,298	288,987	47,024	63,310	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 1,305,262	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Fall 1985..	4,160,521	<sup>3</sup> 87,404	—	—	—	—	<sup>3</sup> 2,757,129	129,297	2,206,884	308,860	47,442	66,646	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 1,335,988	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Fall 1986..	4,233,871	<sup>3</sup> 74,541	—	—	—	—	<sup>3</sup> 2,822,925	131,584	2,244,445	330,398	47,938	68,580	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 1,336,205	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Fall 1987..	4,311,941	<sup>3</sup> 74,191	—	—	—	—	<sup>3</sup> 2,859,826	125,927	2,279,241	335,991	48,185	70,282	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 1,378,124	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Fall 1988..	4,366,978	<sup>3</sup> 68,798	—	—	—	—	<sup>3</sup> 2,920,280	126,508	2,318,428	355,660	48,705	72,979	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 1,377,900	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )

Percentage distribution

1949-50....	100.0	2.6	0.4	1.4	( <sup>1</sup> )	0.8	74.1	3.3	70.3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	0.5	23.3	2.4	8.3	5.3	8.1	0.7	0.4
1959-60....	100.0	2.0	0.5	0.8	0.3	0.7	89.8	3.0	84.8	( <sup>2</sup> )	0.8	0.7	0.1	0.3	28.2	3.8	5.4	7.8	9.2	0.8	1.4
1969-70....	100.0	1.9	0.2	0.4	0.4	<sup>3</sup> 0.9	88.1	2.7	80.1	1.7	1.3	1.4	0.2	<sup>3</sup> 0.7	30.0	4.9	5.2	8.0	8.1	0.8	3.0
Fall 1980..	100.0	1.9	—	0.3	<sup>3</sup> 1.1	<sup>3</sup> 0.5	88.8	2.8	82.4	7.8	1.2	1.5	0.3	<sup>3</sup> 2.8	29.5	5.4	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	<sup>3</sup> 24.1
Fall 1984..	100.0	<sup>3</sup> 1.6	—	—	—	—	<sup>3</sup> 66.3	3.1	53.4	7.1	1.2	1.8	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 32.1	( <sup>5</sup> )					
Fall 1985..	100.0	<sup>3</sup> 1.6	—	—	—	—	<sup>3</sup> 66.3	3.1	53.0	7.4	1.1	1.8	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 32.1	( <sup>5</sup> )					
Fall 1986..	100.0	<sup>3</sup> 1.8	—	—	—	—	<sup>3</sup> 66.7	3.1	53.0	7.8	1.1	1.8	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 31.8	( <sup>5</sup> )					
Fall 1987..	100.0	<sup>3</sup> 1.7	—	—	—	—	<sup>3</sup> 66.3	2.9	52.9	7.8	1.1	1.8	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 32.0	( <sup>5</sup> )					
Fall 1988..	100.0	<sup>3</sup> 1.8	—	—	—	—	<sup>3</sup> 66.9	2.9	53.0	8.1	1.1	1.7	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 31.8	( <sup>5</sup> )					

Pupils per staff member

1949-50....	19.3	748.1	4,297.7	1,393.1	—	2,569.2	26.1	582.1	27.5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3,984.7	82.8	789.1	307.8	364.9	237.2	2,668.0	4,382.4
1959-60....	18.8	829.3	3,553.4	2,633.2	6,532.2	2,554.1	24.1	553.8	26.0	( <sup>2</sup> )	2,026.3	2,402.7	16,589.1	5,605.1	59.7	463.4	311.0	217.3	182.8	2,184.7	1,180.3
1969-70....	13.5	698.8	8,413.4	3,505.3	3,349.9	<sup>3</sup> 1,448.5	19.9	503.8	22.5	794.5	1,068.8	335.5	7,396.0	<sup>3</sup> 1,925.4	45.2	277.4	260.2	168.7	166.9	1,717.4	457.1
Fall 1980..	9.8	519.4	—	3,083.8	<sup>3</sup> 910.1	<sup>3</sup> 1,990.8	14.3	382.2	18.7	125.8	852.1	639.8	2,915.9	<sup>3</sup> 351.2	33.3	183.0	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	<sup>3</sup> 40.7
Fall 1984..	9.7	<sup>3</sup> 601.2	—	—	—	—	<sup>3</sup> 14.8	314.8	18.1	135.7	833.8	819.3	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 30.0	( <sup>5</sup> )					
Fall 1985..	9.5	<sup>3</sup> 584.9	—	—	—	—	<sup>3</sup> 14.3	304.9	17.9	126.5	831.0	591.5	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 29.5	( <sup>5</sup> )					
Fall 1986..	9.4	<sup>3</sup> 533.3	—	—	—	—	<sup>3</sup> 14.1	302.2	17.7	120.3	829.3	579.7	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 29.8	( <sup>5</sup> )					
Fall 1987..	9.3	<sup>3</sup> 539.3	—	—	—	—	<sup>3</sup> 14.0	317.7	17.6	119.1	830.3	568.2	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 29.0	( <sup>5</sup> )					
Fall 1988..	9.2	<sup>3</sup> 584.2	—	—	—	—	<sup>3</sup> 13.8	317.7	17.4	113.0	825.2	550.7	( <sup>5</sup> )	( <sup>5</sup> )	<sup>3</sup> 29.2	( <sup>5</sup> )					

<sup>1</sup> Data included in column 5.

<sup>2</sup> Data included in column 10.

<sup>3</sup> Data not comparable with figures for other years.

NOTE.—Some data have been revised from previously published figures. Because of variations in data collection instruments, some categories are only roughly comparable over time. Because of rounding, details may not add to totals.

<sup>4</sup> Data included in column 22.

<sup>5</sup> Data included in column 18.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems, Common Core of Data Survey*, and unpublished estimates. (This table was prepared May 1990.)

Table 77.—Staff employed in public school systems, by type of assignment and State: Fall 1988

[In full-time equivalents]

State or other area	Total	School district staff		School staff						Other support services staff
		Officials and administrators	Administrative support staff	School Administrators	School and library support staff	Teachers	Instructional aides	Guidance counselors	Librarians	
1	2	3	4	5	6	7	8	9	10	11
<b>United States<sup>1</sup></b>	<b>4,366,978</b>	<b>69,798</b>	<b>128,029</b>	<b>126,508</b>	<b>201,176</b>	<b>2,316,428</b>	<b>355,860</b>	<b>72,979</b>	<b>48,705</b>	<b>1,048,893</b>
Alabama	72,955	1,512	—	1,956	2,218	38,845	4,108	1,048	1,224	22,048
Alaska	13,500	520	597	420	1,977	6,272	1,537	178	169	1,830
Arizona	60,014	1,220	4,802	1,389	645	31,817	4,584	758	611	14,610
Arkansas	50,734	550	633	1,628	2,177	27,730	3,456	990	756	12,816
California	404,789	5,495	20,734	11,503	22,518	203,342	51,468	5,295	1,139	83,275
Colorado	59,814	1,015	1,988	2,534	3,992	31,398	4,040	996	724	13,127
Connecticut <sup>2</sup>	40,870	1,100	—	1,490	—	35,502	—	2,134	644	—
Delaware	10,766	148	349	389	434	5,898	719	188	119	2,524
District of Columbia	10,819	435	464	581	228	6,394	639	277	185	1,418
Florida	197,403	2,802	—	5,729	—	100,370	18,113	4,152	2,424	62,813
Georgia	120,669	823	4,138	4,340	4,444	59,916	14,094	1,379	1,871	29,864
Hawaii	19,943	187	—	420	—	7,950	1,800	448	258	8,880
Idaho	18,558	303	350	532	588	10,425	994	247	174	2,935
Illinois	188,235	1,689	—	4,278	1,641	105,097	12,340	2,708	2,115	58,467
Indiana	105,430	1,413	418	2,897	7,129	54,029	10,327	1,575	1,057	26,787
Iowa	58,119	531	872	1,442	4,361	30,226	3,243	1,006	875	13,763
Kansas	48,828	487	2,133	1,502	2,004	28,122	2,708	1,056	927	9,907
Kentucky	71,685	1,515	5,128	1,873	2,608	35,788	5,609	975	1,090	17,301
Louisiana	88,381	1,398	1,833	2,268	2,861	43,203	7,101	834	1,162	27,903
Maine	25,450	537	1,593	868	268	14,593	2,895	523	235	3,918
Maryland	75,229	307	2,072	2,369	3,383	40,899	5,480	1,470	1,051	18,198
Massachusetts	106,327	2,351	5,814	2,153	3,184	60,068	9,511	2,183	701	20,362
Michigan	189,810	1,894	1,798	4,507	10,071	79,847	10,783	2,800	1,584	58,548
Minnesota	75,885	1,855	3,182	1,890	3,035	42,750	7,556	877	785	14,385
Mississippi <sup>3</sup>	43,227	766	1,472	1,334	1,983	27,283	7,946	682	669	1,112
Missouri	101,878	1,131	—	4,311	—	50,893	3,930	1,965	1,303	38,543
Montana <sup>3</sup>	12,414	182	—	439	—	9,826	1,033	322	306	526
Nebraska	32,292	533	1,899	1,045	—	18,003	2,454	537	497	7,524
Nevada <sup>3</sup>	10,138	187	—	427	—	6,899	—	307	175	361
New Hampshire	19,185	148	584	578	1,080	10,442	1,981	528	222	3,824
New Jersey	144,051	1,498	12,680	8,201	22,883	79,898	8,789	2,932	1,635	7,935
New Mexico	30,159	363	668	738	1,763	15,770	3,067	528	229	7,035
New York	312,426	4,263	18,330	7,054	8,319	172,807	24,430	5,288	3,353	69,582
North Carolina	119,181	2,093	—	3,733	—	81,933	18,016	2,238	2,098	29,050
North Dakota	13,789	332	342	371	451	7,731	965	165	170	3,262
Ohio	188,715	5,600	5,487	4,759	14,585	101,105	8,031	3,103	1,707	42,338
Oklahoma	84,078	664	819	1,828	3,671	35,116	3,680	1,018	702	18,780
Oregon	47,317	915	1,815	1,419	2,420	25,147	4,048	1,072	726	9,955
Pennsylvania	188,279	7,887	7,131	3,955	7,028	104,379	10,624	3,307	1,940	42,028
Rhode Island	14,771	147	729	528	553	9,192	1,009	339	229	2,045
South Carolina	81,908	787	2,155	2,017	3,138	35,877	4,731	1,198	1,081	10,928
South Dakota	13,898	338	644	528	268	8,260	1,138	249	170	2,305
Tennessee	84,500	818	—	4,434	4,180	42,857	7,437	1,088	1,313	22,775
Texas <sup>4</sup>	—	—	—	—	—	—	—	—	—	—
Utah	30,762	274	485	798	1,720	17,590	2,778	381	288	6,468
Vermont	11,959	358	204	422	664	8,852	1,128	277	182	1,872
Virginia	117,291	1,834	695	3,164	5,579	60,883	8,942	2,297	1,770	32,127
Washington	89,810	1,010	2,180	2,283	3,634	38,780	5,502	1,244	1,109	13,868
West Virginia	40,433	518	1,782	1,256	602	22,177	2,838	545	358	10,377
Wisconsin	82,307	1,118	2,063	2,029	4,497	48,541	8,232	1,587	1,230	15,010
Wyoming	13,275	325	239	321	649	8,893	1,247	172	140	3,289
<b>Outlying areas</b>										
American Samoa	1,255	19	73	60	49	874	23	20	8	329
Guam	2,778	8	—	54	123	1,403	60	58	29	1,045
Northern Marianas	643	—	18	38	39	334	97	13	8	98
Puerto Rico	82,322	478	1,465	1,259	1,039	33,357	2,358	785	752	20,811
Virgin Islands	3,322	135	270	79	119	1,597	353	73	48	650

<sup>1</sup> U.S. totals include imputations for Connecticut, Mississippi, Montana, Nevada, and Texas, which are not reflected in State totals.

<sup>2</sup> Support staff not reported.

<sup>3</sup> Support staff underreported.

<sup>4</sup> Data not reported.

—Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and unpublished estimates. (This table was prepared May 1990.)

Table 78.—Staff employed in public school systems, by type of assignment and State: Fall 1987

[In full-time equivalents]

State or other area	Total	School district staff		School staff					Librarians	Other support services staff
		Officials and administrators	Administrative support staff	School administrators	School and library support staff	Teachers	Instructional aides	Guidance counselors		
1	2	3	4	5	6	7	8	9	10	11
United States <sup>1</sup> .....	4,311,941	74,191	129,406	125,927	194,431	2,279,241	335,991	70,282	49,185	1,054,297
Alabama .....	70,855	1,480	—	1,910	2,147	37,718	3,677	1,023	1,207	21,495
Alaska <sup>2</sup> .....	7,285	196	73	357	—	6,113	277	112	130	27
Arizona .....	59,095	1,207	4,523	1,335	653	30,707	4,564	739	598	14,771
Arkansas .....	47,741	1,215	897	1,306	1,857	25,572	2,587	978	757	12,774
California .....	392,299	10,101	19,603	14,531	21,476	195,864	49,985	5,332	1,188	74,219
Colorado .....	59,265	987	2,253	2,421	3,812	31,168	4,052	990	726	12,854
Connecticut <sup>3</sup> .....	40,214	1,017	—	1,457	—	35,050	—	2,055	635	—
Delaware .....	10,790	145	355	374	442	5,951	718	174	119	2,512
District of Columbia .....	11,130	445	232	298	172	8,232	638	273	182	2,662
Florida .....	184,608	2,718	—	5,567	—	95,857	17,564	4,020	2,421	56,461
Georgia .....	119,320	637	3,775	4,105	4,014	62,280	11,898	1,319	1,859	29,433
Hawaii .....	18,036	184	—	420	—	7,684	1,339	441	258	7,710
Idaho .....	18,205	299	334	532	556	10,258	923	244	171	2,688
Illinois .....	186,595	1,706	—	4,238	1,654	105,217	11,555	2,688	2,189	57,372
Indiana .....	105,328	1,438	392	2,676	6,931	53,749	9,637	1,485	1,055	27,983
Iowa .....	56,870	812	872	1,425	4,271	30,873	3,050	928	680	13,959
Kansas .....	47,569	459	2,058	1,474	1,939	27,317	2,523	996	923	9,880
Kentucky .....	69,192	1,394	3,930	1,640	2,488	35,239	5,182	915	1,079	17,325
Louisiana .....	89,794	2,125	2,581	2,268	2,102	42,920	7,477	798	1,112	27,415
Maine .....	24,410	492	1,508	638	241	14,204	2,683	441	222	3,781
Maryland .....	73,717	304	2,201	2,327	3,326	40,093	5,318	1,403	1,041	17,704
Massachusetts .....	103,471	2,319	5,572	2,105	2,996	59,517	8,024	2,075	682	20,181
Michigan .....	170,162	1,681	1,910	4,516	10,141	79,972	11,166	2,835	1,551	56,390
Minnesota .....	74,027	1,609	3,260	1,634	3,102	42,132	6,389	855	766	14,280
Mississippi <sup>2</sup> .....	42,540	949	53	1,212	2,601	29,930	7,754	747	665	1,829
Missouri .....	96,736	1,194	—	4,101	—	49,632	3,540	1,902	1,273	35,094
Montana <sup>2</sup> .....	12,477	174	—	487	—	9,659	1,011	323	329	494
Nebraska .....	31,809	514	1,526	1,038	—	17,713	2,472	513	498	7,535
Nevada <sup>2</sup> .....	9,736	179	—	408	—	8,348	—	290	166	345
New Hampshire .....	18,835	147	578	567	1,189	10,363	1,501	481	192	3,639
New Jersey .....	141,257	1,668	12,548	5,119	22,237	78,335	8,193	2,778	1,587	8,594
New Mexico .....	29,347	341	818	726	1,820	15,175	3,070	496	230	8,871
New York .....	327,428	4,086	23,003	6,885	7,845	170,236	23,825	5,028	3,288	93,252
North Carolina .....	114,243	2,040	—	3,643	—	59,771	17,002	1,982	2,043	27,782
North Dakota .....	13,533	343	334	387	471	7,632	899	164	187	3,156
Ohio .....	184,130	5,253	5,948	4,738	14,388	99,708	7,178	2,918	1,698	42,321
Oklahoma .....	63,922	560	958	1,781	3,505	34,515	3,750	1,026	632	17,065
Oregon .....	47,211	895	1,636	1,397	2,397	24,911	3,995	1,064	759	10,167
Pennsylvania .....	185,929	7,808	6,920	3,859	6,981	103,307	10,187	3,169	1,921	41,477
Rhode Island .....	14,569	145	709	526	547	8,934	901	328	220	2,259
South Carolina .....	82,557	790	2,051	1,994	3,032	35,701	5,652	1,170	1,074	11,093
South Dakota .....	14,202	153	592	430	587	8,172	1,178	249	183	2,678
Tennessee .....	93,256	632	—	4,112	4,065	42,082	7,401	1,031	1,318	22,615
Texas .....	377,240	5,942	4,126	12,357	28,743	187,159	27,945	5,334	3,406	102,228
Utah .....	29,976	322	428	804	1,553	17,124	2,561	412	319	6,453
Vermont .....	12,321	366	251	665	660	6,856	1,263	259	170	2,031
Virginia .....	114,439	1,785	679	3,085	5,457	59,928	8,405	2,080	1,754	31,266
Washington .....	66,405	1,006	2,111	2,247	3,599	38,344	5,120	1,240	1,114	13,824
West Virginia .....	41,415	525	1,630	1,308	595	22,702	2,888	558	371	10,838
Wisconsin .....	80,340	1,051	2,119	2,019	4,411	47,721	5,812	1,457	1,136	14,614
Wyoming .....	13,373	333	304	324	798	8,798	1,266	170	133	3,247
Outlying areas .....										
American Samoa .....	1,206	22	75	64	45	856	24	22	8	290
Guam .....	2,884	11	—	60	126	1,407	73	51	26	1,126
Northern Marianas .....	512	—	18	31	63	305	62	7	8	20
Puerto Rico .....	42,314	313	26	2,230	482	33,069	2,278	615	729	2,572
Virgin Islands .....	3,254	126	268	85	118	1,590	332	68	43	624

<sup>1</sup> U.S. totals include imputations for Connecticut, Mississippi, Montana, and Nevada, which are not reflected in State totals.

<sup>2</sup> Support staff underreported.

<sup>3</sup> Support staff not reported.

—Data not available, not reported, or not applicable.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and unpublished estimates. (This table was prepared January 1990.)

Table 79.—Staff and teachers in public elementary and secondary schools, by State: Fall 1985 to fall 1988

State or other area	Teachers as a percent of staff, fall 1985	Fall 1986 <sup>1</sup>			Fall 1987 <sup>1</sup>			Fall 1988		
		Staff	Teachers	Teachers as a percent of staff	Staff	Teachers	Teachers as a percent of staff	Staff	Teachers	Teachers as a percent of staff
1	2	3	4	5	6	7	8	9	10	11
<b>United States</b> .....	<sup>2</sup> 53.0	<sup>2</sup> 4,233,671	<sup>2</sup> 2,244,445	<sup>2</sup> 53.0	<sup>2</sup> 4,311,941	<sup>2</sup> 2,279,241	<sup>2</sup> 52.9	<sup>2</sup> 4,366,978	<sup>2</sup> 2,316,428	<sup>2</sup> 53.0
Alabama.....	52.4	70,907	36,971	52.1	70,855	37,718	53.4	72,955	36,845	53.2
Alaska.....	51.0	9,810	6,448	55.7	<sup>3</sup> 7,285	8,113	<sup>3</sup> 83.9	13,500	8,272	48.5
Arizona.....	52.0	56,207	29,104	51.8	59,095	30,707	52.0	60,014	31,817	52.7
Arkansas.....	53.4	46,372	24,944	53.8	47,741	25,572	53.8	50,734	27,730	54.7
California.....	48.6	395,244	190,484	49.4	392,299	195,864	49.9	404,769	203,342	50.2
Colorado.....	51.4	58,537	30,704	52.5	59,263	31,168	52.8	59,814	31,398	52.5
Connecticut.....	<sup>4</sup> 87.2	<sup>4</sup> 39,284	34,252	<sup>4</sup> 87.2	<sup>4</sup> 40,214	35,050	<sup>4</sup> 87.2	<sup>4</sup> 40,870	31,702	<sup>4</sup> 86.9
Delaware.....	55.4	10,597	5,883	55.5	10,790	5,951	55.2	10,768	5,898	54.8
District of Columbia.....	58.6	11,845	5,984	50.1	11,130	8,232	56.0	10,819	8,394	60.2
Florida.....	51.6	177,639	91,969	51.8	184,608	95,857	51.9	197,403	100,370	50.8
Georgia.....	52.8	111,317	57,881	52.0	119,320	62,280	52.2	120,669	59,816	49.7
Hawaii.....	42.5	15,892	7,291	45.9	18,038	7,684	42.8	19,943	7,950	39.9
Idaho.....	63.9	18,039	10,234	63.8	18,205	10,258	63.3	18,558	10,425	63.0
Illinois.....	56.6	186,572	104,609	56.4	186,595	105,217	58.4	186,235	105,097	56.4
Indiana.....	50.8	104,482	52,896	50.8	105,328	53,749	51.0	105,430	54,029	51.2
Iowa.....	54.0	56,825	30,958	54.5	56,870	30,873	54.5	56,119	30,226	53.9
Kansas.....	57.3	47,227	27,064	57.3	47,569	27,317	57.4	48,828	28,122	57.8
Kentucky.....	51.1	67,721	34,507	51.0	69,192	35,239	50.9	71,885	35,788	49.9
Louisiana.....	48.2	88,591	42,929	48.5	88,794	42,920	48.3	88,361	43,203	48.9
Maine.....	81.2	22,966	13,685	58.6	24,410	14,204	58.2	25,450	14,593	57.3
Maryland.....	53.9	72,931	39,491	54.1	73,717	40,093	54.4	75,229	40,899	54.4
Massachusetts.....	57.7	101,905	58,066	57.0	103,471	59,517	57.5	106,327	60,068	56.5
Michigan.....	48.7	171,931	83,130	48.4	170,162	79,972	47.0	189,810	79,847	47.1
Minnesota.....	58.4	69,836	40,957	58.6	74,027	42,132	56.9	75,885	42,750	56.3
Mississippi.....	47.0	<sup>3</sup> 40,687	26,219	<sup>3</sup> 64.4	<sup>3</sup> 42,540	28,930	<sup>3</sup> 63.3	<sup>3</sup> 43,227	27,283	<sup>3</sup> 63.1
Missouri.....	53.3	91,609	48,902	53.4	96,736	49,832	51.3	101,878	50,593	49.8
Montana.....	<sup>3</sup> 78.1	<sup>3</sup> 12,613	9,818	<sup>3</sup> 77.8	<sup>3</sup> 12,477	9,859	<sup>3</sup> 77.4	<sup>3</sup> 12,414	9,826	<sup>3</sup> 77.5
Nebraska.....	57.2	31,576	17,748	56.2	31,809	17,713	55.7	32,292	18,003	55.8
Nevada.....	<sup>3</sup> 87.4	<sup>3</sup> 9,212	7,908	<sup>3</sup> 85.8	<sup>3</sup> 9,736	8,348	<sup>3</sup> 85.7	<sup>3</sup> 10,136	8,899	<sup>3</sup> 85.6
New Hampshire.....	59.6	18,387	10,300	58.0	18,635	10,363	55.6	19,185	10,442	54.4
New Jersey.....	53.9	139,541	75,558	54.1	141,257	78,335	55.5	144,051	79,898	55.3
New Mexico.....	53.2	28,548	14,878	52.1	29,347	15,175	51.7	30,159	15,770	52.3
New York.....	53.1	317,782	168,940	53.2	327,428	170,238	52.0	312,428	172,807	55.3
North Carolina.....	52.4	110,628	58,103	52.5	114,243	59,771	52.3	119,181	61,933	52.0
North Dakota.....	57.0	13,693	7,779	58.8	13,533	7,632	58.4	13,789	7,731	58.1
Ohio.....	54.0	182,796	98,894	54.1	184,130	99,708	54.2	188,715	101,105	54.1
Oklahoma.....	53.5	85,263	35,041	53.7	83,822	34,515	54.1	84,076	35,118	54.8
Oregon.....	53.0	48,598	24,815	52.8	47,211	24,911	52.8	47,317	25,147	53.1
Pennsylvania.....	55.6	184,888	102,993	55.7	185,829	103,307	55.7	188,279	104,379	55.4
Rhode Island.....	63.3	14,317	8,916	62.3	14,569	8,934	61.3	14,771	9,192	62.2
South Carolina.....	56.7	61,847	35,349	57.2	62,557	35,701	57.1	61,908	35,877	58.0
South Dakota.....	57.3	13,903	6,031	57.8	14,202	8,172	57.5	13,898	8,260	59.4
Tennessee.....	51.1	80,968	41,103	50.8	83,266	42,082	50.5	84,500	42,857	50.5
Texas.....	50.7	374,986	186,385	49.7	377,240	187,159	49.8	—	—	—
Utah.....	58.1	30,501	17,752	58.2	29,976	17,124	57.1	30,782	17,590	57.2
Vermont.....	52.3	—	—	—	12,321	6,856	54.0	11,959	6,852	57.3
Virginia.....	54.3	106,455	58,141	53.8	114,439	59,928	52.4	117,291	60,883	51.9
Washington.....	56.4	85,955	37,065	56.2	88,405	38,344	56.1	89,810	38,780	55.7
West Virginia.....	55.0	41,853	22,931	55.1	41,415	22,702	54.8	40,433	22,177	54.8
Wisconsin.....	59.7	79,386	47,039	59.3	80,340	47,721	59.4	82,307	48,541	59.0
Wyoming.....	50.8	14,326	7,201	50.3	13,373	6,798	50.8	13,275	6,893	50.4
<b>Outlying areas</b>										
American Samoa.....	—	1,162	623	53.8	1,206	656	54.4	1,255	674	53.7
Guam.....	55.5	2,985	1,430	47.9	2,884	1,407	48.8	2,778	1,403	50.5
Northern Marianas.....	—	—	—	—	512	305	59.8	643	334	51.9
Puerto Rico.....	79.2	40,979	32,361	79.0	42,314	33,069	78.2	42,322	33,357	53.5
Virgin Islands.....	49.0	3,258	1,606	49.3	3,254	1,590	48.9	3,322	1,597	48.1

<sup>1</sup> Some data have been revised from previously published figures.<sup>2</sup> U.S. totals include imputations for underreporting and nonreporting States.<sup>3</sup> Support staff underreported.<sup>4</sup> Support staff not reported.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and unpublished estimates. (This table was prepared May 1990.)

**Table 80.—Staff, enrollment, and pupil-staff ratios in public elementary and secondary schools, by State:  
Fall 1985 to fall 1988**

State or other area	Pupil-staff ratio, fall 1985	Fall 1986 <sup>1</sup>			Fall 1987 <sup>1</sup>			Fall 1988 <sup>1</sup>		
		Staff	Enrollment	Pupil-staff ratio	Staff	Enrollment	Pupil-staff ratio	Staff	Enrollment	Pupil-staff ratio
1	2	3	4	5	6	7	8	9	10	11
<b>United States</b> .....	<sup>2</sup> 9.5	<sup>2</sup> 4,233,671	<sup>3</sup> 39,753,172	<sup>2</sup> 9.4	<sup>2</sup> 4,311,941	<sup>4</sup> 40,007,946	<sup>2</sup> 9.3	<sup>2</sup> 4,366,978	<sup>4</sup> 40,192,366	<sup>2</sup> 9.2
Alabama.....	10.6	70,907	733,735	10.3	70,855	729,234	10.3	72,955	724,751	9.9
Alaska.....	8.0	9,810	107,848	11.0	<sup>3</sup> 7,285	105,678	<sup>3</sup> 14.5	13,500	106,481	7.9
Arizona.....	10.2	56,207	534,536	9.5	59,095	572,421	9.7	60,014	574,890	9.6
Arkansas.....	9.3	46,372	437,438	9.4	47,741	437,036	9.2	50,734	436,367	8.6
California.....	11.2	385,244	4,377,989	11.4	392,299	4,486,322	11.4	404,789	4,618,120	11.4
Colorado.....	9.5	58,537	558,415	9.5	59,263	560,236	9.5	59,814	560,081	9.4
Connecticut.....	<sup>4</sup> 12.2	<sup>4</sup> 39,284	468,847	<sup>4</sup> 11.9	<sup>4</sup> 40,214	465,485	<sup>4</sup> 11.8	<sup>4</sup> 40,870	463,488	<sup>4</sup> 11.3
Delaware.....	9.0	10,597	94,410	8.9	10,790	95,659	8.9	10,766	96,676	9.0
District of Columbia.....	8.3	11,945	85,812	7.2	11,130	86,435	7.8	10,819	84,792	8.0
Florida.....	9.1	177,639	1,607,320	9.0	184,808	1,664,774	9.0	197,403	1,720,930	8.7
Georgia.....	9.9	111,317	1,096,425	9.8	119,320	1,110,947	9.3	120,669	1,107,994	9.2
Hawaii.....	9.6	15,892	164,640	10.4	18,036	166,160	9.2	19,943	167,488	8.4
Idaho.....	13.0	18,039	208,391	13.0	16,205	212,444	13.1	16,558	214,615	13.0
Illinois.....	10.1	185,572	1,825,185	9.6	186,595	1,811,446	9.7	186,235	1,794,916	9.6
Indiana.....	9.4	104,462	966,780	9.3	105,326	964,129	9.2	105,430	960,994	9.1
Iowa.....	8.3	58,825	481,266	8.5	58,670	480,928	8.5	56,119	478,200	8.5
Kansas.....	8.8	47,227	416,091	8.8	47,569	421,112	8.9	46,828	426,596	8.7
Kentucky.....	9.8	67,721	642,778	9.5	69,192	642,696	9.3	71,685	637,627	8.9
Louisiana.....	8.9	66,591	795,188	9.0	68,794	793,093	8.9	68,361	786,663	8.9
Maine.....	8.9	22,966	211,752	9.2	24,410	211,617	8.7	25,450	212,902	8.4
Maryland.....	9.4	72,931	675,747	9.3	73,717	683,797	9.3	75,229	688,947	9.2
Massachusetts.....	8.6	101,905	833,918	8.2	103,471	825,320	8.0	106,327	823,428	7.7
Michigan.....	9.5	171,931	1,597,154	9.3	170,162	1,589,287	9.3	169,810	1,582,765	9.3
Minnesota.....	10.0	69,836	711,134	10.2	74,027	721,481	9.7	75,885	726,950	9.6
Mississippi.....	8.5	<sup>3</sup> 40,687	498,639	<sup>3</sup> 12.3	<sup>3</sup> 42,540	505,550	<sup>3</sup> 11.9	<sup>3</sup> 43,227	503,326	<sup>3</sup> 11.6
Missouri.....	8.8	91,609	800,606	8.7	96,736	802,060	8.3	101,876	806,639	7.9
Montana.....	<sup>3</sup> 12.1	<sup>2</sup> 12,613	153,327	<sup>3</sup> 12.2	<sup>3</sup> 12,477	152,207	<sup>3</sup> 12.2	<sup>3</sup> 12,414	152,191	<sup>3</sup> 12.3
Nebraska.....	8.6	31,576	267,139	8.5	31,809	268,100	8.4	32,292	269,434	8.3
Nevada.....	<sup>3</sup> 17.5	<sup>3</sup> 9,212	161,239	<sup>3</sup> 17.5	<sup>3</sup> 9,736	168,353	<sup>3</sup> 17.3	<sup>3</sup> 10,136	176,474	<sup>3</sup> 17.4
New Hampshire.....	9.5	18,387	163,717	8.9	18,635	166,045	8.9	19,185	169,413	8.8
New Jersey.....	8.1	139,541	1,107,467	7.9	141,257	1,092,982	7.7	144,051	1,080,671	7.5
New Mexico.....	10.0	28,548	281,943	9.9	29,347	287,229	9.8	30,159	292,425	9.7
New York.....	8.4	317,782	2,607,719	8.2	327,428	2,594,070	7.9	312,426	2,573,715	8.2
North Carolina.....	9.9	110,626	1,085,248	9.8	114,243	1,085,976	9.5	119,161	1,083,156	9.1
North Dakota.....	8.7	13,693	118,703	8.7	13,533	119,004	8.8	13,789	118,609	8.6
Ohio.....	9.9	162,786	1,793,506	9.8	164,130	1,793,431	9.7	166,715	1,778,544	9.5
Oklahoma.....	8.9	65,253	593,183	9.1	63,822	584,212	9.2	64,076	580,426	9.1
Oregon.....	9.6	46,598	449,307	9.6	47,211	455,995	9.7	47,317	461,752	9.8
Pennsylvania.....	9.2	184,868	1,674,161	9.1	185,829	1,668,542	9.0	188,279	1,659,714	8.8
Rhode Island.....	9.6	14,317	134,690	9.4	14,569	134,600	9.3	14,771	134,347	9.1
South Carolina.....	9.9	61,847	611,629	9.9	62,557	614,921	9.8	61,908	615,774	9.9
South Dakota.....	8.5	13,903	125,456	9.0	14,202	126,817	8.9	13,898	126,910	9.1
Tennessee.....	10.4	80,968	818,073	10.1	83,256	823,783	9.9	84,500	821,580	9.7
Texas.....	8.8	374,986	3,209,515	8.6	377,240	3,236,787	8.6	—	3,283,707	—
Utah.....	13.7	30,501	415,994	13.6	29,976	423,386	14.1	30,782	431,119	14.0
Vermont.....	7.4	—	92,112	—	12,321	92,755	7.5	11,959	93,464	7.8
Virginia.....	9.2	108,455	975,135	9.0	114,439	978,417	8.6	117,291	982,393	8.4
Washington.....	11.7	65,955	761,428	11.5	66,405	775,755	11.3	69,610	790,916	11.4
West Virginia.....	8.7	41,853	351,837	8.4	41,415	344,236	8.3	40,433	335,912	8.3
Wisconsin.....	9.9	79,366	767,619	9.7	80,340	772,363	9.6	82,307	774,857	9.4
Wyoming.....	7.2	14,326	100,955	7.0	13,373	96,455	7.4	13,275	97,793	7.4
<b>Outlying areas</b>										
American Samoa.....	—	1,182	11,055	9.5	1,206	11,246	9.3	1,255	11,764	9.4
Guam.....	10.9	2,985	25,676	8.6	2,884	25,936	9.0	2,776	26,041	9.4
Northern Marianas.....	—	—	—	—	512	5,819	11.4	643	6,079	9.5
Puerto Rico.....	16.7	40,979	679,489	16.6	42,314	672,637	15.9	62,322	661,893	10.6
Virgin Islands.....	—	3,258	24,435	7.5	3,254	24,020	7.4	3,322	23,492	7.1

<sup>1</sup> Some data revised from previously published figures.

<sup>2</sup> U.S. totals include imputations for underreporting and nonreporting States.

<sup>3</sup> Support staff underreported.

<sup>4</sup> Support staff not reported.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and unpublished estimates. (This table was prepared May 1990.)

**Table 81.—Principals in public and private elementary and secondary schools, by selected characteristics: 1987-88**

Selected characteristics	Total <sup>1</sup>	Percent of principals, by highest degree earned <sup>2</sup>				Average years of experience				Average annual salary of principals, by length of work		
		Bachelor's	Master's	Educational specialist	Doctor's	As a principal	Other school position	As a teacher	Outside school position	10 months or less	11 months	12 months
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Public schools</b>												
Total.....	77,690	2.4	53.4	35.1	8.9	10.0	3.8	9.8	1.0	\$38,726	\$41,563	\$44,252
Men.....	58,585	1.9	55.7	34.3	8.2	11.2	3.8	9.0	1.1	39,143	41,488	44,509
Women.....	19,118	3.9	48.6	37.8	11.3	8.1	4.0	12.3	1.0	37,643	41,562	43,241
<b>Race/ethnicity</b>												
White <sup>3</sup> .....	69,048	2.5	53.7	35.0	8.8	10.1	3.8	9.8	1.0	38,136	41,397	44,319
Black <sup>3</sup> .....	6,696	—	51.4	36.9	11.5	8.8	4.8	11.8	1.2	42,796	42,843	43,319
Hispanic <sup>4</sup> .....	2,483	—	54.2	30.2	( <sup>5</sup> )	8.8	5.4	9.8	1.3	40,394	42,235	46,770
Asian or Pacific Islander <sup>3</sup> .....	434	—	52.8	33.4	( <sup>5</sup> )	7.7	4.5	10.8	0.4	41,581	( <sup>5</sup> )	( <sup>5</sup> )
American Indian or Alaskan Native <sup>3</sup> .....	821	—	51.2	—	( <sup>5</sup> )	9.9	4.8	9.1	1.3	( <sup>5</sup> )	( <sup>5</sup> )	43,706
<b>Age</b>												
Under 40.....	14,430	3.8	54.7	33.7	( <sup>5</sup> )	4.3	2.5	7.8	0.7	34,901	37,885	39,359
40 to 44.....	17,755	2.0	49.0	39.7	9.2	8.8	3.7	9.2	1.0	37,872	40,225	43,351
45 to 49.....	16,408	0.0	52.8	35.8	9.8	10.0	4.0	10.3	0.9	39,004	42,316	45,249
50 to 54.....	14,936	2.2	56.8	33.2	7.9	13.2	4.3	10.8	1.3	40,377	43,454	45,884
55 or over.....	13,891	2.7	55.9	31.7	9.8	18.5	4.1	11.4	1.4	42,272	44,060	46,999
<b>Private schools</b>												
Total.....	25,401	25.7	51.0	12.2	4.2	8.0	2.8	9.8	2.4	13,182	23,505	22,651
Men.....	12,131	26.3	49.6	9.8	9.1	8.1	2.8	6.8	3.3	13,963	32,553	25,752
Women.....	13,243	25.2	52.3	14.4	3.8	7.8	2.5	12.5	1.5	12,784	18,663	18,693
<b>Race/ethnicity</b>												
White <sup>3</sup> .....	24,056	25.9	51.0	12.3	6.1	8.0	2.8	9.8	2.3	12,853	23,582	22,746
Black <sup>3</sup> .....	771	( <sup>5</sup> )	5.8	( <sup>5</sup> )	( <sup>5</sup> )	8.8	4.1	10.2	2.8	( <sup>5</sup> )	( <sup>5</sup> )	21,895
Hispanic <sup>4</sup> .....	629	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	8.0	3.5	11.1	2.2	( <sup>5</sup> )	( <sup>5</sup> )	23,101
<b>Age</b>												
Under 40.....	7,808	34.8	48.1	7.5	3.5	4.2	1.5	5.5	1.8	15,658	23,390	20,024
40 to 44.....	5,352	21.4	56.5	13.9	8.0	8.4	2.5	9.5	1.9	13,965	22,022	24,960
45 to 49.....	4,497	25.4	48.2	14.6	8.2	8.1	2.9	10.5	2.7	12,466	23,971	25,287
50 to 54.....	2,979	22.2	55.5	11.2	8.9	10.7	2.8	12.3	2.2	11,944	23,171	23,443
55 or over.....	4,703	18.3	54.0	15.4	9.2	14.1	4.3	14.4	3.7	10,465	25,565	22,197

<sup>1</sup> Total differs from data appearing in other tables because of varying survey processing procedures and time period coverages.

<sup>2</sup> Percentages for those with less than a bachelor's degree are not shown.

<sup>3</sup> Includes persons of Hispanic origin.

<sup>4</sup> Persons of Hispanic origin may be of any race.

<sup>5</sup> Too few sample cases (fewer than 30) for a reliable estimate.

—Data not available or not applicable.

NOTE.—Details may not add to 100 percent because of rounding and survey item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared May 1990.)

**Table 82.—Secondary school principals' beliefs about educational issues and purposes: 1965, 1977, and 1987**

Beliefs about educational issues	Percent agreeing with statement			Beliefs about educational purposes	Rank		
	1965	1977	1987		1965	1977	1987
1	2	3	4	5	6	7	8
School programs should include instruction on drug/alcohol abuse.....	—	—	92	Acquisition of basic skills.....	1	1	1
High schools should develop special programs for gifted students.....	19	92	92	Development of positive self-concept and good human relations.....	7	2	2
High schools should develop special programs for the handicapped, ethnic minority, and non-English-speaking.....	—	75	85	Development/practice of intellectual inquiry and problem solving.....	4	3	3
Computer competence is essential for all students.....	—	—	89	Preparation for a changing world.....	5	8	4
More stringent requirements are needed for all students in traditional academic subjects.....	—	—	63	Development of moral/spiritual values.....	2	4	5
Schools require far too little academic work of students.....	18	56	46	Career planning and training in specific entry-level occupational skills.....	—	5	6
Standardized testing in all subjects is necessary to improve instruction.....	—	—	40	Understanding of the American value system (political, economic, social).....	3	7	7
Disinterested youth or those hostile toward school should not be required to attend high school.....	34	59	47	Development of skills to operate in a technological society.....	8	10	8
School attendance should be compulsory to high school graduation or age 18.....	39	15	34	Develop knowledge and skills in preparation for family life.....	—	8	9
The academic year should be lengthened.....	22	12	32	Physical fitness and useful leisure-time sports.....	6	9	10
				Appreciation for and experience with the fine arts.....	—	11	11

—Data not available.

SOURCE: National Association of Secondary School Principals. *High School Leaders and Their Schools*, Vol. 1, 1988. (This table was prepared November 1988.)

**Table 83.—Administrative roadblocks reported by secondary school principals: 1965, 1977, and 1987**

Problem	Percent		
	1965	1977	1987
1	2	3	4
Time taken up by administrative detail.....	87	90	83
Lack of time.....	86	86	79
Inability to obtain funds.....	—	79	76
Apathetic or irresponsible parents.....	—	79	70
New State guidelines and requirements.....	—	—	89
Time to administer/supervise student activities.....	—	—	68
Variations in the ability of teachers.....	88	84	64
Inability to provide teachers time for professional development.....	83	59	62
Inefficient space and facilities.....	78	66	61
Resistance to change by staff.....	64	56	57
Problem students.....	—	76	55
Defective communications among administrative levels.....	41	54	55
Longstanding traditions.....	47	40	51

—Data not available.

SOURCE: National Association of Secondary School Principals. *High School Leaders and Their Schools*, Vol. 1, 1988. (This table was prepared November 1988.)

**Table 84.—Public school districts and public and private elementary and secondary schools: 1929-30 to 1988-89**

School year	Public school districts <sup>1</sup>	Public schools <sup>2</sup>					Private schools <sup>2 3</sup>		
		Total, all schools <sup>4</sup>	Total, regular schools <sup>5</sup>	Elementary schools		Secondary schools	Total <sup>4</sup>	Elementary	Secondary
				Total	One-teacher				
1	2	3	4	5	6	7	8	9	10
1929-30.....	—	—	—	238,308	149,282	23,930	—	9,275	3,258
1937-38.....	119,001	—	—	221,660	121,178	25,467	—	9,992	3,327
1939-40.....	117,108	—	—	—	113,600	—	—	11,306	3,588
1945-46.....	101,382	—	—	160,227	88,563	24,314	—	9,863	3,294
1947-48.....	94,926	—	—	146,760	75,096	25,484	—	10,071	3,292
1949-50.....	83,718	—	—	128,225	59,652	24,542	—	10,375	3,331
1951-52.....	71,094	—	—	123,763	50,742	23,746	—	10,666	3,322
1953-54.....	63,057	—	—	110,875	42,665	25,637	—	11,739	3,913
1955-56.....	54,859	—	—	104,427	34,964	26,046	—	12,372	3,887
1957-58.....	47,594	—	—	95,446	25,341	25,507	—	13,065	3,994
1959-60.....	40,520	—	—	91,853	20,213	25,784	—	13,574	4,061
1961-62.....	35,676	—	—	81,910	13,333	25,350	—	14,762	4,129
1963-64.....	31,705	—	—	77,584	9,895	26,431	—	—	4,451
1965-66.....	26,983	—	—	73,216	6,491	26,597	17,649	15,340	4,606
1967-68.....	22,010	—	94,197	70,879	4,146	27,011	—	—	—
1970-71.....	17,995	—	89,372	65,800	1,815	25,352	—	14,372	3,770
1973-74.....	16,730	—	88,655	65,070	1,365	25,906	—	—	—
1975-76.....	16,376	89,597	87,034	63,242	1,186	25,330	—	—	—
1976-77.....	16,271	—	86,501	62,644	1,111	25,378	19,910	16,385	5,904
1978-79.....	16,014	—	84,816	61,982	1,056	24,504	19,489	18,097	5,766
1980-81.....	15,912	85,982	83,688	61,069	921	24,362	20,764	16,792	5,678
1982-83.....	15,824	84,740	82,039	59,656	788	23,988	—	—	—
1983-84.....	15,747	84,178	81,418	59,082	838	23,947	<sup>6</sup> 27,694	<sup>6</sup> 20,872	<sup>6</sup> 7,862
1984-85.....	—	84,007	81,147	58,827	825	23,916	—	—	—
1985-86.....	—	—	—	—	—	—	<sup>6</sup> 25,616	<sup>6</sup> 20,252	<sup>6</sup> 7,387
1986-87.....	<sup>7</sup> 15,713	83,455	82,190	60,784	763	23,389	—	—	—
1987-88.....	<sup>7</sup> 15,577	83,248	82,246	61,490	729	22,937	26,836	—	—
1988-89.....	<sup>7</sup> 15,376	83,165	82,081	61,531	583	22,785	—	—	—

<sup>1</sup> Includes operating and nonoperating districts.  
<sup>2</sup> Schools with both elementary and secondary programs are included under elementary schools and also under secondary schools.  
<sup>3</sup> Data for most years are partly estimated.  
<sup>4</sup> Includes regular schools and special schools not classified by grade span.  
<sup>5</sup> Includes elementary, secondary, and combined elementary/secondary schools.  
<sup>6</sup> This figure is from a sample survey and should not be compared directly with the data for earlier years.  
<sup>7</sup> Because of expanded survey coverage, data are not directly comparable with figures for earlier years.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems; Statistics of Public Elementary and Secondary School Systems; Statistics of Nonpublic Elementary and Secondary Schools; Private Schools in American Education*; and, Common Core of Data survey. (This table was prepared January 1990.)

**Table 85.—Public school districts and enrollment, by size of district: 1986-87, 1987-88, and 1988-89**

Enrollment size of district	1986-87			1987-88			1988-89		
	Number of districts	Percent of districts	Percent of students	Number of districts	Percent of districts	Percent of students	Number of districts	Percent of districts	Percent of students
1	2	3	4	5	6	7	8	9	10
Total.....	15,713	100.0	100.0	15,577	100.0	100.0	15,376	100.0	100.0
25,000 or more.....	173	1.1	27.9	171	1.1	27.3	177	1.2	27.8
10,000 to 24,999.....	447	2.8	17.1	464	3.0	17.4	473	3.1	17.6
5,000 to 9,999.....	915	5.8	16.5	937	6.0	16.5	924	6.0	16.1
2,500 to 4,999.....	1,823	11.6	16.4	1,912	12.3	16.8	1,907	12.4	16.7
1,000 to 2,499.....	3,504	22.3	14.7	3,561	22.9	14.7	3,529	22.9	14.5
600 to 999.....	1,754	11.2	3.5	1,796	11.5	3.6	1,813	11.8	3.8
300 to 599.....	2,257	14.4	2.5	2,290	14.7	2.5	2,266	14.7	2.5
1 to 299.....	4,071	25.9	1.3	4,041	25.9	1.3	3,984	25.9	1.3
Size not reported <sup>1</sup> .....	769	4.9	—	405	2.6	—	303	2.0	—

<sup>1</sup> Includes school districts reporting enrollment of 0.  
 —Data not reported.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared May 1990.)

NOTE.—Because of rounding, details may not add to totals.

**Table 86.—Number and percentage of public elementary and secondary education agencies, by State and type of agency: 1988-89**

State or other area	Total agencies	Regular school districts, including supervisory union components		Regional education service agencies and supervisory union administrative center		State-operated agencies		Federally-operated and other agencies	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>16,982</b>	<b>15,376</b>	<b>90.5</b>	<b>1,321</b>	<b>7.8</b>	<b>183</b>	<b>1.1</b>	<b>102</b>	<b>0.6</b>
Alabama.....	133	129	97.0	0	0.0	1	0.8	3	2.3
Alaska.....	56	55	98.2	0	0.0	1	1.8	0	0.0
Arizona.....	244	238	97.5	5	2.0	0	0.0	1	0.4
Arkansas.....	350	329	94.0	18	5.1	3	0.9	0	0.0
California.....	1,151	1,077	93.6	68	5.9	6	0.5	0	0.0
Colorado.....	197	176	89.3	20	10.2	1	0.5	0	0.0
Connecticut.....	176	166	94.3	6	3.4	4	2.3	0	0.0
Delaware.....	22	19	86.4	0	0.0	3	13.6	0	0.0
District of Columbia.....	1	1	100.0	0	0.0	0	0.0	0	0.0
Florida.....	67	67	100.0	0	0.0	0	0.0	0	0.0
Georgia.....	186	186	100.0	0	0.0	0	0.0	0	0.0
Hawaii.....	1	1	100.0	0	0.0	0	0.0	0	0.0
Idaho.....	115	115	100.0	0	0.0	0	0.0	0	0.0
Illinois.....	1,053	972	92.3	46	4.4	5	0.5	30	2.8
Indiana.....	331	303	91.5	24	7.3	3	0.9	1	0.3
Iowa.....	465	433	93.1	15	3.2	17	3.7	0	0.0
Kansas.....	304	304	100.0	0	0.0	0	0.0	0	0.0
Kentucky.....	256	177	69.1	0	0.0	77	30.1	2	0.8
Louisiana.....	83	66	79.5	0	0.0	6	7.2	11	13.3
Maine.....	294	210	71.4	83	28.2	0	0.0	1	0.3
Maryland.....	24	24	100.0	0	0.0	0	0.0	0	0.0
Massachusetts.....	437	359	82.2	77	17.6	1	0.2	0	0.0
Michigan.....	622	561	90.2	57	9.2	4	0.6	0	0.0
Minnesota.....	505	436	86.3	69	13.7	0	0.0	0	0.0
Mississippi.....	167	152	91.0	15	9.0	0	0.0	0	0.0
Missouri.....	545	544	99.8	1	0.2	0	0.0	0	0.0
Montana.....	631	549	87.0	80	12.7	2	0.3	0	0.0
Nebraska.....	981	862	87.9	112	11.4	7	0.7	0	0.0
Nevada.....	17	17	100.0	0	0.0	0	0.0	0	0.0
New Hampshire.....	230	170	73.9	60	26.1	0	0.0	0	0.0
New Jersey.....	615	602	97.9	13	2.1	0	0.0	0	0.0
New Mexico.....	96	88	91.7	0	0.0	8	8.3	0	0.0
New York.....	762	721	94.6	41	5.4	0	0.0	0	0.0
North Carolina.....	142	140	98.6	0	0.0	2	1.4	0	0.0
North Dakota.....	346	296	85.5	39	11.3	5	1.4	6	1.7
Ohio.....	794	613	77.2	179	22.5	2	0.3	0	0.0
Oklahoma.....	653	609	93.3	20	3.1	0	0.0	24	3.7
Oregon.....	340	304	89.4	29	8.5	6	1.8	1	0.3
Pennsylvania.....	602	501	83.2	98	16.3	3	0.5	0	0.0
Rhode Island.....	38	37	97.4	0	0.0	1	2.6	0	0.0
South Carolina.....	95	91	95.8	0	0.0	3	3.2	1	1.1
South Dakota.....	228	191	83.8	17	7.5	0	0.0	20	8.8
Tennessee.....	141	141	100.0	0	0.0	0	0.0	0	0.0
Texas.....	1,087	1,062	97.7	20	1.8	4	0.4	1	0.1
Utah.....	48	40	83.3	6	12.5	2	4.2	0	0.0
Vermont.....	336	276	82.1	60	17.9	0	0.0	0	0.0
Virginia.....	157	136	86.6	19	12.1	2	1.3	0	0.0
Washington.....	296	296	100.0	0	0.0	0	0.0	0	0.0
West Virginia.....	55	55	100.0	0	0.0	0	0.0	0	0.0
Wisconsin.....	449	430	95.8	19	4.2	0	0.0	0	0.0
Wyoming.....	58	49	84.5	5	8.6	4	6.9	0	0.0
<b>Outlying areas</b>									
American Samoa.....	1	1	100.0	0	0.0	0	0.0	0	0.0
Guam.....	1	1	100.0	0	0.0	0	0.0	0	0.0
Northern Marianas.....	1	1	100.0	0	0.0	0	0.0	0	0.0
Puerto Rico.....	1	1	100.0	0	0.0	0	0.0	0	0.0
Virgin Islands.....	1	1	100.0	0	0.0	0	0.0	0	0.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared January 1990.)

Table 87.—Selected statistics for public school districts enrolling more than 20,000 pupils, by State: 1968-69

Name of district, by State	State	1968 Enrollment	Class-room teachers, 1968	Pupils per teacher, 1968	Percent minority, 1968	Number of schools, 1968	Number of 1967-68 graduates <sup>2</sup>	Revenue and expenditures <sup>3</sup> 1968-67 (in thousands of dollars)								Current expenditure per pupil 1968-1967 <sup>4</sup> in thousands	
								Revenue receipts				Total expenditures	Current expenditures		Capital outlay		Interest on school debt
								Total	Federal	State	Local		Total	Instruction			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>Districts with more than 20,000 students.</b>	—	12,520,940	—	—	—	18,310	659,475	\$51,462,719	\$3,968,000	\$25,878,522	\$22,116,194	\$50,921,719	\$45,719,908	\$27,361,967	\$3,402,322	\$806,488	—
Birmingham City.....	Ala.	43,203	2,155	20.0	86.8	92	2,261	113,063	16,479	59,105	36,079	110,394	107,477	60,670	2,834	83	2,448
Huntsville City.....	Ala.	25,041	1,381	18.1	37.1	39	1,783	73,550	11,066	35,342	27,122	70,836	66,929	38,101	3,230	677	2,611
Jefferson County.....	Ala.	41,224	2,099	19.8	15.6	63	3,139	108,765	6,676	65,911	33,978	107,879	104,242	62,642	2,333	1,304	2,244
Mobile County.....	Ala.	67,901	3,261	20.8	46.6	85	3,873	146,244	19,399	90,669	35,978	140,067	134,149	78,317	3,117	2,601	1,955
Montgomery County.....	Ala.	36,038	1,892	19.0	59.8	53	1,784	82,101	12,973	48,584	20,544	79,760	78,036	45,754	1,724	—	2,148
Anchorage.....	Alaska	40,007	1,942	20.8	25.4	78	2,359	259,088	8,661	179,345	73,082	274,755	\$222,599	129,945	39,518	12,638	5,770
Mesa Unified.....	Ariz.	81,061	2,750	22.2	14.8	62	3,291	187,162	6,352	102,636	78,175	221,148	158,449	89,942	52,541	10,158	3,245
Paradise Valley Unified.....	Ariz.	25,499	1,266	19.8	5.9	30	1,556	87,854	1,496	41,031	45,327	97,099	71,715	41,009	17,720	7,664	3,319
Tucson Unified.....	Ariz.	56,520	2,145	26.3	43.6	102	2,964	209,444	13,989	101,086	95,259	232,151	199,104	113,336	30,390	2,657	3,905
Washington.....	Ariz.	21,853	1,090	20.0	11.1	32	—	68,378	2,583	41,723	24,070	69,474	64,163	41,044	4,067	—	3,160
Little Rock.....	Ark.	26,787	1,573	17.0	63.9	48	1,719	60,343	6,419	15,902	38,022	69,171	58,243	36,492	9,764	1,184	2,997
Pulaski County Special.....	Ark.	21,855	1,206	18.1	25.8	35	1,473	64,891	5,202	41,023	38,666	83,797	75,649	47,045	5,355	2,593	2,452
ABC Unified.....	Calif.	21,243	848	25.1	66.0	29	1,565	85,980	3,585	68,354	14,041	84,965	82,805	48,388	1,886	274	3,719
Anaheim Union High.....	Calif.	21,142	839	25.2	43.9	19	2,920	93,360	2,922	62,526	28,210	86,371	82,477	48,636	3,304	590	3,455
Bakersfield City Elementary.....	Calif.	22,478	944	23.8	60.9	32	—	71,302	5,914	55,012	10,808	69,956	67,664	41,370	2,291	—	3,495
Capistrano Unified.....	Calif.	23,473	966	24.3	14.8	26	1,470	70,866	1,203	31,689	37,974	68,806	64,286	39,154	4,477	43	3,316
Chino Unified.....	Calif.	20,888	823	25.4	34.9	23	835	84,011	1,169	49,583	13,259	62,451	58,008	35,287	3,304	1,139	3,423
Compton Unified.....	Calif.	26,362	1,064	24.8	99.8	36	801	111,082	12,127	88,127	10,808	109,806	105,532	56,605	4,206	68	3,995
East Side Union High.....	Calif.	21,964	906	24.2	70.5	12	3,962	96,753	5,484	63,445	27,844	92,199	68,375	48,725	2,884	940	3,873
Elk Grove Unified.....	Calif.	22,077	872	25.3	40.3	29	1,240	68,345	2,329	55,354	10,662	65,952	58,503	35,659	8,941	508	3,623
Fontana Unified.....	Calif.	22,173	892	24.9	49.2	26	758	59,072	2,519	49,451	7,102	59,858	57,189	34,079	2,855	14	3,697
Fremont Unified.....	Calif.	26,380	1,166	22.8	32.4	40	1,748	96,134	2,847	68,006	25,479	93,054	88,967	53,401	3,919	168	3,442
Freemont Unified.....	Calif.	64,446	2,777	23.2	61.8	64	2,597	236,984	19,341	177,192	39,451	238,614	218,160	130,827	20,253	201	3,931
Garden Grove Unified.....	Calif.	36,184	1,456	24.8	56.6	58	2,495	136,514	7,127	82,406	46,981	132,934	128,509	80,259	4,232	193	3,612
Glendale Unified.....	Calif.	22,954	890	25.6	41.9	28	1,662	70,511	3,284	50,404	18,613	72,086	68,945	41,223	3,112	29	3,480
Hacienda La Puente Unified.....	Calif.	22,773	882	25.8	78.7	36	1,387	94,834	5,554	77,154	12,126	95,174	92,381	55,700	2,632	181	4,104
Lodi Unified.....	Calif.	22,487	929	24.2	38.5	35	1,109	75,712	3,670	60,107	11,935	77,459	87,001	41,071	9,919	539	3,684
Long Beach Unified.....	Calif.	66,784	2,607	23.8	66.1	80	3,793	254,141	21,996	194,486	37,859	249,139	238,978	135,439	10,181	—	3,615
Los Angeles Unified.....	Calif.	592,681	24,678	24.0	64.2	625	24,572	2,661,464	209,301	2,065,361	386,792	2,606,232	2,460,207	1,432,642	145,164	2,661	4,326
Montebello Unified.....	Calif.	31,735	1,139	27.9	93.3	28	1,552	118,101	8,918	92,897	14,288	118,470	112,883	68,153	5,285	302	3,601
Moreno Valley Unified.....	Calif.	23,600	938	25.2	38.1	22	716	87,635	2,470	75,682	9,483	83,844	50,110	29,809	33,870	64	3,735
Mt. Diablo Unified.....	Calif.	31,923	1,378	23.2	20.8	46	2,332	110,846	3,824	71,552	35,870	115,983	111,127	68,606	4,633	223	3,648
Oakland Unified.....	Calif.	51,218	2,189	23.4	90.9	89	2,188	207,534	19,568	156,574	29,392	211,875	208,178	118,804	2,217	1,482	4,478
Orange Unified.....	Calif.	24,580	1,004	24.5	33.4	39	1,948	87,722	1,908	43,864	41,950	91,097	87,460	51,856	3,072	565	3,817
Pasadena Unified.....	Calif.	21,590	895	24.1	79.4	31	1,181	83,475	6,566	60,389	18,520	86,388	84,225	48,818	2,116	45	3,882
Pomona Unified.....	Calif.	25,183	934	27.0	60.7	32	753	89,129	8,634	73,542	8,753	89,219	84,225	48,818	2,116	45	3,882
Poway Unified.....	Calif.	22,189	903	24.8	17.9	21	1,273	62,043	1,300	37,478	23,265	60,178	58,565	35,831	1,578	37	3,457
Richmond Unified.....	Calif.	29,662	1,300	22.8	66.8	49	1,687	101,073	8,773	68,715	25,585	105,850	104,896	59,089	1,105	49	3,926
Riverside Unified.....	Calif.	28,567	1,144	25.0	40.4	36	1,465	92,164	4,897	64,484	22,973	92,533	89,443	51,190	2,757	333	3,574
Sacramento City Unified.....	Calif.	46,632	2,002	23.3	61.7	72	1,939	171,108	13,021	125,897	32,190	171,549	166,928	99,061	4,352	269	3,933
Saddleback Valley Unified.....	Calif.	23,150	904	25.8	18.9	29	1,848	77,070	1,187	35,661	40,222	74,001	71,335	45,249	1,747	919	3,450
San Bernardino City Unified.....	Calif.	36,941	1,408	26.2	59.3	55	1,151	129,905	8,503	102,411	16,991	121,840	118,439	69,183	3,334	67	3,664
San Diego City Unified.....	Calif.	117,168	4,737	24.7	58.8	155	6,817	484,784	40,364	259,753	187,667	479,381	467,183	259,647	11,895	303	4,220
San Francisco Unified.....	Calif.	82,528	2,923	21.4	85.2	110	4,039	251,172	20,645	186,874	43,853	248,432	236,195	138,408	9,337	900	3,877
San Jose Unified.....	Calif.	29,323	1,444	20.3	54.4	40	1,831	137,203	8,636	82,233	48,334	131,318	129,932	71,050	6,497	889	4,111
San Juan Unified.....	Calif.	48,715	2,079	22.5	14.2	65	3,303	170,778	7,041	124,841	38,894	166,798	160,974	92,831	5,598	226	3,879
Santa Ana Unified.....	Calif.	40,028	1,595	25.1	90.2	42	1,265	132,265	7,775	79,844	44,648	131,354	122,679	78,095	8,007	688	3,537
Stockton City Unified.....	Calif.	31,570	1,309	24.1	76.2	44	1,084	114,205	10,409	87,951	15,645	117,566	114,496	65,896	2,859	211	4,193
Sweetwater Union High.....	Calif.	26,845	1,074	25.0	72.9	20	3,447	104,106	5,732	74,151	24,223	111,838	101,855	60,914	9,880	93	4,330
Adams Arapahoe.....	Colo.	25,732	1,348	19.1	28.8	43	1,404	118,299	4,433	52,283	59,583	117,454	91,929	53,792	15,433	10,092	3,554
Boulder Valley.....	Colo.	20,825	1,142	18.2	14.8	42	1,582	93,668	2,204	24,821	66,663	86,865	80,107	48,110	4,340	2,418	3,910
Cherry Creek.....	Colo.	27,193	1,448	18.8	11.1	36	1,495	126,753	1,022	27,757	97,974	148,718	104,461	61,131	33,335	10,870	3,948
Colorado Springs.....	Colo.	30,297	1,575	19.2	21.2	58	1,996	110,936	5,198	50,597	55,141	109,307	103,829	82,223	5,878	—	3,427
Denver County.....	Colo.	58,664	3,485	18.8	64.7	114	3,156	301,231	23,368	58,261	221,802	273,505	251,742	160,189	20,103	1,860	4,179
Jefferson County.....	Colo.	75,318	3,664	20.8	10.4	123	5,480	300,319	8,905	135,748	157,666	366,699	313,680	207,987	48,808	8,211	4,131
Northglenn-Thornton.....	Colo.	20,872	1,089	18.8	19.7	35	1,106	89,017	2,151	42,828	44,238	87,069	67,062	38,782	12,738	7,269	3,426

133

134

Table 87.—Selected statistics for public school districts enrolling more than 20,000 pupils, by State: 1988-89—Continued

Name of district, by State	State	1988 Enrollment	Class-room teachers, 1988	Pupils per teacher, 1988	Percent minority, 1988	Number of schools, 1988	Number of 1987-88 graduates <sup>1</sup>	Revenue and expenditures <sup>2</sup> 1988-89 (in thousands of dollars)							Current expenditure per pupil 1988-1989 <sup>3</sup> in thousands		
								Revenue receipts				Total expenditures	Current expenditures			Capital outlay	Interest on school debt
								Total	Federal	State	Local		Total	Instruction			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Hartford.....	Conn.	24,404	1,594	15.3	91.3	31	781	137,738	10,367	67,631	59,740	131,067	128,007	77,941	1,044	1,016	2,400
D.C. Public Schools.....	D.C.	84,792	6,064	14.0	—	167	3,882	438,630	45,480	—	393,170	453,623	428,105	254,773	25,716	—	5,001
Alachua County.....	Fla.	24,422	1,361	17.9	37.1	39	1,312	96,938	7,437	61,180	28,341	94,458	96,832	43,216	5,863	1,763	3,720
Bay County.....	Fla.	21,277	1,213	17.5	19.3	33	1,199	78,748	6,699	50,561	21,288	76,588	73,464	40,667	3,025	99	3,442
Brevard County.....	Fla.	51,583	3,054	16.9	17.1	70	3,269	188,294	10,234	100,898	77,172	182,431	167,165	92,958	14,424	622	3,472
Broward County.....	Fla.	142,202	7,449	19.1	38.7	188	7,531	614,365	30,220	270,401	313,744	599,674	537,134	269,283	59,576	3,164	4,076
Clay County.....	Fla.	20,374	1,120	16.2	9.4	24	1,207	69,077	3,519	48,374	17,184	85,524	59,692	32,350	5,307	225	3,085
Dade County.....	Fla.	268,047	14,665	16.3	76.9	294	12,722	1,139,306	83,222	613,167	442,919	1,127,154	1,042,270	576,509	81,076	3,808	4,277
Duval County.....	Fla.	105,269	5,622	16.7	40.0	146	5,000	395,133	31,092	254,036	110,005	384,564	355,517	192,079	37,321	1,728	3,453
Escambia County.....	Fla.	42,114	2,472	17.0	33.4	71	2,424	158,594	14,599	104,366	39,629	152,772	113,447	77,459	6,741	584	3,491
Hillsborough County.....	Fla.	118,022	6,892	17.3	33.2	170	6,670	486,768	40,443	275,653	170,472	523,214	438,132	230,900	73,533	11,549	3,790
Lee County.....	Fla.	39,264	2,115	16.6	21.6	61	1,912	160,834	9,315	90,708	90,611	170,516	132,977	64,960	1,272	3,766	
Leon County.....	Fla.	25,726	1,552	16.6	37.2	40	1,373	109,664	7,557	70,827	31,480	108,161	94,254	44,434	13,275	632	3,910
Manatee County.....	Fla.	24,580	1,401	17.5	22.9	41	1,178	105,600	6,266	47,776	51,558	98,683	65,119	47,010	12,518	1,040	3,721
Marion County.....	Fla.	27,235	1,599	17.0	27.4	36	1,425	97,929	7,480	59,780	30,669	102,203	92,020	49,547	9,677	306	3,615
Ocala County.....	Fla.	24,984	1,448	17.3	17.1	34	1,802	86,789	6,211	55,356	23,222	84,819	80,658	41,702	3,457	507	3,376
Orange County.....	Fla.	91,752	5,671	16.2	35.7	129	4,699	360,373	22,245	175,134	182,994	369,319	320,795	162,996	47,496	1,026	3,813
Palm Beach County.....	Fla.	95,433	6,023	15.8	37.2	132	4,594	426,052	24,863	120,111	281,076	454,846	371,611	197,125	62,020	1,015	4,391
Pasco County.....	Fla.	31,619	1,823	17.3	6.2	41	1,453	116,693	7,546	64,423	44,726	120,112	104,892	55,439	13,596	1,622	3,674
Pinellas County.....	Fla.	90,555	5,438	16.7	20.5	130	5,506	390,204	20,133	176,665	193,406	390,290	338,250	177,893	50,797	1,453	3,603
Polk County.....	Fla.	62,538	3,708	16.9	26.7	102	2,966	220,863	17,061	136,952	67,650	220,810	204,981	111,070	15,111	716	3,481
Sarasota County.....	Fla.	26,853	1,616	16.6	14.1	35	1,594	131,309	6,365	40,541	84,403	135,634	111,745	59,617	22,841	1,048	4,393
Seminole County.....	Fla.	45,022	2,323	19.4	20.3	46	2,668	155,323	7,816	90,961	56,726	167,661	134,297	73,620	17,893	5,481	3,226
Volusia County.....	Fla.	43,922	2,434	16.0	20.9	63	2,073	173,438	6,694	81,393	83,351	167,264	140,515	76,383	17,177	9,572	3,496
Atlanta City.....	Ga.	63,448	3,689	16.4	—	115	3,590	367,616	32,910	180,930	173,776	321,901	302,944	163,374	18,907	—	4,553
Bibb County.....	Ga.	23,621	1,420	16.6	—	40	1,047	94,516	6,740	60,026	25,750	65,088	76,046	49,530	6,371	671	3,191
Chatham County.....	Ga.	32,370	1,903	17.0	—	46	1,408	141,264	9,446	80,668	51,150	126,616	112,104	68,495	14,432	80	3,506
Clayton County.....	Ga.	32,676	1,999	16.4	—	41	1,973	120,931	4,445	70,228	46,258	108,776	97,908	61,990	6,082	2,768	3,027
Cobb County.....	Ga.	64,932	3,565	16.2	—	77	4,508	230,752	4,548	126,262	97,842	219,766	176,065	117,618	35,524	6,177	2,961
De Kalb County.....	Ga.	72,738	4,326	16.6	—	102	5,239	350,371	7,736	168,580	174,055	305,512	280,848	169,695	21,274	3,390	3,671
Fulton County.....	Ga.	40,020	2,447	16.4	—	68	2,536	209,535	4,974	86,247	116,314	175,613	159,746	95,462	14,402	1,465	4,096
Gwinnett County.....	Ga.	58,269	3,244	18.0	—	57	3,270	206,097	2,162	115,039	88,896	198,231	152,748	96,419	38,727	6,756	2,915
Muscogee County.....	Ga.	29,640	1,702	17.4	—	51	1,808	166,750	11,011	80,373	75,366	155,125	147,149	83,508	7,453	523	4,979
Richmond County.....	Ga.	32,097	1,914	16.8	—	53	1,709	101,619	9,644	83,139	8,836	111,947	99,640	64,509	10,425	1,682	3,094
Hawaii Department of Education.....	Hawaii	167,488	8,421	19.9	76.9	231	10,575	665,620	66,465	575,451	23,704	585,614	515,237	313,620	70,377	—	3,129
Boise City ISD.....	Idaho	22,516	1,092	20.6	—	40	1,485	80,454	2,631	32,498	25,325	61,950	59,031	37,195	1,349	1,170	2,687
City of Chicago Schools.....	Ill.	394,587	21,693	16.2	67.6	601	17,525	1,783,322	211,287	921,508	650,549	1,716,494	1,645,842	903,431	60,460	10,192	3,619
Rockford.....	Ill.	25,866	1,588	16.3	28.6	53	1,749	103,443	5,863	46,209	49,625	102,333	95,032	55,816	4,483	2,618	3,358
School District 46.....	Ill.	25,223	1,280	19.7	27.1	49	1,526	88,728	3,827	39,326	45,575	88,044	81,550	52,143	4,246	2,248	3,192
Evansville-Vanderburgh Schools.....	Ind.	22,772	1,345	16.9	14.5	38	1,432	85,281	5,284	40,684	39,313	81,807	75,263	41,052	6,343	201	3,313
Fort Wayne Community Schools.....	Ind.	32,136	1,835	19.7	26.2	54	2,054	112,832	5,468	58,197	49,167	112,493	104,755	56,509	6,516	1,222	3,230
Gary Community Schools.....	Ind.	26,767	1,419	16.9	98.2	43	1,455	103,331	6,679	80,820	33,832	97,854	83,929	48,471	2,493	1,432	3,369
Indianapolis Public Schools.....	Ind.	50,214	2,990	16.8	50.4	90	1,761	229,307	16,616	128,522	62,169	197,123	187,748	93,909	9,377	—	3,276
South Bend Community Schools.....	Ind.	21,684	1,221	17.6	33.4	36	1,371	81,823	4,544	42,723	34,556	61,370	75,711	40,570	5,361	298	3,458
Des Moines Independent Community.....	Iowa	31,488	1,325	23.6	18.1	63	1,867	115,682	6,842	60,968	48,272	116,570	110,964	68,453	5,165	441	3,824
Kansas City.....	Kansas	22,921	1,196	19.2	58.2	50	1,247	83,729	3,954	51,321	28,754	62,685	79,762	51,112	2,725	376	3,437
Shawnee Mission Public Schools.....	Kansas	30,171	1,675	16.1	7.1	54	2,530	111,228	1,648	27,416	62,164	112,011	104,889	74,601	8,932	1,000	3,424
Wichita.....	Kansas	47,107	2,560	16.4	30.0	91	2,352	180,757	4,732	53,204	102,621	162,506	154,537	98,106	8,628	1,141	3,720
Fayette County.....	Ky.	31,268	1,976	15.8	23.9	55	1,756	94,790	4,802	46,263	43,725	93,785	86,741	64,326	3,832	3,212	2,864
Jefferson County.....	Ky.	92,315	5,268	17.5	31.2	160	5,337	330,768	24,722	154,352	151,694	311,464	289,732	203,146	14,123	7,609	3,121
Caddo Parish School Board.....	La.	52,930	2,506	21.1	—	72	2,555	159,575	13,891	75,344	70,340	159,559	139,448	72,162	16,353	3,758	2,697
Calcasieu Parish School Board.....	La.	33,192	1,484	22.4	—	58	1,940	91,407	6,083	47,335	35,969	98,954	62,303	39,619	13,312	3,339	2,420
East Baton Rouge Parish School.....	La.	57,610	3,443	18.6	—	102	3,298	180,206	16,402	92,720	71,084	173,407	170,492	78,431	2,342	573	2,825
Jefferson Parish School Board.....	La.	57,827	3,147	18.4	—	85	2,536	202,790	14,645	85,662	102,563	199,396	170,578	61,933	16,263	10,557	2,950
Lafayette Parish School Board.....	La.	27,571	1,571	17.5	—	40	1,463	77,726	6,291	40,719	30,718	74,962	66,161	35,358	444	8,377	2,362

ELEMENTARY AND SECONDARY: SCHOOL DISTRICTS 99

Table 87.—Selected statistics for public school districts enrolling more than 20,000 pupils, by State: 1988-89—Continued

Name of district, by State	State	1988 Enrollment	Class-room teachers, <sup>1</sup> 1988	Pupils per teacher 1988	Percent minority, <sup>2</sup> 1988	Number of schools, 1988	Number of 1987-88 graduates <sup>3</sup>	Revenue and expenditures <sup>4</sup> 1988-89 (in thousands of dollars)							Current expenditure per pupil 1988-1989 <sup>5</sup> in thousands		
								Revenue receipts				Total expenditures	Current expenditures			Capital outlay	Interest on school debt
								Total	Federal	State	Local		Total	Instruction			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Orleans Parish School Board.....	La.	84,098	4,638	18.1	—	122	3,603	252,543	41,030	114,819	96,694	262,389	230,797	115,670	23,614	7,978	2,703
Rapids Parish School Board.....	La.	24,324	1,193	20.4	—	48	1,149	65,197	8,764	39,148	17,285	65,517	63,859	31,055	1,029	629	2,835
St. Tammany Parish School Board.....	La.	26,415	1,471	18.0	—	42	1,406	79,286	3,985	36,947	38,374	78,815	67,532	34,211	6,959	4,324	2,589
Terrebonne Parish School Board.....	La.	21,210	1,167	18.2	—	42	909	52,684	5,690	26,726	18,268	62,376	52,131	24,811	8,430	1,815	2,424
Anne Arundel County.....	Md.	84,328	3,574	18.0	17.5	113	4,546	301,791	13,562	111,881	176,348	278,404	262,520	155,637	13,414	2,470	4,101
Baltimore City.....	Md.	107,486	5,708	18.8	81.5	180	4,829	447,017	51,094	247,214	148,709	424,576	406,956	243,806	13,636	3,984	3,858
Baltimore County.....	Md.	82,086	5,008	16.4	20.3	149	6,067	426,825	12,173	131,121	263,531	415,490	401,295	233,436	11,974	2,221	5,000
Carroll County.....	Md.	20,978	1,121	18.7	2.7	32	1,619	77,048	2,869	37,741	36,438	75,947	69,978	42,735	5,847	124	3,490
Frederick County Board of Education.....	Md.	25,734	1,452	17.7	7.7	42	1,739	101,473	4,039	43,936	53,498	99,726	92,673	52,904	6,039	1,016	3,740
Harford County.....	Md.	29,497	1,681	17.5	14.1	42	2,025	111,461	6,163	53,029	52,269	109,325	105,049	63,766	3,778	498	3,736
Howard County.....	Md.	27,564	1,524	18.1	19.5	45	2,091	148,470	3,209	41,581	101,700	142,509	126,869	71,720	13,822	1,818	4,950
Montgomery County.....	Md.	98,533	5,726	17.2	34.0	162	7,590	587,245	13,174	135,802	438,269	803,880	540,131	324,552	58,514	7,235	5,718
Prince George's County.....	Md.	105,312	5,778	18.2	70.3	172	7,631	487,816	23,996	199,196	264,624	473,518	459,858	255,624	11,828	1,633	4,452
Boston.....	Mass.	59,184	—	—	75.8	120	2,344	375,073	29,520	127,755	217,798	367,782	351,959	219,400	3,226	12,597	8,473
Springfield.....	Mass.	23,310	—	—	59.7	42	903	105,795	10,684	85,479	9,632	87,498	85,138	50,826	487	1,893	3,572
Worcester.....	Mass.	20,766	—	—	31.2	49	865	91,453	9,099	30,555	30,555	97,721	92,946	54,066	4,184	591	4,845
Detroit City.....	Mich.	174,061	—	—	91.6	259	7,510	785,082	80,344	443,950	260,788	784,234	755,964	417,078	17,503	10,767	3,713
Flint City.....	Mich.	28,140	—	—	69.4	42	1,043	135,995	8,045	61,290	66,660	138,271	137,107	62,048	1,184	—	4,112
Grand Rapids City.....	Mich.	25,016	—	—	48.7	68	1,085	139,021	9,709	54,118	75,194	120,348	116,127	55,254	2,207	2,012	2,894
Lansing.....	Mich.	20,841	—	—	43.1	41	1,242	101,240	5,127	33,306	62,607	99,968	97,368	49,259	1,861	719	3,803
Utica Community Schools.....	Mich.	23,122	—	—	3.2	37	2,160	96,620	940	24,581	71,099	102,806	97,576	50,105	1,591	3,639	3,916
Anoka.....	Minn.	32,870	1,707	19.3	4.2	39	2,317	130,627	3,909	86,299	40,419	136,400	126,742	80,385	8,994	664	4,046
Minneapolis Special.....	Minn.	40,024	1,997	20.0	47.3	55	2,252	211,455	12,613	77,275	121,367	219,615	199,276	122,119	14,901	5,436	5,173
Saint Paul.....	Minn.	33,457	1,831	18.3	39.1	51	1,912	173,245	11,567	81,813	79,845	184,596	156,233	97,220	5,238	3,125	4,984
Jackson.....	Miss.	33,168	1,567	21.2	78.0	56	1,769	99,080	12,034	43,801	43,245	95,964	89,231	49,064	5,979	754	2,744
Kansas City.....	Mo.	35,148	2,541	13.8	—	76	1,488	185,845	15,111	73,397	97,337	185,618	152,324	80,800	33,241	53	4,206
Parkway.....	Mo.	22,678	1,278	17.7	—	25	1,946	86,376	639	17,297	70,440	92,973	85,004	53,006	6,213	1,758	3,797
Springfield.....	Mo.	23,221	1,297	17.9	—	57	1,590	69,932	3,614	25,061	41,037	68,239	64,357	41,283	3,195	687	2,745
St. Louis City.....	Mo.	48,128	3,393	13.6	—	128	1,547	259,192	29,961	123,468	105,743	243,580	236,865	129,284	6,712	203	4,909
Lincoln Public Schools.....	Neb.	26,567	1,637	16.2	7.3	46	1,666	101,632	4,568	18,313	78,951	91,820	91,595	47,309	6,225	—	3,624
Omaha Public Schools.....	Neb.	41,243	2,265	18.0	33.1	80	2,357	167,805	10,206	36,396	121,203	160,909	152,414	75,487	8,494	1	3,656
Clark County.....	Nev.	105,151	4,892	21.5	28.1	129	5,584	347,248	14,827	222,205	110,214	348,136	303,583	178,735	39,573	2,982	3,182
Washoe County School District <sup>6</sup> .....	Nev.	35,221	1,726	20.4	17.9	64	1,922	116,970	3,735	70,934	42,301	114,965	108,025	65,047	4,169	2,791	3,204
Jersey City.....	N.J.	27,742	1,849	15.0	86.7	37	1,064	176,614	16,399	112,385	47,830	163,937	157,770	102,567	3,514	2,653	5,282
Newark.....	N.J.	49,823	3,373	14.8	90.3	82	2,138	336,120	42,893	225,316	89,911	316,268	304,841	174,449	4,923	8,504	5,759
Paterson.....	N.J.	21,682	1,602	13.7	89.8	33	735	111,253	11,756	79,497	20,000	103,280	97,978	67,268	2,073	3,229	4,220
Albuquerque.....	N.M.	65,057	4,554	18.7	—	117	4,774	271,599	18,192	221,770	31,637	274,202	250,011	138,892	23,336	855	3,126
Buffalo City Schools.....	N.Y.	46,228	3,048	15.2	58.1	75	2,577	257,715	28,153	156,221	73,341	264,820	245,939	147,339	6,494	2,367	5,567
New York City Public Schools.....	N.Y.	936,153	54,031	17.3	80.1	999	38,097	6,436,748	450,961	2,172,468	2,812,619	5,367,589	5,142,438	3,153,007	157,283	67,868	5,546
Rochester City Schools.....	N.Y.	31,774	2,237	14.2	70.7	54	1,470	211,535	19,469	95,285	96,781	207,113	195,688	119,279	8,630	2,795	6,058
Syracuse City Schools.....	N.Y.	21,066	1,660	11.3	40.9	33	968	136,133	9,540	73,576	53,017	137,726	116,056	69,612	16,727	2,943	5,523
Buncombe County.....	N.C.	21,768	1,332	16.3	6.4	40	1,503	78,694	3,516	46,715	28,463	76,753	67,006	42,266	8,708	1,039	3,073
Cumberland County.....	N.C.	44,116	2,495	17.7	45.9	69	2,725	130,883	13,668	85,691	31,524	130,561	126,442	80,861	3,130	969	2,888
Forsyth Winston-Salem Schools.....	N.C.	38,395	2,417	15.9	37.8	55	2,669	138,354	7,824	81,360	49,170	136,251	132,168	82,749	3,168	915	3,401
Gaston County.....	N.C.	30,556	1,880	16.3	18.5	54	1,855	94,421	5,400	63,150	25,871	92,016	85,311	57,941	5,565	1,140	2,709
Greensboro City.....	N.C.	20,397	1,268	16.1	54.1	38	1,458	67,348	4,570	46,977	35,799	80,619	78,906	49,771	1,713	—	3,727
Guilford County.....	N.C.	23,851	1,427	16.7	19.1	40	1,807	68,397	3,558	48,869	35,970	63,897	79,030	48,062	3,244	1,623	3,303
Mecklenburg-Charlotte Schools.....	N.C.	75,064	4,117	18.2	42.8	106	4,614	261,448	14,448	158,248	106,754	276,650	261,572	157,862	14,357	2,721	3,566
Wake County.....	N.C.	61,003	3,420	17.8	30.0	79	3,955	232,144	8,104	117,822	106,218	221,918	187,865	115,081	28,881	5,172	3,228
Akron City.....	Ohio	33,923	1,858	18.3	40.4	58	2,235	136,468	8,214	65,057	63,197	143,101	137,802	78,488	4,835	465	3,959
Cincinnati City.....	Ohio	61,606	2,962	17.3	61.9	86	2,595	224,870	15,668	99,446	109,736	250,227	236,415	139,479	4,148	7,666	4,585
Cleveland City.....	Ohio	72,116	3,650	19.8	76.7	130	2,906	402,011	28,039	190,047	183,925	378,826	365,927	177,413	9,643	3,556	5,078
Columbus City.....	Ohio	65,160	3,711	17.6	48.9	137	2,902	295,447	25,200	123,971	146,276	281,524	275,192	167,896	3,350	3,002	4,184
Dayton City.....	Ohio	28,302	1,670	16.9	62.7	48	1,238	164,749	9,729	65,313	69,707	147,953	143,826	69,958	4,127	—	4,626

100 ELEMENTARY AND SECONDARY SCHOOL DISTRICTS

137

138



Table 87.—Selected statistics for public school districts enrolling more than 20,000 pupils, by State: 1988-89—Continued

Name of district, by State	State	1988 Enrollment	Class-room teachers, 1988	Pupils per teacher, 1988	Percent minority, 1988	Number of schools, 1988	Number of 1987-88 graduates *	Revenue and expenditures † 1988-89 (in thousands of dollars)								Current expenditure per pupil 1986-1987 ‡ in thousands	
								Revenue receipts				Total expenditures	Current expenditures		Capital outlay		Interest on school debt
								Total	Federal	State	Local		Total	Instruction			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Toledo City.....	Ohio	41,976	2,227	18.8	42.5	84	2,288	166,248	10,368	89,859	66,001	181,752	178,823	120,148	3,451	1,478	4,078
Oklahoma City.....	Okl.	38,736	1,892	20.5	53.4	84	1,787	117,178	4,187	54,858	58,153	116,065	107,295	74,956	7,803	987	2,696
Tulsa City.....	Okl.	40,854	2,012	20.3	35.3	77	2,515	134,868	9,053	60,592	65,223	134,087	124,116	90,531	9,836	115	2,620
Portland.....	Oreg.	53,130	2,650	20.0	27.4	98	2,611	277,829	16,278	48,539	213,012	278,287	253,623	127,434	17,349	5,315	4,910
Beaverton.....	Oreg.	22,351	1,118	20.0	7.1	36	1,486	97,032	2,402	18,115	76,515	93,819	87,125	48,287	4,653	1,841	4,061
Salem/Keizer.....	Oreg.	26,558	1,147	23.2	9.2	48	1,343	102,518	5,155	32,801	64,562	111,075	99,531	51,941	7,684	3,860	3,942
Philadelphia City.....	Pa.	191,141	10,914	17.5	78.5	255	9,805	978,947	105,013	483,533	390,401	949,215	852,459	471,007	63,849	33,107	4,319
Pittsburgh.....	Pa.	39,809	2,360	18.7	53.3	82	2,783	268,083	18,017	90,650	159,218	254,382	224,182	118,938	24,099	6,101	5,500
Aiken County.....	S.C.	22,854	1,170	19.8	35.8	38	1,313	64,873	4,301	35,199	25,373	62,466	58,247	31,530	2,129	2,090	2,581
Berkeley County.....	S.C.	26,511	1,383	19.5	33.1	38	1,347	68,010	6,018	38,069	21,923	68,885	62,331	33,694	3,728	2,828	2,439
Charleston County.....	S.C.	43,019	2,489	17.3	56.0	70	1,925	137,785	11,705	55,655	70,425	136,480	120,033	62,753	8,887	7,540	2,657
Greenville County.....	S.C.	51,150	2,947	17.4	27.3	92	2,856	144,194	10,497	70,717	62,960	157,110	140,843	77,079	11,424	4,843	2,783
Horry County.....	S.C.	23,310	1,397	18.7	31.1	38	1,269	74,731	6,061	28,252	40,418	89,918	86,454	19,920	35,666	3,544	2,887
Richland.....	S.C.	27,275	1,660	18.4	74.5	51	1,517	98,637	9,031	37,514	52,092	103,742	87,908	44,987	11,302	4,034	3,208
Chattanooga City.....	Tenn.	22,490	1,227	18.3	54.2	52	1,240	71,595	7,471	26,854	37,270	73,911	66,711	45,154	4,085	1,135	2,804
Hamilton County.....	Tenn.	21,872	1,128	19.4	4.5	37	1,198	53,784	2,704	23,281	27,799	52,417	50,787	35,445	859	971	2,484
Knox County.....	Tenn.	50,118	2,515	19.9	14.0	92	3,198	70,980	4,895	28,479	36,806	72,018	65,701	44,589	2,788	3,529	2,497
Memphis City.....	Tenn.	105,828	5,228	20.2	78.7	181	5,568	315,409	37,056	122,825	155,728	307,898	290,077	198,753	14,069	3,732	2,661
Nashville-Davidson County.....	Tenn.	68,063	4,182	18.4	39.8	119	3,170	226,847	15,207	72,941	138,699	229,512	211,975	139,529	12,183	5,354	3,299
Shelby County.....	Tenn.	34,771	1,892	20.8	18.4	38	2,044	78,459	4,518	33,245	38,698	86,786	47,549	7,524	2,171	2,191	
Aldine ISD.....	Texas	37,983	—	—	81.1	35	1,478	110,011	5,737	49,021	55,443	105,612	93,538	58,273	7,419	4,657	2,224
Aker ISD.....	Texas	28,833	—	—	54.3	24	1,093	100,518	843	22,478	77,497	98,692	78,929	44,995	12,865	6,898	2,847
Amarillo ISD.....	Texas	27,307	—	—	31.8	48	1,490	85,300	4,930	44,953	35,417	84,157	79,359	47,158	3,919	879	2,818
Arlington ISD.....	Texas	42,153	—	—	22.4	50	2,484	135,645	3,972	35,979	95,894	110,201	68,532	20,500	6,488	2,496	
Austin ISD.....	Texas	62,733	—	—	55.3	103	3,085	253,882	12,093	57,199	184,590	283,854	219,107	121,160	47,153	17,594	3,339
Beaumont ISD.....	Texas	20,841	—	—	63.6	32	1,096	75,788	8,313	28,445	41,008	62,440	71,055	40,122	11,181	224	3,460
Brownsville ISD.....	Texas	35,896	—	—	96.1	37	1,261	119,225	18,069	84,487	18,689	121,640	97,858	63,842	10,824	3,958	2,750
Clear Creek ISD.....	Texas	20,894	—	—	20.8	22	1,323	73,839	1,437	21,938	50,484	70,775	58,020	34,468	10,130	2,625	2,753
Conroe ISD.....	Texas	21,544	—	—	18.5	30	1,398	75,984	2,341	28,395	45,278	72,831	65,646	37,164	2,935	4,260	2,776
Corpus Christi ISD.....	Texas	41,419	—	—	74.3	81	1,943	134,715	10,839	72,255	51,821	146,124	116,437	68,212	24,342	3,345	2,830
Cypress-Fairbanks ISD.....	Texas	38,324	—	—	24.8	32	2,078	137,740	1,805	33,737	102,398	123,114	105,181	81,075	5,818	12,317	2,998
Dallas ISD.....	Texas	130,904	—	—	80.9	190	5,600	484,734	39,918	118,954	328,862	525,817	444,490	282,008	52,055	29,272	3,357
Ector County.....	Texas	28,268	—	—	46.5	35	1,204	85,561	5,042	37,182	43,337	79,730	75,709	44,382	3,103	918	2,623
El Paso ISD.....	Texas	63,189	—	—	77.8	74	3,378	188,948	23,311	117,824	47,113	198,877	170,209	101,133	21,587	4,851	2,537
Fort Bend ISD.....	Texas	31,104	—	—	52.1	32	1,818	105,848	2,120	38,355	87,373	108,053	78,079	41,894	19,838	10,138	2,701
Fort Worth ISD.....	Texas	68,033	—	—	64.4	118	3,370	218,898	19,328	92,855	104,713	214,643	197,713	114,745	11,227	5,703	2,688
Garland ISD.....	Texas	34,923	—	—	28.4	54	1,860	116,548	3,325	49,101	64,122	141,474	93,111	55,488	38,997	9,366	2,502
Houston ISD.....	Texas	190,290	—	—	84.5	242	7,975	849,233	52,524	223,347	373,382	587,582	552,153	310,357	27,929	7,500	2,609
Irving ISD.....	Texas	21,797	—	—	32.3	29	1,339	73,385	2,434	20,061	50,870	70,711	63,579	36,185	5,384	1,788	2,695
Killeen ISD.....	Texas	22,892	—	—	50.8	28	829	57,572	11,700	37,383	6,489	61,885	51,124	30,829	9,994	5,67	2,348
Klein ISD.....	Texas	24,485	—	—	22.9	23	1,731	69,207	1,042	34,791	53,374	77,860	70,082	41,358	898	6,902	2,720
Laredo ISD.....	Texas	23,042	—	—	97.8	28	1,177	69,588	10,850	471	7,287	71,536	65,813	40,853	3,662	2,061	2,786
Lubbock ISD.....	Texas	30,953	—	—	50.5	58	1,641	103,119	8,171	52,412	42,536	105,532	94,062	51,715	10,123	1,347	2,855
McAllen ISD.....	Texas	20,852	—	—	87.2	27	918	65,042	6,030	41,501	15,511	82,234	57,931	35,725	2,358	1,947	2,708
Mesquite ISD.....	Texas	23,724	—	—	18.9	33	1,158	66,218	1,714	35,880	28,622	77,020	54,834	29,513	13,308	6,880	2,249
North East ISD.....	Texas	39,558	—	—	35.9	40	2,727	120,009	4,178	41,085	74,748	113,798	108,242	82,385	3,554	2,000	2,627
Northside ISD.....	Texas	48,528	—	—	53.7	59	2,998	138,873	7,069	64,093	67,511	158,527	120,368	72,327	28,097	10,082	2,533
Pasadena ISD.....	Texas	35,420	—	—	44.8	43	1,722	118,942	4,365	53,869	58,708	107,172	101,059	58,987	4,718	1,395	2,582
Piano ISD.....	Texas	28,724	—	—	13.3	35	2,177	119,811	2,451	22,718	94,344	120,818	88,989	55,235	21,401	10,248	2,957
Richardson ISD.....	Texas	32,211	—	—	25.1	50	2,885	139,100	—	24,682	114,418	127,847	120,129	87,131	2,250	5,588	3,274
San Antonio ISD.....	Texas	81,507	—	—	83.1	104	2,584	219,825	27,033	129,582	63,210	228,891	204,992	122,457	19,481	4,218	3,048
Spring Branch ISD.....	Texas	25,522	—	—	46.3	34	1,599	105,782	3,298	21,434	61,030	100,850	91,480	48,128	3,948	3,111	2,214
Ysleta ISD.....	Texas	50,209	—	—	62.5	48	2,722	151,389	12,480	105,123	33,786	148,538	124,227	77,961	17,684	6,625	2,424
Alpine.....	Utah	37,571	1,513	24.8	3.4	45	1,823	85,782	4,505	58,385	22,872	81,048	75,097	48,827	2,017	3,932	2,122
Davis County.....	Utah	51,994	2,185	24.0	5.0	70	3,022	127,243	7,801	61,850	37,592	130,818	113,336	72,346	9,710	7,570	2,294
Granite.....	Utah	75,897	3,258	23.2	8.0	98	3,830	185,048	8,168	107,223	69,655	177,448	182,928	105,992	6,377	6,145	2,229
Jordan.....	Utah	62,702	2,694	23.3	5.1	68	3,140	150,468	7,512	94,737	48,219	158,406	135,182	86,447	16,850	4,394	2,214
Salt Lake City.....	Utah	24,537	1,178	20.9	22.4	48	1,135	83,096	6,882	28,214	50,002	78,568	74,070	44,583	1,575	923	3,022

ELEMENTARY AND SECONDARY: SCHOOL DISTRICTS 101

**Table 87.—Selected statistics for public school districts enrolling more than 20,000 pupils, by State: 1988-89—Continued**

Name of district, by State	State	1988 Enrollment	Class-room teachers <sup>1</sup> 1988	Pupils per teacher 1988	Percent minority, 1988	Number of schools, 1988	Number of 1987-88 graduates <sup>2</sup>	Revenue and expenditures <sup>3</sup> 1986-87 (in thousands of dollars)									Current expenditure per pupil 1986-87 <sup>4</sup> in thousands
								Revenue receipts				Total expenditures	Current expenditures			Interest on school debt	
								Total	Federal	State	Local		Total	Instruction	Capital outlay		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Weber County.....	Utah	25,067	1,063	23.1	4.8	39	1,508	62,617	3,959	36,267	20,571	70,202	60,639	35,135	1,403	2,060	2,750
Chesapeake City.....	Va.	27,875	1,526	16.1	—	35	1,778	94,973	5,099	49,426	40,448	88,611	85,086	65,947	2,175	1,550	3,355
Chesterfield County.....	Va.	41,489	2,414	17.2	—	48	2,749	142,272	3,215	68,884	70,173	157,196	124,440	91,248	26,008	6,748	3,375
Fairfax County.....	Va.	127,518	7,541	18.9	—	184	10,956	629,429	18,609	168,841	441,979	664,945	593,746	406,344	58,613	12,386	4,744
Hampton City.....	Va.	20,732	1,238	16.7	—	34	1,420	75,512	5,459	37,290	32,763	72,158	71,689	53,603	3	466	3,578
Henrico County.....	Va.	31,587	1,900	16.6	—	51	2,333	124,973	4,028	48,967	71,976	121,992	115,236	81,638	5,547	1,209	3,752
Newport News City.....	Va.	27,670	1,552	17.8	—	34	1,624	102,893	8,188	49,068	45,617	97,446	95,613	65,191	783	850	3,706
Norfolk City.....	Va.	36,690	2,332	15.7	—	56	1,235	165,275	16,605	66,136	82,532	161,318	146,604	104,149	12,739	1,773	4,126
Prince William County.....	Va.	40,127	2,337	17.2	—	52	2,724	154,896	4,397	67,759	82,740	153,519	142,558	100,768	7,150	3,811	3,696
Richmond City.....	Va.	27,426	1,840	14.9	—	60	1,216	154,435	12,266	46,962	95,207	147,840	139,926	84,995	7,615	89	4,954
Virginia Beach City.....	Va.	66,970	3,565	16.6	—	67	3,572	223,629	15,539	105,766	102,522	202,650	177,507	136,256	19,548	5,595	2,962
Lake Washington.....	Wash.	21,495	979	22.0	9.8	38	—	66,414	2,496	60,510	23,406	85,204	74,819	44,532	6,048	3,397	3,779
Seattle.....	Wash.	43,023	2,242	19.2	53.5	111	—	214,039	16,143	134,718	81,180	214,305	195,188	107,344	15,123	3,994	4,479
Spokane.....	Wash.	27,615	1,360	20.3	10.7	58	—	104,498	6,609	75,367	22,522	106,165	99,482	58,009	7,107	1,596	3,534
Tacoma.....	Wash.	29,511	1,573	16.6	30.5	66	—	145,718	9,956	96,468	39,292	146,553	127,991	72,988	14,675	3,867	4,419
Kanawha County.....	W.Va.	35,788	2,276	15.7	—	111	2,123	125,080	6,766	71,062	45,232	125,901	116,021	60,514	7,680	—	3,153
Madison Metropolitan Schools.....	Wis.	22,029	1,473	15.0	17.9	42	1,846	110,316	4,762	23,651	81,705	111,528	106,613	89,970	4,032	683	5,071
Milwaukee.....	Wis.	91,996	5,588	16.5	65.6	146	3,944	447,651	39,660	244,405	163,386	446,636	436,634	272,099	9,139	863	5,058
Racine.....	Wis.	21,653	1,394	15.5	32.6	37	1,327	94,061	4,753	48,345	40,963	96,718	94,266	60,555	1,510	922	4,654

<sup>1</sup> Data exclude teachers reported as working in school district offices rather than in schools.  
<sup>2</sup> Excludes data for nonreporting districts.  
<sup>3</sup> Expenditures by local school districts only. Excludes expenditures by State education agencies for local school districts.  
<sup>4</sup> Current expenditure per pupil based on fall enrollment collected by the Bureau of the Census.  
<sup>5</sup> Enrollment data reported directly from local education agency.

ISD—Independent school district.  
 —Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and U.S. Department of Commerce, "Survey of Local Government Finances." (This table was prepared May 1990.)

Table 48.—Enrollment of the 130 largest public school districts: Fall 1988

Name of school district	State	Rank order <sup>1</sup>	Enrollment, fall 1988	Name of school district	State	Rank order <sup>1</sup>	Enrollment, fall 1988
1	2	3	4	1	2	3	4
New York City Public Schools	N.Y.	1	938,153	Ysleta ISD	Texas	66	50,209
Los Angeles Unified	Calif.	2	592,881	Knox County	Tenn.	67	50,116
City of Chicago Schools	Ill.	3	394,587	Newark	N.J.	68	49,823
Dade County	Fla.	4	268,047	Northside ISD	Texas	69	48,528
Philadelphia City	Pa.	5	191,141	Wichita	Kansas	70	47,107
Houston ISD	Texas	6	190,290	San Juan Unified	Calif.	71	46,715
Detroit City	Mich.	7	174,081	Sacramento City Unified	Calif.	72	46,832
Hawaii Department of Education	Hawaii	8	187,488	Buffalo City Schools	N.Y.	73	46,228
Broward County	Fla.	9	142,202	St. Louis City	Mo.	74	46,128
Dallas ISD	Texas	10	130,904	Seminole County	Fla.	75	45,022
Fairfax County	Va.	11	127,518	Cumberland County	N.C.	76	44,116
Hillsborough County	Fla.	12	119,022	Volusia County	Fla.	77	43,922
San Diego City Unified	Calif.	13	117,168	Birmingham City	Ala.	78	43,203
Baltimore City	Md.	14	107,488	Seattle	Wash.	79	43,023
Memphis City	Tenn.	15	105,828	Charleston County	S.C.	80	43,019
Prince George's County	Md.	16	105,312	Arlington ISD	Texas	81	42,153
Duval County	Fla.	17	105,269	Escambia County	Fla.	82	42,114
Clark County	Nev.	18	105,151	Toledo City	Ohio	83	41,978
Montgomery County	Md.	19	98,533	Chesterfield County	Va.	84	41,489
Palm Beach County	Fla.	20	95,433	Corpus Christi ISD	Texas	85	41,419
Jefferson County	Ky.	21	92,315	Omaha Public Schools	Nebr.	86	41,243
Milwaukee	Wis.	22	91,998	Jefferson County	Ala.	87	41,224
Orange County	Fla.	23	91,752	Tulsa City	Okla.	88	40,854
Pinellas County	Fla.	24	90,555	Prince William County	Va.	89	40,127
Albuquerque	N.M.	25	85,057	Santa Ana Unified	Calif.	90	40,028
D.C. Public Schools	D.C.	26	84,792	Minneapolis Special	Minn.	91	40,024
Orleans Parish School Board	La.	27	84,098	Fulton County	Ga.	92	40,020
Baltimore County	Md.	28	82,088	Anchorage	Alaska	93	40,007
Granite	Utah	29	75,897	Pittsburgh	Pa.	94	39,809
Jefferson County	Colo.	30	75,318	North East ISD	Texas	95	39,558
Mecklenburg-Charlotte Schools	N.C.	31	75,064	Lee County	Fla.	96	39,264
De Kalb County	Ga.	32	72,738	Oklahoma City	Okla.	97	38,736
Cleveland City	Ohio	33	72,116	Forsyth Winston-Salem Schools	N.C.	98	38,395
Nashville-Davidson County	Tenn.	34	68,063	Aldine ISD	Texas	99	37,983
Forth Worth ISD	Texas	35	68,033	Alpine	Utah	100	37,571
Mobile County	Ala.	36	67,901	San Bernardino City Unified	Calif.	101	36,941
Virginia Beach City	Va.	37	66,970	Norfolk City	Va.	102	36,630
Long Beach Unified	Calif.	38	66,784	Cypress-Fairbanks ISD	Texas	103	36,324
Columbus City	Ohio	39	65,160	Garden Grove Unified	Calif.	104	36,164
Cobb County	Ga.	40	64,932	Montgomery County	Ala.	105	36,038
Fresno Unified	Calif.	41	64,448	Brownville ISD	Texas	106	35,898
Anne Arundel County	Md.	42	64,328	Kanawha County	W. Va.	107	35,788
Atlantic City	Ga.	43	63,448	Pasadena ISD	Texas	108	35,420
El Paso ISD	Texas	44	63,169	Washoe County School District	Nev.	109	35,221
Austin ISD	Texas	45	62,733	Kansas City	Mo.	110	35,148
Jordan	Utah	46	62,702	Garland ISD	Texas	111	34,923
Polk County	Fla.	47	62,538	Shelby County	Tenn.	112	34,771
San Francisco Unified	Calif.	48	62,528	Akron City	Ohio	113	33,923
San Antonio ISD	Texas	49	61,507	Saint Paul	Minn.	114	33,457
Mesa Unified	Ariz.	50	61,061	Calcasieu Parish School Board	La.	115	33,192
Wake County	N.C.	51	61,003	Jackson	Miss.	116	33,168
Boston	Mass.	52	59,184	Anoka	Minn.	117	32,870
Denver County	Colo.	53	58,664	Clayton County	Ga.	118	32,676
Gwinnett County	Ga.	54	58,269	Chatham County	Ga.	119	32,370
Jefferson Parish School Board	La.	55	57,827	Richardson ISD	Texas	120	32,211
East Baton Rouge Parish School	La.	56	57,810	Fort Wayne Community Schools	Ind.	121	32,138
Tucson Unified	Ariz.	57	56,520	Richmond County	Ga.	122	32,097
Portland	Oreg.	58	53,130	Mt. Diablo Unified	Calif.	123	31,923
Caddo Parish School Board	La.	59	52,930	Rochester City Schools	N.Y.	124	31,774
Davis County	Utah	60	51,994	Montebello Unified	Calif.	125	31,735
Cincinnati City	Ohio	61	51,608	Pasco County	Fla.	126	31,619
Brevard County	Fla.	62	51,583	Henrico County	Va.	127	31,587
Oakland Unified	Calif.	63	51,218	Stockton City Unified	Calif.	128	31,570
Greenville County	S.C.	64	51,150	Des Moines Independent Community	Iowa	129	31,488
Indianapolis Public Schools	Ind.	65	50,214	Fayette County	Ky.	130	31,268

<sup>1</sup> Public school districts ranked by size of enrollment in fall 1988.  
ISD = Independent School District.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared May 1990.)

**Table 89.—Public elementary and secondary schools, by type of school: 1967-68 to 1988-89**

Year	Total, all public schools	Regular schools											Other schools <sup>6</sup>
		Total <sup>1</sup>	Schools with elementary grades only				Schools with secondary grades only					Combined elementary/secondary schools	
			Total <sup>2</sup>	Middle schools <sup>3</sup>	One-teacher schools	Other elementary schools	Total <sup>4</sup>	Junior high <sup>5</sup>	3-year or 4-year schools	5-year or 6-year schools	Other high schools		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1967-68.....	—	94,197	67,186	—	4,146	63,040	23,318	7,437	10,751	4,650	480	3,693	—
1970-71.....	—	89,372	64,020	2,080	1,815	60,125	23,572	7,750	11,265	3,887	670	1,780	—
1972-73.....	—	86,864	62,942	2,308	1,475	59,159	23,919	7,878	11,550	3,962	529	2,003	—
1974-75.....	—	87,456	61,759	3,224	1,247	57,288	23,837	7,690	11,480	4,122	545	1,860	—
1975-76.....	86,597	87,034	61,704	3,916	1,166	56,622	23,792	7,521	11,572	4,113	586	1,538	1,563
1976-77.....	—	86,501	61,123	4,180	1,111	55,832	23,857	7,434	11,658	4,130	635	1,521	—
1978-79.....	—	84,816	60,312	5,879	1,056	53,377	22,834	6,282	11,410	4,429	713	1,670	—
1980-81.....	85,982	83,688	59,326	6,003	921	52,402	22,619	5,890	10,758	4,193	1,778	1,743	2,294
1982-83.....	84,740	82,039	58,051	6,675	798	50,378	22,383	5,948	11,678	4,067	690	1,605	2,701
1983-84.....	84,178	81,418	57,471	6,885	838	49,748	22,336	5,936	11,670	4,046	684	1,611	2,760
1984-85.....	84,007	81,147	57,231	6,893	825	49,513	22,320	5,916	11,671	4,021	712	1,596	2,860
1986-87.....	83,455	82,190	58,801	7,452	763	50,586	21,406	5,142	11,453	4,197	614	1,983	1,265
1987-88.....	83,248	82,248	59,311	7,641	729	50,841	20,758	4,900	11,279	4,048	531	2,179	1,000
1988-89.....	83,165	82,081	59,296	7,957	583	50,756	20,550	4,687	11,350	3,994	519	2,235	1,084

<sup>1</sup> Excludes special education, alternative, and other schools not classified by grade span.  
<sup>2</sup> Includes schools beginning with grade 8 or below and with no grade higher than 8.  
<sup>3</sup> Includes schools with grade spans beginning with 4, 5, or 6 and ending with grade 6, 7, or 8.  
<sup>4</sup> Includes schools with no grade lower than 7.  
<sup>5</sup> Includes schools with grades 7 and 8 or grades 7 through 9.

<sup>6</sup> Includes special education, alternative, and other schools not classified by grade span.  
 —Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; and Common Core of Data survey. (This table was prepared January 1990.)

**Table 90.—Public elementary and secondary schools, by type and size of school: 1988-89**

Enrollment size of school	Number of schools, by type					Enrollment, by type of school <sup>1</sup>				
	Total <sup>2</sup>	Elementary <sup>3</sup>	Secondary <sup>4</sup>	Combined elementary/secondary <sup>5</sup>	Other <sup>2</sup>	Total <sup>2</sup>	Elementary <sup>3</sup>	Secondary <sup>4</sup>	Combined elementary/secondary <sup>5</sup>	Other <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11
<b>Total.....</b>	<b>83,165</b>	<b>59,296</b>	<b>20,550</b>	<b>2,235</b>	<b>1,084</b>	<b>40,402,644</b>	<b>25,106,648</b>	<b>14,003,602</b>	<b>921,039</b>	<b>369,355</b>
<b>Percent<sup>6</sup>.....</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Under 100.....	8.82	6.72	10.45	25.15	56.64	0.91	0.76	0.87	2.84	7.18
100 to 199.....	11.19	10.97	11.06	14.77	17.71	3.41	3.86	2.38	5.14	7.49
200 to 299.....	12.55	13.89	9.27	9.98	8.30	6.39	8.09	3.38	5.95	5.99
300 to 399.....	14.68	17.38	8.32	8.32	4.06	10.39	14.02	4.27	7.11	4.10
400 to 499.....	13.77	16.14	6.26	8.41	2.21	12.50	16.70	5.46	9.08	2.86
500 to 599.....	11.39	13.00	7.72	6.10	1.48	12.62	16.41	6.22	10.63	2.35
600 to 699.....	7.98	8.61	6.79	6.00	0.74	10.43	12.82	6.45	9.40	1.42
700 to 799.....	5.56	5.54	6.01	4.21	1.01	8.40	9.52	6.59	7.62	2.27
800 to 999.....	6.03	4.98	9.10	7.20	1.57	10.61	10.12	11.91	15.52	4.10
1,000 to 1,499.....	5.34	2.54	13.35	5.05	2.21	12.91	6.70	23.91	17.19	7.78
1,500 to 1,999.....	1.66	0.20	5.85	1.39	1.11	5.77	0.77	14.73	5.78	5.54
2,000 to 2,999.....	0.90	0.03	3.42	0.36	0.65	4.26	0.16	11.75	2.04	4.44
3,000 or more.....	0.14	0.01	0.40	0.18	2.31	1.19	0.04	2.08	1.70	44.49
<b>Average enrollment<sup>6</sup>.....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>494</b>	<b>433</b>	<b>681</b>	<b>412</b>	<b>341</b>

<sup>1</sup> These enrollment data should be regarded as approximations only. Totals differ from those reported in other tables because this table represents data reported by schools rather than by States or school districts.

<sup>2</sup> Includes special education, alternative, and other schools not classified by grade span.

<sup>3</sup> Includes schools beginning with grade 8 or below and with no grade higher than 8.

<sup>4</sup> Includes schools with no grade lower than 7.

<sup>5</sup> Includes schools with both elementary and secondary grades.

<sup>6</sup> Data by size of school for those schools reporting enrollment.  
 —Data not applicable.

NOTE —Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared January 1990.)

Table 91.—Public elementary and secondary schools, by type and State: 1986-87 to 1988-89

State or other area	Total, all schools, <sup>1</sup> 1986-87	Total, all schools, <sup>1</sup> 1987-88	Number of schools, 1988-89							
			Total <sup>1</sup>	Schools with elementary grades only <sup>2</sup>	Schools with secondary grades only <sup>3</sup>	Combined elementary/secondary schools <sup>4</sup>				Unclassified schools <sup>5</sup>
						Total	Prekindergarten, kindergarten, or first grade to grade 12	Other schools ending with grade 12	Other combined schools	
1	2	3	4	5	6	7	8	9	10	11
<b>United States .....</b>	<b>63,455</b>	<b>63,248</b>	<b>63,165</b>	<b>59,296</b>	<b>20,550</b>	<b>2,235</b>	<b>1,309</b>	<b>446</b>	<b>480</b>	<b>1,084</b>
Alabama .....	1,300	1,298	1,292	836	282	174	143	6	25	0
Alaska .....	448	458	453	175	62	216	159	1	56	0
Arizona .....	1,026	985	1,023	750	247	15	8	4	3	11
Arkansas .....	1,120	1,112	1,094	666	419	9	5	0	4	0
California .....	7,298	7,123	7,312	5,181	1,797	125	65	43	17	209
Colorado .....	1,324	1,323	1,339	952	353	12	3	3	6	22
Connecticut .....	965	970	973	722	226	13	9	3	1	12
Delaware .....	164	167	168	108	46	14	10	2	2	0
District of Columbia .....	182	188	187	124	40	4	0	0	4	19
Florida .....	2,334	2,379	2,432	1,798	442	192	103	48	41	0
Georgia .....	1,739	1,724	1,728	1,262	351	115	36	33	46	0
Hawaii .....	229	229	231	166	53	10	8	1	1	2
Idaho .....	558	565	561	366	170	12	7	2	3	13
Illinois .....	4,281	4,263	4,225	3,066	964	19	13	5	1	176
Indiana .....	1,920	1,928	1,923	1,406	444	35	17	13	5	38
Iowa .....	1,651	1,633	1,622	1,066	522	20	1	13	6	14
Kansas .....	1,476	1,463	1,465	1,011	453	1	0	0	1	0
Kentucky .....	1,399	1,399	1,394	1,031	336	0	0	0	0	27
Louisiana .....	1,615	1,599	1,582	1,131	375	76	49	15	12	0
Maine .....	732	749	751	600	137	12	10	1	1	2
Maryland .....	1,205	1,206	1,217	961	228	22	12	5	5	6
Massachusetts .....	1,785	1,795	1,826	1,426	377	21	14	4	3	2
Michigan .....	3,630	3,620	3,284	2,383	776	57	36	13	8	68
Minnesota .....	1,570	1,570	1,559	1,023	517	19	9	4	6	0
Mississippi .....	915	955	957	614	229	103	74	18	11	11
Missouri .....	2,137	2,150	2,153	1,509	593	18	3	10	5	33
Montana .....	779	775	761	550	208	1	0	0	1	2
Nebraska .....	1,565	1,537	1,512	1,132	373	7	6	1	0	0
Nevada .....	299	305	315	233	74	6	1	5	0	2
New Hampshire .....	438	435	435	340	84	11	6	4	1	0
New Jersey .....	2,250	2,246	2,257	1,751	422	3	1	2	0	81
New Mexico .....	642	648	651	476	169	2	0	1	1	4
New York .....	3,901	3,971	3,983	2,758	980	157	99	29	29	88
North Carolina .....	1,983	1,952	1,949	1,429	455	41	19	8	14	24
North Dakota .....	695	691	681	425	245	11	8	3	0	0
Ohio .....	3,758	3,743	3,738	2,742	968	28	7	17	4	0
Oklahoma .....	1,865	1,889	1,832	1,188	633	1	0	1	0	10
Oregon .....	1,222	1,214	1,206	893	296	15	7	5	3	2
Pennsylvania .....	3,328	3,313	3,298	2,436	753	43	14	9	20	66
Rhode Island .....	298	298	302	235	59	3	2	0	1	5
South Carolina .....	1,106	1,103	1,103	828	283	14	8	4	2	0
South Dakota .....	768	790	792	487	289	0	0	0	0	16
Tennessee .....	1,638	1,578	1,565	1,139	351	53	36	3	14	22
Texas .....	5,908	5,787	5,856	4,100	1,381	375	231	79	65	0
Utah .....	719	725	730	477	219	7	3	1	3	27
Vermont .....	329	333	331	268	48	14	12	1	1	1
Virginia .....	1,759	1,761	1,765	1,328	374	26	9	10	7	37
Washington .....	1,744	1,852	1,870	1,297	503	70	39	15	16	0
West Virginia .....	1,116	1,084	1,065	732	285	27	6	1	20	21
Wisconsin .....	2,007	2,002	2,009	1,437	557	5	0	0	5	10
Wyoming .....	379	389	408	284	122	1	1	0	0	1
<b>Outlying areas</b>										
American Samoa .....	—	30	30	22	6	0	0	0	0	2
Guam .....	—	37	37	31	5	0	0	0	0	1
Northern Marianas .....	—	26	26	22	4	0	0	0	0	0
Puerto Rico .....	—	1,756	1,676	1,145	315	188	5	1	182	28
Virgin Islands .....	—	34	34	24	8	1	0	0	1	1

<sup>1</sup> Includes special education, alternative, and other schools not classified by grade span.

<sup>2</sup> Includes schools beginning with grade 6 or below and with no grade higher than 0.

<sup>3</sup> Includes schools with no grade lower than 7.

<sup>4</sup> Includes schools with both elementary and secondary grades.

<sup>5</sup> Schools not reported by grade span.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared January 1990.)

Table 92.—Public elementary schools by grade span, and average school size, by State: 1988-89

State or other area	Total	Schools, by grade span						Average number of students per school <sup>2</sup>
		Prekinder- garten, or 1st grade to grades 3 or 4	Prekinder- garten, kindergarten, or 1st grade to grade 5	Prekinder- garten, kindergarten, or 1st grade to grade 6	Prekinder- garten, kindergarten, or 1st grade to grade 8	Grades 4, 5, or 6 to 6, 7, or 8	Other and unclassified grade spans <sup>1</sup>	
1	2	3	4	5	6	7	8	9
<b>United States</b> .....	<b>59,296</b>	<b>5,043</b>	<b>13,842</b>	<b>20,774</b>	<b>5,394</b>	<b>7,957</b>	<b>6,286</b>	<b>433</b>
Alabama .....	838	78	190	220	127	147	76	484
Alaska .....	175	8	15	102	17	8	27	299
Arizona .....	750	49	72	342	147	72	68	538
Arkansas .....	666	78	59	391	4	80	54	380
California .....	5,181	231	1,025	2,871	524	500	230	559
Colorado .....	952	41	308	374	13	148	68	381
Connecticut .....	722	63	176	254	59	100	70	410
Delaware .....	108	41	5	14	1	22	25	547
District of Columbia .....	124	4	1	102	5	4	8	404
Florida .....	1,798	42	773	419	23	234	307	698
Georgia .....	1,262	81	346	293	49	215	276	570
Hawaii .....	166	1	9	139	11	5	1	590
Idaho .....	366	40	63	187	24	42	30	357
Illinois .....	3,066	314	475	799	760	393	325	379
Indiana .....	1,406	56	415	633	53	173	78	429
Iowa .....	1,066	145	267	357	33	180	84	279
Kansas .....	1,011	87	189	413	175	116	51	268
Kentucky .....	1,031	35	297	260	236	135	68	415
Louisiana .....	1,131	138	233	265	64	191	240	490
Maine .....	600	90	70	104	111	87	138	236
Maryland .....	961	24	451	258	14	141	73	485
Massachusetts .....	1,426	218	379	359	68	223	176	372
Michigan .....	2,383	210	726	812	58	367	210	415
Minnesota .....	1,023	113	133	564	13	87	113	433
Mississippi .....	814	83	48	187	45	87	164	521
Missouri .....	1,509	102	276	545	151	185	250	361
Montana .....	550	41	56	126	211	37	77	181
Nebraska .....	1,132	52	83	564	250	46	137	143
Nevada .....	233	7	89	101	18	22	18	482
New Hampshire .....	340	52	56	105	47	48	32	308
New Jersey .....	1,751	214	387	393	296	253	228	401
New Mexico .....	478	25	156	173	7	78	39	401
New York .....	2,758	238	823	1,200	63	367	267	557
North Carolina .....	1,429	128	391	375	155	256	124	475
North Dakota .....	425	13	10	280	51	10	81	185
Ohio .....	2,742	318	820	1,014	118	420	256	409
Oklahoma .....	1,188	104	206	329	311	159	79	316
Oregon .....	893	65	241	313	120	123	31	326
Pennsylvania .....	2,436	265	732	837	57	321	224	422
Rhode Island .....	235	34	27	112	5	25	32	352
South Carolina .....	826	97	252	147	29	174	127	519
South Dakota .....	487	31	56	185	122	45	48	164
Tennessee .....	1,139	111	211	340	249	135	93	461
Texas .....	4,100	417	1,384	791	147	814	547	528
Utah .....	477	10	102	314	8	38	7	557
Vermont .....	268	27	19	129	60	19	14	218
Virginia .....	1,328	120	429	314	8	197	262	490
Washington .....	1,297	75	274	523	59	145	221	423
West Virginia .....	732	74	94	430	49	60	25	263
Wisconsin .....	1,437	133	343	498	187	192	104	341
Wyoming .....	284	26	60	135	8	33	22	217
<b>Outlying areas</b>								
American Samoa .....	22	0	0	0	21	0	1	319
Guam .....	31	0	19	0	0	8	8	622
Northern Marianas .....	22	0	0	1	1	0	20	197
Puerto Rico .....	1,145	137	41	740	8	39	182	264
Virgin Islands .....	24	1	1	22	0	0	0	533

<sup>1</sup> Schools not reported by grade span.<sup>2</sup> Average for schools reporting enrollment data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared January 1990.)

NOTE.—Exclude schools not reported by level, such as special education schools for the handicapped.

Table 93.—Public secondary schools by grade span, and average school size, by State: 1988-89

State	Total	Schools, by grade span							Average number of students per school <sup>2</sup>
		Grades 7 to 9 and 7 to 9	Grades 7 to 12	Grades 8 to 12	Grades 9 to 12	Grades 10 to 12	Other spans ending with grade 12	Other and unclassified grade spans <sup>1</sup>	
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>20,550</b>	<b>4,687</b>	<b>3,513</b>	<b>481</b>	<b>10,015</b>	<b>1,335</b>	<b>112</b>	<b>407</b>	<b>681</b>
Alabama.....	282	30	79	11	141	11	2	8	728
Alaska.....	82	19	13	0	24	1	1	4	515
Arizona.....	247	87	5	1	140	11	0	3	875
Arkansas.....	419	73	227	2	41	61	0	15	414
California.....	1,797	504	80	51	987	131	12	32	918
Colorado.....	353	85	71	4	153	32	2	6	560
Connecticut.....	228	58	14	4	138	8	1	3	687
Delaware.....	46	14	3	3	23	3	0	0	773
District of Columbia.....	40	25	0	1	11	2	0	1	737
Florida.....	442	93	51	4	222	40	0	32	1,246
Georgia.....	351	51	25	78	181	10	0	6	955
Hawaii.....	53	22	8	0	23	0	0	0	1,168
Idaho.....	170	53	39	0	55	21	0	2	478
Illinois.....	964	273	22	6	633	11	6	13	633
Indiana.....	444	99	111	2	214	14	0	4	789
Iowa.....	522	97	157	3	235	28	0	2	334
Kansas.....	453	105	52	2	271	20	1	2	338
Kentucky.....	336	59	51	6	188	14	0	18	649
Louisiana.....	375	75	78	8	191	13	1	9	649
Maine.....	137	27	18	2	83	6	0	1	512
Maryland.....	228	50	9	4	150	7	1	7	972
Massachusetts.....	377	81	46	5	232	12	1	0	757
Michigan.....	776	171	126	24	403	41	0	11	711
Minnesota.....	517	84	282	6	89	41	1	4	547
Mississippi.....	229	48	48	12	79	30	1	11	641
Missouri.....	593	94	227	17	222	25	1	7	505
Montana.....	208	35	2	0	167	3	0	1	251
Nebraska.....	373	47	230	4	72	19	0	1	291
Nevada.....	74	20	22	1	26	5	0	0	854
New Hampshire.....	84	19	18	0	44	3	0	0	677
New Jersey.....	422	84	38	16	262	15	2	7	884
New Mexico.....	169	44	30	2	75	11	1	6	599
New York.....	980	235	217	18	423	57	0	30	943
North Carolina.....	455	124	32	6	223	57	1	12	842
North Dakota.....	245	19	185	8	18	11	2	2	195
Ohio.....	968	242	135	17	518	39	7	10	700
Oklahoma.....	633	135	57	1	320	95	6	19	319
Oregon.....	298	76	27	4	173	14	1	1	561
Pennsylvania.....	753	149	195	12	282	88	8	19	812
Rhode Island.....	59	19	8	3	23	6	0	0	862
South Carolina.....	263	52	25	13	144	17	1	11	803
South Dakota.....	289	110	0	0	165	9	4	1	164
Tennessee.....	351	91	39	5	177	34	1	4	804
Texas.....	1,381	261	173	22	804	39	32	50	746
Utah.....	219	70	25	3	65	45	4	7	732
Vermont.....	48	1	39	0	14	0	0	0	610
Virginia.....	374	87	17	64	173	22	0	11	936
Washington.....	503	128	69	18	226	46	4	12	588
West Virginia.....	285	97	36	1	85	59	6	1	519
Wisconsin.....	557	120	58	6	336	38	1	0	503
Wyoming.....	122	45	2	1	61	12	0	1	300
<b>Outlying areas</b>									
American Samoa.....	6	0	0	0	6	0	0	0	483
Guam.....	5	0	0	0	5	0	0	0	1,451
Northern Marianas.....	4	0	0	0	1	1	0	2	442
Puerto Rico.....	315	157	22	1	0	122	1	12	732
Virgin Islands.....	8	5	0	0	2	1	0	0	1,288

<sup>1</sup> Schools not reported by grade span.

<sup>2</sup> Average for schools reporting enrollment data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared January 1990.)

NOTE.—Excludes schools not reported by level, such as special education schools for the handicapped.

Table 94.—High school graduates compared with population 17 years of age: 1869–70 to 1989–90

[In thousands]

School year	Population 17 years old <sup>1</sup>	High school graduates					Graduates as a percent of 17-year-old population
		Total <sup>2</sup>	Sex		Control		
			Male	Female	Public <sup>3</sup>	Private <sup>4</sup>	
1	2	3	4	5	6	7	8
1869-70	815	16	7	9	—	—	2.0
1879-80	948	24	11	13	—	—	2.5
1889-90	1,259	44	19	25	22	22	3.5
1899-1900	1,489	95	38	57	62	33	6.4
1909-10	1,786	156	64	93	111	45	8.8
1919-20	1,855	311	124	188	231	80	16.8
1929-30	2,296	667	300	367	592	75	29.0
1939-40	2,403	1,221	579	643	1,143	78	50.8
1947-48	2,281	1,190	583	627	1,073	117	52.6
1949-50	2,034	1,200	571	629	1,063	136	59.0
1951-52	2,086	1,197	569	627	1,056	141	57.4
1953-54	2,135	1,276	613	664	1,129	147	59.8
1955-56	2,242	1,415	680	735	1,252	163	63.1
1956-57	2,272	1,434	690	744	1,270	164	63.1
1957-58	2,325	1,506	725	781	1,332	174	64.8
1958-59	2,458	1,627	784	843	1,435	192	66.2
1959-60	2,672	1,858	895	963	1,627	231	69.5
1960-61	2,892	1,964	955	1,009	1,725	239	67.9
1961-62	2,768	1,918	938	980	1,678	240	69.3
1962-63	2,740	1,943	956	987	1,710	233	70.9
1963-64	2,978	2,283	1,120	1,183	2,008	275	76.7
1964-65	3,684	2,658	1,311	1,347	2,360	298	72.1
1965-66	3,486	2,665	1,323	1,342	2,367	298	76.4
1966-67	3,500	2,672	1,328	1,344	2,374	298	76.3
1967-68	3,532	2,695	1,338	1,357	2,395	300	76.3
1968-69	3,659	2,822	1,399	1,423	2,522	300	77.1
1969-70	3,757	2,889	1,430	1,459	2,589	300	76.9
1970-71	3,872	2,937	1,454	1,483	2,637	300	75.9
1971-72	3,973	3,001	1,487	1,514	2,699	302	75.5
1972-73	4,049	3,036	1,500	1,536	2,730	306	75.0
1973-74	4,132	3,073	1,512	1,561	2,763	310	74.4
1974-75	4,256	3,133	1,542	1,591	2,823	310	73.6
1975-76	4,272	3,148	1,552	1,596	2,837	311	73.7
1976-77	4,272	3,155	1,548	1,607	2,840	315	73.9
1977-78	4,286	3,127	1,531	1,596	2,825	302	73.0
1978-79	4,327	3,117	1,523	1,594	2,817	300	72.0
1979-80	4,282	3,043	1,491	1,552	2,748	295	71.4
1980-81	4,207	3,020	1,483	1,537	2,725	295	71.8
1981-82	4,121	2,995	1,471	1,524	2,705	290	72.7
1982-83	3,939	2,888	1,437	1,451	2,598	290	73.3
1983-84	3,753	2,767	—	—	2,495	272	73.7
1984-85	3,658	2,677	—	—	2,414	263	73.2
1985-86 <sup>5</sup>	3,821	2,643	—	—	2,383	260	73.0
1986-87 <sup>5</sup>	3,697	2,694	—	—	2,429	265	72.9
1987-88 <sup>5</sup>	3,781	2,801	—	—	2,500	301	74.1
1988-89 <sup>5</sup>	3,761	2,767	—	—	2,496	291	74.1
1989-90 <sup>5</sup>	—	2,665	—	—	2,399	266	—

<sup>1</sup> Derived from *Current Population Reports*, Series P-25.<sup>2</sup> Includes graduates of public and private schools.<sup>3</sup> Data for 1929-30 and preceding years are from *Statistics of Public High Schools* and exclude graduates of high schools which failed to report to the Office of Education.<sup>4</sup> For most years, private school data have been estimated based on periodic private school surveys. For years through 1957-58, private includes data for subcollegiate departments of institutions of higher education and residential schools for exceptional children.<sup>5</sup> Data have been revised from previously published figures.<sup>6</sup> Estimated.

—Data not available

NOTE.—Includes graduates of regular day school programs. Excludes graduates of other programs, when separately reported, and recipients of high school equivalency certificates. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public High Schools*; Biennial Survey of Education in the United States; *Statistics of State School Systems*; *Statistics of Nonpublic Elementary and Secondary Schools*; Common Core of Data surveys; and U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25. (This table was prepared July 1990.)

Table 95.—Public high school graduates, by State: 1969-70 to 1989-90

State	1969-70	1974-75	1979-80	1980-81	1983-84	1984-85	1985-86	1986-87	1987-88	Estimated 1988-89	Estimated 1989-90	Percent change, 1985-86 to 1989-90
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>United States.....</b>	<b>2,588,639</b>	<b>2,822,638</b>	<b>2,747,678</b>	<b>2,725,285</b>	<b>2,495,053</b>	<b>2,414,201</b>	<b>2,382,616</b>	<b>2,433,803</b>	<b>2,500,374</b>	<b>2,495,965</b>	<b>2,398,689</b>	<b>0.7</b>
Alabama.....	45,286	46,633	45,190	44,894	42,021	40,002	39,620	42,463	43,799	<sup>2</sup> 43,437	41,354	4.4
Alaska.....	3,297	4,220	5,223	5,343	5,457	5,184	5,464	5,892	5,907	<sup>2</sup> 5,644	5,746	5.2
Arizona.....	22,040	25,685	28,633	28,416	28,332	27,877	27,533	29,549	29,777	<sup>2</sup> 31,688	32,140	16.7
Arkansas.....	26,068	26,836	29,052	29,577	27,049	26,342	26,227	27,101	27,776	<sup>2</sup> 28,162	27,287	4.0
California.....	260,908	273,411	249,217	242,172	232,199	225,448	229,026	237,414	249,817	<sup>2</sup> 266,422	<sup>3</sup> 267,907	17.0
Colorado.....	30,312	34,983	36,804	35,897	32,954	32,255	32,621	34,200	35,977	<sup>2</sup> 34,535	32,000	-1.9
Connecticut.....	34,755	<sup>4</sup> 42,792	37,883	38,369	33,679	32,126	33,571	31,141	32,383	32,000	31,800	-5.3
Delaware.....	6,985	8,235	7,582	7,349	6,410	5,893	5,791	5,895	5,963	<sup>2</sup> 6,104	5,841	-2.6
District of Col. <sup>5</sup> .....	4,980	5,367	4,959	4,848	4,073	3,940	3,875	3,842	3,882	<sup>2</sup> 3,565	3,700	-4.5
Florida.....	70,478	86,481	87,324	88,755	85,908	81,140	83,029	82,184	89,206	<sup>2</sup> 92,404	95,583	15.1
Georgia.....	56,859	59,803	61,621	62,963	60,718	58,654	59,082	60,018	61,765	<sup>2</sup> 61,937	53,412	-9.6
Hawaii.....	10,407	11,283	11,493	11,472	10,454	10,092	9,958	10,371	10,575	<sup>2</sup> 10,551	9,958	( <sup>6</sup> )
Idaho.....	12,296	12,631	13,187	12,679	11,732	12,148	12,059	12,243	12,425	<sup>2</sup> 13,370	14,000	16.1
Illinois.....	126,864	<sup>4</sup> 141,316	135,579	136,795	122,561	117,027	114,319	116,075	119,090	116,660	<sup>3</sup> 108,594	-5.0
Indiana.....	69,984	74,104	73,143	73,381	65,710	63,308	59,817	60,364	64,037	<sup>2</sup> 64,861	60,816	1.7
Iowa.....	44,063	43,005	43,445	42,635	37,248	36,087	34,279	34,580	35,218	<sup>2</sup> 35,461	36,180	5.5
Kansas.....	33,394	32,458	30,890	29,397	26,730	25,983	25,587	26,933	27,036	<sup>2</sup> 27,025	25,676	0.3
Kentucky.....	37,473	42,368	41,203	41,714	39,645	37,999	37,288	36,948	39,484	<sup>2</sup> 40,341	38,500	3.3
Louisiana.....	43,641	47,691	46,297	46,199	39,400	39,742	39,965	39,084	39,058	<sup>2</sup> 38,442	37,826	-5.4
Maine.....	14,003	14,830	15,445	15,554	13,935	13,924	13,006	13,692	13,808	<sup>2</sup> 14,837	14,165	8.9
Maryland.....	46,462	55,408	54,270	54,050	50,684	48,299	46,700	46,107	47,175	<sup>2</sup> 45,791	41,960	-10.1
Massachusetts.....	63,865	<sup>4</sup> 79,000	73,802	74,831	65,885	63,411	<sup>7</sup> 60,360	61,010	59,515	54,147	49,888	-17.7
Michigan.....	121,000	135,509	124,316	124,372	<sup>7</sup> 108,926	105,908	101,042	107,725	106,151	106,000	106,000	4.9
Minnesota.....	60,480	66,535	64,908	64,168	55,378	53,352	51,988	53,533	54,645	<sup>2</sup> 52,623	48,200	-7.3
Mississippi.....	29,853	27,243	27,586	28,083	26,324	25,315	25,134	26,201	27,896	<sup>2</sup> 28,835	27,849	10.8
Missouri.....	55,315	62,375	62,265	60,359	53,388	51,290	49,204	50,840	51,316	<sup>2</sup> 51,968	49,200	-0.0
Montana.....	11,520	12,293	12,135	11,634	10,224	10,016	9,761	10,073	10,311	<sup>2</sup> 10,351	8,998	-7.8
Nebraska.....	21,280	22,249	22,410	21,411	18,674	18,036	17,645	18,129	18,300	<sup>2</sup> 19,612	<sup>3</sup> 18,834	5.5
Nevada.....	5,449	7,232	8,473	9,069	8,726	8,572	8,784	<sup>7</sup> 9,506	9,404	9,407	9,736	10.8
New Hampshire.....	8,516	11,050	11,722	11,552	11,478	11,052	10,648	10,796	11,685	11,757	11,990	12.6
New Jersey.....	86,498	<sup>4</sup> 98,000	94,564	93,168	85,589	81,547	78,781	79,376	80,863	75,513	68,450	-13.1
New Mexico.....	16,060	18,438	18,424	17,915	15,914	15,622	15,468	15,701	15,868	15,140	14,816	-4.2
New York.....	190,000	210,780	204,064	198,465	174,762	166,752	182,165	183,765	185,379	154,600	143,900	-11.3
North Carolina.....	68,886	70,094	70,862	69,395	66,803	67,245	65,865	65,421	67,836	<sup>2</sup> 69,709	64,949	-1.4
North Dakota.....	11,150	10,690	9,928	9,924	8,569	8,146	7,610	7,821	8,432	<sup>2</sup> 8,072	7,701	1.2
Ohio.....	142,248	158,179	144,169	143,503	127,837	122,281	119,561	121,121	124,503	<sup>2</sup> 125,931	127,800	6.9
Oklahoma.....	36,293	37,809	39,305	38,875	35,254	34,626	34,452	35,514	36,145	<sup>2</sup> 36,773	36,200	5.1
Oregon.....	32,236	30,668	29,939	28,729	27,214	26,870	26,286	27,165	28,058	<sup>2</sup> 26,903	25,200	-4.1
Pennsylvania.....	151,014	163,124	146,458	144,645	132,412	127,226	122,871	121,219	124,376	118,200	109,950	-10.6
Rhode Island.....	10,146	11,042	10,864	10,719	9,820	9,362	8,908	8,771	8,855	<sup>2</sup> 8,558	7,933	-12.1
South Carolina.....	34,940	38,312	38,697	38,347	36,800	34,500	34,500	36,000	36,300	36,900	34,000	-1.4
South Dakota.....	11,757	11,725	10,889	10,385	8,638	8,206	7,870	8,074	8,415	<sup>2</sup> 8,100	7,690	-2.3
Tennessee.....	49,000	49,363	49,845	50,648	44,711	43,293	43,263	44,731	47,904	<sup>2</sup> 47,610	46,300	7.0
Texas.....	139,046	159,487	171,449	171,665	161,580	159,234	161,150	168,430	171,436	<sup>2</sup> 176,873	170,000	5.5
Utah.....	18,395	19,688	20,035	19,886	19,606	19,890	19,774	20,930	22,226	<sup>2</sup> 23,016	22,181	12.2
Vermont.....	6,095	6,455	6,733	6,424	6,002	5,789	5,794	5,968	6,173	6,000	6,100	5.3
Virginia.....	58,562	65,570	66,621	67,126	62,177	60,959	63,113	65,008	65,688	<sup>2</sup> 65,667	61,300	-2.9
Washington.....	50,425	50,990	50,402	50,046	44,919	45,431	45,805	49,873	51,754	<sup>2</sup> 49,425	46,026	0.5
West Virginia.....	26,139	24,631	23,369	23,580	22,613	22,262	21,870	22,401	22,406	<sup>2</sup> 22,686	22,146	1.3
Wisconsin.....	66,753	70,979	69,332	67,743	62,189	58,851	58,340	56,872	58,428	<sup>2</sup> 58,099	<sup>3</sup> 55,777	-4.4
Wyoming.....	5,363	5,648	6,072	6,161	5,764	5,687	5,587	5,933	6,148	<sup>3</sup> 6,053	<sup>3</sup> 5,751	3.0
<b>Outlying areas</b>												
American Samoa.....	<sup>8</sup> 367	448	—	—	—	—	608	647	633	—	—	—
Guam.....	972	1,117	—	—	—	1,099	840	898	898	—	—	—
<b>Northern</b>												
Marianas.....	—	—	—	—	265	—	—	289	285	—	—	—
Puerto Rico.....	24,917	27,071	—	—	33,166	31,519	31,597	30,137	31,832	—	—	—
Virgin Islands.....	<sup>8</sup> 432	641	—	—	998	1,008	1,044	1,170	1,026	—	—	—

<sup>1</sup> National total includes estimates for nonreporting States.  
<sup>2</sup> Actual 1988-89 count.  
<sup>3</sup> Data estimated by the National Center for Education Statistics (NCES).  
<sup>4</sup> Data estimated by reported State.  
<sup>5</sup> Beginning in 1983-84, graduates from adult programs are excluded.  
<sup>6</sup> Less than .05 percent.  
<sup>7</sup> Projected data from *State Projections to 1993* published by NCES.  
<sup>8</sup> Data are for 1970-71.  
 — Data not reported.

NOTE.—Data include graduates of regular day school programs, but exclude graduates of other programs and persons receiving high school equivalency certificates. They also exclude graduates of subcollegiate departments of institutions of higher education, Federal schools for American Indians and on Federal installations, and residential schools for exceptional children. Some data have been revised from previously published figures. All 1988-89 and 1989-90 data are State estimates unless otherwise indicated.  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data surveys and *State Projections to 1993*. (This table was prepared February 1990.)

**Table 96.—General Educational Development (GED) credentials issued and age of test takers: 1974 to 1989**

Year	Total, in thousands <sup>1</sup>	Percentage distribution of GED test takers, by age				
		19 years old or less	20- to 24-year-olds	25- to 29-year-olds	30- to 34-year-olds	35 years old or over
1	2	3	4	5	6	7
1974.....	294	35	27	19	9	17
1975.....	340	33	28	14	9	18
1976.....	333	31	28	14	10	17
1977.....	332	40	24	13	8	14
1978.....	381	31	27	13	10	18
1979.....	426	37	28	12	13	11
1980.....	479	37	27	13	8	15
1981.....	489	37	27	13	8	14
1982.....	486	37	28	13	8	15
1983.....	465	34	29	14	8	15
1984.....	427	32	28	15	9	18
1985.....	413	32	26	15	10	18
1986.....	428	32	26	15	10	17
1987.....	444	33	24	15	10	18
1988.....	410	35	22	14	10	18
1989.....	357	36	22	14	10	17

<sup>1</sup> Number of persons receiving high school equivalency certificates based on the GED test.

SOURCE: American Council on Education, General Educational Development Testing Service, GED Statistical Report, various years. (This Table was prepared May 1990.)

NOTE.—Because of rounding, details may not add to totals.

**Table 97.—Percentage of high school dropouts among persons 16 to 24 years old, <sup>1</sup> by sex and race/ethnicity: October 1967 to October 1989**

Year	Total				Men				Women			
	All races	White <sup>2</sup>	Black <sup>2</sup>	Hispanic origin <sup>3</sup>	All races	White <sup>2</sup>	Black <sup>2</sup>	Hispanic origin <sup>3</sup>	All races	White <sup>2</sup>	Black <sup>2</sup>	Hispanic origin <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
1967.....	17.0	15.4	28.8	—	16.5	14.7	30.8	—	17.3	16.1	26.9	—
1968.....	16.2	14.7	27.4	—	15.8	14.4	27.1	—	16.5	15.0	27.6	—
1969.....	15.2	13.8	26.7	—	14.3	12.8	26.9	—	16.0	14.8	26.7	—
1970.....	15.0	13.2	27.9	—	14.2	12.2	29.4	—	15.7	14.1	26.8	—
1971.....	14.7	13.4	23.7	—	14.2	12.8	25.5	—	15.2	14.2	22.1	—
1972.....	14.8	13.7	21.5	34.3	14.1	13.1	22.3	33.6	17.1	14.2	20.8	35.0
1973.....	14.1	12.9	22.3	33.7	13.7	12.5	21.6	30.7	14.5	13.3	22.9	36.4
1974.....	14.3	13.2	21.3	33.0	14.2	13.4	20.1	33.8	14.4	13.1	22.3	32.3
1975.....	13.9	12.8	22.8	29.2	13.3	12.0	22.8	26.8	14.5	13.2	22.8	31.5
1976.....	14.1	13.3	20.4	31.3	14.1	13.2	21.2	30.2	14.2	13.3	19.7	32.3
1977.....	14.1	13.4	19.7	32.9	14.5	13.9	19.5	31.5	13.8	12.8	20.0	34.2
1978.....	14.2	13.4	20.2	33.1	14.6	13.6	22.5	33.2	13.9	13.2	18.2	33.0
1979.....	14.8	13.8	21.2	33.8	15.0	14.0	22.5	33.0	14.2	13.1	20.0	34.5
1980.....	14.1	13.3	19.3	35.2	15.1	14.2	21.1	37.2	13.1	12.3	17.9	33.2
1981.....	13.9	13.8	18.5	33.1	15.1	14.5	20.0	35.9	12.8	13.2	17.2	30.4
1982.....	13.9	13.1	18.4	31.7	14.5	13.8	21.1	30.8	13.3	12.7	16.0	32.7
1983.....	13.7	12.9	18.1	31.5	14.9	14.1	19.8	34.3	12.5	11.7	16.5	29.1
1984.....	13.1	12.7	15.8	29.8	14.0	13.5	16.7	30.8	12.3	11.8	14.5	29.1
1985.....	12.6	12.2	15.7	27.8	13.4	13.0	16.1	29.8	11.8	11.3	15.3	25.2
1986.....	12.1	11.9	13.7	30.0	12.9	12.8	14.4	32.7	11.3	11.1	13.0	27.2
1987.....	12.7	12.5	14.5	28.8	13.3	13.0	15.7	29.0	12.2	12.0	13.5	28.1
1988.....	12.9	12.7	14.9	35.8	13.5	13.5	15.4	38.0	12.2	11.9	14.4	35.5
1989.....	12.8	12.4	13.8	33.0	13.8	13.4	14.9	34.4	11.7	11.4	12.9	31.8

<sup>1</sup> "Status" dropouts.

<sup>2</sup> Includes persons of Hispanic origin.

<sup>3</sup> Persons of Hispanic origin may be of any race.

— Data not available.

NOTE.—Dropouts are persons who are not enrolled in school and who are not high

school graduates. People who have received GED credentials are counted as graduates. Data are based upon sample surveys of the civilian noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations; and U.S. Department of Education, National Center for Education Statistics, "Dropout Rates in the United States." (This table was prepared May 1990.)

**Table 98.—Percentage of high school dropouts among persons 14 to 34 years old, by age, race/ethnicity, and sex:  
October 1970 to October 1989**

Year, race/ethnicity, and sex	Total, 14 to 34 years	14 and 15 years	16 and 17 years	18 and 19 years	20 and 21 years	22 to 24 years	25 to 29 years	30 to 34 years
1	2	3	4	5	6	7	8	9
<b>October 1970</b>								
All races.....	17.0	1.8	6.0	16.2	16.6	16.7	22.5	26.5
Male.....	16.2	1.7	7.1	16.0	16.1	17.9	21.4	26.2
Female.....	17.7	1.9	6.9	16.3	16.9	19.4	23.6	26.8
White <sup>1</sup> .....	15.2	1.7	7.3	14.1	14.6	16.3	19.9	24.6
Male.....	14.4	1.7	6.3	13.3	14.1	15.3	19.0	24.2
Female.....	16.0	1.6	8.4	14.6	15.1	17.2	20.7	24.9
Black <sup>1</sup> .....	30.0	2.4	12.6	31.2	29.6	37.6	44.4	43.5
Male.....	30.4	2.0	13.3	36.4	29.6	39.5	43.1	45.9
Female.....	29.5	2.8	12.4	26.6	29.6	36.4	45.6	41.5
<b>October 1980</b>								
All races.....	13.0	1.7	6.6	15.7	15.9	15.2	13.9	14.6
Male.....	13.2	1.3	6.9	16.9	17.6	16.4	13.8	14.0
Female.....	12.6	2.2	6.6	14.7	14.3	14.0	14.0	15.2
White <sup>1</sup> .....	12.1	1.7	9.2	14.9	14.5	13.9	12.7	13.4
Male.....	12.4	1.2	9.3	16.1	15.6	15.4	12.7	13.1
Female.....	11.6	2.1	9.2	13.6	13.4	12.6	12.7	13.6
Black <sup>1</sup> .....	18.8	2.0	6.9	21.2	24.6	24.0	22.6	23.5
Male.....	19.0	1.5	7.2	22.7	31.3	24.9	22.1	21.9
Female.....	18.7	2.5	6.6	19.6	19.6	23.3	22.9	24.6
Hispanic origin <sup>2</sup> .....	35.2	5.7	16.5	39.0	41.6	40.6	40.9	45.4
Male.....	35.6	3.3	16.1	43.1	41.4	42.9	40.1	43.9
Female.....	34.9	7.9	15.0	34.6	41.9	38.6	41.7	47.0
<b>October 1987</b>								
All races.....	12.1	1.5	6.7	13.3	14.3	15.2	14.0	12.6
Male.....	12.6	1.3	6.1	13.9	14.9	16.7	15.0	13.6
Female.....	11.5	1.6	7.3	12.7	13.6	13.9	13.1	12.0
White <sup>1</sup> .....	11.7	1.5	6.6	13.0	13.9	15.0	13.7	11.5
Male.....	12.4	1.2	5.8	13.6	14.6	16.2	15.0	12.5
Female.....	11.0	1.7	7.4	12.3	13.3	13.6	12.5	10.6
Black <sup>1</sup> .....	15.2	1.7	6.6	15.9	17.1	17.6	16.3	21.0
Male.....	15.9	1.9	6.7	16.0	17.7	21.4	16.1	23.0
Female.....	14.5	1.5	7.0	15.7	16.6	14.4	16.5	19.3
Hispanic origin <sup>2</sup> .....	30.9	2.4	11.6	27.9	32.0	36.0	36.3	40.2
Male.....	31.5	2.0	7.6	31.5	31.3	36.0	39.7	38.6
Female.....	30.1	2.8	16.6	24.3	32.5	33.6	32.8	41.9
<b>October 1988</b>								
All races.....	12.2	1.1	6.7	14.6	14.6	14.6	13.9	12.6
Male.....	12.9	1.1	6.3	15.6	16.3	15.2	14.7	13.6
Female.....	11.5	1.0	7.1	13.5	13.0	14.0	13.2	11.6
White <sup>1</sup> .....	12.0	1.1	7.1	14.3	14.2	14.1	13.7	12.4
Male.....	12.6	1.1	6.6	15.5	16.1	14.6	14.8	13.4
Female.....	11.1	1.1	7.4	13.1	12.4	13.3	12.6	11.4
Black <sup>1</sup> .....	13.9	1.1	6.0	17.9	16.2	17.2	16.3	14.9
Male.....	14.1	1.0	5.1	18.0	21.7	17.7	15.2	16.6
Female.....	13.7	1.4	6.6	17.7	15.2	16.6	17.2	13.4
Hispanic origin <sup>2</sup> .....	34.9	1.1	19.7	31.2	43.2	42.6	40.6	39.5
Male.....	35.6	1.9	16.1	35.2	43.5	41.1	42.6	41.0
Female.....	33.9	0.3	21.4	27.3	42.7	44.2	39.0	38.0
<b>October 1989</b>								
All races.....	12.5	1.5	6.0	14.3	15.6	13.6	13.2	13.1
Male.....	13.1	1.1	5.9	14.6	16.1	15.1	13.9	13.6
Female.....	11.6	2.1	5.6	13.5	14.1	12.4	12.6	12.7
White <sup>1</sup> .....	12.0	1.7	6.1	13.6	15.6	13.4	12.6	12.3
Male.....	12.9	0.9	6.4	14.4	17.1	14.9	13.8	13.0
Female.....	11.1	2.4	5.7	12.6	14.2	12.0	11.5	11.6
Black <sup>1</sup> .....	15.3	0.4	5.6	16.0	16.6	14.9	17.3	16.5
Male.....	15.2	0.0	4.1	17.5	23.3	16.1	14.6	19.3
Female.....	15.4	0.9	7.1	16.5	11.1	14.0	19.3	16.3
Hispanic origin <sup>2</sup> .....	35.4	7.2	12.5	27.9	41.2	41.1	40.1	40.2
Male.....	36.7	1.3	9.6	25.9	45.6	44.6	41.9	41.0
Female.....	34.1	9.7	15.7	30.0	35.9	37.3	38.3	39.4

<sup>1</sup> Includes persons of Hispanic origin.

<sup>2</sup> Persons of Hispanic origin may be of any race.

NOTE.—Dropouts are persons who are not enrolled in school and who are not high school graduates. People who have received GED credentials are counted as graduates. Data are based upon sample surveys of the civilian noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, Nos. 222 and 429; and unpublished data. (This table was prepared May 1990.)

**Table 99.—Students with handicaps exiting the educational system, by age, handicapping condition, and basis of exit: United States and outlying areas, 1987-88**

Student Characteristics	Total exiting the system		Graduated with diploma		Graduated through certificate		Reached maximum age <sup>1</sup>		Dropped out <sup>2</sup>		Other reasons for exit <sup>3</sup>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Age group</b>												
14 to 21 + <sup>4</sup> .....	238,570	100.0	100,195	42.0	26,832	11.2	5,962	2.5	85,395	27.4	40,186	16.8
14.....	7,720	100.0	90	1.2	481	6.2	14	0.2	1,074	13.9	8,081	78.5
15.....	10,686	100.0	130	1.2	389	3.5	8	0.1	3,687	34.3	6,512	60.9
16.....	25,456	100.0	596	2.3	465	1.8	32	0.1	16,334	64.2	8,029	31.5
17.....	42,368	100.0	17,794	42.0	1,909	4.5	4	0.1	15,218	35.9	7,403	17.5
18.....	71,550	100.0	42,898	59.7	7,560	10.8	5	0.7	14,898	20.8	5,889	8.2
19.....	39,834	100.0	24,591	61.7	5,168	13.0	56	0.1	8,964	17.5	3,055	7.7
20.....	12,933	100.0	8,444	64.9	2,299	17.8	335	2.6	2,545	19.7	1,310	10.1
21.....	12,455	100.0	2,868	23.2	2,431	19.5	4,308	34.6	1,128	9.1	1,700	13.8
21 +.....	1,991	100.0	400	20.1	593	29.8	660	33.1	111	5.6	227	11.4
<b>Handicapping condition</b>												
All conditions, 14 to 21 +.....	236,481	100.0	98,442	41.8	26,829	11.3	5,971	2.5	85,274	27.6	39,965	16.9
Learning disabled.....	121,581	100.0	58,053	47.7	10,373	8.5	844	0.7	32,505	26.7	19,806	16.3
Speech impaired.....	10,605	100.0	3,719	35.1	854	8.1	140	1.3	1,881	17.7	4,011	37.8
Mentally retarded.....	53,141	100.0	18,335	34.5	11,419	21.5	3,241	6.1	14,241	26.8	5,905	11.1
Emotionally disturbed.....	34,091	100.0	10,552	31.0	1,702	5.0	498	1.5	13,683	40.1	7,656	22.5
Hard of hearing/deaf.....	4,489	100.0	2,541	56.8	506	11.3	256	5.7	664	14.8	522	11.8
Orthopedically impaired.....	3,384	100.0	1,845	54.6	418	12.4	121	3.6	556	16.4	644	19.0
Other health impaired.....	3,309	100.0	1,179	35.6	545	16.5	189	5.1	725	21.9	691	20.9
Visually handicapped.....	1,854	100.0	925	50.0	160	9.7	37	2.2	300	16.1	232	14.0
Multihandicapped.....	3,921	100.0	1,374	35.0	794	20.2	640	16.3	340	16.3	473	12.1
Deaf-blind.....	306	100.0	119	38.9	58	19.0	25	8.2	79	25.8	25	8.2

<sup>1</sup> Upper age limits for service eligibility vary by State.  
<sup>2</sup> These figures reflect an estimate of those who were actually known to have dropped out and do not include youth who simply stopped coming to school or whose status was unknown.  
<sup>3</sup> Includes students who died or no longer received special education services; however, exit reason is unknown.  
<sup>4</sup> Includes data for students not reported by specific age.

NOTE.—It can be assumed that a substantial proportion of the "Other" category includes students who are no longer in school and have neither graduated nor reached the maximum age. Therefore, the overall dropout figure probably exceeds 25 percent.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, *The Twelfth Annual Report to Congress on the Implementation of the Education of the Handicapped Act, 1989*. (This table was prepared May 1990.)

**Table 100.—Employment status, wages earned, and living arrangements of special education students out of high school more than 1 year: 1987<sup>1</sup>**

Type of handicap	Percent of youth working for pay		Average hourly wage earned	Percent earning		Percent living	
	Full-time	Part-time		Less than \$3.00	More than \$5.00	Independently <sup>2</sup>	With parents
1	2	3	4	5	6	7	8
All conditions.....	29.2	17.2	\$4.35	11.9	21.0	17.3	68.9
Learning disabled.....	37.9	19.3	4.83	7.8	25.0	22.0	66.8
Speech impaired.....	28.8	21.2	4.09	13.9	26.5	13.2	73.0
Mentally retarded.....	19.8	11.6	3.68	24.7	11.5	9.2	75.7
Emotionally disturbed.....	18.5	21.5	3.94	18.3	12.4	15.1	65.9
Hard of hearing.....	22.9	22.6	4.08	8.5	26.2	16.6	77.8
Deaf.....	23.6	14.7	4.08	3.4	6.8	20.2	71.6
Orthopedically impaired.....	1.3	12.8	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	11.8	76.8
Other health impaired.....	13.9	14.9	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	15.8	70.8
Visually handicapped.....	10.0	14.3	3.12	29.3	10.8	26.0	64.4
Multihandicapped.....	1.3	4.4	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	3.1	50.2
Deaf-blind.....	0.0	9.5	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Data based on students who completed, reached maximum age for services, or dropped out of high school during the 1985-86 school year.  
<sup>2</sup> Living independently includes living alone, with a spouse or roommate, in military housing, or in a college dormitory.  
<sup>3</sup> Too few cases to report.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, *The Eleventh Annual Report to Congress on the Implementation of The Education of the Handicapped Act, 1988*. (This table was prepared December 1988.)

**Table 101.—Student proficiency in reading, by age and selected characteristics of students: 1970-71 to 1987-88**

Selected characteristics of students	9-year-olds				13-year-olds				17-year-olds <sup>1</sup>			
	1970-71	1979-80	1983-84	1987-88	1970-71	1979-80	1983-84	1987-88	1970-71	1979-80	1983-84	1987-88
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	207.3	214.8	211.0	211.8	255.2	258.5	257.1	257.5	285.4	285.8	288.8	290.1
<b>Sex</b>												
Male.....	200.9	209.7	207.7	207.5	249.5	254.3	252.7	251.8	279.0	282.1	283.8	286.0
Female.....	213.7	220.0	214.2	216.3	260.9	262.7	261.7	263.0	291.5	289.5	293.9	293.8
<b>Race/ethnicity</b>												
White.....	213.8	221.3	218.3	217.7	260.9	264.4	262.6	261.3	291.4	293.1	295.6	294.7
Black.....	170.0	189.2	185.7	188.5	222.4	232.4	236.0	242.9	238.6	242.5	264.2	274.4
Hispanic.....	( <sup>2</sup> )	189.5	187.2	193.7	( <sup>2</sup> )	236.8	239.6	240.1	( <sup>2</sup> )	260.7	268.1	270.8
<b>Television watched per day</b>												
0 to 2 hours.....	—	219.9	219.3	217.0	—	263.3	268.1	264.3	—	291.0	297.4	295.6
3 to 5 hours.....	—	222.3	218.3	218.2	—	257.1	261.6	258.7	—	277.1	284.5	285.4
6 hours or more.....	—	211.0	198.9	198.1	—	243.2	244.2	245.5	—	257.7	267.8	268.6
<b>Parental education</b>												
Not high school graduate.....	188.4	193.9	195.1	192.5	238.5	238.5	240.1	246.5	261.6	261.9	269.3	267.4
Graduated high school.....	207.7	212.7	208.9	210.8	255.5	253.6	253.2	252.7	283.3	277.4	281.1	282.0
Post high school.....	223.7	225.9	222.9	220.0	270.2	270.9	267.7	265.3	302.3	299.3	301.2	299.5
<b>Reading material in the home<sup>3</sup></b>												
0 to 2 items.....	186.2	197.7	198.4	198.5	226.6	235.8	238.4	242.9	246.2	257.6	264.1	268.8
3 items.....	207.9	216.6	216.6	214.8	248.9	253.1	254.3	255.6	273.9	278.5	283.0	287.1
4 items.....	222.8	227.9	227.1	223.0	266.5	268.5	266.1	264.2	295.6	295.6	296.3	295.8
<b>Region</b>												
Northeast.....	213.0	220.9	215.9	215.2	261.2	260.1	260.4	258.6	292.2	285.4	292.0	294.8
Southeast.....	194.3	210.2	204.3	207.2	245.0	252.7	256.4	257.8	270.8	281.0	284.8	285.5
Central.....	214.4	216.5	215.6	210.2	260.0	264.6	258.7	255.9	290.8	288.6	290.1	291.2
West.....	204.8	212.4	208.1	207.9	253.5	256.3	253.9	257.9	283.7	286.6	289.1	289.0

<sup>1</sup> All participants of this age were in school.

<sup>2</sup> Hispanics included by race.

<sup>3</sup> The 4 items for the scale were: (1) newspaper subscription; (2) magazine subscription; (3) more than 25 books in home; and (4) encyclopedia at home.

— Data not available.

NOTE.—The NAEP scores have been evaluated at certain performance levels. A score of 300 (adept) implies an ability to find, understand, summarize, and explain relatively complicated literary and informational material. A score of 250 (intermediate) im-

plies an ability to search for specific information, interrelate ideas, and make generalizations about literature, science, and social studies materials. A score of 200 (basic) implies an ability to understand, combine ideas, and make inferences based on short uncomplicated passages about specific or sequentially related information. A score of 150 implies an ability to follow written directions and select phrases to describe pictures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Reading Report Card, 1971-88*, by Educational Testing Service. (This table was prepared March 1990.)

**Table 102.—Student proficiency in reading, by percentile and age: 1970-71 to 1987-88**

Percentile	9-year-olds				13-year-olds				17-year-olds <sup>1</sup>			
	1970-71	1979-80	1983-84	1987-88	1970-71	1979-80	1983-84	1987-88	1970-71	1979-80	1983-84	1987-88
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Average</b> .....	207.3	214.8	211.0	211.8	255.2	258.5	257.1	257.5	285.4	285.8	288.8	290.1
<b>Standard deviation</b> .....	42.0	38.0	41.1	41.2	35.7	34.8	35.5	34.7	45.7	41.9	40.3	37.1
<b>Percentiles</b>												
5th.....	135.7	149.2	141.3	142.0	193.9	200.2	197.3	199.7	207.7	213.7	220.8	226.2
10th.....	152.1	165.4	157.2	158.8	208.5	213.3	210.6	213.0	228.4	231.1	238.6	241.5
25th.....	180.0	191.1	183.9	184.3	232.6	235.6	234.0	234.3	256.5	259.2	262.7	265.8
50th.....	209.2	217.2	212.7	213.7	257.1	259.7	258.3	257.9	288.1	288.0	290.4	291.1
75th.....	216.8	241.3	239.7	240.1	280.0	282.9	281.6	281.4	316.9	315.1	316.8	316.0
90th.....	260.3	261.6	262.9	263.0	299.6	302.4	301.7	301.6	341.9	337.8	339.6	338.9
95th.....	273.9	273.1	276.5	277.5	310.9	314.0	313.7	313.7	356.6	351.1	352.6	348.7

<sup>1</sup> All participants of this age were in school.

NOTE.—The NAEP scores have been evaluated at certain performance levels. A score of 300 (adept) implies an ability to find, understand, summarize, and explain relatively complicated literary and informational material. A score of 250 (intermediate) implies an ability to search for specific information, interrelate ideas, and make generalizations about literature, science, and social studies materials. A score of 200 (basic) implies an ability to understand, combine ideas, and make inferences based on short un-

complicated passages about specific or sequentially related information. A score of 150 implies an ability to follow written directions and select phrases to describe pictures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Reading Report Card, 1971-88*, by Educational Testing Service. (This table was prepared March 1990.)

**Table 103.—Student proficiency in reading, by age, amount of time spent on homework and reading habits: 1979-80, 1983-84, and 1987-88**

Age and year	Amount of time spend on homework						Reading of books, newspapers, and magazines <sup>1</sup>			
	Total	None	Did not do assigned homework	Less than 1 hour	1 to 2 hours	More than 2 hours	Total	Yearly or monthly	Weekly	Daily
1	2	3	4	5	6	7	8	9	10	11
Percent										
<b>9-year-olds</b>										
1983-84	100.0	35.6	4.1	41.5	12.7	6.1	100.0	58.7	30.5	10.7
1987-88	100.0	28.8	4.5	47.0	12.7	7.0	100.0	63.8	26.8	9.4
<b>13-year-olds</b>										
1979-80	100.0	31.6	6.0	31.3	23.9	7.2	—	—	—	—
1983-84	100.0	22.6	3.7	35.9	29.2	8.6	100.0	30.1	48.9	21.0
1987-88	100.0	17.1	4.4	37.4	30.4	10.7	100.0	32.9	47.7	19.4
<b>17-year-olds <sup>2</sup></b>										
1979-80	100.0	31.0	12.6	23.9	22.8	9.7	—	—	—	—
1983-84	100.0	22.4	11.4	26.2	26.8	13.2	100.0	20.2	53.3	26.5
1987-88	100.0	20.8	13.4	27.8	26.0	12.0	100.0	24.4	54.3	21.3
Proficiency score										
<b>9-year-olds</b>										
1983-84	211.0	211.0	197.9	215.6	215.2	199.9	211.0	206.7	219.5	211.2
1987-88	211.8	212.4	195.0	215.3	213.4	199.8	211.8	209.7	219.8	212.9
<b>13-year-old</b>										
1979-80	258.5	253.5	251.3	259.8	264.4	261.9	—	—	—	—
1983-84	257.1	253.0	246.3	260.0	285.6	264.1	257.1	244.2	260.7	268.8
1987-88	257.5	251.0	248.1	258.9	262.3	263.9	257.5	249.7	264.0	267.5
<b>17-year-olds <sup>2</sup></b>										
1979-80	285.8	276.2	285.8	288.4	292.5	298.2	—	—	—	—
1983-84	288.8	273.8	285.2	288.6	295.4	303.4	288.8	269.6	287.6	298.6
1987-88	290.1	277.2	287.5	289.4	296.8	304.0	290.1	273.2	291.8	301.8

<sup>1</sup> Reading in or out of school.  
<sup>2</sup> Excludes persons not enrolled in school.

NOTE.—The NAEP scores have been evaluated at certain performance levels. A score of 300 (adept) implies an ability to find, understand, summarize, and explain relatively complicated literary and informational material. A score of 250 (intermediate) implies an ability to search for specific information, interrelate ideas, and make generalizations about literature, science, and social studies materials. A score of 200 (basic) im-

plies an ability to understand, combine ideas, and make inferences based on short un-complicated passages about specific or sequentially related information. A score of 150 implies an ability to follow written directions and select phrases to describe pictures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Reading Report Card, 1971-88*, by Educational Testing Service. (This table was prepared March 1990.)

**Table 104.—Student reading in school, by type of reading material: 1983-84 and 1987-88**

Type of reading	Percent of students reporting ever reading types of materials					
	9-year-olds		13-year-olds		17-year-olds	
	1983-84	1987-88	1983-84	1987-88	1983-84	1987-88
1	2	3	4	5	6	7
Biographies	45.1	44.0	62.2	65.8	58.9	64.1
Books about other times and places	79.0	80.4	83.4	81.1	81.4	78.7
Plays	55.6	52.8	59.2	66.6	63.4	70.3
Poems	70.4	69.2	68.4	74.9	76.0	81.7
Science books	84.0	89.8	89.8	92.8	89.8	74.6

<sup>1</sup> All participants of this age were in school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Reading Report Card, 1971-88*, by Educational Testing Service. (This table was prepared April 1990.)

**Table 105.—Percentage of students at or above selected reading proficiency levels, by race/ethnicity, and age: 1970-71 to 1987-88**

Year, sex, and race/ethnicity	8-year-olds <sup>1</sup>				13-year-olds <sup>1</sup>				17-year-olds <sup>2</sup>			
	Rudimentary <sup>3</sup>	Basic <sup>4</sup>	Intermediate <sup>5</sup>	Adept <sup>6</sup>	Rudimentary <sup>3</sup>	Basic <sup>4</sup>	Intermediate <sup>5</sup>	Adept <sup>6</sup>	Basic <sup>4</sup>	Intermediate <sup>5</sup>	Adept <sup>6</sup>	Advanced <sup>7</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1970-71</b>												
Total .....	90.5	58.2	15.3	1.0	99.8	92.8	57.9	9.8	95.9	78.5	39.2	6.6
Male .....	87.5	52.0	11.8	0.8	99.7	90.3	51.8	7.3	94.5	74.6	34.0	5.0
Female .....	93.4	64.3	18.7	1.3	99.9	95.3	64.0	12.2	97.3	82.2	44.1	8.3
White <sup>8</sup> .....	94.0	63.4	17.7	1.2	99.9	96.0	64.3	11.3	97.7	83.5	43.3	7.5
Black .....	69.6	21.9	2.1	0.0	98.8	74.4	21.8	0.9	82.0	39.7	7.5	0.3
<b>1974-75</b>												
Total .....	93.2	62.2	14.6	0.5	99.7	93.3	58.6	10.3	96.4	80.4	39.1	6.1
Male .....	91.1	56.3	11.3	0.3	99.6	91.0	51.5	7.0	95.4	76.2	33.9	5.2
Female .....	95.4	68.2	17.9	0.8	99.9	95.7	65.7	13.6	97.4	84.3	44.1	7.0
White .....	96.0	68.8	17.8	0.6	99.9	96.4	65.4	12.0	98.6	86.1	44.0	7.0
Black .....	81.1	33.2	1.9	0.0	98.4	77.4	25.6	1.7	81.1	42.4	7.9	0.3
Hispanic .....	80.5	35.9	2.2	0.0	99.6	82.3	29.6	2.3	88.3	51.9	12.9	1.1
<b>1979-80</b>												
Total .....	94.6	67.8	17.2	0.6	99.9	94.9	60.9	11.3	97.2	81.0	38.5	5.3
Male .....	92.9	62.2	14.1	0.4	99.8	93.4	56.1	9.1	96.2	78.3	35.7	4.6
Female .....	96.4	72.9	20.2	0.7	99.9	96.3	65.6	13.5	98.1	83.9	41.3	6.1
White .....	97.2	74.3	20.5	0.7	100.0	97.2	67.7	13.6	99.1	87.3	44.1	6.3
Black .....	84.7	40.8	3.6	0.0	99.1	84.0	30.8	1.5	84.9	43.9	6.7	0.2
Hispanic .....	83.5	40.9	4.4	0.0	99.8	87.3	36.4	1.9	93.2	61.2	14.9	1.3
<b>1983-84</b>												
Total .....	92.5	61.9	17.0	1.0	99.8	94.1	59.1	10.9	96.3	83.1	40.0	5.5
Male .....	90.5	58.8	15.8	0.8	99.7	92.5	53.9	8.9	97.7	79.2	35.4	4.7
Female .....	94.5	65.2	18.1	1.1	99.9	95.8	64.1	13.1	98.9	87.0	44.8	6.5
White .....	95.4	69.1	20.8	1.2	99.9	96.3	65.5	13.3	99.1	87.9	46.3	6.5
Black .....	82.0	35.7	4.2	0.0	99.4	85.5	34.4	2.1	95.8	66.0	18.3	0.9
Hispanic .....	82.4	39.9	3.8	0.0	99.5	86.4	38.6	3.9	95.6	68.4	20.6	1.9
<b>1987-88</b>												
Total .....	93.0	62.5	17.0	1.2	99.8	95.1	58.0	10.6	98.9	86.2	41.8	4.8
Male .....	91.0	58.1	15.7	0.6	99.6	93.5	51.3	8.2	98.4	83.2	37.3	3.9
Female .....	95.0	66.9	18.4	1.7	100.0	96.7	64.6	13.0	99.3	89.0	45.9	5.7
White .....	94.9	68.3	19.7	1.4	99.9	96.6	63.3	12.3	99.5	89.3	46.3	5.7
Black .....	85.6	39.2	5.9	0.1	99.7	90.7	39.2	4.0	97.1	76.0	25.8	1.9
Hispanic .....	88.1	46.9	8.2	0.0	99.1	86.3	34.9	3.1	96.4	72.9	24.3	1.3

<sup>1</sup> Virtually no students were able to read at the advanced level.

<sup>2</sup> Virtually all students were able to read at the rudimentary level.

<sup>3</sup> Able to follow brief written directions and select phrases to describe pictures.

<sup>4</sup> Able to understand combined ideas and make references based on short uncomplicated passages about specific or sequentially related information.

<sup>5</sup> Able to search for specific information, interrelate ideas, and make generalizations about literature, science, and social studies materials.

<sup>6</sup> Able to find, understand, summarize, and explain relatively complicated literary and informational material.

<sup>7</sup> Able to understand the links between ideas even when those links are not explicitly stated and to make appropriate generalizations even when the texts lack clear introductions or explanations.

<sup>8</sup> Includes Hispanic.

— Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Reading Report Card, 1971-88*, by Educational Testing Service. (This table was prepared February 1990.)

**Table 106.—Writing performance of 4th, 8th, and 11th graders, by sex, race/ethnicity, and region: 1984 and 1988**

Sex, race/ethnicity and region	4th graders		8th graders		11th graders	
	1984	1988	1984	1988	1984	1988
1	2	3	4	5	6	7
All students .....	170.6	173.3	212.4	208.2	223.0	220.7
Sex						
Male .....	165.0	164.3	204.5	197.9	211.9	211.1
Female .....	176.7	182.4	220.5	218.2	234.5	229.2
Race/ethnicity						
White .....	177.2	180.0	217.9	213.1	229.1	225.3
Black .....	148.2	150.7	188.3	190.1	204.2	206.9
Hispanic .....	157.9	162.2	194.2	197.2	200.8	202.0
Region						
Northeast .....	179.1	174.8	219.5	209.3	226.3	224.5
Southeast .....	168.7	171.3	211.8	209.7	222.1	221.3
Central .....	169.4	176.2	208.6	204.3	225.1	218.8
West .....	168.8	169.8	210.5	209.6	218.2	219.1

NOTE.—The writing scale score ranges from 0 to 400 and is defined as the average of a respondent's estimated scores on specific writing tasks. The average response method is used to estimate average writing achievement for each participant as if each had performed all 11 writing tasks.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Writing Report Card, 1984-88*, by Educational Testing Service. (This table was prepared April 1990.)

**Table 107.—Student values and attitudes toward writing, by grade level: 1984 and 1988**

Statements about writing	Percent of students reporting the statement is true more than half the time, by grade level					
	Grade 4		Grade 8		Grade 11	
	1984	1988	1984	1988	1984	1988
1	2	3	4	5	6	7
Writing helps me think more clearly.....	—	—	44.5	44.0	52.4	48.8
Writing helps me tell others what I think.....	—	—	52.1	53.3	55.3	57.2
Writing helps tell others how I feel.....	—	—	50.1	54.1	55.4	58.2
Writing helps me understand my own feelings.....	—	—	40.2	44.7	47.3	48.5
Writing can help me get a good job.....	33.8	44.6	40.2	52.3	52.9	52.3
Writing helps me share my ideas.....	52.9	60.9	52.2	59.1	61.8	63.3
Writing helps me show people I know something.....	62.5	60.9	54.8	64.7	58.3	64.2
People who write well have a better chance of.....	—	—	47.0	50.2	54.4	55.8
getting good jobs.....	—	—	49.2	54.5	54.2	58.3
People who write well are more influential.....	—	—	49.2	54.5	54.2	58.3
I like to write.....	55.8	54.6	38.9	41.9	40.3	36.6
I am a good writer.....	60.0	59.7	41.5	43.7	38.8	40.5
People like what I write.....	53.4	53.2	38.1	38.0	35.7	37.0
I write on my own outside of school.....	47.7	44.1	36.4	36.5	31.0	26.4
I don't like to write things that will be graded.....	37.9	35.1	31.4	33.1	26.7	31.1
If I didn't have to write for school, I wouldn't write anything.....	33.4	26.7	17.2	18.8	14.9	15.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Writing Report Card, 1984-88*, by Educational Testing Service. (This table was prepared April 1990.)

**Table 106.—Percentage of students writing at a minimal level or better,<sup>1</sup> by sex and race/ethnicity, by age: 1974, 1979, and 1984**

Age, writing task, and year	All students	Sex		Race/ethnicity		
		Male	Female	White	Black	Hispanic
1	2	3	4	5	6	7
<b>Age 9</b>						
<b>Informative writing</b>						
1979.....	53.4	47.1	59.4	58.4	33.5	29.1
1984.....	55.7	50.9	60.7	59.7	36.0	51.9
<b>Persuasive writing</b>						
1979.....	63.7	58.8	68.7	68.0	44.1	45.4
1984.....	58.2	51.1	65.8	62.6	40.1	50.9
<b>Imaginative writing</b>						
1974.....	36.7	30.9	42.8	41.3	17.3	22.4
1979.....	41.4	38.8	48.1	43.6	28.9	36.8
1984.....	54.6	50.7	58.2	57.3	44.8	46.2
<b>Age 13</b>						
<b>Informative writing</b>						
1979.....	74.4	66.5	80.6	77.3	60.6	65.3
1984.....	61.4	78.8	84.2	84.9	64.4	76.6
<b>Persuasive writing</b>						
1979.....	27.6	27.6	27.9	30.1	18.2	18.6
1984.....	34.1	33.8	34.6	37.0	26.2	19.9
<b>Imaginative writing</b>						
1974.....	69.0	63.5	74.1	70.8	57.1	67.0
1979.....	60.7	55.8	65.9	62.3	53.1	58.3
1984.....	66.7	61.1	73.1	65.3	75.3	65.7
<b>Age 17<sup>2</sup></b>						
<b>Informative writing</b>						
1979.....	67.1	61.6	91.6	89.4	72.8	78.1
1984.....	69.0	67.4	90.7	91.3	79.5	86.1
<b>Persuasive writing</b>						
1979.....	60.6	58.7	62.4	62.7	52.5	46.3
1984.....	63.8	62.3	65.4	67.2	55.7	52.9
<b>Imaginative writing</b>						
1974.....	78.4	72.1	80.1	77.6	70.3	67.8
1979.....	71.3	66.0	76.7	72.5	64.7	55.2
1984.....	75.1	70.6	79.5	76.4	68.4	76.2

<sup>1</sup> Standards for minimal performance level differ by grade level.<sup>2</sup> All participants of this age group were in school.

NOTE.—Informative writing is used to share knowledge and convey messages, instructions, and ideas. Persuasive writing attempts to bring about some action or change. Imaginative writing provides a special way of sharing our experiences and understanding the world. Five levels of proficiency were defined for each task: non-rateable, unsatisfactory, minimal, adequate, and elaborated. Non-rateable responses included those that were blank, off-task, and unreadable. Unsatisfactory responses were those that failed to reflect a basic understanding of the purpose of the writing. Minimal responses recog-

nized the elements needed to complete the task, but were not managed well enough to ensure that the intended purpose of the writing was achieved. Adequate responses included the features critical to accomplishing the purpose of the writing and were likely to have the intended effect. Elaborated responses went beyond the merely adequate, reflecting a higher level of coherence and elaboration.

SOURCE: U.S. Department of Education, Office of Educational Research and Improvement, National Assessment of Educational Progress, *Writing: Trends Across the Decade, 1974-1984*. (This table was prepared June 1987.)

**Table 109.—Student writing in school, by type of writing assignment: 1983-84 and 1987-88**

Type of writing assignment	Percent of students reporting at least one paper written for English class last week					
	9-year-olds		13-year-olds		17-year-olds <sup>1</sup>	
	1983-84	1987-88	1983-84	1987-88	1983-84	1987-88
1	2	3	4	5	6	7
Essay, composition, or theme .....	19.3	25.1	40.9	48.4	59.6	63.6
Book report .....	38.1	40.5	35.4	34.8	30.4	30.7
Other report .....	28.3	32.0	28.5	29.4	37.7	38.4
Letter .....	38.5	38.7	20.8	25.3	15.9	19.6
Story .....	37.2	43.3	41.8	48.9	39.7	39.7
Poem .....	25.7	29.7	14.7	14.7	18.3	20.9
Play .....	13.9	15.2	10.4	12.2	12.6	11.3

<sup>1</sup> All participants of this age were in school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Writing Report Card, 1984-88*, by Educational Testing Service. (This table was prepared April 1990.)

**Table 110.—Student proficiency in geography, U.S. history, and literature, by student characteristics: 1986 and 1988**

Characteristic	Percent-age distribution of 12th graders in 1988	Geography scores of 12th graders in 1988	History scores in 1988			Literature scores of 11th graders in 1988	Characteristic	Percent-age distribution of 12th graders in 1988	Geography scores of 12th graders in 1988	History scores in 1988			Literature scores of 11th graders in 1988
			4th graders	8th graders	12th graders					4th graders	8th graders	12th graders	
1	2	3	4	5	6	7	8	9	10	11	12	14	18
United States .....	100	293.1	220.8	263.9	295.0	285.0	Hours spent on homework each day .....						
Sex							None assigned .....	8	277.0	223.6	253.4	290.7	—
Male .....	48	301.2	222.9	266.2	298.5	282.8	Did not do it .....	9	299.0	209.0	247.2	291.6	—
Female .....	52	285.7	218.2	261.6	291.6	287.3	½ hour or less .....	21	295.0	221.8	294.2	295.4	—
Race							2 hours .....	17	295.0	—	267.9	298.4	—
White .....	78	301.1	227.5	270.4	301.1	289.9	More than 2 hours .....	10	298.0	—	287.2	302.4	—
Black .....	14	258.4	199.5	248.0	274.4	267.5	Parents' level of education .....						
Hispanic .....	7	271.8	202.7	244.3	273.9	264.8	No high school diploma .....	8	297.0	202.7	244.9	274.2	296.2
Region							Graduated high school .....	24	283.5	214.1	256.1	285.3	273.4
Northeast .....	26	295.0	222.6	270.1	296.9	293.0	Post high school .....	23	294.2	228.0	289.1	296.8	298.3
Southeast .....	23	283.3	215.5	258.0	289.2	282.6	Graduated college .....	43	305.3	231.4	274.9	306.0	297.6
Central .....	25	296.2	223.8	265.3	297.9	284.3	Reading materials in the home .....						
West .....	26	295.3	220.7	262.6	295.5	280.4	0 to 2 types .....	13	273.0	207.7	248.6	275.0	—
Size and type of community							0 to 3 types .....	—	—	—	—	—	285.4
Rural .....	15	—	220.0	266.8	296.2	273.7	3 types .....	24	287.0	220.2	261.3	289.3	—
Urban disadvantaged .....	15	—	198.2	248.2	273.8	265.2	4 types .....	63	300.0	231.1	272.0	302.0	279.3
Urban advantaged .....	14	—	236.9	275.9	307.8	301.4	5 types .....	—	—	—	—	—	291.7
School program							Parents living at home .....						
Academic .....	59	304.0	—	—	307.1	296.7	Both .....	78	297.0	223.1	268.1	298.9	290.3
General .....	32	276.0	—	—	279.8	271.7	One parent .....	17	285.0	212.2	255.1	286.7	282.1
Vocational/technical .....	9	276.0	—	—	275.1	265.9	Neither .....	5	274.0	202.0	248.3	273.2	271.6
Hours of TV viewing each day							Mothers working outside the home .....						
0 to 2 hours .....	51	300.0	222.6	269.6	299.0	—	Full-time .....	55	293.0	—	265.3	283.3	288.1
3 to 5 hours .....	44	289.0	225.5	265.0	293.3	—	Part-time .....	17	299.0	—	267.4	289.9	292.5
6 or more hours .....	6	286.0	210.8	251.1	276.7	—	Not at all .....	25	295.0	—	284.2	285.3	288.2

<sup>1</sup> Data are for 11th graders in 1988.  
—Data not available.

NOTE.—As with the NAEP reading scale, these scales range from 0 to 500.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Literature and U.S. History, *The U.S. History Report Card*, and *The Geography Learning of High-School Seniors*, prepared by Educational Testing Service. (This table was prepared in April 1990.)

**Table 111.—Percentage of students at or above selected history proficiency levels, by age, sex, race/ethnicity, and region: 1988**

Sex, region, and race/ethnicity	4th graders <sup>1</sup>			8th graders				12th graders			
	Simple historical facts <sup>2</sup>	Beginning historical information and interpretation <sup>3</sup>	Basic historical terms and relationships <sup>4</sup>	Simple historical facts <sup>2</sup>	Beginning historical information and interpretation <sup>3</sup>	Basic historical terms and relationships <sup>4</sup>	Interprets historical information and ideas <sup>5</sup>	Simple historical facts <sup>2</sup>	Beginning historical information and interpretation <sup>3</sup>	Basic historical terms and relationships <sup>4</sup>	Interprets historical information and ideas <sup>5</sup>
1	2	3	4	5	6	7	8	9	10	11	12
All students.....	78.0	15.9	0.2	96.0	67.7	12.7	0.1	99.4	88.9	43.9	4.6
Female.....	77.1	19.0	0.3	95.6	69.2	15.7	0.2	99.2	88.3	50.8	6.5
Male.....	74.9	12.7	0.1	96.5	66.2	9.8	(*)	99.6	89.4	41.4	2.8
White.....	84.8	19.8	0.3	97.4	75.9	15.7	0.1	99.6	92.7	52.8	5.5
Black.....	49.0	4.2	(*)	93.2	44.9	3.5	(*)	99.0	77.3	21.2	0.5
Hispanic.....	54.3	4.2	(*)	91.2	43.8	4.1	(*)	98.4	76.1	23.2	1.4
Region											
Northeast.....	77.1	18.8	0.1	97.2	73.7	17.2	0.2	99.3	89.9	48.6	6.2
Southeast.....	69.2	13.0	0.1	94.9	61.0	8.9	0.1	99.1	87.4	37.7	3.0
Central.....	82.0	17.7	0.2	96.5	69.5	12.9	0.1	99.7	90.8	49.9	4.7
West.....	76.4	14.7	0.4	95.7	66.9	12.1	(*)	99.6	87.4	46.6	4.2

<sup>1</sup> Virtually no students were able to interpret historical information and ideas.  
<sup>2</sup> Score of 200 or more. Know some historical facts of the type learned from everyday experiences and able to read simple timelines, graphs, and maps.  
<sup>3</sup> Score of 250 or more. Know a variety of historical facts of the type learned from historical studies. Developing sense of chronology.  
<sup>4</sup> Score of 300 or more. Demonstrate broad knowledge of historical terms, facts, regions, and ideas. Some knowledge of content of primary texts in U.S. political history.  
<sup>5</sup> Score of 350 or more. Detailed understanding of historical vocabulary, facts, regions, and ideas. Able to relate social science concepts to historical themes and can evaluate causal relationships.

\* Virtually no students were able to perform at this level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The U.S. History Report Card*, prepared by Educational Testing Service. (This table was prepared April 1990.)

**Table 112.—Average percentage of students responding correctly to history questions, by time period and grade: 1988**

Area of test	Average percent correct			Area of test	Average percent correct		
	Grade 4	Grade 8	Grade 12		Grade 4	Grade 8	Grade 12
1	2	3	4	1	2	3	4
All items.....	61.1	60.2	60.3				
Exploration and colonization, up to 1783				Rise of modern America and World War I, 1877-1920			
All items given at a grade.....	70.2	75.8	64.6	All items given at a grade.....	60.1	50.7	57.1
14 items given at grades 4 and 8.....	70.2	85.8	—	14 items given at grades 8 and 12.....	—	37.5	54.6
6 items given at grades 8 and 12.....	—	55.9	71.3				
Revolutionary era, Constitution and New Republic, 1783 to 1815				United States, 1920-1941			
All items given at a grade.....	54.3	61.0	58.8	All items given at a grade.....	46.4	51.7	59.2
13 items given at grades 4 and 8.....	54.3	75.1	—	7 items given at grades 8 and 12.....	—	42.6	62.9
15 items given at grades 8 and 12.....	—	51.0	62.9				
Economic and social development of antebellum republic, 1790-1861				World War II and postwar era, 1931-1968			
All items given at a grade.....	56.5	64.1	62.6	All items given at a grade.....	62.2	54.8	59.6
8 items given at grades 8 and 12.....	—	60.4	71.4	9 items given at grades 8 and 12.....	—	46.9	61.3
Crisis of the Union: Origins, Civil War and Reconstruction, 1850-1877				Modern post-industrial era, 1968 to present			
All items given at a grade.....	63.5	59.7	61.2	All items given at a grade.....	61.3	54.7	61.7
12 items given at grades 8 and 12.....	—	55.7	68.8	9 items given at grades 8 and 12.....	—	50.2	68.4

—Data not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The U.S. History Report Card*, prepared by Educational Testing Service. (This table was prepared in April 1990.)

**Table 113.—Mathematics proficiency, by age and by selected characteristics of students: 1977-78, 1981-82, and 1985-86**

Selected characteristics of students	9-year-olds			13-year-olds			17-year-olds		
	1977-78	1981-82	1985-86	1977-78	1981-82	1985-86	1977-78	1981-82	1985-86
1	2	3	4	5	6	7	8	9	10
<b>All students</b> .....	<b>219</b>	<b>219</b>	<b>222</b>	<b>264</b>	<b>269</b>	<b>269</b>	<b>300</b>	<b>299</b>	<b>302</b>
<b>Sex</b>									
Male.....	217	217	222	264	269	270	304	302	305
Female.....	220	221	222	265	268	268	297	296	299
<b>Race/ethnicity</b>									
White.....	224	224	227	272	274	274	306	304	308
Black.....	192	195	202	230	240	249	268	272	279
Hispanic.....	203	204	205	238	252	254	276	277	283
<b>Television watched per day</b>									
0 to 2 hours.....	—	218	222	—	273	276	305	303	310
3 to 5 hours.....	—	227	229	—	266	271	296	294	299
6 or more hours.....	—	215	213	—	256	255	279	280	282
<b>Reading materials in the home<sup>1</sup></b>									
0 to 2 items.....	201	203	208	239	250	255	277	281	281
3 items.....	221	221	224	260	267	266	296	295	297
4 items.....	231	231	234	275	279	276	308	306	309

<sup>1</sup> The 4 items in the scale were: newspaper subscription; magazine subscription; more than 25 books in the home; and encyclopedias in the home.  
—Data not available.

NOTE.—Performers at the 150 level know some basic addition and subtraction facts, and most can add two-digit numbers without regrouping. They recognize simple situations in which addition and subtraction apply. Performers at the 200 level have considerable understanding of two-digit numbers and know some basic multiplication and division facts. Performers at the 250 level have an initial understanding of the four basic operations. They can also compare information from graphs and charts, and are developing an ability to analyze simple logical relations. Performers at the 300 level can compute

decimals, simple fractions, and percents. They can identify geometric figures, measure simple fractions, and percents. They can identify geometric figures, measure lengths and angles, and calculate areas of rectangles. They are developing the skills to operate with signed numbers, exponents, and square roots. Performers at the 350 level can apply a range of reasoning skills to solve multi-step problems. They can solve routine problems involving fractions and percents, recognize properties of basic geometric figures, and work with exponents and square roots.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Mathematics Report Card*, prepared by Educational Testing Service. (This table was prepared January 1989.)

**Table 114.—Percentage of students at or above five mathematics proficiency levels, by race/ethnicity and age: 1977-78, 1981-82, and 1985-86**

Year and race/ethnicity	9-year-old <sup>1</sup>				13-year-olds <sup>2</sup>				17-year-olds <sup>2</sup>			
	Simple arithmetic facts	Beginning skills and understanding	Basic operations and beginning problem solving	Moderately complex procedures and reasoning	Beginning skills and understanding	Basic operations and beginning problem solving	Moderately complex procedures and reasoning	Multi-step problems and algebra	Beginning skills and understanding	Basic operations and beginning problem solving	Moderately complex procedures and reasoning	Multi-step problems and algebra
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1977-78</b>												
<b>All students</b> .....	<b>96.5</b>	<b>70.3</b>	<b>19.4</b>	<b>0.8</b>	<b>94.5</b>	<b>64.9</b>	<b>17.9</b>	<b>0.9</b>	<b>99.8</b>	<b>92.1</b>	<b>51.4</b>	<b>7.4</b>
White.....	98.3	76.0	22.5	0.9	97.5	72.9	21.4	1.1	100.0	95.8	57.3	8.6
Black.....	87.8	42.5	4.3	( <sup>3</sup> )	79.5	28.9	2.1	( <sup>3</sup> )	98.7	70.0	18.0	0.4
Hispanic.....	93.5	54.3	10.8	0.5	85.9	35.6	3.4	0.1	99.3	77.4	22.1	1.1
<b>1981-82</b>												
<b>All students</b> .....	<b>97.2</b>	<b>71.5</b>	<b>18.7</b>	<b>0.6</b>	<b>97.6</b>	<b>71.8</b>	<b>17.8</b>	<b>0.5</b>	<b>99.9</b>	<b>92.9</b>	<b>48.3</b>	<b>5.4</b>
White.....	98.6	76.9	21.5	0.7	99.1	78.5	20.9	0.6	100.0	96.3	54.5	6.3
Black.....	90.4	46.7	4.5	( <sup>3</sup> )	89.0	38.1	3.3	( <sup>3</sup> )	99.6	75.3	17.3	0.6
Hispanic.....	95.0	55.0	9.2	( <sup>3</sup> )	96.1	54.2	6.2	0.2	99.9	81.3	20.6	0.5
<b>1985-86</b>												
<b>All students</b> .....	<b>97.8</b>	<b>73.9</b>	<b>20.8</b>	<b>0.6</b>	<b>96.5</b>	<b>73.1</b>	<b>15.9</b>	<b>0.4</b>	<b>99.9</b>	<b>96.0</b>	<b>51.1</b>	<b>6.4</b>
White.....	98.9	79.2	24.5	0.7	99.2	79.7	18.6	0.5	99.9	98.3	58.0	7.6
Black.....	93.0	53.3	5.4	( <sup>3</sup> )	95.5	49.4	4.0	0.1	100.0	86.0	21.7	0.3
Hispanic.....	96.4	58.7	8.0	( <sup>3</sup> )	96.1	55.2	5.4	0.3	98.9	90.8	28.8	1.2

<sup>1</sup> Virtually no students were able to perform multi-step problems and algebra.

<sup>2</sup> Virtually all students knew simple arithmetic facts. Data are only for students enrolled in school.

<sup>3</sup> Virtually no students were able to perform at this level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Mathematics Report Card*, prepared by Educational Testing Service. (This table was prepared January 1989.)

**Table 115.—Percentage of students at or above five science proficiency levels, by race/ethnicity and age: 1976-77, 1981-82, and 1985-86**

Year, age, and race/ethnicity	9-year-olds <sup>1</sup>				13-year-olds <sup>2</sup>				17-year-olds <sup>2</sup>			
	Know everyday science facts	Understand simple scientific principles	Apply basic scientific information	Analyze scientific procedures and data	Understand simple scientific principles	Apply basic scientific information	Analyze scientific procedures and data	Integrate specialized scientific information	Understand simple scientific principles	Apply basic scientific information	Analyze scientific procedures and data	Integrate specialized scientific information
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1976-77</b>												
Total.....	93.6	87.9	26.2	3.5	85.9	49.2	10.9	0.7	97.2	81.8	41.7	8.5
White.....	97.8	78.5	31.3	4.3	91.9	56.7	13.1	0.9	99.2	88.4	47.4	9.9
Black.....	73.1	27.7	3.8	0.1	57.1	15.1	1.2	( <sup>3</sup> )	64.5	40.9	8.3	0.8
Hispanic.....	83.1	42.1	8.5	0.5	63.1	19.1	2.3	0.2	92.7	61.7	19.1	2.0
<b>1981-82</b>												
Total.....	95.0	70.4	24.8	2.2	89.6	51.5	9.4	0.4	95.8	76.8	37.5	7.2
White.....	98.1	78.0	30.1	2.7	94.5	58.7	11.2	0.4	98.7	85.0	44.0	8.8
Black.....	81.2	38.7	3.8	0.4	66.8	18.8	0.8	( <sup>3</sup> )	81.0	36.5	6.7	0.1
Hispanic.....	84.6	41.8	4.4	( <sup>3</sup> )	74.5	25.8	2.4	( <sup>3</sup> )	86.1	46.8	12.5	1.4
<b>1985-86</b>												
Total.....	96.3	71.4	27.8	3.4	91.8	53.4	9.4	0.2	96.7	80.3	41.4	7.5
White.....	98.5	78.4	32.6	4.3	96.4	61.9	11.8	0.3	98.8	87.6	48.8	9.0
Black.....	87.5	45.1	8.8	0.4	74.3	20.2	0.9	( <sup>3</sup> )	89.8	52.9	12.3	1.0
Hispanic.....	89.6	49.1	10.7	0.2	78.1	27.8	1.6	( <sup>3</sup> )	92.9	61.6	15.5	0.5

<sup>1</sup> Virtually no students were able to integrate specialized scientific information.  
<sup>2</sup> Virtually all students knew everyday science facts. Data are only for students enrolled in school.  
<sup>3</sup> Virtually no students were able to perform at this level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Science Report Card, 1988*, by Educational Testing Service. (This table was prepared April 1990.)

**Table 116.—Science proficiency, by age and by selected characteristics of students: 1976-77, 1981-82, and 1985-86**

Selected characteristics of students	9-year-olds			13-year-olds			17-year-olds		
	1976-77	1981-82	1985-86	1976-77	1981-82	1985-86	1976-77	1981-82	1985-86
1	2	3	4	5	6	7	8	9	10
All students.....	219.9	220.9	224.3	247.4	250.2	251.4	289.6	283.3	288.5
Sex									
Male.....	222.1	221.0	227.3	251.1	255.7	256.1	297.1	291.9	294.9
Female.....	217.7	220.7	221.3	243.8	245.0	246.9	282.3	275.2	282.3
Race/ethnicity									
White.....	229.6	229.1	231.9	256.1	257.3	259.2	297.7	293.2	297.5
Black.....	174.9	187.1	196.2	208.1	217.2	221.3	240.3	234.8	252.8
Hispanic.....	191.9	189.0	199.4	213.4	225.5	228.1	282.3	248.7	259.3
Region									
Northeast.....	224.5	221.8	228.2	255.3	254.1	257.8	296.4	284.4	292.2
Southeast.....	205.1	214.0	218.8	235.1	238.7	247.1	276.4	276.2	283.5
Central.....	225.3	226.3	227.9	253.8	253.9	249.4	294.1	289.3	294.4
West.....	220.9	219.9	222.1	243.0	252.4	252.3	286.8	280.9	283.2
Parental education									
Less than high school.....	198.5	198.2	203.6	223.5	225.4	229.4	265.4	258.6	257.5
Graduated high school.....	223.0	218.1	219.8	245.4	243.2	244.8	284.4	275.3	277.0
Some college.....	237.2	229.2	235.8	260.3	258.9	257.8	295.7	290.1	295.1
Graduated college.....	232.3	230.8	235.2	266.5	263.5	264.4	309.3	300.2	303.8

<sup>1</sup>JTE.—Performers at the 150 level know some general scientific facts of the type that could be learned from everyday experiences. Performers at the 200 level are developing some understanding of simple scientific principles, particularly in the life sciences. Performers at the 250 level can interpret data from simple tables and make inferences about the outcomes of experimental procedures. They exhibit knowledge and understanding of the life sciences, and also demonstrate some knowledge of basic information from the physical sciences. Performers at the 300 level can evaluate the appropriateness of the design of an experiment and have the skill to apply their scientific knowl-

edge in interpreting information from text and graphs. These students also exhibit a growing understanding of principles from the physical sciences. Performers at the 350 level can infer relationships and draw conclusions using detailed scientific knowledge from the physical sciences, particularly chemistry. They also can apply basic principles of genetics and interpret the societal implications of research in this field.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Science Report Card, 1988*, prepared by Educational Testing Service. (This table was prepared January 1990.)

**Table 117.—Student proficiency in civics, by sex, race/ethnicity, and age: 1976, 1982, and 1988**

Sex and race/ethnicity	Percent correct						Percent understanding the nature of political institutions, <sup>1</sup> 1988			Percent understanding specific government structures and functions, <sup>2</sup> 1988		
	13-year-olds			17-year-olds			Grade 4	Grade 8	Grade 12	Grade 4	Grade 8	Grade 12
	1976	1982	1988	1978	1982	1988						
1	2	3	4	5	6	7	8	9	10	11	12	13
All students .....	49.1	49.1	50.0	61.7	61.3	59.6	9.6	61.4	69.2	0.1	12.7	49.0
Male .....	49.7	50.1	50.5	63.5	63.1	61.2	10.3	59.7	66.0	0.2	14.1	52.5
Female .....	48.5	48.2	49.5	60.0	59.8	58.2	8.9	63.1	90.4	( <sup>3</sup> )	11.4	45.8
White .....	50.7	50.7	51.2	63.4	63.8	61.4	12.3	69.3	92.8	0.1	18.3	55.4
Black .....	42.1	42.0	45.7	52.5	51.8	53.1	2.2	41.2	76.8	( <sup>3</sup> )	4.0	23.2
Hispanic .....	41.1	43.9	45.5	51.5	52.3	53.8	3.8	41.0	78.8	( <sup>3</sup> )	3.4	29.5

<sup>1</sup> Knowledge of government responsibilities; the interrelationships of citizens and government; and individual rights.

<sup>2</sup> Knowledge of the structures, functions, and powers of American government as described in the Constitution; and principles of government such as separation of powers or checks and balances.

<sup>3</sup> Virtually no students performed at this level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *The Civics Report Card*, by Educational Testing Service. (This table was prepared April 1990.)

**Table 118.—Eighth graders' achievement on history, mathematics, reading, and science tests: 1988**

Achievement test and score quartile	Distribution of eighth graders' achievement by score quartile <sup>1</sup>												
	Sex		Race/ethnicity					Socioeconomic status <sup>2</sup>			Control of school		
	Male	Female	White	Black	Hispanic	Asian	American Indian	Low	Middle	High	Public	Catholic	Other private
1	2	3	4	5	6	7	8	9	10	11	12	13	14
History .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lower quartile .....	25.3	25.3	19.8	41.9	40.4	21.7	43.1	44.4	23.5	9.8	27.1	12.6	11.2
Lower middle quartile .....	22.2	26.8	23.0	31.9	26.2	19.9	31.0	28.2	26.5	16.9	25.1	21.0	18.5
Upper middle quartile .....	25.3	26.0	28.2	17.4	20.1	28.4	18.4	18.3	27.9	28.5	25.0	31.3	28.5
Upper quartile .....	27.3	21.8	29.2	6.8	13.3	32.1	7.4	9.2	22.1	44.6	22.8	35.1	41.8
Mathematics .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lower quartile .....	25.4	25.0	18.3	49.0	39.2	18.8	46.3	44.3	23.8	9.3	26.8	16.9	8.3
Lower middle quartile .....	24.4	26.0	24.1	28.7	30.1	19.7	29.1	30.8	26.9	16.1	25.8	24.7	17.6
Upper middle quartile .....	24.4	24.3	27.0	15.1	19.9	22.3	16.3	17.0	26.2	19.3	23.7	28.6	28.4
Upper quartile .....	25.8	24.6	30.6	7.2	10.6	39.2	8.3	7.9	22.3	48.5	23.8	29.7	45.7
Reading .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lower quartile .....	30.4	21.3	19.9	45.0	38.2	23.5	44.9	44.0	24.2	11.1	27.7	13.8	10.4
Lower middle quartile .....	25.0	25.0	23.5	29.4	30.5	22.8	30.0	29.1	27.0	16.9	25.6	23.1	16.6
Upper middle quartile .....	22.7	25.8	26.2	18.8	20.1	24.6	18.5	18.5	25.8	20.3	23.7	28.2	25.8
Upper quartile .....	21.9	28.2	30.4	9.0	11.2	29.3	8.8	8.4	23.0	45.7	23.0	34.9	47.2
Science .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lower quartile .....	25.4	25.9	19.2	47.7	37.8	22.0	46.9	42.3	24.7	11.1	27.2	17.2	11.0
Lower middle quartile .....	21.7	26.7	22.4	30.1	30.7	23.0	27.4	29.2	25.5	16.9	24.3	25.3	21.1
Upper middle quartile .....	25.7	26.0	28.8	15.9	20.8	24.8	17.4	19.3	27.3	29.4	25.2	31.3	29.4
Upper quartile .....	27.1	21.4	29.6	8.3	10.9	30.3	8.3	9.1	22.6	42.5	23.4	26.1	38.5

<sup>1</sup> Twenty five percent of all students fall into each one of the quartile groupings.

<sup>2</sup> Socioeconomic status was measured by a composite score on parental education and occupations, family income, and household characteristics. The "Low" SES group is the lowest quartile; the "Middle" SES group is the middle two quartiles; and the "High" SES group is the upper quartile.

NOTE.—Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988" survey. (This table was prepared June 1989.)

**Table 119.—Scholastic Aptitude Test score averages for college-bound high school seniors, by sex: 1966-67 to 1988-89**

School year	Verbal score			Mathematical score		
	Total	Male	Female	Total	Male	Female
1	2	3	4	5	6	7
1966-67	466	463	468	492	514	487
1967-68	466	464	466	492	512	470
1968-69	463	459	466	493	513	470
1969-70	460	459	461	488	509	465
1970-71	455	454	457	488	507	468
1971-72	453	454	452	484	505	461
1972-73	445	446	443	481	502	460
1973-74	444	447	442	480	501	459
1974-75	434	437	431	472	495	449
1975-76	431	433	430	472	497	446
1976-77	429	431	427	470	497	445
1977-78	429	433	425	468	494	444
1978-79	427	431	423	467	493	443
1979-80	424	428	420	466	491	443
1980-81	424	430	418	466	492	443
1981-82	426	431	421	467	493	443
1982-83	425	430	420	468	493	445
1983-84	426	433	420	471	495	449
1984-85	431	437	425	475	499	452
1985-86	431	437	426	475	501	451
1986-87	430	435	425	476	500	453
1987-88	428	435	422	476	498	455
1988-89	427	434	421	476	500	454

NOTE.—Possible scores on each part of the SAT range from 200 to 800. Data for the years 1966-67 through 1970-71 are estimates derived from the test scores of all participants.

SOURCE: College Entrance Examination Board, *College-Bound Seniors, 1989 Profile of SAT and Achievement Test Takers*. (Copyright © 1989 by the College Entrance Examination Board. All rights reserved.) (This table was prepared September 1988.)

**Table 120.—Scholastic Aptitude Test score averages, by race/ethnicity: 1975-76 to 1988-89**

Racial/ethnic background	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1986-87	1987-88	1988-89
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>SAT-Verbal</b>													
All students	431	429	429	427	424	424	426	425	426	431	430	428	427
White	451	448	448	444	442	442	444	443	445	449	447	445	446
Black	332	330	332	330	330	332	341	339	342	346	351	353	351
Mexican-American	371	370	370	370	372	373	377	375	376	382	379	382	381
Puerto Rican	364	355	349	345	350	353	360	358	358	368	360	355	360
Asian-American	414	405	401	396	396	397	398	395	398	404	405	408	409
American Indian	388	390	387	386	390	391	388	388	390	392	393	393	384
Other	410	402	399	393	394	388	392	386	388	391	405	410	414
<b>SAT-Mathematical</b>													
All students	472	470	468	467	466	466	467	468	471	475	476	478	478
White	493	489	485	483	482	483	483	484	487	490	489	490	491
Black	354	357	354	358	360	362	366	369	373	376	377	384	386
Mexican-American	410	408	402	410	413	415	416	417	420	426	424	428	430
Puerto Rican	401	397	388	388	394	398	403	403	405	409	400	402	406
Asian-American	518	514	510	511	509	513	513	514	519	518	521	522	525
American Indian	420	421	419	421	426	425	424	425	427	428	432	435	428
Other	458	457	450	447	449	447	449	446	450	448	455	460	487

NOTE.—Possible scores on each part of the SAT range from 200 to 800. No race/ethnic group data are available prior to 1975-76. No data are available for 1985-86 due to changes in the Student Descriptive Questionnaire completed when students registered for the test.

SOURCE: College Entrance Examination Board, *National Report on College-Bound Seniors, 1989*. (Copyright © 1989 by the College Entrance Examination Board. All rights reserved.) (This table was prepared September 1989.)

**Table 121.—Distribution of Scholastic Aptitude Test scores, by sex of student: 1975-76 to 1988-89**

Year	Number of test takers	Percent of students with specified scores											
		200 or higher	250 or higher	300 or higher	350 or higher	400 or higher	450 or higher	500 or higher	550 or higher	600 or higher	650 or higher	700 or higher	750 or higher
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Verbal</b>													
<b>Total</b>													
1975-76.....	999,809	100.00	96.26	89.26	77.47	60.27	43.01	28.11	15.58	8.20	3.55	1.23	0.25
1980-81.....	994,048	100.00	95.46	87.32	75.34	58.44	40.84	25.76	13.87	7.00	3.01	1.03	0.21
1984-85.....	977,361	100.00	95.96	88.81	77.22	60.62	43.23	27.38	15.33	7.88	3.55	1.16	0.19
1985-86.....	1,000,748	100.00	95.81	88.92	77.55	61.77	43.17	28.03	15.75	7.87	3.25	0.99	0.14
1986-87.....	1,080,426	100.00	96.06	88.57	76.62	60.18	43.02	27.85	15.44	8.14	3.42	1.07	0.13
1987-88.....	1,134,364	100.00	95.81	88.62	76.44	60.53	42.36	26.91	14.94	7.32	3.22	0.92	0.09
1988-89.....	1,088,223	100.00	95.72	88.21	75.39	59.55	42.17	26.77	14.85	7.76	3.16	0.87	0.10
<b>Male</b>													
1975-76.....	494,626	100.00	96.39	89.54	77.90	60.90	43.65	28.69	16.04	8.49	3.69	1.29	0.26
1980-81.....	478,448	100.00	95.97	88.50	77.16	60.73	42.89	27.53	15.03	7.67	3.30	1.13	0.23
1984-85.....	471,992	100.00	96.30	89.71	78.69	62.58	45.35	29.21	16.71	8.79	4.06	1.34	0.21
1985-86.....	481,477	100.00	96.19	89.87	79.10	63.74	45.17	29.77	17.02	8.71	3.68	1.11	0.15
1986-87.....	520,326	100.00	96.23	89.12	77.72	61.79	44.91	29.71	16.93	9.22	4.02	1.26	0.15
1987-88.....	544,065	100.00	96.14	89.54	78.21	62.92	45.04	29.25	16.70	8.44	3.82	1.13	0.11
1988-89.....	521,229	100.00	96.00	89.06	77.04	61.66	44.81	29.15	16.63	8.93	3.75	1.07	0.12
<b>Female</b>													
1975-76.....	505,183	100.00	96.14	88.97	77.05	59.65	42.38	27.55	15.13	7.92	3.42	1.17	0.24
1980-81.....	515,596	100.00	94.99	86.23	73.66	56.32	38.56	24.11	12.80	6.39	2.73	0.94	0.18
1984-85.....	505,369	100.00	95.64	87.96	75.66	58.79	41.26	25.66	14.04	7.02	3.07	0.98	0.16
1985-86.....	519,271	100.00	95.48	88.04	76.11	59.95	41.31	26.42	14.57	7.09	2.85	0.86	0.12
1986-87.....	560,100	100.00	95.93	88.07	75.60	59.67	41.26	26.13	14.05	7.14	2.67	0.90	0.11
1987-88.....	590,299	100.00	95.50	87.76	74.82	58.33	39.93	24.76	13.32	6.29	2.66	0.74	0.06
1988-89.....	566,994	100.00	95.45	87.42	73.88	57.42	39.75	24.58	13.21	6.68	2.61	0.69	0.06
<b>Mathematics</b>													
<b>Total</b>													
1975-76.....	999,776	100.00	96.78	93.65	83.55	70.87	57.16	41.82	26.94	16.34	8.49	3.75	1.16
1980-81.....	993,672	100.00	96.85	92.99	82.77	70.48	55.57	40.59	25.98	14.45	7.08	2.71	0.66
1984-85.....	977,361	100.00	99.15	93.99	83.83	71.35	57.98	43.36	29.33	17.06	8.63	3.58	0.82
1985-86.....	1,000,747	100.00	96.91	93.63	84.64	71.98	57.41	42.32	29.29	17.95	9.56	4.06	1.01
1986-87.....	1,080,426	100.00	96.91	93.30	84.22	71.81	57.40	42.37	29.67	18.32	9.94	3.86	1.02
1987-88.....	1,134,364	100.00	99.06	93.93	84.62	72.17	57.43	43.03	29.55	17.60	9.26	3.76	0.91
1988-89.....	1,088,223	100.00	99.08	94.04	84.57	71.97	57.94	42.81	29.33	18.01	10.07	4.27	1.11
<b>Male</b>													
1975-76.....	494,619	100.00	99.13	95.37	87.63	77.29	65.30	50.65	34.93	22.71	12.70	6.02	1.99
1980-81.....	478,301	100.00	99.20	94.96	87.17	77.17	63.99	49.45	33.92	20.36	10.75	4.46	1.17
1984-85.....	471,995	100.00	99.37	95.53	87.73	78.05	65.78	51.80	37.09	23.09	12.59	5.65	1.41
1985-86.....	481,477	100.00	99.24	95.36	88.49	78.26	65.53	51.16	37.47	24.49	14.00	6.44	1.73
1986-87.....	520,326	100.00	99.16	94.91	87.75	77.36	64.90	50.74	37.66	24.82	14.47	6.15	1.75
1987-88.....	544,065	100.00	99.31	95.37	87.91	77.48	64.40	50.71	36.91	23.63	13.43	5.96	1.57
1988-89.....	521,229	100.00	99.30	95.45	88.00	77.82	65.19	50.91	37.13	24.43	14.62	6.70	1.99
<b>Female</b>													
1975-76.....	505,157	100.00	96.45	91.96	79.56	64.59	49.20	33.17	19.12	10.11	4.37	1.53	0.34
1980-81.....	515,371	100.00	96.53	91.14	78.69	64.27	47.76	32.37	18.60	8.94	3.66	1.09	0.19
1984-85.....	505,366	100.00	98.95	92.56	80.19	66.06	50.70	35.48	22.06	11.46	4.94	1.65	0.26
1985-86.....	519,270	100.00	96.61	92.01	81.07	66.16	49.87	34.12	21.70	11.88	5.45	1.89	0.34
1986-87.....	560,100	100.00	96.67	91.80	80.93	66.26	50.44	34.59	22.25	12.29	5.74	1.73	0.33
1987-88.....	590,299	100.00	98.67	92.60	81.58	67.26	51.00	35.94	22.78	12.05	5.42	1.77	0.30
1988-89.....	566,994	100.00	96.87	92.75	81.42	66.77	51.27	35.37	22.15	12.11	5.90	2.03	0.39

NOTE.—Possible scores on each part of the SAT range from 200 to 800. In some years, mathematics and verbal test results were not available for each student.

SOURCE: College Entrance Examination Board, *National Report on College-Bound Seniors*, various years. (Copyright © 1989 by the College Entrance Examination Board. All rights reserved.) (This table was prepared September 1989.)

**Table 122.—Scholastic Aptitude Test score averages, by Intended area of study:<sup>1</sup> 1977-78 to 1988-89**

Test and year	Intended area of study									
	Arts and humanities	Biological sciences and related areas	Business commerce, and communications	Computer and information sciences	Educa-tion	Engineer-ing	Mathe-matics	Physical sciences	Social sciences and related areas	Miscellane-ous <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11
<b>Verbal</b>										
1977-78 .....	439	436	409	420	396	448	464	499	448	422
1978-79 .....	438	435	408	419	392	445	459	498	446	420
1979-80 .....	434	433	406	417	389	444	455	495	448	419
1980-81 .....	434	433	406	418	391	448	456	498	448	420
1981-82 .....	438	434	409	417	394	449	455	496	450	424
1982-83 .....	438	432	409	413	394	448	453	496	451	421
1983-84 .....	440	434	410	411	398	453	457	501	451	423
1984-85 .....	445	439	414	413	404	453	459	506	454	429
1986-87 .....	447	438	415	403	408	456	475	507	452	410
1987-88 .....	444	434	414	400	407	453	468	500	447	409
1988-89 .....	445	433	414	398	406	452	473	504	447	410
Change, 1978-79 to 1988-89 .....	9	-2	6	-23	14	7	14	6	1	-10
<b>Mathematics</b>										
1977-78 .....	454	474	448	499	422	540	585	566	464	481
1978-79 .....	452	472	448	498	420	538	580	561	463	458
1979-80 .....	452	472	446	496	418	535	577	560	463	459
1980-81 .....	453	472	448	492	418	534	572	558	463	459
1981-82 .....	452	470	448	489	419	537	568	558	464	461
1982-83 .....	454	470	445	484	418	539	572	560	466	460
1983-84 .....	456	475	449	483	425	543	578	564	467	463
1984-85 .....	462	480	455	488	432	545	578	569	471	469
1986-87 .....	469	482	459	476	437	554	602	576	472	453
1987-88 .....	471	482	482	470	442	547	596	588	472	455
1988-89 .....	473	481	485	472	440	551	606	577	473	459
Change, 1978-79 to 1988-89 .....	21	9	17	-28	20	15	26	16	10	1

<sup>1</sup> Students indicated their first and second choices of fields of study. Only their first choices are reported here.

<sup>2</sup> Includes "trade and vocational," "other," and "undecided" through 1984-85. Data for 1986-87 to 1988-89 exclude "other."

NOTE.—Possible scores on each part of the SAT range from 200 to 800. No data are available for 1985-86 due to changes in the Student Descriptive Questionnaire completed when students registered for the test.

SOURCE: College Entrance Examination Board, *National Report on College-Bound Seniors*, various years. (Copyright © 1989 by the College Entrance Examination Board. All rights reserved.) (This table was prepared September 1989.)

Table 123.—Scholastic Aptitude Test score averages, by State: 1974-75 to 1988-89

State	1974-75		1979-80		1980-81		1985-86		1986-87		1987-88		1988-89		Percent of graduates taking SAT 1988 <sup>1</sup>
	Verbal	Math													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
United States....	434	472	424	466	424	466	431	475	430	476	426	476	427	476	—
Alabama.....	426	457	446	482	457	488	473	514	476	515	480	520	482	520	6
Alaska.....	461	461	450	482	449	486	445	479	445	479	441	475	443	480	42
Arizona.....	496	525	475	516	478	514	466	509	463	505	455	500	452	500	23
Arkansas.....	482	510	480	514	477	510	482	519	480	521	479	518	471	515	7
California.....	435	473	424	472	426	475	423	481	424	482	424	484	422	484	44
Colorado.....	479	515	468	515	467	513	466	514	466	514	460	511	458	508	29
Connecticut.....	442	471	431	466	430	463	440	474	439	473	436	472	435	473	75
Delaware.....	439	476	431	469	429	470	442	475	440	470	433	466	435	468	60
District of Columbia.....	—	—	—	—	—	—	413	439	407	435	405	434	407	439	67
Florida.....	441	474	424	464	424	463	426	469	423	470	422	466	420	467	47
Georgia.....	397	427	389	425	390	426	402	440	400	440	404	444	402	445	59
Hawaii.....	414	476	396	472	390	464	403	477	404	477	408	480	406	482	52
Idaho.....	493	524	482	518	486	523	475	512	473	502	467	501	465	500	17
Illinois.....	460	510	459	507	459	508	466	519	463	521	464	520	462	520	17
Indiana.....	416	463	407	450	406	451	415	459	415	459	412	458	412	459	55
Iowa.....	523	568	508	554	515	566	519	578	515	574	513	577	512	572	5
Kansas.....	503	540	497	538	502	542	498	544	498	547	494	541	495	545	10
Kentucky.....	470	507	471	507	474	509	483	519	479	519	475	515	477	519	10
Louisiana.....	456	491	462	499	461	494	474	507	473	509	476	513	473	513	9
Maine.....	437	471	427	467	426	465	434	466	433	466	430	466	431	466	59
Maryland.....	436	471	422	463	423	461	436	475	437	477	433	475	434	480	60
Massachusetts.....	434	469	423	464	422	462	436	473	435	474	432	474	432	473	72
Michigan.....	451	498	452	505	456	508	462	514	459	513	457	513	458	514	12
Minnesota.....	506	552	491	541	486	539	482	540	472	531	470	531	474	532	15
Mississippi.....	477	503	461	506	473	502	485	516	467	521	462	519	472	516	4
Missouri.....	465	500	458	508	462	504	476	519	474	516	471	519	471	516	13
Montana.....	500	547	488	544	485	539	485	541	479	530	471	529	469	523	20
Nebraska.....	459	507	464	539	489	537	493	549	488	545	487	545	487	543	10
Nevada.....	455	497	445	485	445	487	445	485	439	484	440	486	439	487	23
New Hampshire.....	449	465	441	485	439	479	450	485	450	486	446	487	447	485	66
New Jersey.....	424	454	415	452	414	450	424	465	425	467	424	469	423	471	67
New Mexico.....	466	516	482	524	474	510	469	527	484	525	476	524	483	532	11
New York.....	441	484	424	465	427	471	427	471	425	469	420	469	419	471	69
North Carolina.....	399	426	393	429	391	427	399	436	400	436	401	440	397	439	57
North Dakota.....	510	554	499	549	494	544	506	556	509	558	498	555	500	567	5
Ohio.....	456	499	455	499	457	500	460	503	455	499	452	499	451	497	23
Oklahoma.....	480	514	476	516	465	526	467	521	466	520	463	522	479	522	6
Oregon.....	440	466	426	465	431	469	444	466	444	484	441	462	443	484	49
Pennsylvania.....	430	470	423	463	421	459	429	465	426	463	424	462	423	463	63
Rhode Island.....	432	469	417	456	415	452	432	466	433	465	431	469	429	466	63
South Carolina.....	382	412	375	409	374	406	395	431	397	435	400	438	399	439	55
South Dakota.....	523	561	500	551	519	561	531	567	513	563	511	559	496	543	6
Tennessee.....	477	511	480	513	475	514	466	521	487	524	485	524	486	523	12
Texas.....	431	467	416	455	415	455	419	458	416	459	417	462	415	462	43
Utah.....	516	553	515	546	511	546	506	541	503	540	498	536	499	537	5
Vermont.....	439	478	432	468	427	467	442	474	440	474	437	472	435	470	63
Virginia.....	431	463	423	460	424	461	435	473	434	473	430	472	430	472	59
Washington.....	469	522	476	521	472	517	461	502	455	496	448	494	446	491	39
West Virginia.....	462	502	462	499	458	495	462	502	458	496	451	496	446	491	15
Wisconsin.....	492	544	472	533	477	533	476	536	475	534	473	534	477	536	12
Wyoming.....	506	546	484	525	476	526	484	534	463	533	474	527	462	516	14

<sup>1</sup> Based on the number of high school graduates in 1989 as projected by the Western Interstate Commission for Higher Education, and number of 1989 seniors who took the SAT.

—Data not available.

NOTE.—Possible scores on each part of the SAT range from 200 to 800. Rankings of

States based on SAT scores alone are invalid because of the varying proportions of students in each State taking the tests.

SOURCE: College Entrance Examination Board, "National SAT Scores For Class of 1989 Show Little Change, But Most Groups Improve Steadily Over Past Decade." (Copyright © 1989 by the College Entrance Examination Board. All rights reserved.) (This table was prepared September 1989.)

**Table 124.—Profile of Scholastic Aptitude Test takers: 1988-89**

1	SAT takers		Percent distribution			Verbal mean 7	Math mean 8
	Number 2	Percent 3	Total 4	Male 5	Female 6		
<b>Total</b> .....	<b>1,088,223</b>	<b>100</b>	<b>100</b>	<b>48</b>	<b>52</b>	<b>427</b>	<b>478</b>
<b>Type of high school</b>							
Public .....	848,538	82	100	47	53	425	476
Religiously affiliated .....	139,182	13	100	49	51	440	472
Independent .....	53,389	5	100	54	46	474	521
Not known .....	47,134	5	—	—	—	—	—
<b>Location of high school</b>							
Large city .....	239,551	23	100	47	53	417	467
Medium-sized city .....	138,193	13	100	47	53	429	476
Small city or town .....	204,851	20	100	48	52	428	473
Suburban .....	336,218	32	100	48	52	443	494
Rural .....	117,821	11	100	47	53	419	481
Not known .....	51,589	5	—	—	—	—	—
<b>Size of senior class</b>							
More than 1,000 .....	3,955	( <sup>1</sup> )	100	50	50	449	513
750-1,000 .....	18,724	2	100	47	53	420	479
500-749 .....	148,148	1	100	47	53	429	486
250-499 .....	435,824	42	100	48	52	428	479
100-249 .....	295,741	29	100	48	52	428	471
Fewer than 100 .....	130,302	13	100	48	54	438	478
Not known .....	55,529	5	—	—	—	—	—

<sup>1</sup> Less than 0.5 percent.  
—Data not available.

SOURCE: College Entrance Examination Board, *1989 Profile of SAT and Achievement Test Takers*. (Copyright © 1989 by College Entrance Board.) (This table was prepared February 1990.)

**Table 125.—American College Testing (ACT) score<sup>1</sup> averages, by sex: 1969-70 to 1988-89**

Type of test and sex	1969-70	1974-75	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Composite, total</b> .....	<b>19.9</b>	<b>19.8</b>	<b>18.4</b>	<b>18.5</b>	<b>18.6</b>	<b>18.5</b>	<b>18.6</b>	<b>18.4</b>	<b>18.3</b>	<b>18.5</b>	<b>18.6</b>	<b>18.8</b>	<b>18.7</b>	<b>18.6</b>	<b>18.6</b>
Male .....	20.3	19.5	19.2	19.3	19.3	19.3	19.3	19.2	19.1	19.3	19.4	19.6	19.5	19.6	19.3
Female .....	19.4	17.8	17.8	17.8	17.9	17.9	17.8	17.8	17.8	17.9	17.9	18.1	18.1	18.1	18.0
<b>English, total</b> .....	<b>18.5</b>	<b>17.7</b>	<b>17.7</b>	<b>17.9</b>	<b>17.9</b>	<b>17.9</b>	<b>17.8</b>	<b>17.9</b>	<b>17.8</b>	<b>18.1</b>	<b>18.1</b>	<b>18.5</b>	<b>18.4</b>	<b>18.5</b>	<b>18.4</b>
Male .....	17.6	17.1	17.0	17.4	17.4	17.3	17.3	17.3	17.3	17.5	17.6	17.9	17.9	18.0	17.8
Female .....	19.4	18.3	18.2	18.3	18.4	18.3	18.2	18.4	18.2	18.6	18.6	18.9	18.9	19.0	18.9
<b>Math, total</b> .....	<b>20.0</b>	<b>17.6</b>	<b>17.4</b>	<b>17.5</b>	<b>17.5</b>	<b>17.4</b>	<b>17.3</b>	<b>17.2</b>	<b>18.9</b>	<b>17.3</b>	<b>17.2</b>	<b>17.3</b>	<b>17.2</b>	<b>17.2</b>	<b>17.1</b>
Male .....	21.1	19.3	18.9	19.1	19.1	18.9	18.9	18.8	18.4	18.8	18.8	18.8	18.8	18.4	18.3
Female .....	18.8	18.2	16.1	18.2	18.2	18.2	18.0	18.0	15.7	18.1	18.0	18.0	18.1	18.1	16.1
<b>Social studies, total</b> .....	<b>19.7</b>	<b>17.4</b>	<b>17.3</b>	<b>17.1</b>	<b>17.2</b>	<b>17.2</b>	<b>17.2</b>	<b>17.3</b>	<b>17.1</b>	<b>17.3</b>	<b>17.4</b>	<b>17.6</b>	<b>17.5</b>	<b>17.4</b>	<b>17.2</b>
Male .....	20.3	18.7	18.2	18.0	18.1	18.2	18.3	18.1	18.0	18.1	18.3	18.6	18.4	18.4	18.1
Female .....	19.0	16.4	16.5	18.4	18.4	18.4	18.4	18.8	18.4	18.5	18.8	18.9	18.7	18.6	16.4
<b>Natural science, total</b> .....	<b>20.8</b>	<b>21.1</b>	<b>20.9</b>	<b>20.9</b>	<b>21.1</b>	<b>21.1</b>	<b>21.0</b>	<b>20.8</b>	<b>20.9</b>	<b>21.0</b>	<b>21.2</b>	<b>21.4</b>	<b>21.4</b>	<b>21.4</b>	<b>21.2</b>
Male .....	21.6	22.4	22.3	22.3	22.3	22.4	22.3	22.2	22.4	22.4	22.6	22.7	22.8	22.8	22.6
Female .....	20.0	20.0	19.8	19.8	20.2	20.0	20.0	19.7	19.6	19.9	20.0	20.2	20.1	20.2	20.0

<sup>1</sup> Scores on each test range from 1 to 36.

SOURCE: The American College Testing Program, *High School Profile Report, 1987* and "ACT News," September 12, 1988. (This table was prepared November 1989.)

**Table 126.—Average number of Carnegie units earned by high school graduates in various subject fields, by student characteristic: 1982 and 1987**

Characteristic	Total	English	History/ social studies	Math	Computer science	Science	Foreign language	Vocational education <sup>1</sup>	Arts	Physical education	Other <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11	12
<b>1982 graduates</b>											
All students.....	21.2	3.90	3.10	2.54	0.11	2.19	1.05	3.98	1.39	1.93	1.14
<b>Sex</b>											
Male.....	21.0	3.78	3.09	2.61	0.13	2.25	0.88	3.91	1.23	2.06	1.06
Female.....	21.5	3.64	3.12	2.48	0.10	2.13	1.23	4.05	1.55	1.81	1.20
<b>Race</b>											
White.....	21.4	3.78	3.15	2.59	0.12	2.27	1.13	3.89	1.45	1.89	1.12
Black.....	20.5	3.90	2.97	2.44	0.10	1.99	0.73	4.15	1.18	1.88	1.07
Hispanic.....	20.8	3.79	2.94	2.22	0.07	1.79	0.78	4.55	1.27	2.13	1.25
Asian.....	22.0	3.94	3.04	3.11	0.10	2.58	1.81	2.58	1.22	2.21	1.34
<b>Academic track</b>											
Academic.....	22.6	4.17	3.52	3.34	0.15	3.01	1.71	2.16	1.39	1.92	1.16
Vocational.....	20.8	3.48	2.69	1.74	0.06	1.43	0.35	7.54	0.96	1.80	0.78
Both.....	24.7	4.41	3.74	2.99	0.12	2.58	0.55	6.66	0.89	2.01	0.77
Neither.....	18.4	3.44	2.71	1.91	0.09	1.53	0.70	3.96	1.70	2.00	1.32
<b>Control</b>											
Public.....	21.1	3.77	3.05	2.48	0.11	2.14	0.94	4.21	1.42	1.88	0.88
Private.....	22.7	4.10	3.52	3.16	0.08	2.57	1.95	2.09	1.20	1.50	2.51
<b>1987 graduates</b>											
All students.....	23.0	4.03	3.33	2.97	0.43	2.59	1.48	3.65	1.43	1.97	1.14
<b>Sex</b>											
Male.....	22.9	4.01	3.31	3.03	0.47	2.66	1.29	3.67	1.24	2.13	1.07
Female.....	23.1	4.05	3.35	2.92	0.40	2.53	1.63	3.84	1.60	1.81	1.21
<b>Race</b>											
White.....	23.1	3.99	3.30	2.88	0.45	2.64	1.50	3.69	1.46	1.94	1.11
Black.....	22.5	4.14	3.31	2.90	0.35	2.39	1.12	4.01	1.20	2.01	1.11
Hispanic.....	22.9	4.23	3.23	2.77	0.36	2.33	1.27	3.57	1.35	2.40	1.37
Asian.....	24.5	4.31	3.64	3.72	0.57	3.17	2.17	2.08	1.12	2.57	1.14
<b>Academic track</b>											
Academic.....	23.8	4.24	3.62	3.46	0.50	3.10	1.95	2.23	1.50	1.94	1.21
Vocational.....	22.1	3.61	2.73	1.99	0.24	1.65	0.49	7.74	0.84	1.91	0.83
Both.....	24.2	4.22	3.47	3.00	0.34	2.48	0.83	8.40	0.79	1.88	0.79
Neither.....	20.7	3.57	2.76	2.07	0.40	1.68	0.89	4.08	1.83	2.12	1.29
<b>Control</b>											
Public.....	22.9	4.01	3.31	2.92	0.43	2.57	1.37	3.88	1.44	2.06	0.94
Private.....	23.7	4.25	3.53	3.44	0.44	2.61	2.37	1.52	1.28	1.08	2.96

<sup>1</sup> Includes non-occupational vocational education, vocational general introduction, agriculture, business, marketing, health, occupational home economics, trade and industry, and technical courses.

<sup>2</sup> Includes personal and social courses, religion and theology, and all other courses not included in the other subject fields.

NOTE.—The Carnegie unit is a standard of measurement that represents one credit for the completion of a 1-year course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "1987 High School Transcript Study." (This table was prepared December 1988.)

**Table 127.—Average number of Carnegie units earned by high school graduates in vocational education courses, by student characteristic: 1982 and 1987**

Characteristic	Total	Non-occupational vocational education	Vocational general introduction	Agriculture	Business	Marketing	Health	Occupational home economics	Trade and industry	Technical
1	2	3	4	5	6	7	8	9	10	11
<b>1982 graduates</b>										
All students.....	3.98	1.84	0.37	0.17	0.78	0.08	0.04	0.09	0.60	0.01
<b>Sex</b>										
Male.....	3.91	1.75	0.36	0.29	0.29	0.07	0.02	0.04	1.07	0.02
Female.....	4.05	1.93	0.38	0.08	1.23	0.09	0.06	0.14	0.15	0.01
<b>Race</b>										
White.....	3.89	1.78	0.36	0.18	0.80	0.08	0.03	0.09	0.55	0.02
Black.....	4.15	1.98	0.41	0.08	0.74	0.10	0.10	0.10	0.97	0.01
Hispanic.....	4.55	2.17	0.43	0.18	0.73	0.07	0.05	0.10	0.01	0.01
Asian.....	2.58	1.37	0.18	0.05	0.45	0.03	0.03	0.03	0.41	0.01
<b>Academic track</b>										
Academic.....	2.18	1.28	0.18	0.04	0.37	0.03	0.02	0.04	0.19	0.01
Vocational.....	7.54	2.13	0.77	0.51	1.83	0.18	0.08	0.17	1.85	0.02
Both.....	0.66	1.95	0.54	0.54	1.78	0.21	0.12	0.14	1.37	0.01
Neither.....	0.98	2.34	0.36	0.03	0.59	0.08	0.03	0.11	0.34	0.02
<b>Control</b>										
Public.....	4.21	1.94	0.39	0.18	0.81	0.09	0.04	0.10	0.65	0.01
Private.....	2.09	1.03	0.20	0.04	0.55	0.03	0.02	0.03	0.18	0.01
<b>1987 graduates</b>										
All students.....	3.65	1.84	0.34	0.17	0.62	0.10	0.05	0.10	0.56	0.01
<b>Sex</b>										
Male.....	3.87	1.81	0.31	0.28	0.34	0.07	0.03	0.05	0.96	0.02
Female.....	3.64	1.67	0.37	0.08	1.01	0.12	0.07	0.15	0.18	0.01
<b>Race</b>										
White.....	3.69	1.66	0.33	0.20	0.69	0.10	0.04	0.09	0.57	0.01
Black.....	4.01	1.83	0.44	0.09	0.74	0.11	0.09	0.19	0.50	0.02
Hispanic.....	3.57	1.64	0.30	0.06	0.70	0.11	0.05	0.09	0.62	0.00
Asian.....	2.08	1.01	0.20	0.01	0.44	0.08	0.03	0.05	0.25	0.01
<b>Academic track</b>										
Academic.....	2.23	1.29	0.20	0.04	0.42	0.03	0.02	0.04	0.18	0.01
Vocational.....	7.74	2.22	0.72	0.58	1.54	0.31	0.13	0.28	1.95	0.01
Both.....	8.40	1.87	0.58	0.59	1.49	0.23	0.13	0.23	1.46	0.02
Neither.....	4.08	2.35	0.40	0.10	0.58	0.10	0.04	0.12	0.38	0.01
<b>Control</b>										
Public.....	3.88	1.74	0.36	0.19	0.71	0.11	0.05	0.11	0.60	0.01
Private.....	1.52	0.73	0.15	0.01	0.43	0.01	0.01	0.00	0.17	0.01

NOTE.—The Carnegie unit is a standard of measurement that represents one credit for the completion of a 1-year course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "1987 High School Transcript Study." (This table was prepared December 1988.)

**Table 128.—Percentage of high school graduates earning minimum credits in selected combinations of academic courses: 1982 and 1987**

All students	Year of graduation and course combinations taken <sup>1</sup>	Sex		Race/ethnicity			
		Male	Female	White	Black	Hispanic	Asian
1	2	3	4	5	6	7	8
<b>1982 graduates</b>							
4 Eng., 3 S.S., 3 Sci., 3 Math, .5 Comp., & 2 F.L. <sup>2</sup> .....	1.9	2.0	1.7	2.2	0.7	0.5	6.0
4 Eng., 3 S.S., 3 Sci., 3 Math, & .5 Comp. <sup>3</sup> .....	2.7	3.3	2.1	3.1	1.0	0.9	7.1
4 Eng., 3 S.S., 3 Sci., 3 Math, & 2 F.L. ....	8.8	8.5	9.2	10.1	5.2	3.5	17.0
4 Eng., 3 S.S., 3 Sci., & 3 Math.....	13.4	14.3	12.6	14.9	10.1	6.3	21.0
4 Eng., 3 S.S., 2 Sci., & 2 Math.....	29.2	29.1	29.3	30.2	26.1	23.5	34.5
<b>1987 graduates</b>							
4 Eng., 3 S.S., 3 Sci., 3 Math, .5 Comp., & 2 F.L. <sup>2</sup> .....	12.0	13.3	10.9	12.7	6.3	5.5	24.3
4 Eng., 3 S.S., 3 Sci., 3 Math, & .5 Comp. <sup>3</sup> .....	16.3	18.4	14.4	17.2	11.7	6.8	26.1
4 Eng., 3 S.S., 3 Sci., 3 Math, & 2 F.L. ....	20.9	20.9	20.9	21.6	16.1	11.8	41.9
4 Eng., 3 S.S., 3 Sci., & 3 Math.....	28.6	30.1	27.2	29.7	24.3	17.9	48.3
4 Eng., 3 S.S., 2 Sci., & 2 Math.....	54.6	54.6	54.7	53.5	57.2	55.1	71.6
Increase from 1982 to 1987, in percentage points							
<b>Difference from 1982 to 1987</b>							
4 Eng., 3 S.S., 3 Sci., 3 Math, .5 Comp., & 2 F.L. <sup>2</sup> .....	10.2	11.2	9.2	10.5	7.6	5.0	16.2
4 Eng., 3 S.S., 3 Sci., 3 Math, & .5 Comp. <sup>3</sup> .....	13.6	15.1	12.3	14.1	10.7	7.7	21.0
4 Eng., 3 S.S., 3 Sci., 3 Math, & 2 F.L. ....	12.1	12.4	11.6	11.7	10.9	6.4	24.9
4 Eng., 3 S.S., 3 Sci., & 3 Math.....	15.2	15.8	14.7	14.8	14.2	11.6	27.2
4 Eng., 3 S.S., 2 Sci., & 2 Math.....	25.4	25.5	25.4	23.4	29.1	31.6	37.3

<sup>1</sup> Eng. = English; S.S. = Social Studies; Sci. = Science; Comp. = Computer Science; and F.L. = Foreign Language.  
<sup>2</sup> The National Commission on Excellence in Education recommended that all college-bound high school students follow these courses as a minimum.  
<sup>3</sup> The National Commission on Excellence in Education recommended that all high school students follow these courses as a minimum.

NOTE.—Calculations based on unrounded figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "1987 High School Transcript Study," unpublished tabulations. (This table was prepared December 1988.)

**Table 129.—High school courses taken by persons age 16 and over,<sup>1</sup> by sex, race, and age: Spring 1984**

(Numbers in thousands)

Courses taken	Total	Sex		Race		Age					
		Men	Women	White	Black	16 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old	65 years old and over
1	2	3	4	5	6	7	8	9	10	11	12
Persons over 16 who have attended 12 years of school or more.....	129,866	62,334	67,522	114,366	12,160	25,512	35,177	25,718	16,634	14,360	12,436
Number of persons completing courses											
Algebra.....	102,666	50,637	51,859	80,669	9,272	20,106	27,554	20,314	12,682	11,437	10,404
Trigonometry or geometry.....	71,429	37,456	33,973	63,582	5,662	13,764	19,604	14,409	6,105	7,665	7,662
Chemistry or physics.....	62,352	33,612	28,540	54,266	5,922	11,771	17,111	12,714	7,579	6,979	6,197
English, 3 years or more.....	121,363	57,852	63,531	107,062	11,486	24,262	32,636	24,291	15,407	13,268	11,519
Foreign language, 2 years or more.....	56,655	24,364	32,471	50,493	4,456	10,187	16,093	11,622	6,422	5,967	6,665
Industrial arts, shop, or home economics, 2 years or more.....	73,883	36,243	37,640	63,758	6,230	15,300	20,708	14,966	9,874	7,701	5,404
Business courses, 2 years or more.....	54,297	16,043	38,254	47,865	5,160	10,957	14,165	11,260	7,315	6,184	4,366
Percentage of persons completing courses											
Algebra.....	79.1	61.6	76.6	79.3	76.1	76.6	76.3	79.0	77.4	79.5	63.6
Trigonometry or geometry.....	55.0	60.1	60.3	55.6	46.5	54.0	56.3	56.0	48.7	53.4	61.6
Chemistry or physics.....	48.0	54.2	42.3	47.5	46.6	46.1	46.6	49.4	45.6	46.5	49.8
English, 3 years or more.....	93.5	92.6	94.1	93.6	94.3	95.1	92.8	94.5	92.6	92.3	92.6
Foreign language, 2 years or more.....	43.6	39.1	48.1	44.2	36.6	39.9	45.7	45.2	38.6	40.6	53.6
Industrial arts, shop, or home economics, 2 years or more.....	56.9	58.1	55.7	55.7	67.6	60.0	58.9	57.9	59.4	53.6	43.4
Business courses, 2 years or more.....	41.6	25.7	56.7	41.9	42.6	43.0	40.3	43.9	44.0	43.0	35.3

<sup>1</sup> Includes only persons completing 12 years of school or more.

NOTE.—Data are based on sample surveys of the civilian noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-70, No. 11, "Educational Background and Economic Status: Spring 1984." (This table was prepared October 1987.)

**Table 130.—Eighth graders' attitudes about selected classes, by selected student and school characteristics: 1988**

Class subject and attitude	Percent who agree with statement													
	All 8th graders	Sex		Race/ethnicity					Socioeconomic status <sup>1</sup>			Control of school attended		
		Male	Female	White	Black	Hispanic	Asian	American Indian	Low	Middle	High	Public	Catholic	Other private
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Mathematics class</b>														
Look forward to.....	56.6	58.7	54.6	52.6	69.2	64.2	67.6	63.7	62.7	55.9	52.3	57.0	53.6	53.6
Afraid to ask questions.....	20.9	18.6	23.2	19.3	22.0	26.6	23.1	32.5	25.7	20.3	17.7	21.4	19.0	14.8
Useful in my future.....	86.0	89.0	86.9	87.4	89.3	89.7	90.4	85.1	88.0	87.6	88.3	88.0	88.3	86.6
<b>English class</b>														
Look forward to.....	56.9	52.0	61.6	52.2	72.6	67.5	63.6	66.0	62.7	55.7	53.6	57.6	46.4	56.9
Afraid to ask questions.....	15.4	15.6	15.3	14.2	16.7	20.7	17.4	19.6	19.4	15.5	11.5	15.7	15.2	11.0
Useful in my future.....	84.1	60.6	67.6	82.9	67.9	88.1	88.0	60.7	83.3	83.4	86.4	84.1	84.0	85.1
<b>Social studies class</b>														
Look forward to.....	58.5	62.1	55.0	56.0	67.6	63.3	64.0	60.2	58.5	57.6	59.9	59.0	54.0	55.8
Afraid to ask questions.....	15.1	14.1	16.1	13.7	16.5	20.6	19.1	22.2	19.4	15.2	10.7	15.4	13.6	12.1
Useful in my future.....	59.1	61.0	57.3	58.9	66.7	63.0	64.7	64.3	61.2	57.2	60.9	59.3	55.4	61.5
<b>Science class</b>														
Look forward to.....	61.3	65.1	57.5	59.0	68.3	66.6	67.2	64.3	62.9	60.5	61.2	61.7	54.7	63.4
Afraid to ask questions.....	14.9	14.2	15.5	13.5	16.0	20.6	16.2	25.6	16.7	14.6	11.5	15.2	14.0	11.0
Useful in my future.....	66.7	72.3	65.2	67.6	71.7	70.4	74.5	67.6	66.1	67.6	71.4	66.9	64.3	70.6

<sup>1</sup> Socioeconomic status was measured by a composite score on parental education and occupations, family income, and household characteristics. The "Low" SES group is the lowest quartile; the "Middle" SES group is the middle two quartiles; and the "High" SES group is the upper quartile.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988" survey. (This table was prepared June 1989.)

**Table 131.—Expected occupations of 8th graders at age 30, by selected student and school characteristics: 1988**

Expected occupation at age 30	Percent who agree with statement													
	All 8th graders	Sex		Race/ethnicity					Socioeconomic status <sup>1</sup>			Control of school attended		
		Male	Female	White	Black	Hispanic	Asian	American Indian	Low	Middle	High	Public	Catholic	Other private
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Craftsperson or operator.....	4.2	7.6	0.9	4.3	3.2	5.3	3.6	6.6	7.1	4.3	1.4	4.5	2.4	2.0
Farmer or farm manager.....	1.0	1.7	0.3	1.2	0.1	0.6	0.6	0.3	1.0	1.2	0.5	1.0	0.3	1.0
Housewife/homemaker.....	2.3	0.2	4.4	2.5	0.9	2.9	1.1	3.1	3.2	1.9	2.2	2.2	2.1	3.6
Laborer or farm worker.....	0.6	1.0	0.1	0.5	0.6	0.6	0.7	0.2	1.1	0.4	0.3	0.6	0.2	0.1
Military, police, or security officer.....	9.6	14.9	4.3	9.0	11.4	11.0	7.0	17.0	11.5	10.2	6.5	10.0	6.4	6.0
Professional, business, or managerial.....	26.6	19.6	37.6	26.7	29.3	26.0	34.9	23.0	20.1	27.6	38.9	27.6	36.2	36.9
Business owner.....	6.2	6.6	5.6	6.3	5.6	5.7	6.4	5.7	4.7	6.4	7.2	6.0	7.6	8.0
Technical.....	6.2	6.3	4.2	5.7	6.0	7.3	7.6	6.5	6.4	6.6	5.1	6.4	5.6	4.2
Salesperson, clerical, or office worker.....	2.6	1.2	4.5	2.7	2.9	3.6	2.3	2.3	3.6	2.9	1.7	2.9	2.1	1.6
Science or engineering professional.....	5.9	6.5	3.3	6.1	4.2	4.6	9.7	6.4	3.4	5.3	9.4	5.6	7.5	7.6
Service worker.....	4.9	2.1	7.7	4.9	6.4	3.9	2.3	3.4	7.2	5.0	2.5	5.1	3.2	3.0
Other employment.....	17.0	17.6	16.5	17.7	16.3	15.1	13.4	11.9	15.7	17.9	16.6	17.0	17.7	16.4
Don't know.....	10.5	10.4	10.6	10.2	10.4	12.5	10.5	13.5	14.3	10.1	7.5	10.8	6.3	9.1

<sup>1</sup> Socioeconomic status was measured by a composite score on parental education and occupations, family income, and household characteristics. The "Low" SES group is the lowest quartile; the "Middle" SES group is the middle two quartiles; and the "High" SES group is the upper quartile.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988" survey. (This table was prepared June 1989.)

**Table 132.—Eighth graders' attitudes about school climate, by student and school characteristics: 1988**

Statements about school climate	Percent who strongly agree or agree with statement														
	All 8th graders	Sex		Race/ethnicity					Socioeconomic status <sup>1</sup>			Control of school attended			
		Male	Female	White	Black	Hispanic	Asian	American Indian	Low	Middle	High	Public	Catholic	Other private	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Students get along well with teachers.....	67.1	67.8	66.5	68.1	60.5	66.4	73.0	65.2	64.3	66.2	71.5	65.8	75.4	60.5	
There is real school spirit.....	68.6	67.2	69.9	69.8	65.0	64.9	66.7	67.4	67.9	68.9	68.7	68.1	70.5	74.0	
Rules for behavior are strict.....	68.5	70.9	66.1	68.5	68.7	68.4	67.3	65.4	68.2	68.1	69.4	67.1	76.4	77.2	
Discipline is fair.....	69.1	67.3	70.9	69.7	65.0	70.7	72.5	63.5	67.1	66.3	72.7	66.9	69.4	72.7	
Other students often disrupt class.....	77.9	76.2	77.5	77.3	60.5	78.1	78.1	79.0	79.1	76.5	75.6	79.0	70.6	67.8	
Teaching is good.....	80.2	78.9	81.5	80.0	80.0	81.3	83.4	76.7	78.8	79.5	83.0	79.6	82.9	96.4	
Teachers are interested in students.....	75.2	74.9	75.6	74.7	76.6	76.8	76.6	68.5	74.0	74.8	77.3	73.9	83.0	88.2	
Teachers praise my effort when I work hard.....	63.3	63.0	63.5	60.3	72.1	70.7	70.6	63.3	66.6	61.7	63.0	62.3	66.9	74.8	
I often feel "put down" by my teachers.....	21.6	23.4	20.1	21.7	21.5	22.6	17.1	30.5	23.7	21.9	19.6	21.8	22.4	19.3	
Teachers listen to what I have to say.....	68.4	66.9	69.9	67.1	73.2	70.6	74.9	62.1	68.9	66.9	70.9	67.5	73.3	78.2	
I don't feel safe at this school.....	11.6	13.3	10.3	9.9	16.0	16.1	12.2	17.4	15.3	12.1	7.9	12.5	7.6	5.8	
Disruptions by other students interfere with my learning.....	39.6	39.3	39.9	35.7	54.9	44.9	45.1	55.2	48.0	39.4	32.1	41.0	31.8	28.0	
Misbehaving students often get away with it.....	52.8	57.5	48.0	51.9	53.4	55.7	55.3	59.0	52.7	52.2	53.9	53.3	50.5	45.9	

<sup>1</sup>Socioeconomic status was measured by a composite score on parental education and occupations, family income, and household characteristics. The "Low" SES group is the lowest quartile; the "Middle" SES group is the middle two quartiles; and the "High" SES group is the upper quartile.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988" survey. (This table was prepared June 1989.)

**Table 133.—Sex education in public and private schools: 1986**

[Percent of all teenagers]

Sex education, by grade level and content of class	All teenagers	Age of student responding			Region			
		12-13 years	14-15 years	16-17 years	East	Midwest	South	West
1	2	3	4	5	6	7	8	9
Ever had sex education course or class.....	59	42	60	73	65	54	45	60
Beginning in								
1st to 4th grade.....	6	13	4	4	7	7	2	6
5th grade.....	20	40	19	10	16	20	20	23
6th grade.....	18	21	19	16	28	13	12	20
7th grade.....	18	19	22	14	23	12	14	22
8th grade.....	13	5	13	17	14	9	13	15
9th grade.....	15	—	17	21	5	24	25	6
10th grade or later.....	7	—	( <sup>1</sup> )	16	4	6	10	8
In one grade or more								
Just one grade.....	49	52	46	50	43	50	62	42
In more than one grade.....	49	44	52	49	56	46	36	55
Contents of sex education class								
Biological facts about reproduction.....	52	83	89	92	97	82	89	88
Coping with sexual development.....	48	66	83	83	85	78	84	71
Different types of birth control.....	39	48	63	79	71	55	74	65
Preventing sexual abuse.....	32	56	55	53	46	49	61	62
Facts about abortion.....	32	39	57	59	57	45	54	60
Where to get contraceptives.....	30	31	45	67	55	45	60	44
Percent who have had comprehensive sex education <sup>2</sup> .....	35	40	60	70	64	49	64	62

<sup>1</sup> Less than 0.5 percent.

<sup>2</sup> "Comprehensive" sex education includes at least four of the six content areas listed above.

—Data not applicable.

SOURCE: Planned Parenthood Federation of America, Inc., Louise Harris and Associates, Inc., *American Teens Speak: Sex, Myths, TV, and Birth Control*, September-October 1986. (This table was prepared November 1988.)

**Table 134.—Participation of high school seniors in extracurricular activities, by selected student characteristics: 1972 and 1982**

Student characteristics	Percent of seniors participating in activities								
	Athletics <sup>1</sup>	Debating, drama, band, chorus <sup>2</sup>	Subject-matter clubs	Vocational education clubs	Newspaper, magazine, or yearbook clubs	Student council, government, political clubs	Hobby clubs	Cheerleaders, pep club, majorettes	Honorary clubs
1	2	3	4	5	6	7	8	9	10
<b>All 1972 seniors</b> .....	<b>44.5</b>	<b>32.9</b>	<b>25.8</b>	<b>23.0</b>	<b>20.4</b>	<b>19.6</b>	<b>18.7</b>	<b>17.3</b>	<b>14.8</b>
<b>Sex</b>									
Male .....	56.2	26.9	20.4	18.0	14.7	16.6	23.7	5.3	11.1
Female .....	32.1	39.8	31.2	29.6	26.7	21.0	13.3	28.6	19.4
<b>Race</b>									
White .....	44.5	32.8	25.0	21.9	20.7	19.2	16.3	17.3	15.7
Black .....	49.7	40.8	33.1	33.1	21.2	25.5	19.7	20.5	11.6
<b>Father's highest level of education</b>									
Less than high school .....	39.3	31.1	24.1	30.0	19.4	15.4	16.9	15.6	12.5
High school graduate <sup>3</sup> .....	46.7	32.9	25.7	21.9	21.4	20.2	16.0	19.6	16.1
College graduate <sup>4</sup> .....	51.4	40.2	26.6	12.4	24.2	27.6	20.6	17.5	23.1
<b>High school curriculum</b>									
General .....	43.3	33.0	22.3	24.3	17.5	15.5	19.4	15.5	7.0
Academic .....	53.4	39.7	29.6	14.6	25.7	26.7	17.7	20.2	25.2
Vocational .....	31.3	21.9	22.9	37.2	15.4	12.1	18.7	15.2	6.6
<b>All 1982 seniors</b> .....	<b>51.5</b>	<b>34.6</b>	<b>20.6</b>	<b>23.6</b>	<b>18.3</b>	<b>16.3</b>	<b>20.0</b>	<b>13.7</b>	<b>15.6</b>
<b>Sex</b>									
Male .....	61.7	25.8	16.4	20.2	13.3	13.1	23.5	4.1	12.1
Female .....	41.8	42.9	24.6	26.7	23.1	19.3	16.7	22.8	16.6
<b>Race</b>									
White .....	51.1	34.0	19.7	22.2	19.1	15.6	19.1	13.5	16.6
Black .....	54.5	43.1	23.9	30.0	16.0	19.7	19.5	16.6	12.5
<b>Father's highest level of education</b>									
Less than high school .....	43.4	29.4	21.2	31.0	14.6	12.2	16.4	11.6	10.6
High school graduate <sup>3</sup> .....	52.4	33.6	19.6	24.1	17.9	15.9	19.9	14.6	14.9
College graduate <sup>4</sup> .....	62.6	42.4	23.1	13.4	25.9	24.1	21.0	14.4	26.6
<b>High school curriculum</b>									
General .....	49.5	33.1	16.7	22.9	15.0	11.6	20.6	12.6	7.7
Academic .....	61.1	41.9	25.4	12.7	25.5	24.7	19.6	15.7	26.4
Vocational .....	40.7	26.0	18.7	40.2	12.4	10.5	19.5	12.4	7.7

<sup>1</sup>In 1972, includes participation in team athletics, intramurals, letterman's clubs, and sports clubs. In 1982, includes varsity athletic teams and other athletic teams—in or out of school.

<sup>2</sup>In 1972, includes debating, drama, band, and chorus. In 1982, includes debating, drama, band, orchestra, chorus, and dance.

<sup>3</sup>Includes attendance at a vocational, trade or business school, or 2-year college, or attendance at a 4-year college resulting in less than a bachelor's degree.

<sup>4</sup>Includes those with a bachelor's or higher-level degree.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Longitudinal Study of 1972" and High School and Beyond surveys. (This table was prepared August 1987.)

**Table 135.—Incidence of student infractions, disciplinary actions, and perceived changes in amount of classroom disruption in public secondary schools, by school characteristics: 1983-84**

Disruption or disciplinary action	All public secondary schools	Type <sup>1</sup>		School size			Metropolitan status			District size		
		Junior high	Senior high	Less than 400	400 to 999	1,000 or more	Rural	Suburban	Urban	Less than 1,000	1,000 to 24,999	25,000 or more
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Percent of schools with occurrences</b>												
<b>Student infractions</b>												
Student caught selling illegal drugs at school.....	35	31	39	10	38	63	21	46	51	11	40	48
Theft of personal item reported to school <sup>2</sup> .....	82	80	84	71	85	93	79	84	89	72	84	97
Law violations reported to police by school authorities.....	72	70	75	62	71	88	64	78	88	61	73	75
<b>Disciplinary actions</b>												
Suspension for disciplinary reasons.....	96	97	95	89	98	99	92	98	100	88	97	99
In-school alternative to suspension.....	69	75	66	63	71	75	66	75	65	57	74	66
Expulsion.....	37	31	42	29	35	51	35	35	45	27	37	50
Transfer to special school for disruptive students.....	33	39	30	14	38	50	19	43	52	12	34	56
<b>Occurrences per 100 students <sup>3</sup></b>												
<b>Student infractions</b>												
Student caught selling illegal drugs at school.....	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.5	0.1	0.2	0.4
Theft of personal item reported to school <sup>2</sup> .....	1.2	0.8	1.4	1.7	0.9	1.1	1.4	1.0	1.3	2.0	1.0	1.1
Law violations reported to police by school authorities.....	0.8	0.7	0.8	1.0	0.7	0.9	0.7	0.8	1.5	0.9	0.7	1.2
<b>Disciplinary actions</b>												
Suspension for disciplinary reasons.....	10.0	10.2	9.9	7.1	10.1	13.7	8.8	10.9	18.8	4.7	10.4	15.3
In-school alternative to suspension.....	9.9	10.1	9.9	8.0	10.9	13.1	7.1	12.1	12.9	4.9	11.2	11.3
Expulsion.....	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.6	0.3	0.2	0.5
Transfer to special school for disruptive students.....	0.3	0.3	0.4	0.2	0.3	0.6	0.1	0.4	0.9	0.1	0.2	0.9
<b>Percent of school administrators</b>												
<b>Perceived change in amount of classroom disruption between 1980 and 1985 <sup>4</sup></b>												
Less.....	66	59	73	60	69	88	65	71	58	66	66	66
Same.....	22	28	18	27	20	19	24	20	22	22	23	17
More.....	12	13	10	13	11	13	12	9	20	11	11	16

<sup>1</sup> Some schools have both elementary and secondary grades. These schools are not shown separately because their number is small. These schools are included in the totals and in analyses by other school characteristics.

<sup>2</sup> Includes only thefts of items valued at \$10 or more reported by students to school authorities.

<sup>3</sup> Based on all schools, including those reporting no occurrences.

<sup>4</sup> School authorities compared current disruptive classroom behavior with that of 5 years ago on a 5-point scale ranging from "much less now" to "much more now." Percents have been adjusted for "don't know" responses. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Discipline in Public Secondary Schools." (This table was prepared October 1986.)



**Table 136.—Teacher perceptions of changes in disruptive student behavior, by school characteristics: 1986-87**

School characteristics	Percent of teachers indicating that compared to 5 years ago disruptive behavior is—				
	Much less now	Somewhat less now	About the same	Somewhat more now	Much more now
1	2	3	4	5	6
All teachers.....	10	17	29	25	19
School level <sup>1</sup>					
Elementary.....	8	12	27	29	24
Middle school and junior high.....	13	22	24	22	20
Senior high school.....	12	23	32	22	12
School enrollment					
Less than 400.....	11	16	28	25	21
400 to 999.....	10	17	28	26	19
1,000 or more.....	10	19	30	24	17
Metropolitan status					
Urban <sup>2</sup> .....	15	16	20	23	26
Suburban <sup>3</sup> .....	8	16	32	26	18
Rural <sup>4</sup> .....	11	19	28	26	16

<sup>1</sup> Elementary schools include all schools in which the lowest grade is less than 6 and the highest grade is less than 9; middle schools and junior high schools include all schools in which the lowest grade is greater than 5 and the highest grade is less than 10; Senior high schools include all schools in which the lowest grade is greater than 9 and the highest grade is greater than 9. The small number of combined schools, which offer elementary and secondary-level education, are not shown by level of school, but are included in other totals.

<sup>2</sup> Within Standard Metropolitan Statistical Areas, inside central city.

<sup>3</sup> Within Standard Metropolitan Statistical Areas, outside central city.  
<sup>4</sup> Outside of Standard Metropolitan Statistical Areas.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Public School Teacher Perspectives on School Discipline." (This table was prepared December 1987.)

**Table 137.—Percent of teachers rating selected factors as limiting their ability to maintain order, by school level<sup>1</sup> and metropolitan status: 1986-87**

Factors rated as limiting teachers much or very much <sup>1</sup>	All teachers	School level <sup>2</sup>			Metropolitan status		
		Elementary school	Middle and junior high school	Senior high school	Urban <sup>3</sup>	Suburban <sup>4</sup>	Rural <sup>5</sup>
1	2	3	4	5	6	7	8
Lack of or inadequate alternative placements/programs for disruptive students.....	39	43	39	35	52	36	36
Lack of student interest in learning.....	38	31	43	47	45	37	38
School or district restrictions on the use of strict penalties.....	22	21	25	23	34	21	17
Lack of administrative support.....	20	19	20	23	26	18	19
Likelihood of complaint from parents.....	19	23	17	14	23	18	18
Principal/administrator fear of being sued for disciplining students.....	18	19	15	18	21	17	18
Teacher fear of being sued for disciplining students.....	18	22	14	14	21	15	21
Lack of or inadequate teacher training in discipline procedures and school law.....	15	15	17	13	20	13	13
Court decisions on student misconduct.....	15	13	19	17	24	14	11
Teacher fear of being viewed as unable to control students.....	15	15	18	15	22	12	13
Fear of student reprisal.....	8	5	5	8	11	3	5
Lack of or inadequate security personnel.....	6	3	7	10	14	5	4

<sup>1</sup> Teachers responded on a 6-point scale with 0="not at all"; 1="very little"; 4="much"; and 5="very much." Percents are based on teachers who indicated the factor limited them "much" or "very much."

<sup>2</sup> Elementary schools include all schools in which the lowest grade is less than 6 and the highest grade is less than 9; middle schools and junior high schools include all schools in which the lowest grade is greater than 5 and the highest grade is less than 10; senior high schools include all schools in which the lowest grade is greater than 9 and the highest grade is greater than 9. The small number of combined schools, which offer both elementary and secondary-level education, are not shown by level of school but are included in other totals.

<sup>3</sup> Within Standard Metropolitan Statistical Areas, inside central city.  
<sup>4</sup> Within Standard Metropolitan Statistical Areas, outside central city.  
<sup>5</sup> Outside of Standard Metropolitan Statistical Areas.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Public School Teacher Perspectives on School Discipline." (This table was prepared December 1987.)

Table 136.—Trends in drug use among high school seniors, by type of drug and frequency of use: 1975 to 1989

Type of drug and frequency of use	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Percent reporting having ever used drugs															
Alcohol.....	90.4	91.9	92.5	93.1	93.0	93.2	92.8	92.8	92.8	92.8	92.2	91.3	92.2	92.0	90.7
Any illicit drug abuse.....	55.2	58.3	61.6	64.1	65.1	65.4	65.8	64.4	62.9	61.8	60.6	57.6	56.6	53.9	50.9
Marijuana only.....	19.0	22.9	25.8	27.6	27.7	26.7	22.8	23.3	22.5	21.3	20.9	19.9	20.8	—	—
Any illicit drug other than marijuana <sup>1</sup> .....	36.2	35.4	35.8	36.5	37.4	38.7	42.8	41.1	40.4	40.3	39.7	37.7	35.8	32.5	31.4
Use of selected drugs															
Cocaine.....	9.0	9.7	10.8	12.9	15.4	15.7	16.5	16.0	16.2	16.1	17.3	18.9	15.2	12.1	10.3
Heroin.....	2.2	1.8	1.6	1.6	1.1	1.1	1.1	1.2	1.2	1.3	1.2	1.1	1.2	1.1	1.3
LSD.....	11.3	11.0	9.8	9.7	9.5	9.3	9.8	9.8	8.9	8.0	7.5	7.2	8.4	7.7	8.3
Marijuana/hashish.....	47.3	52.8	56.4	59.2	60.4	60.3	59.5	58.7	57.0	54.9	54.2	50.9	50.2	47.2	43.7
PCP.....	—	—	—	—	12.6	9.8	7.8	6.0	5.8	5.0	4.9	4.8	3.0	2.9	3.9
Percent reporting use of drugs in the past 12 months															
Alcohol.....	84.8	85.7	87.0	87.7	88.1	87.9	87.0	86.8	87.3	86.0	85.6	84.5	85.7	85.3	82.7
Any illicit drug abuse.....	45.0	48.1	51.1	53.8	54.2	53.1	52.1	49.4	47.4	45.8	46.3	44.3	41.7	38.5	35.4
Marijuana only.....	18.8	22.7	25.1	26.7	26.0	22.7	18.1	19.3	19.0	17.8	18.9	16.4	17.6	—	—
Any illicit drug other than marijuana <sup>1</sup> .....	26.2	25.4	26.0	27.1	28.2	30.4	34.0	30.1	28.4	28.0	27.4	25.9	24.1	21.1	20.0
Use of selected drugs															
Cocaine.....	5.8	6.0	7.2	9.0	12.0	12.3	12.4	11.5	11.4	11.6	13.1	12.7	10.3	7.9	6.5
Heroin.....	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.8
LSD.....	7.2	6.4	5.5	6.3	6.6	6.5	6.5	6.1	5.4	4.7	4.4	4.5	5.2	4.6	4.9
Marijuana/hashish.....	40.0	44.5	47.6	50.2	50.8	48.8	46.1	44.3	42.3	40.0	40.6	38.8	36.3	33.1	29.6
PCP.....	—	—	—	—	7.0	4.4	3.2	2.2	2.6	2.3	2.9	2.4	1.3	1.2	2.4
Percent reporting use of drugs in the past 30 days															
Alcohol.....	68.2	68.3	71.2	72.1	71.8	72.0	70.7	69.7	69.4	67.2	65.9	65.3	66.4	63.9	60.0
Any illicit drug abuse.....	30.7	34.2	37.6	38.9	38.9	37.2	36.9	32.5	30.5	29.2	29.7	27.1	24.7	21.3	19.7
Marijuana only.....	15.3	20.3	22.4	23.8	22.2	18.8	15.2	15.5	15.1	14.1	14.8	13.9	13.1	—	—
Any illicit drug other than marijuana <sup>1</sup> .....	15.4	13.9	15.2	15.1	16.6	18.4	21.7	17.0	15.4	15.1	14.9	13.2	11.6	10.0	9.1
Use of selected drugs															
Cocaine.....	1.9	2.0	2.9	3.9	5.7	5.2	5.8	5.0	4.9	5.8	6.7	6.2	4.3	3.4	2.8
Heroin.....	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3
LSD.....	2.3	1.9	2.1	2.1	2.4	2.3	2.5	2.4	1.9	1.5	1.6	1.7	1.6	1.6	1.6
Marijuana/hashish.....	27.1	32.2	35.4	37.1	36.5	33.7	31.8	28.5	27.0	25.2	25.7	23.4	21.0	18.0	16.7
PCP.....	—	—	—	—	2.4	1.4	1.4	1.0	1.3	1.0	1.1	1.3	0.6	0.3	1.4

<sup>1</sup> Other illicit drugs include any use of hallucinogens, cocaine, and heroin, or any use of other opiates, stimulants, sedatives, or tranquilizers not under a doctor's orders.  
—Data not available.

NOTE.—A revised questionnaire was used in 1982 and later years to reduce the inappropriate reporting of nonprescription stimulants. This slightly reduced the positive responses for some types of drug abuse.

SOURCE: U.S. Department of Health and Human Services, Alcohol, Drug Abuse, and Mental Health Administration, *Drug Use Among American High School Students and Other Young Adults, National Trends Through 1987* and press release dated February 1990. (This table was prepared May 1990.)

**Table 139.—Ages for compulsory school attendance and compulsory provision of services for special education students, by State: 1989**

State	Compulsory attendance (November 1989)	Compulsory provision of services for special education (October 1989)	State	Compulsory attendance (November 1989)	Compulsory provision of services for special education (October 1989)
1	2	3	1	2	3
Alabama.....	7 to 16	<sup>1</sup> 5 to 20	Missouri.....	7 to 18	5 to 20
Alaska.....	<sup>2</sup> 7 to 16	3 to 21	Montana.....	<sup>7</sup> 7 to 18	<sup>8</sup> 8 to 18
Arizona.....	8 to 16	<sup>1</sup> 5 to 21	Nebraska.....	7 to 16	Birth to 20
Arkansas.....	5 to 17	5 to 20	Nevada.....	7 to 17	5 to 21
California.....	6 to 16	5 to 21	New Hampshire.....	6 to 16	3 to 20
Colorado.....	7 to 16	<sup>3</sup> 5 to 20	New Jersey.....	6 to 16	<sup>3</sup> 3 to 21
Connecticut.....	7 to 16	3 to 21	New Mexico.....	6 to 16	3 to 21
Delaware.....	5 to 16	4 to 20	New York.....	<sup>6</sup> 6 to 16	<sup>10</sup> 3 to 21
District of Columbia.....	7 to 17	3 to 21	North Carolina.....	7 to 16	5 to 20
Florida.....	6 to 16	<sup>4</sup> 5 to 18	North Dakota.....	7 to 16	3 to 20
Georgia.....	7 to 16	5 to 21	Ohio.....	6 to 16	5 to 21
Hawaii.....	6 to 16	3 to 20	Oklahoma.....	7 to 18	4 to 21
Idaho.....	7 to 16	<sup>1</sup> 3 to 20	Oregon.....	7 to 18	<sup>11</sup> 5 to 20
Illinois.....	7 to 16	3 to 21	Pennsylvania.....	8 to 17	<sup>12</sup> 5 to 21
Indiana.....	7 to 16	<sup>3</sup> 5 to 17	Rhode Island.....	6 to 16	3 to 20
Iowa.....	7 to 16	Birth to 20	South Carolina.....	<sup>13</sup> 5 to 17	5 to 20
Kansas.....	7 to 16	5 to 21	South Dakota.....	<sup>7</sup> 7 to 16	3 to 20
Kentucky.....	<sup>6</sup> 6 to 16	5 to 20	Tennessee.....	7 to 17	4 to 21
Louisiana.....	7 to 17	3 to 21	Texas.....	<sup>14</sup> 7 to 17	3 to 21
Maine.....	7 to 17	5 to 19	Utah.....	6 to 16	3 to 21
Maryland.....	6 to 16	Birth to 20	Vermont.....	7 to 16	<sup>3</sup> 5 to 21
Massachusetts.....	6 to 16	3 to 21	Virginia.....	5 to 17	2 to 21
Michigan.....	6 to 16	Birth to 25	Washington.....	8 to 18	3 to 21
Minnesota.....	<sup>6</sup> 7 to 16	Birth to 20	West Virginia.....	6 to 16	5 to 22
Mississippi.....	6 to 14	5 to 20	Wisconsin.....	6 to 16	3 to 20
			Wyoming.....	7 to 16	<sup>11</sup> 3 to 20

<sup>1</sup> In districts where kindergarten is available, special education services are available; all local school systems provide kindergarten.

<sup>2</sup> Ages 7 to 16 or high school graduation.

<sup>3</sup> In some cases a local school system may choose to begin services as of a child's birthdate.

<sup>4</sup> Children are eligible for 13 years of schooling beginning in kindergarten.

<sup>5</sup> Must have parental signature for leaving school between ages of 16 and 18.

<sup>6</sup> Takes effect in the year 2000. Currently 7 to 16.

<sup>7</sup> May leave after completion of eighth grade.

<sup>8</sup> In some cases a local school system may choose to begin services as of a child's birthdate. In districts where kindergarten is available, special education services are available.

<sup>9</sup> The ages are 6 to 17 for New York City and Buffalo.

<sup>10</sup> State has established two points in the program year by which children must be 3 years of age to be eligible for services.

<sup>11</sup> In districts where kindergarten is available, special education services are available.

<sup>12</sup> In some cases a local school system may choose to begin services as of a child's birthdate. In districts where kindergarten is available, special education services are available; all local school systems provide kindergarten.

<sup>13</sup> Permits parental waiver of kindergarten at age 5.

<sup>14</sup> Must complete academic year in which 16th birthday occurs.

NOTE.—The Education of the Handicapped Act (EHA) Amendments of 1996 make it mandatory for all States receiving EHA funds to serve all 6- to 16-year-old handicapped children at present and all 3- to 5-year-old handicapped children by 1991.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, *The Eleventh Annual Report to Congress on the Implementation of the Education of the Handicapped Act, 1989*; Education Commission of the States, "Compulsory School Age Requirements, March 1967," and unpublished revisions. (This table was prepared June 1990.)

**BEST COPY AVAILABLE**

**Table 140.—Eighth graders' attendance patterns, by student and school characteristics: 1988**

Attendance pattern	Percent of 8th graders													
	All 8th graders	Sex		Race/ethnicity					Socioeconomic status <sup>1</sup>			Control of school attended		
		Male	Female	White	Black	Hispanic	Asian	American Indian	Low	Middle	High	Public	Catholic	Other private
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Number of days missed over the past 4 weeks</b>														
None.....	45.2	49.2	41.3	44.8	50.0	41.8	57.9	32.8	39.4	46.0	49.2	44.1	53.5	52.8
1 or 2 days.....	33.7	32.2	35.3	35.1	27.8	31.9	28.5	35.1	32.9	33.5	35.0	33.9	32.8	32.5
3 or 4 days.....	13.3	11.7	15.0	13.0	13.8	16.1	7.3	21.0	16.2	13.4	10.4	13.9	8.5	9.5
5 or more days.....	7.7	6.9	8.5	7.2	6.4	10.2	6.2	11.2	11.4	7.1	5.4	8.1	5.1	5.2
<b>Number of times late over the past 4 weeks</b>														
None.....	63.1	62.5	63.7	66.3	53.8	52.4	66.2	52.9	59.1	63.9	65.4	62.8	69.3	57.6
1 or 2 days.....	25.2	25.4	25.1	24.2	28.6	28.1	23.5	28.9	26.3	24.7	25.3	25.3	22.6	28.6
3 or more days.....	11.7	12.1	11.2	9.5	17.8	19.5	10.3	18.2	14.6	11.5	9.3	11.9	8.1	13.3
<b>Cut classes</b>														
Never or almost never.....	91.1	89.4	92.9	92.0	91.0	85.6	91.7	87.3	88.3	91.3	93.6	90.6	95.8	94.2
At least sometimes..	8.9	10.6	7.1	6.0	9.0	14.4	8.3	12.7	11.7	8.7	6.4	9.4	4.2	5.8

<sup>1</sup> Socioeconomic status was measured by a composite score on parental education and occupations, family income, and household characteristics. The "Low" SES group is the lowest quartile; the "Middle" SES group is the middle two quartiles; and the "High" SES group is the upper quartile.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988" survey. (This table was prepared June 1989.)

**Table 141.—Average number of days per school year, classes per day, hours of class per day, and minutes per class in public high schools, by selected school characteristics: 1984-85**

School characteristic	Days per school year	Credit classes per day	Hours of class per day	Minutes per class
1	2	3	4	5
<b>United States average .....</b>	<b>178.0</b>	<b>6.1</b>	<b>5.14</b>	<b>51.1</b>
<b>District enrollment size</b>				
Less than 2,500.....	177.5	6.1	5.22	51.0
2,500 to 9,999.....	179.0	5.8	4.92	50.9
10,000 or more.....	179.1	5.9	5.19	53.2
<b>Metropolitan status</b>				
In SMSA, <sup>1</sup> inside central city.....	179.0	5.9	4.98	51.2
In SMSA, <sup>1</sup> outside central city.....	179.0	5.9	4.92	49.7
Outside SMSA <sup>1</sup> .....	177.4	6.1	5.26	51.6
<b>Region</b>				
North Atlantic.....	180.2	6.0	4.45	44.8
Great Lakes and Plains.....	177.8	6.0	5.10	51.2
Southeast.....	177.9	5.8	5.33	54.9
West and Southwest.....	178.7	6.3	5.81	53.2

<sup>1</sup> Standard Metropolitan Statistical Area.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Public High School Graduation Requirements." (This table was prepared January 1986.)

Table 142.—State requirements for high school graduation, in Carnegie units: 1980 and 1989

State	1980		1989							First graduating class to which these requirements apply	Notes	
	All courses	All courses	Subject areas									
			English/language arts	Social studies	Mathematics	Science	Physical education/health	Electives	Other courses			
1	2	3	4	5	6	7	8	9	10	11	12	
Alabama												
Standard.....	20	22	4	3	2	2	1.5	9.5		1989	Must become computer literate through related coursework. A minimum competency test is required for graduation.	
Advanced diploma.....	—	22	4	4	3	3	1.5	4	.5 home/personal management; 2 foreign languages.			
Alaska.....	19	21	4	3	2	2	1	9		—	A minimum competency test is required for graduation.	
Arizona.....	18	20	4	2.5	2	2	—	9	.5 free enterprise	1991		
Arkansas.....	18	20	4	3	3	2	1	6.5	.5 fine arts	1988	Social studies options: 1 or 2 units social studies and 1 practical arts.	
California												
Standard.....	(1)	13	3	3	2	2	2	—	1 fine arts or foreign language	—	The State board has published "Model Graduation Requirements" to be used as a guide by local districts. These include specifics in core subjects plus computer studies and foreign language. A minimum competency test is required for graduation.	
Advanced diploma.....	—	16	3	3	3	2	2	—	2 in same foreign language; 1 fine arts.	—		
Colorado.....	—	—	—	—	—	—	—	—	—	—	Local boards determine requirements. State has constitutional prohibition against State requirements.	
Connecticut.....	(2)	20	4	3	3	2	1	6	1 arts or vocational education	1988	A minimum competency test is required for graduation.	
Delaware.....	18	19	4	3	2	2	1.5	6.5		1987		
District of Columbia												
Standard.....	18	20.5	4	2	2	2	1.5	7	1 foreign language; 1 life skills	1985	Electives must include life skills seminar, or a test can be taken and passed in lieu of the seminar.	
Florida												
Standard.....	(2)	24	4	3	3	3	0.5	9	.5 practical/exploratory vocational education; .5 performing arts or speech & debate; .5 life management skills.	1989 credits for college coursework. A minimum competency test is required for graduation.	2 of the science units must include a lab. Beginning 1989, students must have a 1.5 GPA for graduation. Junior and senior students may receive dual	
Academic scholars.....	—	16	4	2	2	2	1.5	1.5	2 foreign languages; 1 fine arts	1984		
Georgia												
Standard.....	20	21	4	3	2	2	1	8	1 computer technology and/or fine arts and/or vocational education and/or junior ROTC.	1988	Students who completed 4 units of vocational education can take a SBE developed consumer education proficiency test.	
Advanced.....	—	21	4	3	3	3	1	4	2 foreign languages; 1 fine arts, vocational education, computer technology or ROTC.	1988		
Hawaii.....	20	20	4	4	2	2	1.5	6	.5 guidance	—		

Table 142.—State requirements for high school graduation, in Carnegie units: 1980 and 1989.—Continued

State	1980		1989							First graduating class to which these requirements apply	Notes
	All courses	All courses	Subject areas								
			English/language arts	Social studies	Mathematics	Science	Physical education/health	Electives	Other courses		
1	2	3	4	5	6	7	8	9	10	11	12
Idaho.....	18	21	4	2	2	2	1.5	6	.5 each: reading, speech and consumer education; 2 humanities.	1989	Practical arts may substitute for one unit of humanities. Total requirement remains the same with electives decreasing. Requires a C average, demonstrated competency in core curriculum on a junior class competency test, or adherence to local district's achievement plan for graduation.
Illinois.....	16	16	3	2	2	1	4.5	2.25	.25 consumer education; 1 art, foreign language, music or vocational education.	1988	One year of mathematics may be computer technology. One year of social studies must be U.S. history or half U.S. history and half American government.
Indiana											
Standard.....	18	19.5	4	2	2	2	1.5	8		1989	State does not use standard Carnegie units.
Academic honors.....	—	24	4	3	4	4	1	4 or 5	3 or 4 in foreign languages (3 in 1 or 2 years each in 2).	1990	
Iowa.....	—	—	—	—	—	—	1	—		—	Legislative requirements in effect for many years. Local districts determine remaining requirements. Junior and senior students may receive dual credits for college work.
Kansas.....	17	21	4	3	2	2	1	9		1989	
Kentucky											
Standard.....	16	20	4	2	3	2	1	7	1 additional math, science, social studies, or vocational education.	1987	1985 and 1986 graduates need 16 units to graduate.
Commonwealth diploma.....	—	22	5	2	—	—	1	—	1 foreign language in advance placement; 6 units in math and science.	1986	
Louisiana											
Standard.....	20	23	4	3	3	3	2	7.5	.5 computer literacy	1989	
Louisiana scholar program.....	—	23	4	3	3	3	2	7.5	.5 computer literacy	1987	Students with an ACT score of 29 or above, 3.5 GPA with no semester grade lower than a B, no unexcused absences and no suspensions receive a Scholar Program seal on diploma.
Regent's scholar program.....	—	24	4	3.5	3	3	2	4.5	3 foreign languages, 1 fine arts	1983	
Maine.....	( <sup>2</sup> )	16	4	2	2	2	1.5	3.5	1 fine arts	1989	American history is required. All students must pass computer proficiency standards. One of the science units must include lab study.
Maryland.....	20	20	4	3	3	2	1	5	1 fine arts; 1 industrial arts/technology education, home economics, vocational education or computer studies.	1989	After grade 11, 4 credits must be earned. Students can earn statewide certificate of merit with fulfillment of additional requirements. Tests on writing, citizenship and minimum competency are required for graduation.
Massachusetts.....	—	—	—	1	—	—	4	—		—	Legislative requirements in effect for many years. American history required; local boards determine additional requirements.
Michigan <sup>4</sup>											
Standard diploma.....	—	—	4	3	3	2	1	—	2 foreign languages, fine or performing arts, or vocational education; 5 computer education.	—	Local legislative requirements in effect for many years. Local boards determine additional requirements. The State board, in January 1984, published graduation requirement guidelines, which local districts are urged to incorporate.

Table 142.—State requirements for high school graduation, in Carnegie units: 1980 and 1989 —Continued

State	1980		1989							First graduating class to which these requirements apply	Notes
	All courses	All courses	Subject areas								
			English/language arts	Social studies	Mathematics	Science	Physical education/health	Electives	Other courses		
1	2	3	4	5	6	7	8	9	10	11	12
College preparatory.....	—	—	4	3	3	2	1	—	At least 2 years foreign language.		
Minnesota.....	15	20	4	3	1	1	1.5	9.5		1982	Junior and senior students may receive dual credits for college coursework.
Mississippi.....	16	18	4	2	2	2	—	8		1989	At least one of the science units must include a lab. A minimum competency test is required for graduation.
Missouri											
Standard diploma.....	20	22	3	2	2	2	1	10	1 practical arts; 1 fine arts	1988	
College preparatory.....	20	24	4	3	3	3	1	8	1 practical arts; 1 fine arts	1988	For college preparation, specific core subjects must be taken.
Montana.....	16	20	4	1.5	2	1	1	10.5		1989	Core requirements in effect for several years. Social studies requirement has 2 alternatives.
Nebraska.....	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )		1991	For graduation, 200 credit hours required, with at least 80 percent in core curriculum courses. The State board is conducting hearings to define core courses.
Nevada.....	19	22.5	4	2	2	2	2.5	8.5	1 arts/humanities; .5 computer literacy.	1992	Computer literacy may be waived by demonstration of competency. A minimum competency test is required for graduation.
New Hampshire.....	16	19.75	4	2.5	2	2	1.25	4	.5 arts; .5 computer science; 3 units from 2 of the following: arts, foreign language, practical arts or vocational education.	1989	A minimum competency test for high school graduation is an option of the local districts.
New Jersey.....	—	21.5	4	3	3	2	4	4	1 fine, practical or performing arts; .5 career exploration.	1990	92 credit hours are required for graduation. State does not use standard Carnegie units.
New Mexico.....	20	23	4	3	3	2	1	9	1 communication skills	1990	The State board requires that all students must achieve computer literacy prior to graduation. Languages other than English can satisfy communication skills requirement. Students preparing for college have an advanced curriculum. A state level minimum competency test is an option of the local districts.
New York											
Local diploma.....	16	18.5	4	4	2	2	.5	varies	1 art and/or music; 3 to 5 from a sequence of specific courses must be chosen by the student; choices vary for the two different diplomas	1989	.5 for health only; 2 noncredit units of physical education beyond the total. Comprehensive tests are required.
Regents' diploma.....	18	18.5	4	4	2	2	.5	varies		1989	Comprehensive exams in most subjects.
North Carolina											
Standard.....	16	20	4	2	2	2	1	9		1987	1 science class must include a lab. A minimum competency test is required for graduation.
Scholars program.....	—	22	4	3	3	3	1	4	2 foreign languages; 2 additional: in English, science, math, social science, foreign language.	1994	

**Table 142.—State requirements for high school graduation, in Carnegie units: 1980 and 1989 —Continued**

State	1980		1989							First graduating class to which these requirements apply	Notes
	All courses	All courses	Subject areas								
			English/language arts	Social studies	Mathematics	Science	Physical education/health	Electives	Other courses		
1	2	3	4	5	6	7	8	9	10	11	12
North Dakota .....	17	17	4	3	2	2	1	5		1984	1 unit of higher level foreign language may be substituted for the 4th unit of English; 1 unit math may be business math. Although 17 units are required, the local education agencies are urged to require a minimum of 20 units.
Ohio .....	17	18	3	2	2	1	1	9		1988	By 1990, a minimum competency test will be required for graduation.
Oklahoma											
High school graduation.....	16	20	4	2	2	2	—	10		1987	
College preparatory.....	10.5	15	4	2	3	2	—	—	4 from: math, history, computer science, economics, English, geography, government foreign language, sociology, science, speech, psychology.	1988	Slight variations between 2-year and 4-year colleges. If foreign language elected, 2 years in same language. Total hour requirement is less for college preparatory path; curriculum is more rigorous and restrictive.
Oregon.....	21	22	3	3.5	2	2	2	8	.5 career development; 1 applied arts, fine arts, or foreign language.	1988	Beginning 1992, a minimum competency test will be required for graduation. A 3.5 GPA student receives an honors seal on the diploma.
Pennsylvania.....	13	21	4	3	3	3	1	5	2 arts/humanities	1989	Computer science can be option instead of arts and humanities. State has prescribed learning objectives and curriculum guidelines for 12 goals of quality education.
Rhode Island											
Standard.....	16	16	4	2	2	2	—	6		1989	
College preparatory.....	16	16	4	2	3	2	—	4	2 foreign languages; .5 arts; .5 computer literacy.	—	A total of 16 units required for graduation.
South Carolina											
Standard.....	16	20	4	3	3	2	1	7		1987	Junior and senior students may receive dual credits for college coursework. Beginning 1990, a minimum competency test is required for graduation.
Academic achievement honors.....	—	22	4	3	3	2	1	7	2 foreign languages	1986	
South Dakota.....	16	20	4	3	2	2	—	6	.5 computer studies; .5 fine arts	1989	Increased total number of requirements being phased in: 19 in 1988; and 20 in 1989. Beginning 1990, requirements include 3 science courses and 7 electives.
Tennessee											
Standard diploma.....	16	20	4	1	2	2	1.5	9	.5 economics	1989	Economics requirement may include: 1 semester in economics, out-of-school experiences through Junior Achievement, or marketing education. A minimum competency test is required for graduation.
Honors, general education....	—	20.5	4	3	3	3	1.5	2	2 in same foreign language; 2 fine/visual or performing arts.		
Honors, vocational education.....	—	20.5	4	3	3	3	1.5	2	4 in same vocational education program.		
Texas											
High school graduation.....	16	21	4	2.5	3	2	1.5	7	.5 economics/free enterprise; .5 health.	1988	A minimum competency test required for graduation. Junior and senior students can receive dual credit for college coursework.

85

100

Table 142.—State requirements for high school graduation, in Carnegie units: 1980 and 1989 —Continued

State	1980		1989							First graduating class to which these requirements apply	Notes
	All courses	All courses	Subject areas								
			English/language arts	Social studies	Mathematics	Science	Physical education/health	Electives	Other courses		
1	2	3	4	5	6	7	8	9	10	11	12
Advanced program.....	18	22	4	2.5	3	3	1.5/1.5	3	.5 economics/free enterprise; 2 foreign languages; 1 computer science; 1 fine arts.	1988	
Utah.....	15	24	3	3	2	2	2	9.5	1.5 arts; 1 vocational education; optional in .5 computer science.	1988	The State board makes specific course recommendations for college entry, vocational, etc.
Vermont.....	—	14.5	4	4	5	5	1.5	—	1 arts	1989	Must have a total of 5 units in math and/or science.
Virginia Standard diploma.....	18	21	4	3	2	2	2	8	1 additional math or science; 1 fine or practical arts.	1989	An appropriate vocational education class or ROTC may satisfy math or science. Grade average of B or better earns a SBE seal on the diploma. Junior and senior students can receive dual credits for college coursework. A minimum competency test is required for graduation.
Advanced studies diploma....	18	23	4	3	3	3	2	4	3 foreign languages; 1 fine or practical arts.		
Washington.....	—	19	3	2.5	2	2	2	5.5	1 occupational educational; 1 fine/visual or performing arts.	1991	Beginning 1990, 45 hours required for graduation. Passed on addition of a credit for students graduating in 1991.
West Virginia.....	18	21	4	3	2	2	2	7	1 applied arts, fine or performing arts, or a foreign language.	1989	
Wisconsin.....	( <sup>2</sup> )	13	4	3	2	2	2	—		1989	Electives are the option of local school districts. The State recommends that districts require a total of 22 units.
Wyoming.....	18	18	( <sup>2</sup> )	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	Local boards determine remaining requirements.	—	Requirements in effect for a number of years. Accreditation standards indicated 4 units of English/language arts, 3 social studies, 2 math courses and 2 science courses.

<sup>1</sup> State permits local board to set minimum academic standards.

<sup>2</sup> Local boards determine requirements.

<sup>3</sup> State requires four credits in English/language arts. Local board determines remaining requirements.

<sup>4</sup> State requires one-half credit in social studies. Local board determines remaining requirements.

—No requirement.

NOTE.—Local school districts frequently have other graduation requirements in addition to State requirements.

SOURCE: Education Commission of the States, *Clearinghouse Notes*, "Changes in Minimum High School Graduation Requirements, 1980 and 1985, September 1985"; and "Minimum High School Graduation Course Requirements," April 1987 and September 1989. (This table was prepared January 1990.)

**Table 143.—States using minimum-competency testing, by government level setting standards, grade levels assessed, and expected uses of standards: November 1985**

States using minimum-competency testing	Government level setting standards	Grade levels assessed	Expected uses					First graduating class assessed
			Grade promotion	High school graduation	Early exit	Remediation	Other	
1	2	3	4	5	6	7	8	9
Alabama.....	State	3,8,9,11		X		X	X	1985
Arizona.....	State/local	8,12	(1)	X				1978
Arkansas.....	State	3,4,8,9				X		
California.....	State/local	4-11,18 yr. old+	X	X	X	X		1979
Colorado.....	Local	9,12		(2)				
Connecticut <sup>3</sup> .....	State	4,8,9				X		
Delaware.....	State	1-8,11		X			X	
Florida.....	State/local	3,5,8,11	X	X	X		X	1981
Georgia.....	State	K,1,3,8,8,10	(4)	X		X	X	1983
Hawaii <sup>6</sup> .....	State	3,9-12		X		X	X	1985
Idaho.....	State	8-12				X	X	1982
Illinois.....	Local	Local option					(3)	
Indiana.....	Local	3,6,8,10				X	X	
Kansas <sup>8</sup> .....	State	2,4,8,8,10					(3)	
Kentucky <sup>7</sup> .....		K-12	X	X		X		
Louisiana <sup>9</sup> .....	State	2,3,4,5	X			X		
Maryland.....	State	7,9		X		X	X	1982
Massachusetts.....	Local	Local option				X		
Michigan.....	State	4,7,10				X	(3)	
Mississippi.....	State	3,5,8,11		X			X	<sup>5</sup> 1987
Missouri.....	State	8+					X	
Nebraska.....	Local	5+					X	
Nevada.....	State	3,6,9,11		X		X		1982
New Hampshire <sup>10</sup> .....	State	4,8,12	(2)	(2)			(2)	
New Jersey.....	State	9-12		X		X	X	1985
New Mexico.....	State	Local option, 10-12					X	1981
New York.....	State	3,5,6,8-12		X		X		1979
North Carolina <sup>11</sup> .....	State	3,6,8,10		X			X	1980
Ohio.....	Local	Local option <sup>12</sup>					(3)	1990
Oklahoma <sup>13</sup> .....	None	3,8,9,12					X	
Oregon.....	Local	Local option		X				1978
Pennsylvania.....	State	3,5,8				X		
South Carolina <sup>14</sup> .....	State	1,2,3,6,8,11	X	X		X	X	1990
Tennessee <sup>15</sup> .....	State/local	3,8,8,9-12	X	X		X	X	1982
Texas <sup>16</sup> .....	State	1,3,5,7,9,11,12		X		X		1987
Utah.....	Local	Local option				X	X	1988
Vermont.....	State	1-8	(17)			X	X	1981
Virginia.....	State/local	K-8,10-12		X			X	1981
Wisconsin.....	Local	1-4,5,8,9-10	(2)	(2)		X		
Wyoming.....	Local	Local option				X		

<sup>1</sup> Legislation in 1983 called for development of a minimum course of study and criteria for high school graduation standards and for grade-to-grade promotion. Local school districts were to implement standards.

<sup>2</sup> Local option.

<sup>3</sup> A new program of State testing for grade 4 began in 1985 and expanded to grades 6 and 8 in 1986. The ninth grade State proficiency test, begun in 1980, was administered for the final time in 1986.

<sup>4</sup> Beginning in fall 1985, third grade students had to demonstrate acceptable performance on criterion-referenced tests in mathematics and reading before promotion to the fourth grade. Beginning in 1986-89 school year, students must pass school readiness test to be eligible for first grade.

<sup>5</sup> Students have three options: paper-and-pencil test; performance test; or course. First time taken (grade 9) must be paper-and-pencil test.

<sup>6</sup> The Kansas Minimum Competency Assessment (MCA) was re-established by 1984 legislative action (SB 473). The MCA will be in effect for 5 school years, 1984-89 through 1988-89.

<sup>7</sup> Legislation in 1984 required the State superintendent to recommend process of using test results for promotion and graduation to the 1986 legislature.

<sup>8</sup> Grade 6 was added beginning with 1986-87 school year.

<sup>9</sup> Although first class assessed graduated in 1987, the first class required to pass for graduation will be the class of 1986.

<sup>10</sup> Students are tested in elementary, middle, and high school. Some local districts test at grades other than 4, 8, and 12.

<sup>11</sup> Grades 3, 6, and 8 are given an annual standardized achievement test. Local school districts use the results as a diagnostic tool.

<sup>12</sup> Locally-based tests in the areas of English composition, mathematics, and reading are required at least once in grades 1-4. Tests in grades 5-8 and 9-11 will be implemented no later than 1989-90.

<sup>13</sup> Test was given in Oklahoma during the 1978-79 school year. There has been no followup to the program. However, a plan for Statewide testing was submitted for legislative action in January 1985.

<sup>14</sup> The South Carolina Education Improvement Act of 1984 specified that the 11th-grade test being used to gather baseline data be replaced in 1985-86 school year with an exit examination in the 10th grade. All students graduating in 1990 and after must pass the examination.

<sup>15</sup> Local districts use the State-designated tests at grades 3, 6, and 8 for remediation and to advise on grade retention. The Tennessee high school test, first taken at grade 9, is required for graduation.

<sup>16</sup> Texas HB 72 (1984) mandated the new testing program. New requirements became effective in 1985-86 school year.

<sup>17</sup> Vermont Basic Competency Program requires students to master the basics before they complete eighth grade.

NOTE.—Some States have dates for assessing the first high school graduating class but do not expect to use the results to determine whether students will graduate.

SOURCE: Education Commission of the States, *Clearinghouse Notes*, "State Activity—Minimum Competency Testing, as of November 1985." (This table was prepared September 1986.)

**Table 144.—States requiring testing for initial certification of teachers, by authorization, year enacted, year effective, and test used: 1987 and 1989**

State	1987				1989	
	Authority <sup>1</sup>	Enacted	Effective	Test used <sup>2</sup>	Effective	Test used <sup>2</sup>
1	2	3	4	5	6	7
Alabama.....	St. Bd.	1980	1981	State	1988	none required
Arizona.....	Leg.	1980	1980	State	1980	State
Arkansas.....	Leg.	1979	1983	NTE	1983	NTE
California.....	Leg.	1981	1982	State	( <sup>3</sup> )	NTE
Colorado.....	Leg.	1981	1983	California Achievement	1990	NTE
Connecticut.....	St. Bd.	1982	1985	State	1988	NTE
Delaware.....	St. Bd.	1982	198 <sup>3</sup>	P-P.S.T	1983	P-P.S.T.
District of Columbia.....	—	—	—	—	1989	NTE
Florida.....	Leg.	1978	1980	State	1988	State; NTE
Georgia.....	St. Bd.	1975	1980	State	1980	State
Hawaii.....	St. Bd.	1986	1986	NTE	1986	NTE
Idaho.....	Leg.	1987	1988	NTE	1986	NTE
Illinois.....	Leg.	1985	1988	State	1988	State
Indiana.....	Leg.	1984	1985	NTE	1985	State; NTE
Iowa.....	—	—	—	—	( <sup>3</sup> )	NTE; P-P.S.T.
Kansas.....	Leg.	1984	1986	To be determined	1986	NTE; P-P.S.T.
Kentucky.....	Leg.	1984	1985	NTE	1985	NTE
Louisiana.....	Leg.	1977	1978	NTE	1978	NTE
Maine.....	Leg.	1984	1988	NTE	1988	NTE
Maryland.....	St. Bd.	1986	1986	NTE	1986	NTE
Massachusetts.....	Leg.	1985	( <sup>3</sup> )	To be determined	( <sup>3</sup> )	NTE; State
Michigan.....	Leg.	1986	1991	To be determined <sup>4</sup>	1991	To be determined
Minnesota.....	—	—	—	—	1988	P-P.S.T
Mississippi.....	Leg.	1975	1977	NTE	1977	NTE
Missouri.....	Leg.	1985	1988	To be determined	1988	To be determined
Montana.....	B.P.E.	1985	1986	NTE	1986	NTE
Nebraska.....	Leg.	1984	1989	To be determined <sup>4</sup>	1989	To be determined
Nevada.....	St. Bd.	1984	( <sup>3</sup> )	To be determined	1988	NTE
New Hampshire.....	St. Bd.	1984	1985	NTE	( <sup>3</sup> )	P-P.S.T.
New Jersey.....	St. Bd.	1984	1985	NTE	1985	NTE
New Mexico.....	St. Bd.	1981	1983	NTE	1983	NTE
New York.....	St. Bd.	1980	1984	NTE	( <sup>3</sup> )	NTE
North Carolina.....	St. Bd.	1984	1984	NTE	1984	NTE
Ohio <sup>6</sup> .....	St. Bd.	1986	1987	NTE	1987	NTE or P-P.S.T.
Oklahoma.....	Leg.	1980	1982	State	1982	State
Oregon.....	O.T.S.P.C.	1984	1985	C.B.E.S.T.	1985	C.B.E.S.T.
Pennsylvania.....	St. Bd.	1985	1987	State	1987	State
Rhode Island.....	St. Bd.	1985	1986	NTE	1986	NTE
South Carolina.....	Leg.	1979	1982	NTE and State	1982	NTE
South Dakota.....	St. Bd.	1985	1986	NTE	1988	Use of NTE repealed
Tennessee.....	St. Bd.	1980	1981	NTE	1981	NTE
Texas.....	Leg.	1981	1986	State	1986	State
Virginia.....	Leg.	1979	1980	NTE	1980	NTE
Washington.....	St. Bd.	1984	( <sup>3</sup> )	To be determined <sup>6</sup>	1993	To be determined <sup>6</sup>
West Virginia <sup>7</sup> .....	St. Bd.	1982	1985	State	( <sup>3</sup> )	N.E.S.
Wisconsin.....	S.P.I.	1986	1990	To be determined	1991	To be determined

<sup>1</sup> St. Bd. = State Board of Education; Leg. = Legislature; B.P.E. = Board of Public Education; O.T.S.P.C. = Oregon Teacher Standards and Practice Commission; S.P.I. = Superintendent of Public Instruction.

<sup>2</sup> NTE = National Teacher Examination; State = State developed test; C.B.E.S.T. = California Basic Education Skills Test; N.E.S. = National Education Service; P-P.S.T. = Preprofessional Skills Test.

<sup>3</sup> Effective year is yet to be determined.

<sup>4</sup> For basic skills and subject-matter competencies.

<sup>5</sup> Test requirements set by local school districts.

<sup>6</sup> State and undetermined tests will be used.

<sup>7</sup> Required for individuals entering West Virginia-approved education programs as of fall 1985.

—Data not available

SOURCE: Education Commission of the States, *Clearinghouse Notes*, "States Requiring Testing for Initial Certification of Teachers, April 1987," and "State Education Leader, Winter 1989." (This table was prepared January 1990.)

**Table 145.—Percentage of public high schools having or strengthening various policies, programs, or practices: 1987-88**

Policy, program, or practice	In operation in 1987-88								Instituted or last strengthened since 1982-83			
	Total	District status			School enrollment				Total	District status		
		Rural	Sub-urban	Urban	Less than 300	300 to 799	800 to 1,499	1,500 or more		Rural	Sub-urban	Urban
1	2	3	4	5	6	7	8	9	10	11	12	13
Strict sanctions for disruptive students .....	98	98	99	95	97	97	98	98	49	55	40	51
Minimum academic standards for participation in athletics .....	96	97	96	97	96	96	97	96	47	44	49	53
Special recognition for academically outstanding students' .....	92	91	93	97	87	92	96	97	59	62	55	57
Programs to reduce absenteeism or tardiness .....	90	91	88	96	90	89	91	95	66	68	63	66
Instruction of students in study skills.....	77	76	76	84	72	76	77	83	61	61	60	66
Required in-service training of teachers in effective use of class time .....	73	76	68	75	77	72	72	68	65	71	59	53
Measures to reduce administrative burden on teachers.....	73	69	77	74	66	72	74	82	63	67	59	63
Nonfinancial recognition for outstanding teachers .....	70	66	72	85	53	73	75	85	54	54	54	56
Policy/guidelines on amount of required homework .....	47	42	48	65	38	47	50	58	52	50	50	63
Financial recognition for outstanding teachers .....	20	17	21	25	18	17	19	29	82	79	87	80

<sup>1</sup> Besides honor roll.

"Public High School Principals' Perceptions of Academic Reform, May 1988." (This table was prepared November 1988.)

SOURCE: U.S. Department of Education, National Center for Education Statistics.

**Table 146.—States requiring education, minimum curriculum standards, and teacher certification on substance abuse education, by State: 1986-87**

State	State requires substance abuse education	Minimum curriculum standards provided	Certification requirement for all teachers	State	State requires substance abuse education	Minimum curriculum standards provided	Certification requirement for all teachers
1	2	3	4	1	2	3	4
<b>Total number with requirement .....</b>	<b>39</b>	<b>32</b>	<b>11</b>				
Alabama .....	X	X		Missouri .....			X
Alaska .....		X		Montana .....			
Arizona .....	X	X		Nebraska .....	X		
Arkansas .....	X	X	X	Nevada .....	X	X	X
California .....	X	X		New Hampshire .....	X		
Colorado .....	X	X		New Jersey .....	X		X
Connecticut .....	X			New Mexico .....	X	X	
Delaware .....	X	X		New York .....	X	X	X
District of Columbia .....	X	X	X	North Carolina .....			
Florida .....	X	X		North Dakota .....	X		
Georgia .....	X	X		Ohio .....	X		X
Hawaii .....		X		Oklahoma .....			
Idaho .....	X			Oregon .....	X		
Illinois .....	X	X	X	Pennsylvania .....	X	X	
Indiana .....	X		X	Rhode Island .....	X	X	
Iowa .....	X	X		South Carolina .....	X		
Kansas .....				South Dakota .....			
Kentucky .....	X	X	X	Tennessee .....		X	
Louisiana .....	X	X		Texas .....	X	X	
Maine .....	X	X		Utah .....	X	X	
Maryland .....	X	X		Vermont .....	X	X	
Massachusetts .....	X			Virginia .....	X	X	
Michigan .....		X		Washington .....	X	X	
Minnesota .....	X	X	X	West Virginia .....	X	X	
Mississippi .....				Wisconsin .....	X	X	
				Wyoming .....			

SOURCE: U.S. Department of Education, National Center for Education Statistics, "State Efforts in Substance Abuse Education." (This table was prepared August 1986.)

Table 147.—Revenues for public elementary and secondary schools, by source of funds: 1919-20 to 1987-88

School year	In thousands				Percentage distribution			
	Total	Federal	State	Local (including intermediate) <sup>1</sup>	Total	Federal	State	Local (including intermediate) <sup>1</sup>
1	2	3	4	5	6	7	8	9
1919-20.....	\$970,121	\$2,475	\$160,085	\$807,561	100.0	0.3	16.5	83.2
1929-30.....	2,088,557	7,334	353,670	1,727,553	100.0	0.4	16.9	82.7
1939-40.....	2,260,527	39,810	684,354	1,536,363	100.0	1.8	30.3	68.0
1941-42.....	2,416,580	34,305	759,993	1,622,281	100.0	1.4	31.4	67.1
1943-44.....	2,604,322	35,886	659,183	1,709,253	100.0	1.4	33.0	65.8
1945-46.....	3,059,845	41,378	1,062,057	1,956,409	100.0	1.4	34.7	63.9
1947-48.....	4,311,534	120,270	1,678,362	2,514,902	100.0	2.8	36.9	58.3
1949-50.....	5,437,044	155,848	2,165,689	3,115,507	100.0	2.9	39.8	57.3
1951-52.....	6,423,816	227,711	2,476,596	3,717,507	100.0	3.5	38.6	57.9
1953-54.....	7,666,852	355,237	2,944,103	4,567,512	100.0	4.5	37.4	58.1
1955-56.....	9,886,677	441,442	3,826,886	5,416,350	100.0	4.6	39.5	55.9
1957-58.....	12,181,513	486,464	4,800,368	6,884,681	100.0	4.0	39.4	56.6
1959-60.....	14,746,618	651,639	5,766,047	8,326,932	100.0	4.4	39.1	56.5
1961-62.....	17,527,707	760,975	6,789,190	9,977,542	100.0	4.3	38.7	56.9
1963-64.....	20,544,182	898,956	8,076,014	11,569,213	100.0	4.4	33.3	56.3
1965-66.....	25,356,858	1,996,954	9,920,219	13,439,686	100.0	7.9	39.1	53.0
1967-68.....	31,903,064	2,806,469	12,275,536	16,821,063	100.0	8.8	36.5	52.7
1969-70.....	40,266,923	3,219,557	16,062,776	20,984,569	100.0	8.0	39.9	52.1
1970-71 <sup>2</sup> .....	44,511,292	3,753,461	17,409,086	23,348,745	100.0	8.4	39.1	52.5
1971-72.....	50,003,645	4,467,969	19,133,256	26,402,420	100.0	8.9	38.3	52.8
1972-73.....	52,117,930	4,525,000	20,843,520	26,749,412	100.0	8.7	40.0	51.3
1973-74.....	58,230,892	4,930,351	24,113,409	29,187,132	100.0	8.5	41.4	50.1
1974-75.....	64,445,239	5,811,595	27,211,116	31,422,528	100.0	9.0	42.2	48.8
1975-76.....	71,206,073	6,318,345	31,776,101	33,111,627	100.0	8.9	44.6	46.5
1976-77.....	75,322,532	6,629,498	32,888,503	36,004,134	100.0	8.8	43.4	47.8
1977-78.....	81,443,160	7,694,194	35,013,266	38,735,700	100.0	9.4	43.0	47.6
1978-79.....	87,994,143	8,600,116	40,132,136	39,261,891	100.0	9.8	45.6	44.6
1979-80.....	96,881,165	8,503,537	45,348,814	42,028,813	100.0	9.8	46.8	43.4
1980-81.....	105,949,087	9,768,262	50,182,959	45,998,166	100.0	9.2	47.4	43.4
1981-82.....	110,191,257	8,186,466	52,436,435	49,568,356	100.0	7.4	47.6	45.0
1982-83.....	117,497,502	8,339,990	56,282,157	52,875,354	100.0	7.1	47.9	45.0
1983-84.....	126,055,419	8,576,547	60,232,981	57,245,892	100.0	6.8	47.8	45.4
1984-85.....	137,294,678	9,105,569	67,168,684	61,020,425	100.0	6.6	48.9	44.4
1985-86.....	149,127,779	9,975,622	73,619,575	65,532,582	100.0	6.7	49.4	43.9
1986-87 <sup>2</sup> .....	158,523,693	10,146,013	78,830,437	69,547,243	100.0	6.4	49.7	43.9
1987-88.....	169,650,907	10,719,821	84,042,408	74,888,679	100.0	6.3	49.5	44.1

<sup>1</sup> Includes a relatively small amount from nongovernmental sources (gifts and tuition and transportation fees from patrons). These sources accounted for 0.4 percent of total revenues in 1967-68.

<sup>2</sup> Revised from previously published figures.

NOTE.—Beginning in 1980-81, revenues for State education agencies are excluded. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems: Revenues and Expenditures for Public Elementary and Secondary Education*; and Common Core of Data survey. (This table was prepared December 1989.)

Table 148.—Revenues for public elementary and secondary schools, by source and State: 1987-88

[Amounts in thousands of dollars]

State or other area	Revenues by source						
	Total	Federal		State		Local and other <sup>1</sup>	
		Amount	Percent of total	Amount	Percent of total	Amount	Percent of total
1	2	3	4	5	6	7	8
United States <sup>2</sup> .....	\$169,650,907	\$10,719,821	6.3	\$64,042,408	49.5	\$74,888,679	44.1
Alabama .....	2,171,704	257,108	11.8	1,398,858	64.4	515,937	23.8
Alaska .....	777,088	87,302	11.2	491,540	63.3	198,244	25.5
Arizona .....	2,361,006	185,845	7.9	1,100,795	46.8	1,074,366	45.5
Arkansas .....	1,211,164	133,222	11.0	681,964	56.3	395,978	32.7
California .....	17,884,789	1,312,838	7.3	12,554,882	70.2	4,017,051	22.5
Colorado .....	2,529,889	123,000	4.9	991,263	39.2	1,415,626	56.0
Connecticut .....	2,890,957	105,489	3.6	1,220,872	42.2	1,564,618	54.1
Delaware .....	484,318	35,410	7.8	318,037	68.5	110,871	23.9
District of Columbia .....	484,717	51,404	10.6	2,873	0.8	430,440	88.8
Florida .....	7,466,975	497,684	8.7	4,104,897	55.0	2,864,394	38.4
Georgia .....	3,715,388	272,309	7.3	2,120,595	57.1	1,322,484	35.6
Hawaii .....	823,136	82,157	13.2	540,441	66.7	538	0.1
Idaho .....	580,432	49,845	8.8	369,979	63.7	160,508	27.7
Illinois .....	6,452,388	338,715	5.2	2,377,115	36.8	3,736,555	57.9
Indiana .....	3,825,865	186,699	4.9	2,144,522	56.1	1,494,643	39.1
Iowa .....	1,958,184	100,755	5.1	927,099	47.3	930,330	47.5
Kansas .....	1,773,743	88,013	5.0	785,478	43.2	920,252	51.9
Kentucky .....	1,819,222	212,093	11.7	1,185,928	65.2	421,201	23.2
Louisiana .....	2,541,890	284,048	11.2	1,406,839	55.3	851,002	33.5
Maine .....	886,378	52,547	5.9	459,028	51.8	374,803	42.3
Maryland .....	3,464,182	173,331	5.0	1,342,091	38.7	1,948,760	56.3
Massachusetts .....	4,485,247	198,121	4.4	1,894,326	42.2	2,392,800	53.3
Michigan .....	7,950,004	432,045	5.8	2,899,032	35.3	4,518,927	59.1
Minnesota .....	3,288,933	139,507	4.2	1,842,218	55.8	1,317,208	39.9
Mississippi .....	1,135,053	112,512	9.9	744,429	65.6	278,112	24.5
Missouri .....	3,069,758	179,700	5.9	1,248,175	40.7	1,641,883	53.5
Montana .....	838,045	49,956	7.9	301,868	47.5	284,201	44.7
Nebraska .....	1,034,017	74,810	7.2	229,261	22.2	730,146	70.8
Nevada .....	660,280	24,811	3.8	255,584	38.7	379,895	57.5
New Hampshire .....	748,214	24,830	3.3	56,753	7.8	666,631	89.1
New Jersey .....	7,250,514	292,569	4.0	3,079,410	42.5	3,878,535	53.5
New Mexico .....	1,028,708	118,600	11.5	781,229	75.9	128,879	12.5
New York .....	17,084,990	774,715	4.5	7,418,745	43.4	8,903,530	52.1
North Carolina .....	3,789,548	286,457	7.8	2,529,307	66.7	973,784	25.7
North Dakota .....	433,358	38,664	8.9	222,567	51.4	172,127	39.7
Ohio .....	8,811,187	338,434	5.1	3,206,787	48.5	3,065,965	48.4
Oklahoma .....	1,750,530	104,480	8.0	1,151,783	65.8	494,267	28.2
Oregon .....	1,842,303	132,839	8.8	537,547	27.7	1,272,117	65.5
Pennsylvania .....	8,781,585	481,503	5.3	4,026,372	45.9	4,293,110	48.9
Rhode Island .....	682,488	30,289	4.4	298,372	43.7	353,818	51.8
South Carolina .....	2,175,842	184,820	8.5	1,184,466	54.4	806,557	37.1
South Dakota .....	434,781	47,359	10.9	114,914	26.4	272,488	62.7
Tennessee .....	2,233,442	233,485	10.5	993,897	44.5	1,006,080	45.0
Texas .....	12,812,869	977,742	7.8	5,573,372	44.2	6,061,755	48.1
Utah .....	1,183,399	73,494	6.2	660,195	55.8	449,710	38.0
Vermont .....	493,874	21,008	4.4	185,006	33.4	307,062	62.2
Virginia .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Washington .....	3,218,732	193,211	6.0	2,428,119	75.4	597,402	18.6
West Virginia .....	1,268,854	103,357	8.1	853,419	67.3	311,878	24.6
Wisconsin .....	3,552,430	154,347	4.3	1,464,187	41.2	1,933,897	54.4
Wyoming .....	568,402	22,121	3.9	279,751	49.2	266,530	46.9
Outlying areas .....							
American Samoa .....	21,047	13,295	63.2	—	—	7,753	36.8
Guam .....	88,106	11,580	13.1	—	—	76,526	86.9
Northern Marianas .....	17,878	5,733	32.1	12,143	67.9	—	—
Puerto Rico .....	942,179	277,253	29.4	—	—	664,926	70.6
Virgin Islands .....	106,533	19,483	18.3	—	—	87,050	81.7

<sup>1</sup> Includes revenues from local and intermediate sources, gifts, and tuition and fees from patrons.<sup>2</sup> Includes estimates for the nonreporting State.<sup>3</sup> Data not reported.

—Data not available or not applicable.

NOTE.—Excludes revenues for State education agencies. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared December 1989.)

Table 149.—Revenues for public elementary and secondary schools, by source and State: 1986-87

[Amounts in thousands of dollars]

State or other area	Revenues, by source						
	Total	Federal		State		Local and other <sup>1</sup>	
		Amount	Percent of total	Amount	Percent of total	Amount	Percent of total
1	2	3	4	5	6	7	8
<b>United States<sup>2</sup></b> .....	<b>\$158,523,693</b>	<b>\$10,148,013</b>	<b>6.4</b>	<b>\$78,830,437</b>	<b>49.7</b>	<b>\$69,547,243</b>	<b>43.9</b>
Alabama.....	2,070,839	241,402	11.7	1,372,983	66.3	456,274	22.0
Alaska.....	731,150	85,277	11.7	465,599	63.7	180,274	24.7
Arizona.....	2,106,564	189,004	9.0	1,017,425	48.3	900,134	42.7
Arkansas.....	1,111,619	128,179	11.5	608,757	54.8	374,689	33.7
California.....	17,219,479	1,217,998	7.1	11,961,834	69.5	4,039,647	23.5
Colorado.....	2,395,723	117,590	4.9	935,154	39.0	1,342,978	56.1
Connecticut.....	2,608,381	114,873	4.4	1,043,373	40.0	1,448,136	55.6
Delaware.....	423,392	32,998	7.7	297,291	69.2	99,103	23.1
District of Columbia.....	439,785	45,460	10.3	2,725	0.6	391,610	89.0
Florida.....	6,610,567	475,228	7.2	3,581,688	54.2	2,553,651	38.6
Georgia.....	3,511,288	263,083	7.5	2,016,071	57.4	1,232,134	35.1
Hawaii.....	592,815	70,191	11.8	522,096	88.1	528	0.1
Idaho.....	544,525	48,203	8.8	342,288	62.9	154,036	28.3
Illinois.....	6,025,415	281,452	4.3	2,358,188	39.1	3,405,775	56.5
Indiana.....	3,583,524	176,260	4.9	2,070,469	58.1	1,316,795	37.0
Iowa.....	1,815,315	94,574	5.2	790,088	43.5	930,654	51.3
Kansas.....	1,681,665	80,984	4.8	712,445	42.4	888,236	52.8
Kentucky.....	1,656,267	182,268	11.0	1,069,039	64.5	394,960	23.8
Louisiana.....	2,416,437	277,627	11.5	1,331,213	55.1	807,597	33.4
Maine.....	779,817	49,681	6.4	391,503	50.2	338,633	43.4
Maryland.....	3,171,051	164,249	5.2	1,241,550	39.2	1,765,253	55.7
Massachusetts.....	4,103,291	201,785	4.9	1,850,688	45.1	2,050,838	50.0
Michigan.....	7,242,874	425,532	5.9	2,525,785	34.9	4,291,557	59.3
Minnesota.....	3,101,661	131,723	4.2	1,765,775	56.9	1,204,163	38.8
Mississippi.....	1,076,279	112,610	10.5	701,829	65.2	261,840	24.3
Missouri.....	2,749,630	172,986	6.3	1,132,198	41.2	1,444,447	52.5
Montana.....	632,958	53,807	8.5	302,825	47.8	276,325	43.7
Nebraska.....	1,005,585	61,695	6.1	226,670	22.5	717,221	71.3
Nevada.....	595,821	26,432	4.4	235,572	39.5	333,817	56.0
New Hampshire.....	647,069	21,828	3.4	38,076	5.9	587,165	90.7
New Jersey.....	6,592,990	290,771	4.4	2,837,625	43.0	3,464,594	52.5
New Mexico.....	1,008,277	123,188	12.2	757,266	75.1	127,823	12.7
New York.....	15,757,034	762,061	4.8	6,688,733	42.4	8,306,241	52.7
North Carolina.....	3,473,998	274,713	7.9	2,294,416	66.0	904,870	26.0
North Dakota.....	421,752	39,714	9.4	214,063	50.8	167,975	39.8
Ohio.....	6,296,386	348,957	5.5	3,124,823	49.6	2,822,606	44.8
Oklahoma.....	1,706,201	95,973	5.6	1,134,945	66.5	475,282	27.9
Oregon.....	1,863,501	123,033	6.6	522,195	28.0	1,218,273	65.4
Pennsylvania.....	8,259,284	418,455	5.1	3,825,204	46.3	4,015,625	48.6
Rhode Island.....	630,222	26,235	4.5	268,310	42.6	333,677	52.9
South Carolina.....	1,986,765	175,915	8.9	1,112,846	56.0	698,004	35.1
South Dakota.....	417,550	49,341	11.8	113,409	27.2	254,800	61.0
Tennessee.....	2,063,971	228,487	11.1	918,685	44.5	916,820	44.4
Texas.....	11,900,931	846,464	7.1	5,603,133	47.1	5,451,335	45.8
Utah.....	1,153,356	69,986	6.1	627,118	54.4	456,252	39.6
Vermont.....	388,013	19,738	5.1	133,284	34.4	234,990	60.6
Virginia.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Washington.....	3,118,233	196,047	6.3	2,258,430	72.4	663,756	21.3
West Virginia.....	1,259,867	93,293	7.4	864,138	68.6	302,435	24.0
Wisconsin.....	3,303,237	154,314	4.7	1,141,259	34.5	2,007,664	60.8
Wyoming.....	609,195	22,551	3.7	261,877	43.0	324,767	53.3
<b>Outlying areas</b>							
American Samoa.....	20,479	13,523	66.0	—	—	6,956	34.0
Guam.....	82,078	10,709	11.8	—	—	81,369	88.4
Northern Marianas.....	14,908	5,180	34.7	9,728	65.3	—	—
Puerto Rico.....	936,115	280,937	30.0	—	—	655,178	70.0
Virgin Islands.....	100,194	18,370	18.3	—	—	81,824	81.7

<sup>1</sup> Includes revenues from local and intermediate sources, gifts, and tuition and fees from patrons.<sup>2</sup> Includes estimates for the nonreporting State.<sup>3</sup> Data not reported.

—Data not available or not applicable.

NOTE—Excludes revenues for State education agencies. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared December 1989.)

Table 150.—Current expenditures for public elementary and secondary education, by State: 1959-60 to 1989-90

(In thousands of dollars)

State or other area	1959-60	1969-70	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>	1987-88	Estimated 1988-89 <sup>2</sup>	Estimated 1989-90 <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14
United States.....	\$12,329,399	\$34,217,773	\$99,964,142	\$94,321,093	\$101,106,524	\$108,267,717	\$115,392,342	\$126,337,491	\$137,164,965	\$146,364,922	\$157,222,497	\$168,562,374	\$180,643,992
Alabama.....	171,130	422,730	1,146,713	1,393,137	1,423,748	1,486,521	1,396,904	1,590,858	1,781,154	1,775,997	1,873,390	2,155,460	2,200,000
Alaska.....	20,841	81,374	377,947	476,368	550,784	625,818	692,418	754,967	818,219	769,015	756,577	793,396	808,060
Arizona.....	104,054	281,941	849,753	1,075,362	1,152,584	1,242,928	1,326,552	1,436,844	1,649,832	1,836,908	2,002,395	2,091,276	2,185,384
Arkansas.....	83,896	235,083	666,949	709,394	755,680	801,184	903,510	1,005,347	1,085,943	1,118,904	1,211,156	1,990,994	1,087,987
California.....	* 1,481,808	3,831,595	9,172,158	9,936,642	10,727,268	11,050,354	12,143,842	13,477,768	15,040,898	18,512,668	17,402,063	19,900,848	22,308,738
Colorado.....	136,740	369,218	1,243,049	1,369,883	1,500,214	1,605,885	1,897,085	1,868,058	2,018,579	2,129,984	2,297,110	2,598,039	2,744,309
Connecticut.....	185,336	588,710	1,227,892	1,440,681	1,543,483	1,711,013	1,818,883	2,117,798	2,144,094	2,414,708	2,748,587	2,990,000	3,110,000
Delaware.....	33,425	108,747	268,108	270,439	275,210	294,222	323,760	353,191	391,558	418,116	440,831	455,965	478,783
District of Columbia.....	45,817	141,136	298,448	295,155	312,940	340,027	371,113	387,918	406,910	441,135	489,357	522,268	547,480
Florida.....	278,508	961,273	2,768,657	3,336,857	3,552,127	3,747,760	4,071,134	4,589,080	5,092,668	5,650,083	6,288,977	6,978,648	7,763,814
Georgia.....	208,096	599,371	1,608,028	1,688,714	1,978,268	2,123,586	2,301,496	2,829,681	2,979,980	3,254,786	3,549,038	3,339,961	3,502,136
Hawaii.....	42,499	141,324	351,889	395,038	425,342	484,858	500,554	521,692	575,458	578,749	606,264	664,078	703,920
Idaho.....	42,719	103,107	313,927	352,912	371,290	398,998	417,426	487,532	492,092	513,011	532,274	516,355	555,000
Illinois.....	663,849	1,896,087	4,579,355	4,773,179	4,928,668	5,108,290	5,332,566	5,662,354	6,066,390	6,483,564	6,923,296	7,285,394	7,560,057
Indiana.....	318,073	809,105	1,851,292	1,898,194	2,133,789	2,239,089	2,434,738	2,898,072	2,851,080	3,108,816	3,330,525	3,571,000	3,828,000
Iowa.....	197,768	527,086	1,186,859	1,337,504	1,400,580	1,474,443	1,532,171	1,599,874	1,644,359	1,708,440	1,859,173	2,045,456	2,129,524
Kansas.....	153,348	362,593	830,133	958,281	1,044,483	1,131,758	1,209,537	1,315,469	1,315,469	1,486,814	1,568,041	1,682,123	1,761,851
Kentucky.....	132,068	353,265	1,054,459	1,098,472	1,157,496	1,233,797	1,354,120	1,384,722	1,434,962	1,583,158	1,801,020	1,801,020	1,882,068
Louisiana.....	230,402	503,217	1,303,902	1,787,692	1,857,207	1,908,595	1,950,669	2,191,478	2,333,748	2,260,393	2,289,241	2,297,456	2,435,304
Maine.....	51,485	155,907	385,492	401,355	447,360	484,744	540,351	599,189	688,873	760,446	839,960	913,634	1,018,702
Maryland.....	209,608	721,794	1,783,058	1,937,159	2,082,775	2,118,972	2,322,690	2,448,771	2,634,209	2,845,404	3,128,165	3,365,000	3,728,000
Massachusetts.....	324,408	907,341	2,638,734	2,784,762	2,873,115	2,792,653	2,898,355	3,139,486	3,403,505	3,744,131	4,098,062	4,407,830	4,495,181
Michigan.....	605,048	1,799,945	4,842,847	5,193,249	5,221,346	5,351,520	5,366,329	5,735,303	6,184,787	6,427,556	6,913,261	7,181,738	7,648,551
Minnesota.....	287,378	781,243	1,786,768	1,900,322	2,035,842	2,075,572	2,253,402	2,461,571	2,637,722	2,818,390	2,981,209	3,089,000	3,315,000
Mississippi.....	100,020	262,760	756,018	718,878	753,648	869,764	982,605	1,023,720	1,058,301	1,112,535	1,221,560	1,277,253	1,342,869
Missouri.....	242,447	642,030	1,504,988	1,643,258	1,715,781	1,772,111	1,965,436	2,108,539	2,277,578	2,515,846	2,747,234	2,345,435	3,073,069
Montana.....	54,079	127,178	358,118	380,092	416,027	458,519	502,290	538,245	567,901	583,861	590,228	583,739	584,323
Nebraska.....	87,892	231,812	581,815	629,017	699,487	759,197	813,214	870,019	911,983	948,149	995,235	1,062,191	1,137,142
Nevada.....	23,770	87,273	281,901	287,752	338,208	364,766	374,201	397,254	495,147	513,014	555,272	632,381	681,492
New Hampshire.....	33,185	101,370	295,400	340,518	372,027	402,307	431,288	473,151	522,804	589,850	677,507	798,606	898,420
New Jersey.....	459,413	1,343,584	3,638,533	3,648,914	4,080,209	4,340,980	4,666,185	4,897,534	5,735,895	6,099,473	6,621,660	7,216,000	7,868,000
New Mexico.....	73,396	183,736	515,451	560,213	647,987	713,599	721,641	784,442	808,036	865,789	916,305	880,309	949,734
New York.....	1,383,708	4,111,839	8,780,500	9,259,948	10,258,454	10,985,481	11,878,838	12,681,301	13,686,039	14,724,687	16,073,392	17,186,000	18,402,000
North Carolina.....	238,059	876,193	1,880,862	2,112,417	2,191,269	2,206,325	2,353,508	2,874,774	2,991,747	3,193,337	3,424,194	3,586,665	3,881,762
North Dakota.....	46,254	97,895	228,483	254,197	307,659	318,784	337,961	365,341	379,470	374,941	385,427	380,337	387,145
Ohio.....	632,932	1,639,805	3,836,578	4,149,858	4,357,731	4,600,475	5,051,057	5,504,181	5,858,999	6,114,428	6,448,903	6,900,000	7,250,000
Oklahoma.....	151,181	339,105	1,055,844	1,193,373	1,481,497	1,580,103	1,581,443	1,575,487	1,740,981	1,707,396	1,692,283	1,740,000	1,760,000
Oregon.....	154,691	403,844	1,126,812	1,292,824	1,417,393	1,352,825	1,417,990	1,560,242	1,662,372	1,747,125	1,944,657	2,077,000	2,217,200
Pennsylvania.....	732,486	1,912,644	4,584,320	4,955,115	5,158,103	5,508,931	5,843,492	6,660,369	6,750,520	7,178,886	7,679,988	8,217,585	8,792,818
Rhode Island.....	48,686	145,443	362,046	395,389	394,485	454,062	486,328	525,824	569,935	608,318	663,800	747,659	807,471
South Carolina.....	116,939	367,689	997,984	1,006,088	1,096,871	1,158,595	1,314,792	1,558,552	1,708,603	1,814,160	1,932,502	2,058,115	2,191,892
South Dakota.....	47,899	109,375	238,332	242,215	273,794	292,102	314,627	338,800	360,832	388,266	389,436	439,533	465,091
Tennessee.....	175,152	473,226	1,319,303	1,429,938	1,488,430	1,577,915	1,827,147	1,836,012	1,990,889	2,167,026	2,352,183	2,491,119	2,718,828
Texas.....	605,577	1,518,181	4,997,689	5,310,181	5,839,849	7,442,159	7,642,784	8,998,478	9,842,812	10,152,521	10,791,854	11,831,630	12,299,000
Utah.....	69,755	179,961	518,251	587,648	626,218	702,162	730,904	813,817	908,484	932,740	974,666	1,002,007	1,096,242
Vermont.....	24,132	78,921	189,811	224,901	247,035	267,530	290,208	313,028	346,184	378,264	458,992	486,750	522,000
Virginia.....	207,399	704,677	1,881,519	2,045,412	2,191,853	2,414,130	2,584,006	2,845,540	3,183,707	3,444,952	3,793,475	4,081,839	4,408,386
Washington.....	239,089	699,984	1,825,792	1,791,477	1,844,080	2,206,231	2,373,841	2,565,957	2,702,652	2,806,836	3,005,980	3,349,000	3,641,000
West Virginia.....	106,873	249,404	678,366	754,899	904,080	957,707	988,532	1,090,514	1,164,682	1,229,069	1,231,986	1,244,691	1,189,006
Wisconsin.....	254,626	777,286	1,908,523	2,036,879	2,142,172	2,308,552	2,456,871	2,655,729	2,893,797	3,086,878	3,316,247	3,535,331	3,783,806
Wyoming.....	32,175	69,584	226,087	271,153	317,328	382,182	424,251	453,674	489,616	489,616	489,616	489,616	521,892

150 ELEMENTARY AND SECONDARY FINANCES

185

1.0



**Table 150.—Current expenditures for public elementary and secondary education, by State: 1959-60 to 1989-90—Continued**

[In thousands of dollars]

State or other area	1959-60	1969-70	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>	1987-88	Estimated 1988-89 <sup>2</sup>	Estimated 1989-90 <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Outlying areas</b>													
American Samoa .....	308	—	—	—	—	—	—	13,348	14,997	19,497	20,186	—	—
Guam .....	3,020	16,852	—	—	50,000	51,173	54,251	58,615	76,545	78,276	78,359	—	—
Northern Marianas .....	—	—	—	—	—	7,714	5,534	9,394	12,566	15,714	19,694	—	—
Puerto Rico .....	54,375	—	—	713,000	670,000	745,360	822,589	856,743	842,627	672,050	935,392	—	—
Trust Territory of the Pacific .....	—	—	—	—	—	—	—	34,002	—	—	—	—	—
Virgin Islands .....	1,662	—	—	—	62,000	70,975	70,411	—	76,751	97,585	89,217	—	—

<sup>1</sup> Data revised from previously published figures.

<sup>2</sup> Data estimated by State education agencies.

<sup>3</sup> U.S. total includes National Center for Education Statistics imputations for nonreporting States.

<sup>4</sup> Actual count.

<sup>5</sup> Estimated by the National Center for Education Statistics.

<sup>6</sup> Includes an estimated \$144,842,000 for summer schools, adult education, and community colleges.

NOTE.—Beginning in 1980-81, expenditures for State administration are excluded. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; and Common Core of Data survey. (This table was prepared January 1990.)

**Table 151.—Summary of expenditures for public elementary and secondary education, by purpose: 1919-20 to 1979-80**

Purpose of expenditures	1919-20	1929-30	1939-40	1949-50	1959-60	1969-70	1971-72	1973-74	1975-76	1979-80
1	2	3	4	5	6	7	8	9	10	11
Amounts in thousands of dollars										
Total expenditures, all schools.....	\$1,036,151	\$2,316,790	\$2,344,049	\$5,837,643	\$15,613,255	\$40,683,429	\$48,050,293	\$56,970,355	\$70,600,573	\$95,961,561
Current expenditures, all schools.....	864,396	1,853,377	1,955,166	4,722,887	12,461,955	34,853,578	42,213,093	50,477,845	62,607,754	87,581,727
Public elementary and secondary schools.....	861,120	1,843,552	1,941,799	4,687,274	12,329,389	34,217,773	41,617,762	50,024,638	62,054,105	86,984,142
Administration.....	36,752	78,680	91,571	220,050	526,408	1,606,646	1,675,504	2,275,726	2,806,956	4,263,757
Instruction.....	632,556	1,317,727	1,403,285	3,112,340	8,350,738	23,270,158	28,148,306	32,608,652	39,667,404	53,257,937
Plant operation.....	115,707	218,072	194,365	427,587	1,065,036	2,537,257	3,145,231	3,815,224	6,675,499	9,744,785
Plant maintenance.....	30,432	78,810	73,321	214,164	422,586	974,941	1,179,540	1,476,349	—	—
Fixed charges.....	9,286	50,270	50,118	261,489	909,323	3,266,920	4,096,404	5,626,682	7,321,317	11,793,934
Other school services <sup>1</sup> .....	36,387	101,993	129,141	451,683	1,033,297	2,561,656	3,372,790	4,222,025	5,560,928	7,923,729
Summer schools.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	13,263	106,461	90,554	93,820	101,319	24,753
Adult education <sup>2</sup> .....	3,277	9,825	13,367	35,814	26,858	128,778	—	—	—	—
Community colleges.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	34,492	138,813	—	—	—	—
Community services.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	57,953	261,731	304,765	359,378	452,330	572,832
Capital outlay <sup>3</sup> .....	153,643	370,878	257,974	1,014,176	2,661,786	4,659,072	4,458,949	4,978,976	6,146,435	6,506,167
Interest on school debt.....	18,212	92,536	130,909	100,576	469,514	1,170,782	1,378,236	1,513,534	1,846,384	1,873,666
Percentage distribution										
Total expenditures, all schools.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current expenditures, all schools.....	83.4	80.0	83.4	80.9	79.8	85.7	87.9	88.8	88.7	91.2
Public elementary and secondary schools.....	83.1	79.8	82.8	80.3	79.0	84.1	87.0	87.8	87.9	90.3
Administration.....	3.5	3.4	3.9	3.8	3.4	3.9	3.9	4.0	4.0	4.4
Instruction.....	61.0	56.9	59.9	53.3	53.5	57.2	58.8	57.2	56.2	55.5
Plant operation.....	11.2	9.3	8.3	7.3	6.9	6.2	6.5	6.7	9.5	10.2
Plant maintenance.....	2.9	3.4	3.1	3.7	2.7	2.4	2.5	2.8	—	—
Fixed charges.....	0.9	2.2	2.1	4.5	5.8	8.0	8.5	9.9	10.4	12.3
Other school services <sup>1</sup> .....	3.5	4.4	5.5	7.7	6.8	6.3	7.0	7.4	7.9	8.3
Summer schools.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	0.1	0.3	0.2	0.2	0.1	( <sup>4</sup> )
Adult education <sup>2</sup> .....	0.3	0.4	0.8	0.6	0.2	0.3	—	—	—	—
Community colleges.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	0.2	0.3	—	—	—	—
Community services.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	0.4	0.6	0.6	0.6	0.8	0.6
Capital outlay <sup>3</sup> .....	14.8	16.0	11.0	17.4	17.0	11.5	9.3	8.7	8.7	6.8
Interest on school debt.....	1.8	4.0	5.8	1.7	3.1	2.9	2.9	2.7	2.8	2.0

<sup>1</sup> Prior to 1959-60, items included under "other school services" were listed under "auxiliary services," a more comprehensive classification which also included community services.

<sup>2</sup> Prior to 1959-60, data shown for adult education represent combined expenditures for adult education, summer schools, and community colleges.

<sup>3</sup> Prior to 1969-70, excludes capital outlay by State and local schoolhousing authorities.

<sup>4</sup> Less than 0.05 percent.

—Data not available.

NOTE.—Beginning in 1959-60, includes Alaska and Hawaii. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; and Common Core of Data survey. (This table was prepared March 1986.)

Table 152.—Current expenditures for public elementary and secondary education, by function and State: 1987-88

[Amounts in thousands of dollars]

State or other area	Current expenditures, by function						
	Total	Instruction		Support services		Noninstructional	
		Amount	Per- cent of total	Amount	Per- cent of total	Amount	Per- cent of total
1	2	3	4	5	6	7	8
<b>United States</b> .....	<b>\$157,222,497</b>	<b>\$97,042,846</b>	<b>61.7</b>	<b>\$54,966,594</b>	<b>35.0</b>	<b>\$5,193,067</b>	<b>3.3</b>
Alabama.....	1,873,390	1,192,924	63.7	571,442	30.5	109,024	5.8
Alaska.....	756,577	463,235	61.2	279,223	36.9	14,119	1.9
Arizona.....	2,002,395	1,170,636	58.5	785,548	39.2	46,210	2.3
Arkansas.....	1,211,156	747,173	61.7	407,822	33.7	56,361	4.7
California.....	17,402,063	10,303,057	59.2	6,575,734	37.8	523,272	3.0
Colorado.....	2,297,110	1,373,343	59.8	874,778	38.1	48,968	2.1
Connecticut.....	2,746,567	1,762,708	64.0	914,662	33.3	51,197	1.9
Delaware.....	440,631	295,425	67.0	134,819	30.8	10,386	2.4
District of Columbia.....	489,357	341,535	69.8	119,801	24.5	26,021	5.7
Florida.....	6,288,977	3,818,668	60.7	2,464,879	39.2	207,431	3.3
Georgia.....	3,549,038	2,268,898	64.0	1,187,172	33.5	72,969	2.1
Hawaii.....	608,264	376,493	61.9	201,417	33.1	30,365	5.0
Idaho.....	532,274	353,274	66.4	176,129	33.1	25,871	4.9
Illinois.....	8,923,298	4,172,325	46.8	2,520,666	28.4	230,308	2.6
Indiana.....	3,330,525	2,076,217	62.3	1,180,747	35.5	73,561	2.2
Iowa.....	1,859,173	1,099,170	59.1	708,431	38.1	51,573	2.8
Kansas.....	1,568,041	919,817	58.7	591,361	37.7	56,963	3.6
Kentucky.....	1,741,799	1,291,821	74.2	367,667	21.1	82,510	4.7
Louisiana.....	2,289,241	1,308,574	57.2	798,808	34.9	181,859	7.9
Maine.....	839,860	586,469	69.9	232,180	27.6	21,231	2.5
Maryland.....	3,126,185	1,944,238	62.2	1,121,857	35.9	82,071	2.6
Massachusetts.....	4,098,062	2,660,873	64.9	1,328,106	32.4	109,282	2.7
Michigan.....	8,913,261	3,938,069	44.2	2,817,145	31.6	158,028	1.8
Minnesota.....	2,981,209	1,863,854	62.5	981,165	32.9	136,389	4.6
Mississippi.....	1,221,560	763,899	62.5	365,006	29.9	98,854	8.1
Missouri.....	2,747,234	1,684,123	61.3	992,482	36.1	70,649	2.6
Montana.....	590,228	364,028	61.7	189,791	32.2	36,407	6.2
Nebraska.....	995,235	643,270	64.6	327,290	32.9	24,675	2.5
Nevada.....	555,272	340,819	61.4	206,345	37.2	8,306	1.5
New Hampshire.....	877,507	435,836	49.7	232,792	26.5	8,979	1.0
New Jersey.....	6,821,860	4,238,134	62.0	2,199,891	32.2	183,835	2.7
New Mexico.....	918,305	528,459	57.6	342,102	37.3	47,744	5.2
New York.....	18,073,392	10,505,139	58.1	5,070,355	28.1	497,898	2.8
North Carolina.....	3,424,194	2,229,418	65.1	1,061,545	31.0	133,232	3.9
North Dakota.....	395,427	237,172	60.0	132,139	33.7	18,116	4.6
Ohio.....	8,448,903	3,759,496	44.5	2,485,029	29.3	202,378	2.4
Oklahoma.....	1,892,263	1,159,773	61.3	468,039	24.7	64,471	3.4
Oregon.....	1,644,857	1,090,881	66.4	768,417	46.1	87,559	5.3
Pennsylvania.....	7,879,968	4,712,060	59.8	2,711,644	34.7	256,282	3.3
Rhode Island.....	663,800	448,057	67.5	200,711	30.2	17,032	2.6
South Carolina.....	1,932,502	1,192,878	61.8	640,406	33.1	99,218	5.1
South Dakota.....	399,436	232,666	58.3	134,068	33.6	22,702	5.8
Tennessee.....	2,352,183	1,668,783	70.9	528,199	22.5	155,201	6.6
Texas.....	10,791,854	6,511,715	60.4	3,853,872	35.7	426,267	3.9
Utah.....	974,666	642,954	66.0	294,622	30.2	37,089	3.8
Vermont.....	456,992	305,266	66.8	145,102	31.8	6,824	1.5
Virginia.....	3,793,475	2,480,178	65.4	1,218,721	32.1	94,577	2.5
Washington.....	3,005,980	1,761,402	58.6	1,143,564	38.0	101,013	3.4
West Virginia.....	1,231,966	595,078	48.3	575,459	46.7	61,429	5.0
Wisconsin.....	3,318,247	2,085,505	62.8	1,171,981	35.3	60,761	1.8
Wyoming.....	466,921	281,044	60.2	177,690	38.1	8,166	1.7
<b>Outlying areas</b>							
American Samoa.....	20,186	10,717	53.1	5,760	28.6	3,890	19.3
Guam.....	78,359	55,426	70.8	17,638	22.5	3,295	4.3
Northern Marianas.....	19,894	8,015	40.3	8,858	44.5	2,821	14.3
Puerto Rico.....	935,392	632,791	67.6	157,027	16.8	145,575	15.6
Virgin Islands.....	89,217	48,174	54.0	34,038	38.2	7,005	7.9

NOTE.—Excludes expenditures for State education agencies. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared December 1989.)

Table 153.—Current expenditures for public elementary and secondary education, by function and State: 1986-87

[Amounts in thousands of dollars]

State or other area	Current expenditures, by function						
	Total	Instruction		Support services		Noninstructional	
		Amount	Per- cent of total	Amount	Per- cent of total	Amount	Per- cent of total
1	2	3	4	5	6	7	8
<b>United States</b> .....	<b>\$146,364,922</b>	<b>\$89,436,863</b>	<b>61.1</b>	<b>\$51,808,026</b>	<b>35.4</b>	<b>\$5,120,033</b>	<b>3.5</b>
Alabama.....	1,775,997	1,130,138	63.6	539,105	30.4	106,756	8.0
Alaska.....	789,015	508,151	64.4	241,889	31.4	19,174	2.5
Arizona.....	1,836,908	1,058,852	57.8	724,469	39.4	53,586	2.9
Arkansas.....	1,118,904	894,090	80.0	372,051	33.3	52,783	4.7
California.....	18,512,868	9,264,208	50.0	8,741,066	47.2	507,394	2.7
Colorado.....	2,129,964	1,271,814	59.7	812,991	38.2	45,359	2.1
Connecticut.....	2,414,708	1,551,106	64.2	827,742	34.3	42,859	1.8
Delaware.....	418,118	279,436	66.8	128,639	30.8	10,041	2.4
District of Columbia.....	441,135	282,403	64.0	134,272	30.4	24,460	5.5
Florida.....	5,650,083	3,234,977	57.3	2,223,948	39.4	191,160	3.4
Georgia.....	3,254,786	2,045,347	62.9	1,121,927	34.5	87,512	2.7
Hawaii.....	578,749	352,509	61.0	193,565	33.5	30,875	5.3
Idaho.....	513,011	313,385	61.1	178,247	34.8	23,378	4.8
Illinois.....	8,463,564	3,862,345	45.6	2,375,572	28.1	225,847	2.7
Indiana.....	3,106,816	1,952,448	62.9	1,084,723	34.9	89,447	2.9
Iowa.....	1,708,440	991,876	58.1	665,147	38.9	51,417	3.0
Kansas.....	1,486,814	863,987	58.1	571,344	38.4	51,483	3.5
Kentucky.....	1,583,158	1,158,089	73.2	348,461	22.0	78,588	4.9
Louisiana.....	2,260,393	1,292,319	57.2	804,938	35.6	163,136	7.2
Maine.....	780,446	522,807	67.1	214,883	27.5	22,755	3.0
Maryland.....	2,845,404	1,783,484	62.7	994,370	34.9	57,550	2.0
Massachusetts.....	3,744,131	2,448,329	65.4	1,196,833	32.0	99,968	2.6
Michigan.....	8,427,556	3,682,912	43.7	2,814,909	33.4	149,735	1.8
Minnesota.....	2,818,380	1,768,267	62.8	918,538	32.6	131,585	4.7
Mississippi.....	1,112,535	690,719	62.1	330,878	29.7	91,138	8.2
Missouri.....	2,515,848	1,541,808	61.3	909,931	36.2	64,107	2.5
Montana.....	583,861	366,171	62.7	190,282	32.6	27,408	4.7
Nebraska.....	948,149	603,861	63.7	318,088	33.5	26,200	2.8
Nevada.....	513,014	309,757	60.4	195,988	38.2	7,268	1.4
New Hampshire.....	589,850	363,427	61.6	198,375	33.6	8,048	1.4
New Jersey.....	6,099,473	3,871,290	63.5	2,043,734	33.5	184,448	3.0
New Mexico.....	865,789	498,202	57.5	323,580	37.4	44,027	5.1
New York.....	14,724,887	9,645,110	65.5	4,819,447	32.7	480,130	3.2
North Carolina.....	3,193,337	2,094,563	65.6	966,844	30.3	131,930	4.1
North Dakota.....	374,941	230,538	61.5	127,722	34.1	18,682	4.4
Ohio.....	8,114,426	3,542,404	43.7	2,372,349	29.2	199,873	2.4
Oklahoma.....	1,707,398	1,110,882	64.9	535,254	31.3	81,260	4.8
Oregon.....	1,747,125	992,077	56.8	692,747	39.7	62,300	3.6
Pennsylvania.....	7,178,886	4,377,194	61.0	2,575,903	35.9	223,789	3.1
Rhode Island.....	608,318	407,519	66.9	184,668	30.4	18,130	2.7
South Carolina.....	1,814,160	1,118,218	61.7	605,523	33.4	92,418	5.1
South Dakota.....	388,266	219,929	56.6	126,266	32.5	22,051	6.0
Tennessee.....	2,187,026	1,514,878	69.3	508,728	23.3	143,420	6.6
Texas.....	10,152,521	6,066,336	59.8	3,493,531	34.4	592,654	5.8
Utah.....	932,740	614,264	65.9	282,299	30.3	36,187	3.9
Vermont.....	378,264	240,877	63.7	130,665	34.5	8,922	1.8
Virginia.....	3,444,952	2,241,056	65.1	1,117,993	32.5	85,903	2.5
Washington.....	2,808,636	1,638,310	58.3	1,075,030	38.3	95,296	3.4
West Virginia.....	1,229,089	592,721	48.3	574,025	46.7	62,323	5.1
Wisconsin.....	3,086,878	1,928,688	62.5	1,102,026	35.7	56,164	1.8
Wyoming.....	489,825	295,188	60.3	185,911	38.0	8,726	1.8
<b>Outlying areas</b>							
American Samoa.....	19,497	9,551	49.0	8,545	33.6	3,400	17.4
Guam.....	78,278	56,854	72.6	18,589	23.7	3,035	3.9
Northern Marianas.....	15,714	8,539	54.3	5,351	34.0	1,824	11.6
Puerto Rico.....	872,050	594,367	68.1	162,322	18.6	115,361	13.2
Virgin Islands.....	97,585	71,819	73.4	18,389	18.8	7,597	7.6

NOTE.—Excludes expenditures for State education agencies. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared December 1989.)

Table 154.—Total and current expenditure per pupil in public elementary and secondary schools: 1919-20 to 1989-90

School year	Expenditure per pupil in average daily attendance				Expenditure per pupil in fall enrollment <sup>1</sup>			
	Unadjusted dollars		Constant 1989-90 <sup>2</sup> dollars		Unadjusted dollars		Constant 1989-90 <sup>2</sup> dollars	
	Total expenditure	Current expenditure	Total expenditure	Current expenditure	Total expenditure	Current expenditure	Total expenditure	Current expenditure
1	2	3	4	5	6	7	8	9
1919-20.....	\$64	\$53	\$426	\$355	\$48	\$40	\$319	\$266
1929-30.....	108	87	805	643	90	72	666	533
1931-32.....	97	81	853	714	82	69	722	605
1933-34.....	76	67	731	647	65	57	621	550
1935-36.....	08	74	813	687	74	63	687	581
1937-38.....	100	84	884	743	86	72	759	638
1939-40.....	106	88	961	800	92	76	833	694
1941-42.....	110	96	896	801	94	84	767	686
1943-44.....	125	117	908	852	105	99	765	718
1945-46.....	148	136	1,015	949	124	116	865	809
1947-48.....	205	181	1,116	989	179	158	975	864
1949-50.....	260	210	1,396	1,128	231	187	1,239	1,001
1951-52.....	314	246	1,519	1,189	275	215	1,330	1,041
1953-54.....	351	265	1,657	1,250	312	236	1,474	1,112
1955-56.....	387	294	1,828	1,390	354	269	1,671	1,270
1957-58.....	447	341	1,989	1,517	408	311	1,814	1,383
1959-60.....	471	375	2,035	1,621	440	350	1,901	1,514
1961-62.....	517	419	2,185	1,770	485	393	2,050	1,661
1963-64.....	559	460	2,300	1,895	520	428	2,141	1,764
1965-66.....	654	538	2,602	2,140	607	499	2,416	1,987
1967-68.....	786	658	2,937	2,458	732	612	2,732	2,266
1969-70.....	955	816	3,210	2,743	878	750	2,951	2,521
1970-71.....	1,049	911	3,354	2,912	970	842	3,100	2,691
1971-72.....	1,128	990	3,480	3,054	1,034	907	3,191	2,800
1972-73.....	1,211	1,077	3,591	3,194	1,118	993	3,311	2,945
1973-74.....	1,364	1,207	3,714	3,268	1,244	1,101	3,368	2,999
1974-75.....	1,545	1,365	3,787	3,345	1,424	1,258	3,490	3,083
1975-76.....	1,697	1,504	3,866	3,443	1,564	1,385	3,581	3,172
1976-77.....	1,816	1,638	3,929	3,543	1,673	1,509	3,620	3,264
1977-78.....	2,002	1,823	4,059	3,695	1,842	1,677	3,734	3,399
1978-79.....	2,210	2,020	4,096	3,745	2,029	1,855	3,762	3,439
1979-80.....	2,491	2,272	4,074	3,716	2,290	2,089	3,745	3,416
1980-81.....	<sup>3</sup> 2,762	2,502	<sup>3</sup> 4,048	3,667	<sup>3</sup> 2,540	2,301	<sup>3</sup> 3,724	3,373
1981-82.....	<sup>3</sup> 2,997	2,726	<sup>3</sup> 4,044	3,678	<sup>3</sup> 2,773	2,521	<sup>3</sup> 3,741	3,402
1982-83.....	<sup>3</sup> 3,232	2,955	<sup>3</sup> 4,182	3,823	<sup>3</sup> 2,987	2,730	<sup>3</sup> 3,864	3,532
1983-84.....	<sup>3</sup> 3,506	3,173	<sup>3</sup> 4,374	3,959	<sup>3</sup> 3,240	2,932	<sup>3</sup> 4,042	3,658
1984-85.....	<sup>3</sup> 3,763	3,470	<sup>3</sup> 4,518	4,166	<sup>3</sup> 3,486	3,215	<sup>3</sup> 4,186	3,860
1985-86.....	<sup>3</sup> 4,069	3,756	<sup>3</sup> 4,748	4,382	<sup>3</sup> 3,761	3,472	<sup>3</sup> 4,389	4,051
1986-87.....	<sup>3</sup> 4,365	3,970	<sup>3</sup> 4,982	4,532	<sup>3</sup> 4,047	3,682	<sup>3</sup> 4,620	4,203
1987-88.....	<sup>3</sup> 4,642	<sup>4</sup> 4,243	<sup>3</sup> 5,088	<sup>4</sup> 4,651	<sup>3</sup> 4,299	<sup>4</sup> 3,930	<sup>3</sup> 4,712	<sup>4</sup> 4,307
1988-89.....	<sup>3</sup> 4,927	<sup>3</sup> 4,495	<sup>3</sup> 5,162	<sup>3</sup> 4,710	<sup>3</sup> 4,563	<sup>3</sup> 4,163	<sup>3</sup> 4,781	<sup>3</sup> 4,362
1989-90.....	<sup>3</sup> 5,247	<sup>3</sup> 4,848	<sup>3</sup> 5,247	<sup>3</sup> 4,848	<sup>3</sup> 4,814	<sup>3</sup> 4,448	<sup>3</sup> 4,814	<sup>3</sup> 4,448

<sup>1</sup> Data for 1919-20 to 1953-54 are based on school-year enrollment.<sup>2</sup> Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor adjusted to a school year basis.<sup>3</sup> Estimated.<sup>4</sup> Preliminary data.

NOTE.—Beginning in 1980-81, 2 changes in definitions were made. State administration expenditures are excluded from both "total" and "current" expenditures, and "other programs" such as summer schools and community services are included in both

"total" and "current" expenditures. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems: Revenues and Expenditures for Public Elementary and Secondary Education*; and Common Core of Data survey. (This table was prepared December 1989.)

Table 155.—Current expenditure per pupil in average daily attendance in public elementary and secondary schools, by State: 1959-60 to 1987-88

State or other area	Current dollars											
	1959-60	1969-70	1974-75	1978-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>2</sup>	1987-88
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>United States.....</b>	<b>\$375</b>	<b>\$818</b>	<b>\$1,365</b>	<b>\$2,272</b>	<b>\$2,502</b>	<b>\$2,726</b>	<b>\$2,955</b>	<b>\$3,173</b>	<b>\$3,470</b>	<b>\$3,756</b>	<b>\$3,970</b>	<b>\$4,243</b>
Alabama.....	241	544	931	1,612	1,985	2,063	2,177	2,055	2,325	2,565	2,573	2,718
Alaska.....	546	1,123	2,439	4,726	5,688	6,312	7,325	8,627	7,843	8,304	8,010	7,971
Arizona.....	404	720	1,216	1,971	2,258	2,462	2,597	2,751	3,009	3,336	3,544	3,744
Arkansas.....	225	568	893	1,574	1,701	1,841	1,971	2,235	2,482	2,658	2,733	2,989
California.....	<sup>3</sup> 424	867	1,367	2,268	2,475	2,671	2,733	2,863	3,256	3,543	3,728	3,840
Colorado.....	396	738	1,287	2,421	2,693	2,914	3,171	3,373	3,697	3,975	4,147	4,462
Connecticut.....	436	951	1,556	2,420	2,876	3,188	3,636	4,023	4,738	4,743	5,435	6,230
Delaware.....	456	900	1,514	2,861	3,018	3,198	3,458	3,849	4,184	4,610	4,825	5,017
District of Columbia.....	131	1,018	1,779	3,259	3,441	3,792	4,260	4,766	5,103	5,337	5,742	6,132
Florida.....	318	732	1,304	1,889	2,401	2,443	2,739	2,932	3,241	3,529	3,794	4,092
Georgia.....	253	588	1,055	1,625	1,708	2,019	2,169	2,352	2,657	2,966	3,181	3,434
Hawaii.....	325	841	1,378	2,322	2,604	2,862	3,239	3,334	3,465	3,807	3,787	3,919
Idaho.....	290	603	1,016	1,659	1,856	1,945	2,070	2,146	2,362	2,484	2,585	2,667
Illinois.....	436	909	1,516	2,587	2,704	2,936	3,100	3,298	3,538	3,781	4,106	4,369
Indiana.....	369	728	1,114	1,882	2,010	2,306	2,480	2,725	3,051	3,275	3,556	3,794
Iowa.....	368	844	1,259	2,326	2,668	2,874	3,095	3,274	3,467	3,619	3,770	4,124
Kansas.....	348	771	1,270	2,173	2,559	2,815	3,058	3,284	3,560	3,829	3,933	4,076
Kentucky.....	233	545	905	1,701	1,784	1,906	2,100	2,311	2,390	2,486	2,733	3,011
Louisiana.....	372	648	1,130	1,792	2,469	2,590	2,691	2,694	2,990	3,187	3,069	3,138
Maine.....	263	692	1,108	1,824	1,934	2,221	2,458	2,700	3,024	3,472	3,850	4,258
Maryland.....	393	918	1,565	2,598	2,914	3,234	3,445	3,858	4,102	4,447	4,777	5,201
Massachusetts.....	409	859	1,481	2,819	2,940	3,137	3,378	3,595	4,026	4,362	5,145	5,471
Michigan.....	415	904	1,524	2,640	3,037	3,140	3,307	3,556	3,848	4,176	4,353	4,692
Minnesota.....	425	904	1,544	2,387	2,673	2,905	3,085	3,395	3,674	3,941	4,180	4,386
Mississippi.....	206	501	877	1,664	1,805	1,706	1,979	2,244	2,350	2,362	2,350	2,548
Missouri.....	344	709	1,149	1,936	2,172	2,342	2,468	2,748	2,958	3,189	3,472	3,786
Montana.....	411	782	1,351	2,476	2,683	2,998	3,289	3,604	3,847	4,091	4,194	4,246
Nebraska.....	337	736	1,271	2,150	2,384	2,704	2,984	3,221	3,471	3,634	3,758	3,943
Nevada.....	430	769	1,188	2,088	2,078	2,424	2,613	2,690	2,829	3,440	3,440	3,623
New Hampshire.....	347	723	1,180	1,916	2,265	2,509	2,750	2,980	3,271	3,542	3,933	4,457
New Jersey.....	388	1,016	1,783	3,191	3,254	3,674	4,007	4,496	4,504	5,570	5,953	6,564
New Mexico.....	363	707	1,114	2,034	2,329	2,703	2,902	2,928	3,153	3,195	3,558	3,691
New York.....	562	1,327	2,308	3,462	3,741	4,280	4,688	5,117	5,492	6,011	6,497	7,151
North Carolina.....	237	612	1,092	1,754	2,001	2,107	2,138	2,303	2,625	2,948	3,129	3,368
North Dakota.....	367	690	1,111	1,920	2,275	2,727	2,852	3,028	3,339	3,483	3,437	3,519
Ohio.....	365	730	1,167	2,075	2,303	2,492	2,676	2,982	3,265	3,527	3,673	3,998
Oklahoma.....	311	604	1,027	1,926	2,199	2,673	2,805	2,859	2,850	3,146	3,099	3,093
Oregon.....	448	925	1,561	2,692	3,100	3,299	3,504	3,677	3,889	4,141	4,337	4,789
Pennsylvania.....	409	882	1,514	2,535	2,824	3,050	3,354	3,648	4,237	4,325	4,616	4,989
Rhode Island.....	413	891	1,604	2,601	2,927	3,040	3,570	3,938	4,287	4,667	4,985	5,329
South Carolina.....	220	613	1,032	1,752	1,734	1,907	2,017	2,183	2,783	3,058	3,214	3,408
South Dakota.....	347	690	1,071	1,908	1,991	2,300	2,486	2,685	2,892	3,051	3,097	3,249
Tennessee.....	236	566	991	1,635	1,794	1,895	2,027	2,101	2,365	2,612	2,827	3,068
Texas.....	332	624	1,063	1,916	2,006	2,229	2,731	2,784	3,124	3,298	3,409	3,608
Utah.....	322	626	1,024	1,657	1,819	1,872	2,014	2,053	2,220	2,390	2,415	2,454
Vermont.....	344	807	1,366	1,997	2,475	2,793	3,061	3,359	3,651	4,031	4,399	5,207
Virginia.....	274	708	1,200	1,970	2,179	2,364	2,656	2,870	3,155	3,520	3,780	4,149
Washington.....	420	915	1,395	2,568	2,542	2,650	3,211	3,465	3,725	3,881	3,964	4,164
West Virginia.....	258	670	1,047	1,920	2,146	2,593	2,765	2,879	3,244	3,528	3,784	3,858
Wisconsin.....	413	883	1,409	2,477	2,738	2,935	3,233	3,513	3,815	4,168	4,523	4,747
Wyoming.....	450	856	1,426	2,527	2,967	3,417	4,045	4,523	4,799	5,114	5,201	5,051
<b>Outlying areas</b>												
American Samoa.....	—	—	880	—	—	—	—	—	1,262	1,387	1,846	1,908
Guam.....	236	820	1,820	—	—	2,133	2,166	2,301	2,489	3,363	3,344	3,295
Northern Marianas.....	—	—	—	—	—	—	1,731	1,142	1,693	2,552	3,099	3,366
Puerto Rico.....	106	—	742	—	—	961	1,112	1,247	1,319	1,325	1,384	1,504
Trust Territory of the Pacific.....	—	—	—	—	—	—	—	—	792	—	—	—
Virgin Islands.....	271	—	1,542	—	—	2,646	2,757	2,710	—	3,223	4,277	4,036

**Table 155.—Current expenditure per pupil in average daily attendance in public elementary and secondary schools, by State: 1959-60 to 1987-88—Continued**

State or other area	Constant 1987-88 dollars <sup>1</sup>											
	1959-60	1969-70	1974-75	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	14	15	16	17	18	19	20	21	22	23	24	25
<b>United States</b> .....	<b>\$1,479</b>	<b>\$2,502</b>	<b>\$3,052</b>	<b>\$3,390</b>	<b>\$3,346</b>	<b>\$3,356</b>	<b>\$3,488</b>	<b>\$3,612</b>	<b>\$3,601</b>	<b>\$3,998</b>	<b>\$4,135</b>	<b>\$4,243</b>
Alabama.....	951	1,668	2,081	2,405	2,654	2,539	2,569	2,339	2,547	2,730	2,680	2,718
Alaska.....	2,154	3,443	5,454	7,054	7,607	7,770	8,645	9,818	8,590	8,840	8,342	7,971
Arizona.....	1,591	2,208	2,719	2,941	3,020	3,031	3,065	3,131	3,296	3,552	3,691	3,744
Arkansas.....	888	1,741	1,998	2,349	2,275	2,266	2,326	2,544	2,718	2,829	2,846	2,989
California.....	1,672	2,659	3,057	3,384	3,310	3,288	3,226	3,372	3,566	3,772	3,882	3,840
Colorado.....	1,582	2,263	2,878	3,612	3,601	3,587	3,743	3,639	4,049	4,231	4,319	4,462
Connecticut.....	1,719	2,917	3,481	3,611	3,845	3,924	4,291	4,579	5,189	5,049	5,660	6,330
Delaware.....	1,797	2,760	3,365	4,269	4,036	3,937	4,078	4,381	4,583	4,908	5,025	5,017
District of Columbia.....	1,700	3,123	3,978	4,863	4,602	4,668	5,027	5,425	5,589	5,682	5,980	6,132
Florida.....	1,252	2,246	2,917	2,819	3,211	3,007	3,232	3,337	3,549	3,757	3,951	4,092
Georgia.....	999	1,803	2,359	2,425	2,284	2,485	2,561	2,677	2,910	3,157	3,313	3,434
Hawaii.....	1,280	2,578	3,081	3,464	3,482	3,523	3,823	3,794	3,795	4,052	3,944	3,919
Idaho.....	1,142	1,850	2,273	2,476	2,482	2,394	2,444	2,442	2,587	2,644	2,692	2,667
Illinois.....	1,728	2,789	3,391	3,860	3,616	3,614	3,658	3,754	3,875	4,026	4,278	4,369
Indiana.....	1,454	2,233	2,492	2,809	2,688	2,639	2,928	3,101	3,342	3,487	3,703	3,794
Iowa.....	1,450	2,589	2,815	3,471	3,567	3,538	3,653	3,726	3,787	3,853	3,926	4,124
Kansas.....	1,371	2,364	2,841	3,243	3,422	3,465	3,610	3,737	3,899	4,077	4,096	4,076
Kentucky.....	919	1,672	2,023	2,538	2,385	2,346	2,478	2,631	2,617	2,647	2,846	3,011
Louisiana.....	1,466	1,987	2,528	2,674	3,302	3,188	3,176	3,066	3,275	3,393	3,198	3,138
Maine.....	1,115	2,124	2,478	2,721	2,586	2,734	2,901	3,072	3,312	3,696	4,009	4,258
Maryland.....	1,548	2,816	3,501	3,877	3,896	3,981	4,066	4,391	4,493	4,734	4,975	5,201
Massachusetts.....	1,612	2,634	3,312	4,207	3,931	3,861	3,987	4,092	4,409	4,857	5,358	5,471
Michigan.....	1,637	2,772	3,410	3,940	4,061	3,865	3,903	4,047	4,215	4,445	4,534	4,692
Minnesota.....	1,676	2,771	3,453	3,562	3,575	3,576	3,641	3,864	4,024	4,195	4,353	4,366
Mississippi.....	812	1,536	1,961	2,483	2,147	2,100	2,336	2,554	2,574	2,514	2,447	2,548
Missouri.....	1,356	2,173	2,569	2,889	2,905	2,883	2,913	3,128	3,240	3,395	3,615	3,786
Montana.....	1,619	2,398	3,023	3,695	3,589	3,690	3,882	4,101	4,214	4,355	4,368	4,246
Nebraska.....	1,329	2,258	2,842	3,208	3,189	3,328	3,521	3,666	3,802	3,868	3,911	3,943
Nevada.....	1,697	2,360	2,657	3,116	2,779	2,984	3,084	3,061	3,099	3,662	3,582	3,623
New Hampshire.....	1,369	2,217	2,639	2,659	3,029	3,088	3,245	3,391	3,582	3,770	4,096	4,457
New Jersey.....	1,528	3,116	3,987	4,762	4,352	4,523	4,730	5,117	4,933	5,930	6,200	6,564
New Mexico.....	1,430	2,168	2,492	3,035	3,115	3,327	3,425	3,333	3,454	3,401	3,705	3,691
New York.....	2,214	4,069	5,163	5,166	5,003	5,269	5,531	5,823	6,015	6,399	6,767	7,151
North Carolina.....	935	1,878	2,442	2,618	2,676	2,594	2,523	2,621	2,876	3,138	3,258	3,368
North Dakota.....	1,446	2,115	2,486	2,665	3,042	3,357	3,366	3,446	3,657	3,708	3,580	3,519
Ohio.....	1,439	2,239	2,611	3,096	3,080	3,068	3,159	3,394	3,598	3,754	3,825	3,898
Oklahoma.....	1,228	1,854	2,297	2,875	2,940	3,290	3,311	3,253	3,121	3,349	3,227	3,093
Oregon.....	1,768	2,836	3,401	4,017	4,145	4,061	4,136	4,185	4,260	4,408	4,517	4,789
Pennsylvania.....	1,614	2,704	3,387	3,782	3,776	3,754	3,959	4,152	4,641	4,604	4,808	4,989
Rhode Island.....	1,630	2,733	3,588	3,881	3,914	3,742	4,213	4,482	4,695	4,969	5,192	5,329
South Carolina.....	868	1,878	2,309	2,614	2,319	2,347	2,361	2,485	3,048	3,256	3,347	3,408
South Dakota.....	1,367	2,116	2,396	2,847	2,662	2,831	2,934	3,056	3,168	3,248	3,226	3,249
Tennessee.....	939	1,736	2,216	2,440	2,399	2,333	2,393	2,392	2,612	2,781	2,944	3,068
Texas.....	1,310	1,914	2,379	2,859	2,682	2,744	3,223	3,166	3,422	3,511	3,551	3,608
Utah.....	1,271	1,920	2,290	2,472	2,433	2,304	2,377	2,336	2,432	2,545	2,515	2,454
Vermont.....	1,356	2,475	3,055	2,980	3,309	3,438	3,613	3,823	3,999	4,291	4,581	5,207
Virginia.....	1,081	2,171	2,683	2,940	2,914	2,935	3,135	3,266	3,455	3,748	3,937	4,149
Washington.....	1,657	2,807	3,119	3,832	3,400	3,262	3,790	3,944	4,080	4,132	4,126	4,164
West Virginia.....	1,019	2,054	2,342	2,865	2,869	3,192	3,263	3,277	3,553	3,756	3,941	3,858
Wisconsin.....	1,628	2,707	3,151	3,696	3,662	3,613	3,815	3,998	4,179	4,437	4,710	4,747
Wyoming.....	1,776	2,625	3,190	3,770	3,068	4,206	4,774	5,147	5,256	5,444	5,417	5,051
<b>Outlying areas</b>												
American Samoa.....	—	—	1,968	—	—	—	—	—	1,382	1,476	1,923	1,908
Guam.....	932	2,514	4,071	—	—	2,626	2,580	2,619	2,726	3,601	3,483	3,295
Northern Marianas.....	—	—	—	—	—	—	2,043	1,300	1,854	2,716	3,227	3,366
Puerto Rico.....	419	—	1,660	—	—	1,183	1,312	1,419	1,445	1,410	1,442	1,504
Trust Territory of the Pacific.....	—	—	—	—	—	—	—	—	867	—	—	—
Virgin Islands.....	1,067	—	3,449	—	—	3,257	3,254	3,084	—	3,431	4,455	4,036

<sup>1</sup> Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor adjusted to a school year basis. These data do not reflect differences in inflation rates from State to State.

<sup>2</sup> Some data revised from previously published figures.

<sup>3</sup> Estimated by the National Center for Education Statistics.

—Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; and Common Core of Data survey. (This table was prepared December 1989.)

## CHAPTER 3

# Postsecondary Education

A salient characteristic of postsecondary education in this country is its diversity. A great variety of types of colleges and universities offers a wide range of programs. For example, a junior college usually offers vocational training or the first 2 years of training at the college level, but a university normally offers a full undergraduate course leading to a bachelor's degree as well as first-professional and graduate programs leading to advanced degrees. Vocational and technical institutions offer training programs which are designed to prepare students for specific careers. Other types of postsecondary education providers, such as community groups, churches, and businesses, offer learning opportunities to adults. This variety of institutions serves a wide scope of individual needs but poses many problems of coverage and definition for researchers.

In recent decades, postsecondary education has become more accessible to all segments of the population. The growth of public junior colleges and low-cost institutions means that the expenses of students attending them can be held to a minimum. Federal and other programs also have attracted many students who otherwise would have found it difficult to finance a college education.

The National Center for Education Statistics (NCES) has greatly expanded its data collection at the postsecondary level in a survey called Integrated Postsecondary Education Data System (IPEDS). IPEDS obtains data from each college and university on its enrollment; State residence of freshmen; staff; faculty and faculty salaries; degrees conferred; and finances, including revenues, expenditures, and property. This new annual study provides a comprehensive overview of postsecondary education by incorporating a survey system with a consistent set of definitions and survey forms for all types of postsecondary institutions.

This chapter provides an overview of the latest statistics from the IPEDS surveys. It also provides historical data that enable the reader to observe long-range trends in American higher education. In addition, it presents summary data from the Bureau of the Census on the characteristics and the majors of college students; and from the Equal Employment Opportunity Commission on the race/ethnicity, academic rank, and sex of college faculty members.

Additional data on postsecondary institutions from the survey, "Participation in Adult Education," compare adult learning activities by demographic characteristics of participants. Data on price indexes and on the number of degrees held by the general population are in chapter 1. Chapter 4 contains tabulations on Federal funding for postsecondary education. Information on employment outcomes for college graduates is in chapter 5. Chapter 7 contains data on college libraries and use of computers by young adults. Further information on survey methodologies is in the "Guide to Sources" in the appendix and in the publications cited in the source notes.

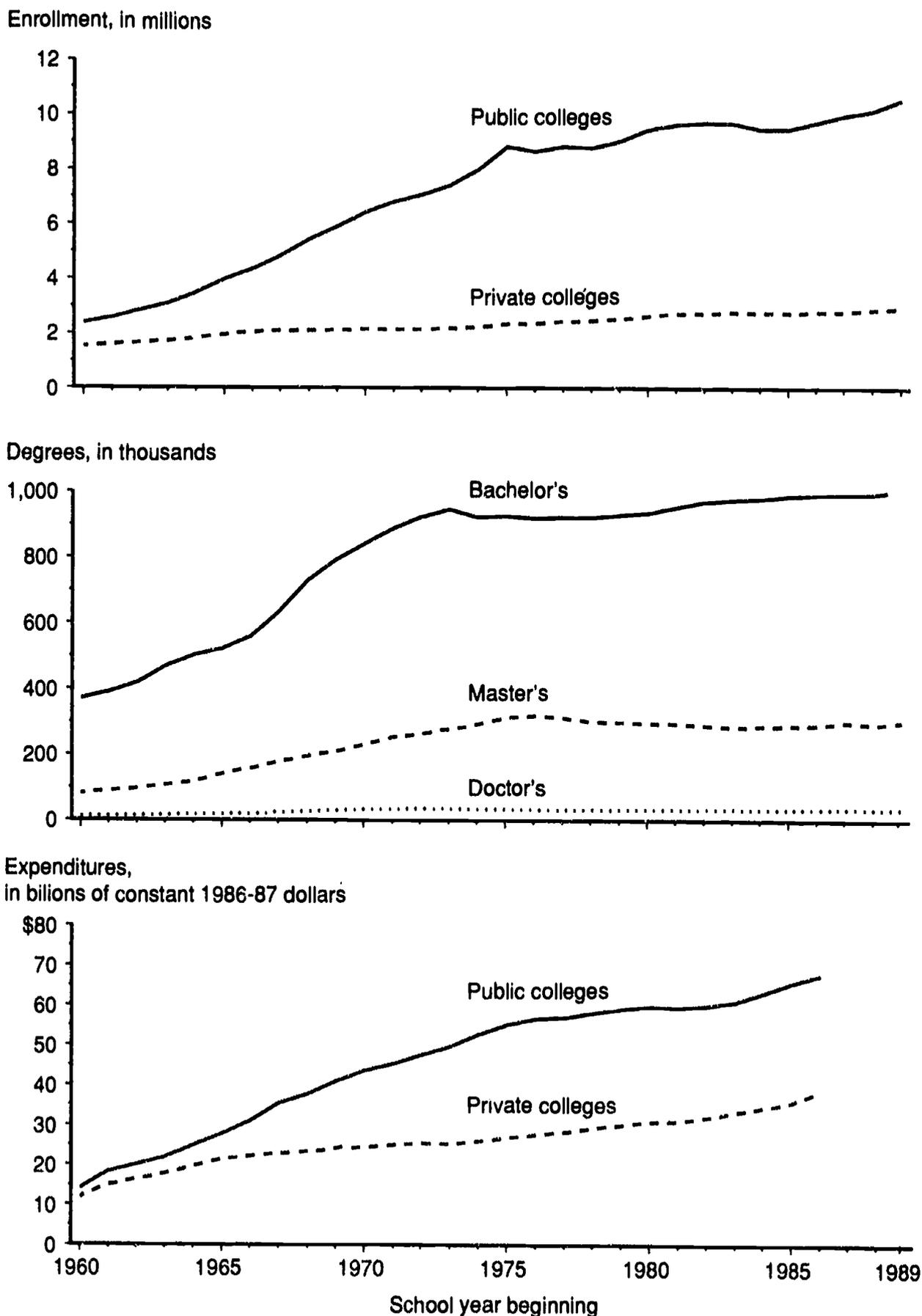
## Highlights

- College enrollment increased 41 percent between 1970 and 1980. Since 1980, enrollments have risen more slowly. Between 1980 and 1988, enrollment increased about 8 percent, from 12.1 million to a record 13.0 million. Most of this growth was in part-time enrollment. Between 1980 and 1988, the number of men enrolled rose only 2 percent, while the number of women increased by 13 percent. (Table 157)
- The number of older students has been growing more rapidly than the number of younger students. Between 1970 and 1989, the enrollment of students under age 25 increased by 24 percent. During the same period, enrollment of persons 25 and over rose by 141 percent. From 1989 to 1996, the NCES projects a rise of 8 percent in enrollments of persons over 25, but a decrease of 2 percent in the number under 25. (Table 159)
- There have been some differing enrollment trends at the undergraduate, graduate, and first-professional levels. Undergraduate enrollment increased rapidly during the 1970s, but fell between 1983 and 1985. Between 1985 and 1988, undergraduate enrollment rose about 7 percent. Graduate enrollment had been steady at about 1.3 million in the late 1970s and early 1980s, but rose about 7 percent between 1985 and 1988. Enrollment in first-professional programs has shown small decreases, dropping about 4 percent between 1984 and 1988. (Tables 171, 172, and 173)

- In the past several years, the number of women in graduate schools has exceeded the number of men. Between 1983 and 1988, the number of male full-time graduate students increased by 6 percent compared with 18 percent for full-time women. Among part-time graduate students, men increased by only 1 percent compared with 16 percent for women. (Table 172)
- Despite the sizable numbers of small colleges, most students attend the larger colleges. In fall 1988, 39 percent of higher education institutions had fewer than 1,000 students; yet altogether, these institutions enrolled only 4 percent of college students. On the other hand, though only 10 percent of the colleges enrolled over 10,000 students each, they accounted for 50 percent of total college enrollment. (Table 199)
- The proportion of college students who were minorities rose between 1978 and 1988. In 1978, 16.3 percent were minorities compared with 18.9 percent in 1988. Much of the change can be attributed to sharply rising numbers of Hispanic and Asian students. However, the proportion of students who were black fell from 9.6 percent in 1978 to 8.9 percent in 1988. The drop in the proportion of black students reflected the declining enrollments of black males and the relatively slow increase in enrollments of black women. (Table 191)
- The student-staff ratio at colleges and universities dropped from 5.4 in 1976 to 4.8 in 1987. The proportion of staff who were non-teaching professionals rose from 15.0 percent in 1976 to 20.7 percent in 1987, while the proportion of staff identified as nonprofessional declined from 42.4 percent to 38.5 percent. (Table 203)
- Approximately 2.3 million persons were employed in colleges and universities in the fall of 1987, including 1.4 million professional and .9 million non-professional staff. About 41 percent of the staff were teachers or teaching assistants, 21 percent were other non-teaching professionals, 19 percent were clerical or secretarial, and the remaining 20 percent were technical, paraprofessional, skilled crafts, service, and maintenance staff. (Table 204)
- Colleges differ widely in their practices of employing part-time and full-time staff. Only 56 percent of the employees at public 2-year colleges were employed full-time compared with 76 percent at public and private 4-year colleges. More of the faculty at public 4-year colleges were employed full-time (80 percent) than at private 4-year colleges (37 percent) or public 2-year colleges (46 percent). (Table 205)
- College faculty generally suffered losses in the purchasing power of their salaries from 1972-73 to 1980-81, when average salaries fell 17 percent after adjustment for inflation. However, between 1980-81 and 1987-88, the average salaries rose by 15 percent, recouping most of the losses. Average salaries for men in 1987-88 (\$38,115) were considerably higher than the average for women (\$30,505) and have increased at a faster rate since 1980-81. (Table 206)
- The proportion of faculty with tenure has remained relatively stable in recent years. About 65 percent of full-time faculty had tenure in 1987-88, but a large difference existed between the proportion of men and women with tenure. Seventy percent of men compared with 50 percent of women had tenure in 1987-88. About 67 percent of the faculty at public institutions had tenure compared with 58 percent of faculty at private institutions. (Table 215)
- During the 1989-90 academic year, 10,606 institutions offered postsecondary education. This included 2,127 4-year colleges, 1,408 2-year colleges, and 7,071 vocational and technical institutions. (Tables 218 and 318)
- The total number of bachelor's degrees increased slowly in the 10-year period between 1977-78 and 1987-88, but there were notable shifts for men and women. Between 1977-78 and 1987-88, the number of bachelor's degrees awarded to men fell by 2 percent, while the number of degrees awarded to women rose by 19 percent. (Table 220)
- Between 1977-78 and 1987-88, the number of associate, bachelor's, and doctor's degrees rose, while the number of master's degrees decreased by 4 percent. Bachelor's and doctor's degrees increased by 8 percent and associate degrees by 6 percent during this period. Although the number of first-professional degrees rose by 6 percent over the entire 1977-78 to 1987-88 period, they declined in the last years of the time period. (Table 220)
- Of the 993,000 bachelor's degrees conferred in 1987-88, the largest numbers of degrees were conferred in the fields of business and management (243,000), social sciences (100,000), education (91,000), engineering and engineering technology (89,000), and health professions (60,000). At the master's degree level, the largest fields were education (78,000) and business and management (70,000). The largest fields at the doctor's degree level were education (6,544), engineering (4,181), physical sciences (3,804), and life sciences (3,598). (Tables 225, 226, and 227)

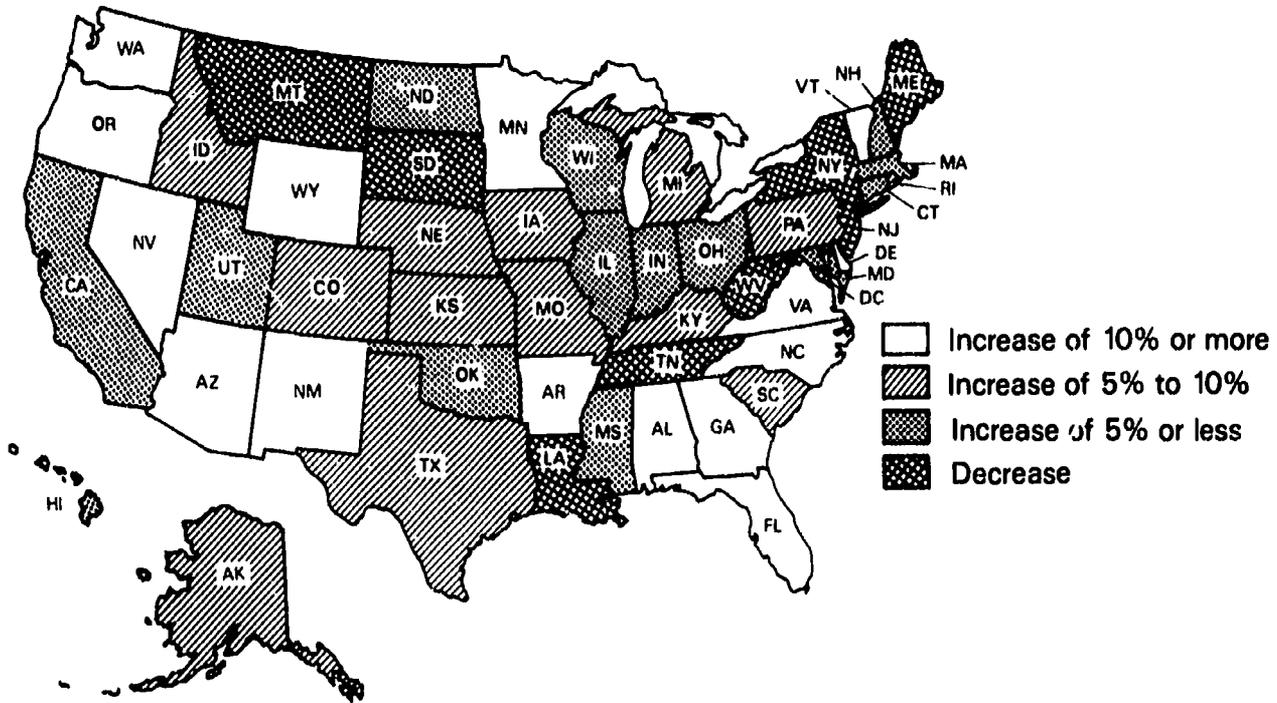
- The pattern of bachelor's degrees by field of study has shifted significantly in recent years. The pace of growth in such areas as business and management has subsided and declines are significant in male majority fields such as engineering and computer and information sciences. The number of degrees conferred in business and management rose by 42 percent between 1977-78 and 1982-83, but by only 7 percent during the following 5-year period. Engineering and engineering technologies rose 60 percent between 1977-78 and 1982-83 but then posted a small decline of .5 percent between 1982-83 and 1987-88. Computer and information sciences had been showing spectacular growth, but dropped 18 percent between 1985-86 and 1987-88. In contrast, some fields such as social sciences and letters that had been declining began to increase. For example, the number of degrees conferred in social sciences dropped by 16 percent between 1977-78 and 1982-83, but rose 5 percent over the next 5 years. Letters declined by 10 percent between 1977-78 and 1982-83, then increased by 21 percent between 1982-83 and 1987-88. Psychology fell by 9 percent during the first 5-year period and rose by 11 percent between 1982-83 and 1987-88. In 1987-88, the number of degrees conferred in education rose for the first time since 1972-73. To some extent, these shifts during the 1982-83 and 1987-88 period highlight the increasing female majority on college campuses by reflecting significant increases in predominantly female fields and decreases in predominantly male fields. (Tables 225, 243, 245, 246, 247, 258, and 260)
- Only about half of the students who enrolled full-time in a 4-year college in 1980 graduated with a bachelor's degree by 1986, according to a recent High School and Beyond survey. About 55 percent of the students who enrolled in private 4-year colleges earned a bachelor's or higher degree by 1986 compared with 46 percent in public 4-year colleges. (Table 276)
- For the 1989-90 academic year, annual undergraduate charges for tuition, room, and board are estimated at \$4,520 at public colleges and \$12,057 at private colleges. Between 1979-80 and 1989-90, charges at public colleges have risen by 109 percent and charges at private colleges by 145 percent. These increases substantially surpassed the rise in the Consumer Price Index, which was about 64 percent during the same 10-year period. (Table 281)
- Trend data show some increases in the expenditures per student of institutions of higher education. After adjustment for inflation at colleges and universities, current-fund expenditures per student rose about 26 percent between 1976-77 and 1986-87. Expenditures increased more quickly at private institutions (19 percent) than at public institutions (12 percent). (Table 298)
- Administrative expenditures (institutional support and academic support, less libraries) have been rising more rapidly than most other types of college expenditures. At public universities, between 1980-81 and 1985-86, inflation adjusted administration expenditures per full-time-equivalent student rose 17 percent compared with 6 percent for instruction expenditures per student. At private universities during the same period, the per student administrative costs rose 24 percent, and the instruction costs rose by 14 percent. (Tables 304 and 307)
- Endowments of colleges and universities have risen rapidly in recent years. Between 1980-81 and 1985-86, the market value of endowments rose by 114 percent, from \$23.5 billion to \$50.3 billion. (Table 313)

**Figure 13.—Enrollment, degrees conferred, and expenditures in institutions of higher education: 1960-61 to 1988-89**



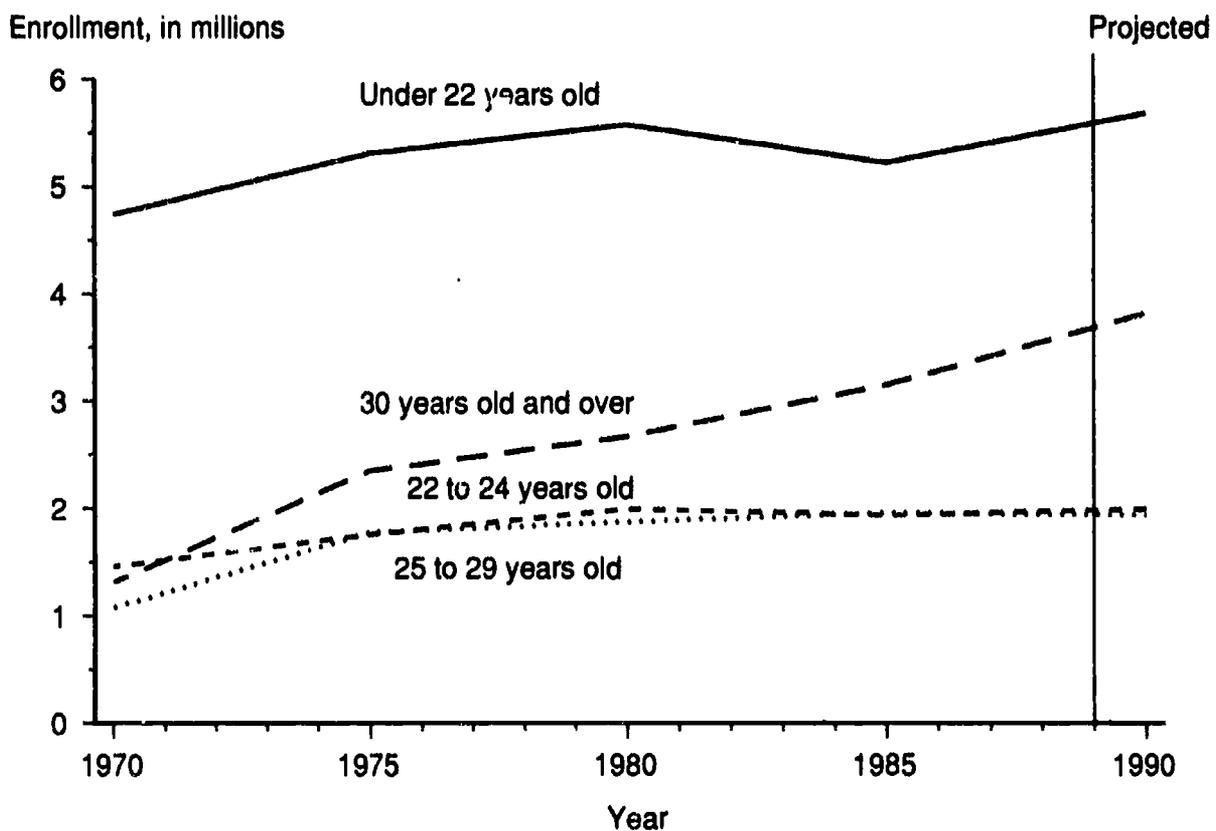
Source: U.S. Department of Education, National Center of Education Statistics, "Fall Enrollment in Institutions of Higher Education," "Degrees and Other Formal Awards Conferred," "Financial Statistics of Institutions of Higher Education" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" and "Completions" surveys.

**Figure 14.—Percentage change in total enrollment in institutions of higher education: Fall 1983 to fall 1988**



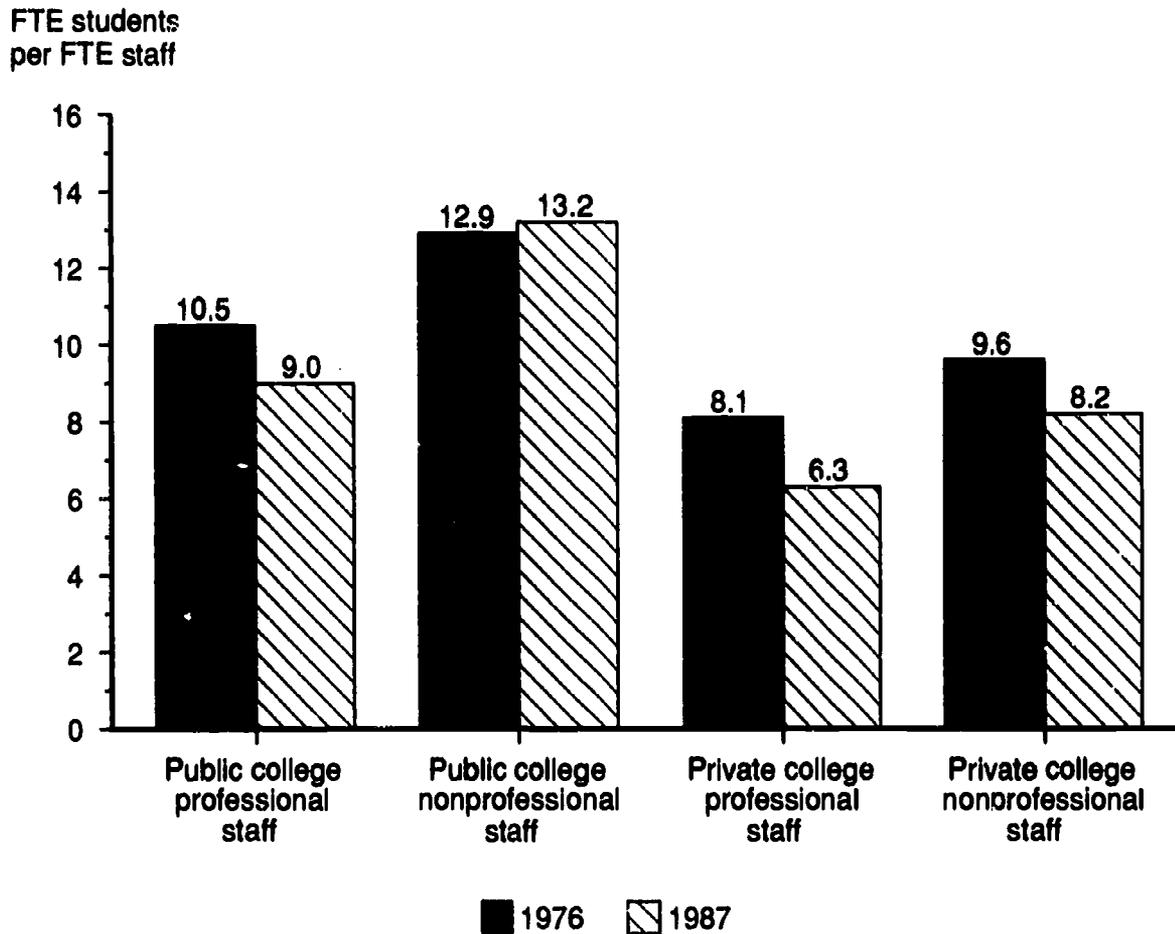
SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Institutions of Higher Education" surveys; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys.

**Figure 15.—Enrollment in institutions of higher education, by age: Fall 1970 to fall 1990**



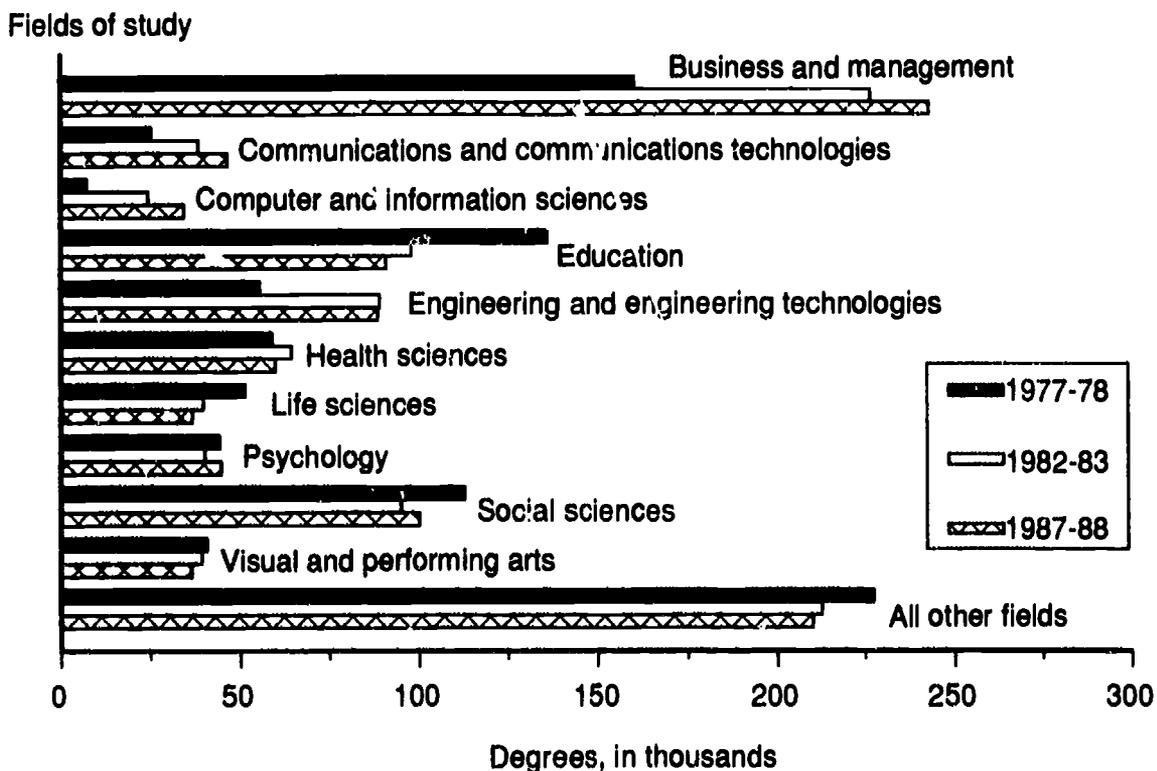
SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Institutions of Higher Education" surveys; Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys; and Projections of Education Statistics to 2001, U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, "Social and Economic Characteristics of Students," various years.

**Figure 16.—Full-time-equivalent students per staff member in public and private institutions of higher education: 1976 and 1987**



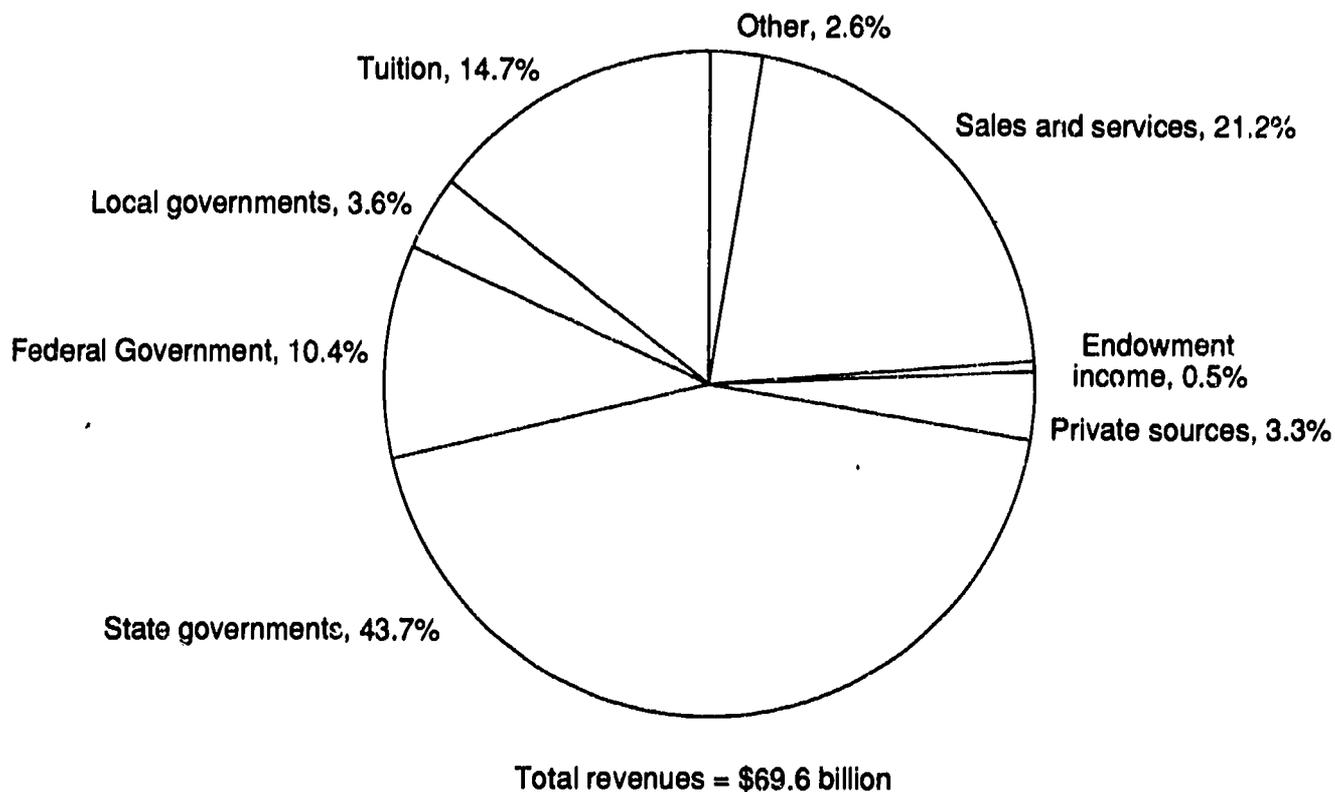
SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Staff, 1976" survey, and Integrated Postsecondary Education Data System (IPEDS), "Staff, 1987" and "Fall Enrollment, 1987" surveys.

**Figure 17.—Trends in bachelor's degrees conferred in selected fields of study: 1977-78, 1982-83, and 1987-88**



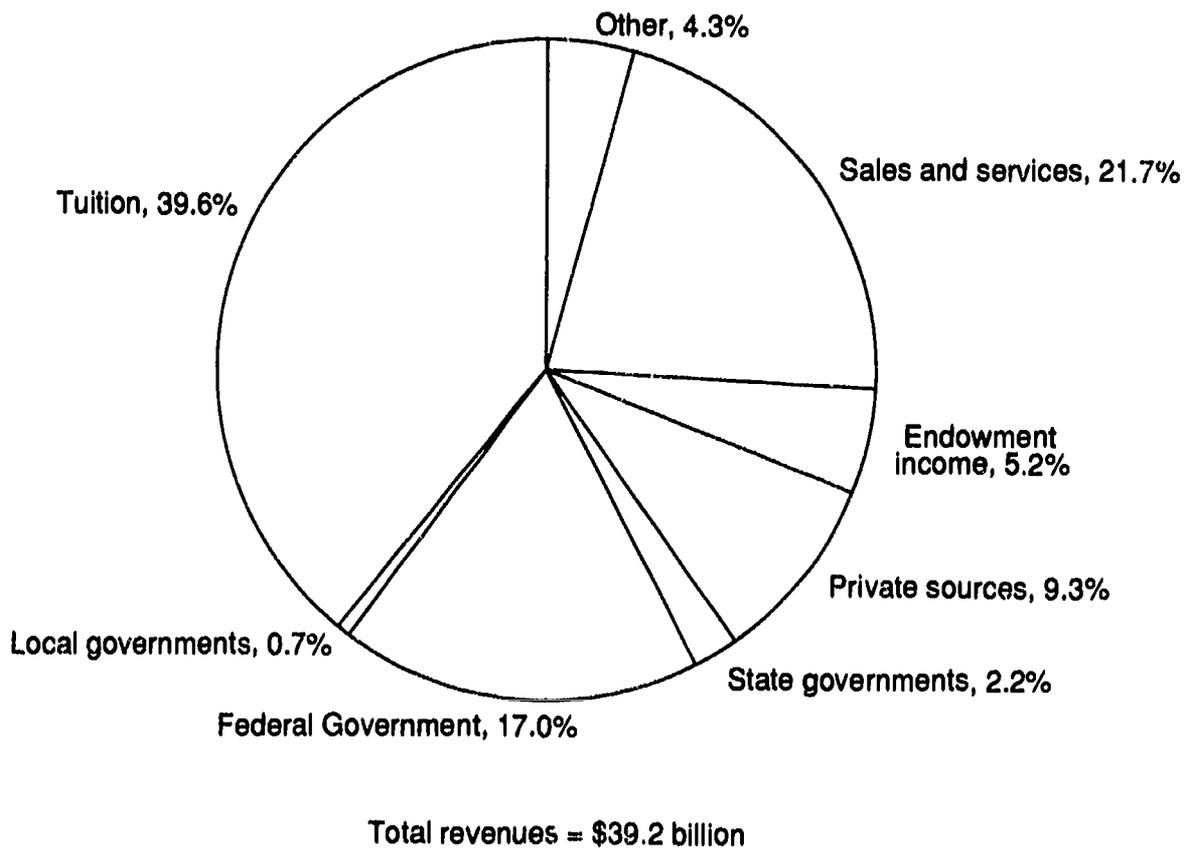
SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey.

**Figure 18.—Sources of current-fund revenue for public institutions of higher education: 1986-87**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Finance, FY 1987" survey.

**Figure 19.—Sources of current-fund revenue for private institutions of higher education: 1986-87**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Finance, FY 1987" survey.

Table 156.—Historical summary of faculty, students, degrees, and finances in institutions of higher education: 1869-70 to 1987-88

Item	1869-70	1879-80	1889-90	1899-1900	1909-10	1919-20	1929-30	1939-40	1949-50	1959-60	1969-70	1979-80	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total institutions <sup>1</sup> .....	563	611	666	677	651	1,041	1,406	1,708	1,851	2,006	2,525	3,152	3,340	3,406	3,587
Total faculty <sup>2</sup> .....	<sup>3</sup> 5,553	<sup>3</sup> 11,522	<sup>3</sup> 15,609	23,666	36,460	46,815	62,366	146,929	246,722	380,554	<sup>4</sup> 450,000	<sup>4</sup> 677,000	<sup>4</sup> 715,000	<sup>4</sup> 722,000	<sup>5</sup> 793,070
Men.....	<sup>3</sup> 4,687	<sup>3</sup> 7,326	<sup>3</sup> 12,704	19,151	29,132	35,807	60,017	106,328	186,169	296,773	<sup>4</sup> 348,000	<sup>4</sup> 479,000	—	—	<sup>5</sup> 529,413
Women.....	<sup>3</sup> 666	<sup>3</sup> 4,194	<sup>3</sup> 3,105	4,717	7,348	12,606	22,369	40,601	60,533	83,781	<sup>4</sup> 104,000	<sup>4</sup> 198,000	—	—	<sup>5</sup> 263,657
Total fall enrollment <sup>6</sup> .....	<sup>3</sup> 52,266	<sup>3</sup> 115,617	<sup>3</sup> 156,756	237,592	<sup>3</sup> 355,213	597,680	1,100,737	1,494,203	2,659,021	3,639,647	8,004,660	11,569,899	12,247,055	12,503,511	12,766,642
Men.....	<sup>3</sup> 41,160	<sup>3</sup> 77,972	<sup>3</sup> 100,453	152,254	<sup>3</sup> 214,648	314,938	619,935	893,250	1,853,068	2,332,817	4,746,201	5,682,677	5,816,450	5,684,515	5,932,056
Women.....	<sup>3</sup> 11,126	<sup>3</sup> 37,645	<sup>3</sup> 56,303	85,338	<sup>3</sup> 140,565	282,942	480,802	600,953	805,953	1,307,230	3,258,459	5,887,022	6,428,605	6,818,996	6,834,586
Earned degrees conferred															
Associate, total.....	—	—	—	—	—	—	—	—	—	—	206,023	400,910	446,047	437,137	435,537
Men.....	—	—	—	—	—	—	—	—	—	—	117,432	183,737	196,166	191,525	190,189
Women.....	—	—	—	—	—	—	—	—	—	—	88,591	217,173	249,881	245,612	245,348
Bachelor's, <sup>7</sup> total.....	9,371	12,896	15,539	27,410	37,199	48,622	122,484	186,500	432,058	392,440	782,656	929,417	967,823	991,339	993,362
Men.....	7,993	10,411	12,857	22,173	28,782	31,960	73,815	109,546	328,841	254,063	451,380	473,811	485,923	490,854	476,842
Women.....	1,378	2,485	2,682	5,237	8,437	16,642	48,989	76,954	103,217	138,377	341,276	455,606	501,900	510,485	516,520
First-professional, <sup>7</sup> total.....	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	34,578	70,131	73,910	72,750	70,415
Men.....	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	32,794	52,718	49,261	47,460	45,288
Women.....	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	1,784	17,415	24,649	25,290	25,127
Master's, <sup>8</sup> total.....	0	879	1,015	1,583	2,113	4,279	14,969	26,731	58,183	74,435	206,291	296,061	288,567	289,557	298,733
Men.....	0	668	821	1,280	1,555	2,965	8,925	16,508	41,220	50,898	125,824	150,749	143,500	141,363	144,923
Women.....	0	11	194	303	558	1,294	6,044	10,223	16,963	23,537	82,667	147,332	145,059	148,194	153,810
Doctor's, total.....	1	54	149	382	443	815	2,299	3,290	8,420	9,829	29,866	32,815	33,653	34,120	34,839
Men.....	1	51	147	359	399	522	1,946	2,861	5,804	6,601	25,890	22,943	21,819	22,099	22,592
Women.....	0	3	2	23	44	93	353	429	618	1,028	3,976	9,872	11,834	12,021	12,247
Finances, in thousands of dollars															
Total current-fund revenue.....	—	—	—	—	\$78,883	\$199,922	\$554,511	\$715,211	\$2,374,645	\$5,785,537	\$21,515,242	\$58,519,962	\$100,437,818	\$108,609,827	—
Educational and general income.....	—	—	\$21,464	\$35,064	87,917	172,929	483,065	571,288	1,833,645	4,688,352	18,486,177	—	—	—	—
Total current-fund expenditures.....	—	—	—	—	—	—	507,142	674,688	2,245,661	5,601,376	21,043,113	56,913,588	97,535,742	<sup>9</sup> 105,763,557	—
Educational and general expenditures.....	—	—	—	—	—	—	377,903	521,990	1,706,444	4,513,208	15,788,689	44,542,643	76,127,965	<sup>9</sup> 82,955,555	—
Value of physical property.....	—	—	95,426	253,599	460,532	741,333	2,065,050	<sup>10</sup> 2,753,780	4,799,964	13,413,548	42,093,580	83,733,387	122,261,355	—	—
Endowment funds <sup>11</sup> .....	—	—	78,788	194,998	323,661	569,071	1,512,023	1,784,604	2,644,323	5,571,121	<sup>12</sup> 10,853,818	<sup>12</sup> 18,561,472	<sup>12</sup> 36,898,162	—	—

<sup>1</sup> Prior to 1979-80, excludes branch campuses<sup>2</sup> Total number of different individuals (not reduced to full-time equivalent). Beginning in 1959-60, data are for the first term of the academic year. Beginning in 1969-70, data include only instructional faculty with the rank of instructor or above.<sup>3</sup> Estimated.<sup>4</sup> Estimated number of senior instructional staff. Excludes graduate assistants.<sup>5</sup> Because of revised survey procedures, data may not be directly comparable to figures for earlier years.<sup>6</sup> Data for 1869-70 to 1949-50 are for resident degree-credit students who enrolled at any time during the academic year.<sup>7</sup> From 1869-70 to 1959-60, first-professional degrees included under bachelor's degrees.<sup>8</sup> Figures for years prior to 1969-70 are not precisely comparable to later data.<sup>9</sup> Preliminary data.<sup>10</sup> Includes unexpended plant funds.<sup>11</sup> Book value. Includes other nonexpendable funds.<sup>12</sup> Endowment funds only.

—Data not available.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Biennial Survey of Education in the United States; Education Directory, Colleges and Universities; Faculty and Other Professional Staff in Institutions of Higher Education; Fall Enrollment in Colleges and Universities; Earned Degrees Conferred; Financial Statistics of Institutions of Higher Education*; and "Fall Enrollment in Institutions of Higher Education," "Degrees and Other Formal Awards Conferred," and "Financial Statistics of Institutions of Higher Education" surveys; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment," "Completions," and "Finance" surveys. (This table was prepared April 1990)

**Table 157.—Total enrollment in institutions of higher education, by attendance status, sex of student, and control of institution: Fall 1947 to fall 1988**

Year	Total enrollment	Attendance status		Sex of student		Control of institution			
		Full-time	Part-time	Men	Women	Public	Private		
							Total	Nonprofit	Proprietary
1	2	3	4	5	6	7	8	9	10
1947 <sup>1</sup>	2,338,226	—	—	1,659,249	676,977	1,152,377	1,185,849	—	—
1948 <sup>1</sup>	2,403,396	—	—	1,709,367	694,029	1,185,588	1,217,608	—	—
1949 <sup>1</sup>	2,444,900	—	—	1,721,572	723,328	1,207,151	1,237,749	—	—
1950 <sup>1</sup>	2,261,298	—	—	1,560,392	720,906	1,139,699	1,141,599	—	—
1951 <sup>1</sup>	2,101,962	—	—	1,390,740	711,222	1,037,933	1,064,024	—	—
1952 <sup>1</sup>	2,134,242	—	—	1,380,357	753,885	1,101,240	1,033,002	—	—
1953 <sup>1</sup>	2,231,054	—	—	1,422,598	806,156	1,185,676	1,045,178	—	—
1954 <sup>1</sup>	2,446,693	—	—	1,563,382	883,311	1,353,531	1,093,162	—	—
1955 <sup>1</sup>	2,653,034	—	—	1,733,184	919,850	1,476,282	1,176,752	—	—
1956 <sup>1</sup>	2,918,212	—	—	1,911,456	1,006,754	1,656,402	1,261,610	—	—
1957	3,323,783	—	—	2,170,765	1,153,016	1,972,673	1,351,110	—	—
1959	3,839,847	2,421,016	<sup>a</sup> 1,218,831	2,332,877	1,307,230	2,180,982	1,458,665	—	—
1961	4,145,065	2,765,133	<sup>a</sup> 1,359,932	2,585,821	1,559,244	2,561,447	1,583,616	—	—
1963	4,779,609	3,183,833	<sup>a</sup> 1,595,778	2,961,540	1,316,069	3,061,279	1,698,330	—	—
1964	5,260,020	3,573,238	<sup>a</sup> 1,706,782	3,248,713	2,031,307	3,467,708	1,812,312	—	—
1965	5,920,664	4,095,728	<sup>a</sup> 1,825,136	3,630,020	2,290,644	3,969,596	1,951,268	—	—
1966	6,389,672	4,438,606	<sup>a</sup> 1,951,266	3,856,216	2,533,656	4,348,917	2,040,955	—	—
1967	6,911,748	4,783,126	<sup>a</sup> 2,118,620	4,132,600	2,778,948	4,616,028	2,095,720	—	—
1968	7,513,091	5,210,155	2,302,936	4,477,649	3,035,442	5,430,652	2,062,439	—	—
1969	8,004,660	5,496,883	2,505,777	4,746,201	3,258,459	5,896,668	2,107,792	—	—
1970	8,560,867	5,816,290	2,764,597	5,043,642	3,537,245	6,428,134	2,152,753	—	—
1971	8,948,644	6,077,232	2,871,412	5,207,004	3,741,640	6,904,309	2,144,335	—	—
1972	9,214,860	6,072,389	3,142,471	5,238,757	3,976,103	7,070,635	2,144,225	—	—
1973	9,902,123	6,189,493	3,412,630	5,371,052	4,231,071	7,419,516	2,182,607	—	—
1974	10,223,729	6,373,273	3,853,456	5,622,429	4,601,300	7,968,500	2,235,229	—	—
1975	11,184,859	6,841,334	4,343,525	6,148,997	5,035,662	8,834,508	2,350,351	—	—
1976	11,012,137	6,717,056	4,295,079	5,910,828	5,201,309	8,653,477	2,359,660	2,314,296	4,362
1977	11,265,767	6,792,925	4,492,662	5,789,016	5,496,771	8,846,993	2,436,794	2,366,652	52,142
1978	11,260,092	6,667,657	4,592,435	5,640,998	5,619,094	8,785,693	2,474,199	2,406,331	65,666
1979	11,569,699	6,794,039	4,775,660	5,682,677	5,987,022	9,036,622	2,533,077	2,461,773	71,304
1980	12,096,695	7,097,958	4,996,937	5,674,374	6,222,521	9,457,394	2,639,501	2,527,767	<sup>a</sup> 111,714
1981	12,371,672	7,161,250	5,190,422	5,975,056	6,396,616	9,647,032	2,724,640	2,572,405	<sup>a</sup> 152,235
1982	12,425,780	7,220,616	5,205,162	6,031,384	6,394,396	9,666,067	2,729,693	2,552,739	<sup>a</sup> 176,954
1983	12,464,661	7,261,050	5,203,611	6,023,725	6,440,936	9,662,734	2,781,927	2,569,167	192,740
1984	12,241,940	7,096,368	5,143,552	5,863,574	6,378,366	9,477,370	2,764,570	2,574,419	190,151
1985	12,247,055	7,075,221	5,171,834	5,818,450	6,428,605	9,479,273	2,767,762	2,571,791	195,991
1986 <sup>4</sup>	12,503,511	7,119,550	5,383,961	5,884,515	6,616,998	9,713,893	2,769,616	2,572,479	<sup>a</sup> 217,139
1987 <sup>4</sup>	12,766,642	7,231,065	5,535,557	5,932,056	6,834,586	9,973,254	2,793,388	2,602,350	<sup>a</sup> 191,038
1988 <sup>5</sup>	13,043,116	7,430,471	5,612,647	5,996,204	7,044,914	10,156,375	2,866,743	2,672,734	<sup>a</sup> 214,009

<sup>1</sup> Degree-credit enrollment only.

<sup>2</sup> Includes part-time resident students and all extension students.

<sup>3</sup> Large increases are due to the addition of schools accredited by the National Association of Trade and Technical Schools.

<sup>4</sup> Data have been revised from previously published figures.

<sup>5</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>6</sup> Preliminary data.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared March 1990.)

Table 158.—Total enrollment in institutions of higher education, by control and type of institution: Fall 1963 to fall 1988

Year	All institutions					Public institutions					Private institutions				
	Total	4-year			2-year	Total	4-year			2-year	Total	4-year			2-year
		Total	University	Other 4-year			Total	University	Other 4-year			Total	University	Other 4-year	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1963 <sup>1</sup>	4,779,609	3,929,248	—	—	850,361	3,081,279	2,341,468	—	—	739,811	1,696,330	1,587,780	—	—	110,550
1964 <sup>1</sup>	5,280,020	4,291,094	—	—	988,926	3,467,708	2,592,929	—	—	874,779	1,812,312	1,698,165	—	—	114,147
1965 <sup>1</sup>	5,920,984	4,747,912	—	—	1,172,952	3,989,596	2,928,332	—	—	1,041,264	1,951,268	1,819,580	—	—	131,688
1966 <sup>1</sup>	6,389,872	5,063,902	—	—	1,325,970	4,348,917	3,159,748	—	—	1,189,169	2,040,955	1,904,154	—	—	136,801
1967 <sup>1</sup>	6,911,748	5,398,988	—	—	1,512,762	4,618,028	3,443,975	—	—	1,372,053	2,095,720	1,955,011	—	—	140,709
1968 <sup>1</sup>	7,513,091	5,720,795	—	—	1,792,296	5,430,852	3,784,176	—	—	1,646,474	2,062,439	1,936,817	—	—	145,622
1969 <sup>1</sup>	8,004,660	6,029,002	—	—	1,976,658	5,696,868	4,050,144	—	—	1,846,724	2,107,792	1,977,658	—	—	129,934
1970	8,580,887	6,261,502	—	—	2,319,385	6,426,134	4,232,722	—	—	2,195,412	2,152,753	2,028,780	—	—	123,973
1971	8,948,844	6,482,733	—	—	2,485,911	6,804,309	4,438,442	—	—	2,365,867	2,144,335	2,024,291	—	—	120,044
1972	9,214,860	6,458,674	—	—	2,756,186	7,070,635	4,429,698	—	—	2,640,939	2,144,227	2,028,978	—	—	115,247
1973	9,802,123	6,592,074	—	—	3,010,049	7,419,516	4,529,895	—	—	2,889,621	2,182,807	2,062,179	—	—	120,428
1974	10,223,729	6,619,735	—	—	3,403,994	7,988,500	4,703,016	—	—	3,285,482	2,235,229	2,116,717	—	—	116,512
1975	11,184,859	7,214,740	2,838,266	4,376,474	3,970,119	8,834,508	4,998,142	2,124,221	2,873,921	3,836,368	2,350,351	2,216,588	714,045	1,502,553	133,763
1976	11,012,137	7,128,616	2,780,289	4,348,527	3,883,321	8,653,477	4,901,691	2,079,929	2,821,762	3,751,766	2,358,660	2,227,125	700,360	1,526,765	131,535
1977	11,285,787	7,242,845	2,793,418	4,449,427	4,042,942	8,848,993	4,945,224	2,070,032	2,875,192	3,901,769	2,438,794	2,297,621	723,386	1,574,235	141,173
1978	11,260,092	7,231,951	2,780,729	4,451,222	4,028,141	8,785,893	4,912,203	2,062,295	2,849,908	3,873,690	2,474,199	2,319,748	716,434	1,601,314	154,451
1979	11,569,899	7,353,233	2,839,582	4,513,651	4,216,666	9,036,622	4,980,012	2,099,525	2,880,487	4,056,610	2,633,077	2,373,221	740,057	1,633,164	159,856
1980	12,096,895	7,570,808	2,902,014	4,668,594	4,526,287	9,457,394	5,128,812	2,154,283	2,974,329	4,326,762	2,639,501	2,441,996	747,731	1,494,265	<sup>2</sup> 197,505
1981	12,371,872	7,655,481	2,901,344	4,754,117	4,716,211	9,647,032	5,166,324	2,152,474	3,013,850	4,480,708	2,724,640	2,489,137	746,670	1,740,267	<sup>2</sup> 235,503
1982	12,425,780	7,654,074	2,883,735	4,770,339	4,771,708	9,696,087	5,176,434	2,152,547	3,023,887	4,519,653	2,729,693	2,477,840	731,188	1,748,452	252,053
1983	12,464,661	7,741,116	2,888,613	4,852,382	4,723,466	9,682,734	5,223,404	2,154,790	3,068,614	4,459,330	2,761,927	2,517,791	734,023	1,783,768	264,136
1984	12,241,940	7,711,167	2,870,329	4,840,838	4,530,773	9,477,370	5,196,273	2,138,621	3,058,652	4,279,097	2,764,570	2,512,694	731,708	1,761,186	251,676
1985	12,247,055	7,715,976	2,870,692	4,845,286	4,531,077	9,479,273	5,209,540	2,141,112	3,066,428	4,269,733	2,767,762	2,516,438	729,580	1,776,858	261,344
1986 <sup>3</sup>	12,503,511	7,823,963	2,697,207	4,926,756	4,679,548	9,713,893	5,300,202	2,160,648	3,139,556	4,413,691	2,789,616	2,523,761	736,561	1,767,200	<sup>4</sup> 265,657
1987 <sup>4</sup>	12,766,842	7,990,420	2,929,327	5,061,093	4,776,222	9,973,254	5,432,200	2,188,008	3,244,192	4,541,054	2,793,388	2,558,220	741,319	1,616,901	<sup>4</sup> 235,168
1988 <sup>5</sup>	13,043,116	8,175,008	2,976,288	5,198,720	4,868,110	10,156,375	5,543,967	2,227,808	3,316,179	4,612,388	2,886,743	2,831,021	746,480	1,882,541	<sup>4</sup> 255,722

<sup>1</sup> Data for 2-year branch campuses of 4-year institutions are included with the 4-year institutions.

<sup>2</sup> Large increases are due to the addition of schools accredited by the National Association of Trade and Technical Schools in 1980 and 1981.

<sup>3</sup> Data have been revised from previously published figures.

<sup>4</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>5</sup> Preliminary data.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

**Table 159.—Total enrollment in institutions of higher education, by attendance status, sex, and age: Fall 1970 to fall 1996**

(In thousands)

Sex and age	1970			1975			1980			1985			1986			1989 (projected)			1996 (projected)		
	Total	Fulltime	Parttime	Total	Fulltime	Parttime	Total	Fulltime	Parttime	Total	Fulltime	Parttime	Total	Fulltime	Parttime	Total	Fulltime	Parttime	Total	Fulltime	Parttime
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<b>Men and women, total</b>	<b>8,581</b>	<b>5,815</b>	<b>2,766</b>	<b>11,185</b>	<b>6,841</b>	<b>4,344</b>	<b>12,097</b>	<b>7,099</b>	<b>4,999</b>	<b>12,247</b>	<b>7,075</b>	<b>5,172</b>	<b>12,504</b>	<b>7,120</b>	<b>5,384</b>	<b>13,419</b>	<b>7,596</b>	<b>5,823</b>	<b>13,747</b>	<b>7,542</b>	<b>6,205</b>
14 to 17 years old.....	259	242	17	278	242	36	247	218	31	235	203	32	200	182	18	193	150	43	210	153	57
18 and 19 years old.....	2,800	2,406	194	2,786	2,510	278	2,901	2,580	320	2,600	2,322	278	2,727	2,415	312	2,965	2,811	355	2,911	2,553	358
20 and 21 years old.....	1,880	1,647	233	2,243	1,854	390	2,423	2,060	364	2,383	1,975	408	2,208	1,813	392	2,521	2,070	451	2,497	2,012	485
22 to 24 years old.....	1,457	881	576	1,754	1,008	746	1,989	1,174	815	1,933	1,227	705	2,100	1,323	777	1,991	1,238	753	1,904	1,182	723
25 to 29 years old.....	1,074	407	668	1,774	692	1,082	1,871	810	1,261	1,953	895	1,258	1,941	899	1,242	1,935	747	1,188	1,899	665	1,034
30 to 34 years old.....	487	100	388	967	279	687	1,243	264	979	1,261	310	951	1,301	333	968	1,371	356	1,015	1,344	366	978
35 years old and over.....	623	134	689	1,383	256	1,127	1,422	193	1,229	1,885	345	1,540	2,030	355	1,675	2,443	423	2,019	3,180	611	2,569
<b>Men, total</b> .....	<b>5,044</b>	<b>3,505</b>	<b>1,540</b>	<b>8,149</b>	<b>3,926</b>	<b>2,222</b>	<b>5,874</b>	<b>3,689</b>	<b>2,185</b>	<b>5,818</b>	<b>3,608</b>	<b>2,211</b>	<b>5,685</b>	<b>3,599</b>	<b>2,285</b>	<b>8,260</b>	<b>3,781</b>	<b>2,479</b>	<b>8,271</b>	<b>3,735</b>	<b>2,535</b>
14 to 17 years old.....	130	124	5	126	109	17	99	84	15	121	102	19	84	78	6	78	81	17	83	62	21
18 and 19 years old.....	1,349	1,265	84	1,397	1,269	128	1,375	1,229	146	1,230	1,108	122	1,312	1,181	131	1,382	1,230	152	1,370	1,217	153
20 and 21 years old.....	1,095	990	105	1,245	1,053	192	1,259	1,104	154	1,218	1,027	189	1,090	923	167	1,248	1,030	218	1,254	1,016	239
22 to 24 years old.....	964	650	314	1,047	686	362	1,064	687	377	1,048	730	318	1,085	720	366	1,058	700	357	1,008	666	342
25 to 29 years old.....	783	327	456	1,122	474	649	993	379	615	991	395	596	1,026	410	616	993	439	554	863	382	481
30 to 34 years old.....	308	72	238	557	184	373	576	129	447	574	149	424	605	167	438	624	187	457	602	181	440
35 years old and over.....	415	75	340	654	152	502	507	77	430	659	97	542	689	121	562	878	154	724	1,091	232	859
<b>Women, total</b> .....	<b>3,537</b>	<b>2,311</b>	<b>1,225</b>	<b>5,036</b>	<b>2,915</b>	<b>2,120</b>	<b>6,223</b>	<b>3,409</b>	<b>2,814</b>	<b>6,429</b>	<b>3,468</b>	<b>2,961</b>	<b>6,819</b>	<b>3,520</b>	<b>3,098</b>	<b>7,159</b>	<b>3,815</b>	<b>3,344</b>	<b>7,476</b>	<b>3,806</b>	<b>3,670</b>
14 to 17 years old.....	129	117	12	152	133	19	148	132	17	113	101	12	116	104	12	115	90	26	128	91	36
18 and 19 years old.....	1,250	1,140	110	1,389	1,241	147	1,526	1,352	174	1,370	1,214	156	1,415	1,234	191	1,583	1,381	203	1,541	1,335	206
20 and 21 years old.....	786	657	128	996	800	196	1,185	955	209	1,166	948	218	1,115	890	225	1,273	1,041	232	1,243	997	247
22 to 24 years old.....	493	231	262	706	322	384	925	487	438	885	497	388	1,014	604	411	934	538	396	896	516	381
25 to 29 years old.....	291	80	212	652	218	433	878	232	646	962	299	662	918	289	626	943	306	635	836	283	553
30 to 34 years old.....	179	28	151	410	95	315	667	135	531	687	181	527	696	166	530	747	189	558	743	205	537
35 years old and over.....	409	59	349	729	105	625	914	115	799	1,248	248	998	1,347	233	1,114	1,565	269	1,286	2,090	380	1,710

NOTE.—Distribution by age is based on samples of the civilian noninstitutional population. Because of rounding, details may not add to totals.

and Projections of Education Statistics to 2001; and U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, "Social and Economic Characteristics of Students,"* various years. (This table was prepared May 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Institutions of Higher Education" surveys, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1986" survey,

**Table 160.—Total enrollment in institutions of higher education, by level, sex, age, and attendance status of student: Fall 1987<sup>1</sup>**

Attendance status and age of student	All levels			Undergraduate			First-professional			Graduate		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>All students</b> .....	<b>12,766,644</b>	<b>5,932,056</b>	<b>6,834,588</b>	<b>11,046,235</b>	<b>5,068,457</b>	<b>5,977,778</b>	<b>268,332</b>	<b>170,129</b>	<b>98,203</b>	<b>1,452,075</b>	<b>693,470</b>	<b>758,605</b>
Under 18.....	207,085	87,168	119,917	206,271	86,732	119,539	47	33	14	787	403	384
18 and 19.....	2,696,652	1,253,984	1,442,668	2,695,892	1,253,815	1,442,277	184	106	88	566	263	303
20 to 21.....	2,392,038	1,169,820	1,223,218	2,375,398	1,160,299	1,215,098	7,269	4,102	3,167	9,371	4,429	4,942
22 to 24.....	2,025,725	1,076,235	947,490	1,724,576	915,014	809,562	99,644	63,181	36,483	201,505	100,040	101,465
25 to 29.....	1,839,916	926,756	913,160	1,327,828	639,577	688,251	95,381	63,701	31,880	416,707	223,478	193,229
30 to 34.....	1,242,344	558,441	683,903	921,165	386,317	534,848	33,065	20,691	12,374	268,114	151,433	136,681
35 to 39.....	882,783	337,774	544,989	647,596	231,380	416,216	16,159	9,368	6,791	219,008	97,026	121,982
40 to 49.....	672,120	288,231	583,889	654,007	209,118	444,889	9,898	4,959	4,939	206,215	74,154	134,061
50 to 64.....	291,698	98,263	193,435	239,029	80,086	157,943	2,078	1,114	964	51,591	17,063	34,526
65 and over.....	102,841	38,507	64,134	84,875	33,904	60,971	272	156	116	7,494	4,447	3,047
Age unknown.....	213,660	95,677	117,783	160,598	72,425	88,173	4,325	2,716	1,607	48,737	20,734	28,003
<b>Full-time</b> .....	<b>7,231,085</b>	<b>3,610,888</b>	<b>3,620,197</b>	<b>6,482,549</b>	<b>3,163,876</b>	<b>3,298,673</b>	<b>241,807</b>	<b>153,668</b>	<b>88,139</b>	<b>528,729</b>	<b>293,544</b>	<b>233,185</b>
Under 18.....	113,938	48,513	65,425	113,659	48,348	65,311	45	31	14	234	134	100
18 and 19.....	2,331,202	1,088,972	1,242,230	2,330,703	1,088,703	1,242,000	190	103	67	309	166	143
20 to 21.....	1,919,332	948,534	970,798	1,905,791	941,234	964,557	7,170	4,037	3,133	6,371	3,263	3,106
22 to 24.....	1,251,794	716,088	535,706	1,034,268	590,066	444,202	96,885	61,448	35,439	120,841	64,576	56,085
25 to 29.....	727,279	412,056	315,223	482,354	246,357	215,997	86,390	57,807	28,593	178,535	107,892	70,643
30 to 34.....	371,825	181,798	190,027	248,844	107,274	141,370	28,779	16,882	10,097	96,402	57,842	38,560
35 to 39.....	217,470	90,852	126,618	148,050	53,779	94,271	12,130	6,968	5,162	57,290	30,105	27,185
40 to 49.....	170,182	62,796	107,386	119,511	41,948	77,565	9,727	3,298	3,441	43,914	17,554	26,360
50 to 64.....	36,224	14,556	23,668	27,116	10,122	16,994	1,261	683	578	9,847	3,751	6,096
65 and over.....	9,330	5,463	3,867	6,565	3,209	3,356	197	113	84	2,568	2,141	427
Age unknown.....	80,529	41,260	39,269	65,888	32,838	33,250	4,023	2,502	1,521	10,616	6,120	4,498
<b>Part-time</b> .....	<b>5,535,557</b>	<b>2,321,168</b>	<b>3,214,389</b>	<b>4,563,683</b>	<b>1,904,781</b>	<b>2,678,905</b>	<b>26,525</b>	<b>16,461</b>	<b>10,064</b>	<b>923,346</b>	<b>399,926</b>	<b>523,420</b>
Under 18.....	93,147	38,655	54,492	92,612	38,384	54,228	2	2	0	533	269	264
18 and 19.....	365,450	165,012	200,438	365,189	164,912	200,277	4	3	1	257	97	160
20 to 21.....	472,706	220,286	252,420	469,607	219,055	250,552	99	65	34	3,000	1,168	1,834
22 to 24.....	773,931	382,147	411,784	690,308	324,948	365,360	2,759	1,735	1,024	80,864	35,484	45,400
25 to 29.....	1,112,837	514,700	597,937	885,474	393,220	472,254	8,991	5,894	3,097	238,172	115,586	122,586
30 to 34.....	870,519	378,643	493,876	872,521	279,043	393,478	6,286	4,009	2,277	191,712	93,591	98,121
35 to 39.....	685,293	248,922	416,371	499,548	177,801	321,945	4,029	2,400	1,629	161,718	66,921	94,797
40 to 49.....	701,958	225,435	476,523	534,496	187,172	367,324	3,181	1,663	1,498	164,301	56,600	107,701
50 to 64.....	253,474	83,707	169,767	210,913	69,984	140,949	817	431	386	41,744	13,312	28,432
65 and over.....	93,311	33,044	60,267	88,310	30,895	57,615	75	43	32	4,928	2,306	2,620
Age unknown.....	133,131	54,617	78,514	94,710	39,787	54,923	302	218	86	38,119	14,614	23,505

Percentage distribution

<b>All students</b> .....	<b>100.0</b>											
Under 18.....	1.6	1.5	1.8	1.9	1.7	2.0	(?)	(?)	(?)	0.1	0.1	(?)
18 and 19.....	21.1	21.1	21.1	24.4	24.7	24.1	0.1	0.1	0.1	(?)	(?)	(?)
20 to 21.....	18.7	19.7	17.9	21.5	22.9	20.3	2.7	2.4	3.2	0.8	0.6	0.7
22 to 24.....	15.9	18.2	13.9	15.6	18.1	13.5	37.1	37.1	37.1	13.9	14.4	13.4
25 to 29.....	14.4	15.6	13.4	12.0	12.6	11.5	35.5	37.4	32.3	28.7	32.2	25.5
30 to 34.....	9.7	9.4	10.0	8.3	7.6	8.9	12.3	12.2	12.6	19.8	21.6	18.0
35 to 39.....	6.8	5.7	6.0	5.9	4.6	7.0	6.0	5.6	6.9	15.1	14.0	16.1
40 to 49.....	6.8	4.9	8.5	5.9	4.1	7.4	3.7	2.9	5.0	14.3	10.7	17.7
50 to 64.....	2.3	1.7	2.6	2.2	1.6	2.6	0.8	0.7	1.0	3.8	2.5	4.6
65 and over.....	0.6	0.6	0.9	0.9	0.7	1.0	0.1	0.1	0.1	0.5	0.6	0.4
Age unknown.....	1.7	1.5	1.7	1.5	1.4	1.5	1.6	1.6	1.6	3.4	3.0	3.7
<b>Full-time</b> .....	<b>100.0</b>											
Under 18.....	1.6	1.3	1.8	1.8	1.5	2.0	(?)	(?)	(?)	(?)	(?)	(?)
18 and 19.....	32.2	30.2	34.3	36.1	34.4	37.6	0.1	0.1	0.1	0.1	0.1	0.1
20 to 21.....	26.5	29.3	26.8	29.5	29.8	29.2	3.0	2.6	3.6	1.2	1.1	1.3
22 to 24.....	17.3	19.8	14.6	16.0	18.7	13.5	40.1	40.0	40.2	22.9	22.0	24.0
25 to 29.....	10.1	11.4	8.7	7.2	7.6	6.5	35.7	37.0	32.4	33.9	36.6	30.3
30 to 34.....	5.1	5.0	5.2	3.6	3.4	4.3	11.1	10.9	11.5	18.3	19.7	16.5
35 to 39.....	3.0	2.5	3.5	2.3	1.7	2.9	5.0	4.5	5.9	10.9	10.3	11.7
40 to 49.....	2.4	1.7	3.0	1.6	1.3	2.4	2.6	2.1	3.9	6.3	6.0	11.3
50 to 64.....	0.5	0.4	0.7	0.4	0.3	0.5	0.5	0.4	0.7	1.9	1.3	2.6
65 and over.....	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.7	0.2
Age unknown.....	1.1	1.1	1.1	1.0	1.0	1.0	1.7	1.6	1.7	2.0	2.1	1.9
<b>Part-time</b> .....	<b>100.0</b>											
Under 18.....	1.7	1.7	1.7	2.0	2.0	2.0	(?)	(?)	(?)	0.1	0.1	0.1
18 and 19.....	6.6	7.1	6.2	6.0	6.7	7.5	(?)	(?)	(?)	(?)	(?)	(?)
20 to 21.....	6.6	6.5	7.9	10.2	11.5	9.4	0.4	0.4	0.3	0.3	0.3	0.3
22 to 24.....	14.0	15.6	12.6	15.1	17.1	13.6	10.4	10.5	10.2	6.7	6.9	6.6
25 to 29.....	20.1	22.2	18.6	16.9	20.8	17.6	33.9	35.8	30.8	25.7	26.9	23.3
30 to 34.....	15.7	16.2	15.4	14.7	14.6	14.7	23.7	24.4	23.8	20.7	23.4	18.7
35 to 39.....	12.0	10.6	13.0	10.9	9.3	12.0	15.2	14.6	16.2	17.5	16.7	18.0
40 to 49.....	12.7	9.7	14.8	11.7	8.6	13.7	11.9	10.1	14.9	17.9	14.2	20.5
50 to 64.....	4.6	3.6	5.3	4.6	3.7	5.3	3.1	2.6	3.8	4.5	3.3	5.4
65 and over.....	1.7	1.4	1.9	1.8	1.6	2.2	0.3	0.3	0.3	0.5	0.6	0.5
Age unknown.....	2.4	2.4	2.4	2.1	2.1	2.1	1.1	1.3	0.9	4.1	3.7	4.5

<sup>1</sup> Revised from previously published data.  
<sup>2</sup> Less than .05 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment, 1987" survey. (This table was prepared March 1990.)

NOTE.—Because of rounding, details may not add to 100.0 percent.

**Table 161.—Total enrollment in institutions of higher education, by type and control of institution, and age and attendance status of student: Fall 1987<sup>1</sup>**

Attendance status and age of student	All institutions			Public institutions			Private institutions		
	Total	4-year	2-year	Total	4-year	2-year	Total	4-year	2-year
1	2	3	4	5	6	7	8	9	10
<b>All students</b> .....	<b>12,766,642</b>	<b>7,990,420</b>	<b>4,776,222</b>	<b>9,973,264</b>	<b>5,432,200</b>	<b>4,541,064</b>	<b>2,793,388</b>	<b>2,558,220</b>	<b>235,168</b>
Under 18.....	207,085	114,510	92,575	154,713	66,232	88,481	62,372	48,276	4,094
18 and 19.....	2,696,652	1,761,544	935,108	2,056,871	1,191,350	865,521	639,781	570,194	69,587
20 to 21.....	2,392,038	1,735,485	856,553	1,817,443	1,196,031	618,412	574,595	537,454	37,141
22 to 24.....	2,025,725	1,409,564	616,181	1,609,102	1,028,462	580,640	416,623	361,102	35,521
25 to 29.....	1,639,918	1,107,823	732,093	1,439,550	740,906	698,644	400,366	366,917	33,449
30 to 34.....	1,242,344	876,716	565,626	991,399	447,802	543,587	250,955	228,918	22,039
35 to 39.....	882,763	474,892	407,871	707,179	312,430	394,749	175,564	182,482	13,122
40 to 49.....	672,120	426,264	443,656	709,539	274,526	435,013	182,581	153,738	8,843
50 to 64.....	291,696	107,484	184,214	249,162	87,226	161,936	42,516	40,258	2,258
65 and over.....	102,841	22,430	60,211	93,232	13,636	79,596	9,409	6,794	615
Age unknown.....	213,660	151,706	81,954	145,054	91,599	53,455	68,606	60,107	8,499
<b>Full-time</b> .....	<b>7,231,085</b>	<b>5,522,418</b>	<b>1,708,669</b>	<b>5,267,062</b>	<b>3,736,150</b>	<b>1,530,912</b>	<b>1,964,023</b>	<b>1,766,266</b>	<b>177,757</b>
Under 18.....	113,938	65,845	28,293	74,740	49,720	25,020	39,198	35,925	3,273
18 and 19.....	2,331,202	1,669,573	661,629	1,715,151	1,116,159	598,992	618,051	551,414	64,637
20 to 21.....	1,919,332	1,576,277	341,055	1,387,303	1,075,616	311,687	532,029	502,661	29,368
22 to 24.....	1,251,794	1,039,003	212,791	940,892	754,172	186,720	310,902	284,831	26,071
25 to 29.....	727,279	552,096	175,181	520,748	367,539	153,207	206,533	184,559	21,974
30 to 34.....	371,825	253,351	118,474	272,375	167,717	104,658	99,450	85,634	13,816
35 to 39.....	217,470	145,171	72,299	155,825	91,330	64,495	81,645	53,841	7,804
40 to 49.....	170,162	107,891	82,161	121,602	63,858	57,744	48,560	44,123	4,437
50 to 64.....	36,224	22,305	15,919	26,169	11,199	14,990	12,035	11,106	929
65 and over.....	9,330	5,889	3,341	5,394	2,121	3,273	3,936	3,688	66
Age unknown.....	60,529	63,023	17,506	46,845	34,719	12,126	33,684	26,304	5,380
<b>Part-time</b> .....	<b>5,535,557</b>	<b>2,468,004</b>	<b>3,067,553</b>	<b>4,706,192</b>	<b>1,696,050</b>	<b>3,010,142</b>	<b>829,365</b>	<b>771,954</b>	<b>57,411</b>
Under 18.....	93,147	28,665	64,282	79,973	18,512	61,461	13,174	12,353	821
18 and 19.....	365,450	91,971	273,479	341,720	73,191	268,529	23,730	16,760	4,950
20 to 21.....	472,706	157,206	315,498	430,140	122,415	307,725	42,566	34,793	7,773
22 to 24.....	773,931	370,561	403,370	668,210	274,290	393,920	105,721	96,271	9,450
25 to 29.....	1,112,637	555,725	556,912	916,804	373,367	543,437	193,833	182,358	11,475
30 to 34.....	870,519	423,367	447,152	719,014	280,065	438,929	151,505	143,282	6,223
35 to 39.....	665,263	329,721	335,572	551,354	221,100	330,254	113,939	106,621	5,318
40 to 49.....	701,958	320,283	381,675	587,937	210,668	377,269	114,021	109,615	4,406
50 to 64.....	253,474	85,179	168,295	222,993	56,027	166,966	30,461	29,152	1,329
65 and over.....	93,311	16,441	76,870	87,838	11,515	76,323	5,473	4,926	547
Age unknown.....	133,131	88,683	44,448	96,209	56,660	41,329	34,922	31,603	3,119

Percentage distribution

<b>All students</b> .....	<b>100.0</b>								
Under 18.....	1.8	1.4	1.9	1.6	1.2	1.9	1.9	1.9	1.7
18 and 19.....	21.1	22.0	19.8	20.6	21.9	19.1	22.9	22.3	29.6
20 to 21.....	18.7	21.7	13.7	16.2	22.1	13.8	20.6	21.0	15.8
22 to 24.....	15.9	17.8	12.9	16.1	16.9	12.6	14.9	14.9	15.1
25 to 29.....	14.4	13.9	15.3	14.4	13.6	15.4	14.3	14.3	14.2
30 to 34.....	9.7	8.5	11.6	9.9	8.2	12.0	9.0	8.9	9.4
35 to 39.....	6.9	5.9	8.5	7.1	5.8	6.7	7.3	6.4	5.6
40 to 49.....	6.8	5.4	9.3	7.1	5.1	9.8	5.8	6.0	3.6
50 to 64.....	2.3	1.3	3.9	2.5	1.2	4.0	1.5	1.6	1.0
65 and over.....	0.8	0.3	1.7	0.9	0.3	1.8	0.3	0.3	0.3
Age unknown.....	1.7	1.9	1.3	1.5	1.7	1.2	2.5	2.3	3.6
<b>Full-time</b> .....	<b>100.0</b>								
Under 18.....	1.8	1.8	1.7	1.4	1.3	1.6	2.0	2.0	1.6
18 and 19.....	32.2	30.2	38.7	32.6	29.9	39.0	31.4	30.9	36.4
20 to 21.....	26.5	26.8	20.0	26.3	28.6	20.4	27.1	26.1	16.5
22 to 24.....	17.3	16.8	12.6	17.9	20.2	12.2	15.8	15.9	14.7
25 to 29.....	10.1	10.0	10.3	9.9	9.8	10.0	10.5	10.3	12.4
30 to 34.....	5.1	4.8	6.9	5.2	4.5	6.8	5.1	4.8	7.8
35 to 39.....	3.0	2.6	4.2	3.0	2.4	4.2	3.1	3.0	4.4
40 to 49.....	2.4	2.0	3.8	2.3	1.7	3.8	2.5	2.5	2.5
50 to 64.....	0.5	0.4	0.9	0.5	0.3	1.0	0.6	0.6	0.5
65 and over.....	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	(*)
Age unknown.....	1.1	1.1	1.0	0.9	0.9	0.8	1.7	1.6	3.0
<b>Part-time</b> .....	<b>100.0</b>								
Under 18.....	1.7	1.2	2.1	1.7	1.0	2.1	1.8	1.8	1.4
18 and 19.....	8.8	3.7	6.9	7.3	4.3	6.9	2.9	2.4	6.8
20 to 21.....	6.5	6.4	10.3	9.1	7.2	10.2	5.1	4.5	13.5
22 to 24.....	14.0	15.0	13.1	14.2	16.2	13.1	12.7	12.5	16.5
25 to 29.....	20.1	22.5	16.2	19.5	22.0	16.1	20.4	23.6	20.0
30 to 34.....	15.7	17.2	14.8	15.3	16.5	14.6	16.3	16.6	14.3
35 to 39.....	12.0	13.4	10.9	11.7	13.0	11.0	13.7	14.1	9.3
40 to 49.....	12.7	13.0	12.4	12.5	12.4	12.5	13.7	14.2	7.7
50 to 64.....	4.6	3.5	5.5	4.7	3.3	5.5	3.7	3.8	2.3
65 and over.....	1.7	0.7	2.5	1.9	0.7	2.5	0.7	0.8	1.0
Age unknown.....	2.4	3.6	1.4	2.1	3.4	1.4	4.2	4.1	5.4

<sup>1</sup> Revised from previously published data.

\* Less than .05 percent.

NOTE.—Because of rounding, details may not add to 100.0 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment, 1987" survey. (This table was prepared March 1990.)

**Table 162.—Total enrollment in institutions of higher education, by level of enrollment, sex, attendance status, and type and control of institution: Fall 1987<sup>1</sup> and fall 1988<sup>2</sup>**

Attendance status, and type and control of institution	Total			Undergraduate			First-professional			Graduate		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13
Fall 1987 <sup>1</sup>												
Total.....	12,786,642	5,932,056	6,854,586	11,046,235	5,068,457	5,977,778	268,332	170,126	96,203	1,452,075	693,470	758,605
Full-time.....	7,231,065	3,810,868	3,420,197	6,462,549	3,183,878	3,298,673	241,807	153,668	88,139	526,729	293,544	233,185
Part-time.....	5,555,557	2,321,168	3,214,389	4,583,686	1,904,781	2,679,005	26,525	16,461	10,064	925,346	399,926	525,420
Total 4-year.....	7,990,420	3,859,233	4,131,187	8,270,013	2,995,634	3,274,379	268,332	170,129	96,203	1,452,075	693,470	758,605
Full-time.....	5,522,416	2,790,721	2,731,695	4,753,880	2,343,566	2,410,371	241,807	153,668	88,139	526,729	293,544	233,185
Part-time.....	2,468,004	1,068,512	1,399,492	1,516,133	652,125	864,008	26,525	16,461	10,064	925,346	399,926	525,420
Total 2-year.....	4,776,222	2,072,823	2,703,399	4,776,222	2,072,823	2,703,399	—	—	—	—	—	—
Full-time.....	1,706,659	820,187	886,502	1,703,669	820,187	886,502	—	—	—	—	—	—
Part-time.....	3,067,553	1,252,656	1,814,897	3,067,553	1,252,656	1,814,897	—	—	—	—	—	—
Public, total.....	9,973,254	4,573,466	5,399,788	8,918,589	4,078,349	4,842,240	110,036	68,089	41,947	944,629	429,029	515,601
Full-time.....	5,267,062	2,628,174	2,640,888	4,824,860	2,375,441	2,449,419	105,378	65,456	39,922	336,824	185,277	151,547
Part-time.....	4,706,192	1,947,292	2,758,900	4,093,729	1,700,908	2,392,821	4,658	2,633	2,025	607,805	243,751	364,054
Public 4-year.....	5,432,200	2,604,626	2,827,574	4,377,535	2,107,509	2,270,028	110,036	68,089	41,947	944,629	429,028	515,601
Full-time.....	3,736,150	1,882,064	1,854,086	3,293,948	1,631,331	1,662,617	105,378	65,456	39,922	336,824	185,277	151,547
Part-time.....	1,696,050	722,562	973,488	1,083,587	476,178	607,409	4,658	2,633	2,025	607,805	243,751	364,054
Public 2-year.....	4,541,054	1,968,840	2,572,214	4,541,054	1,968,840	2,572,214	—	—	—	—	—	—
Full-time.....	1,530,912	744,110	786,802	1,530,912	744,110	786,802	—	—	—	—	—	—
Part-time.....	3,010,142	1,224,730	1,785,412	3,010,142	1,224,730	1,785,412	—	—	—	—	—	—
Private, total.....	2,793,388	1,358,590	1,434,798	2,127,646	992,108	1,135,538	158,296	102,040	56,256	507,446	264,442	243,004
Full-time.....	1,964,023	984,714	979,309	1,637,689	788,235	849,454	136,429	83,212	48,217	189,905	106,267	81,638
Part-time.....	829,365	373,876	455,489	489,957	203,873	286,084	21,867	13,828	8,039	317,541	158,175	161,366
Private 4-year.....	2,556,220	1,254,807	1,303,813	1,892,478	888,125	1,004,353	158,296	102,040	56,256	507,446	264,442	243,004
Full-time.....	1,786,266	908,657	877,609	1,459,932	712,178	747,754	136,429	88,212	48,217	189,905	106,267	81,638
Part-time.....	771,954	346,150	426,204	432,546	175,947	256,599	21,867	13,828	8,039	317,541	158,175	161,366
Private 2-year.....	235,168	103,983	131,185	235,168	103,983	131,185	—	—	—	—	—	—
Full-time.....	177,757	76,057	101,700	177,757	76,057	101,700	—	—	—	—	—	—
Part-time.....	57,411	27,926	29,485	57,411	27,926	29,485	—	—	—	—	—	—
Fall 1988 <sup>2</sup>												
Total.....	13,043,118	5,998,204	7,044,914	11,304,160	5,133,746	6,170,414	267,096	186,685	100,411	1,471,862	697,773	774,089
Full-time.....	7,147,471	3,660,110	3,770,361	8,636,139	3,204,734	3,431,405	241,836	151,182	90,654	552,466	304,194	248,302
Part-time.....	5,812,647	2,338,094	3,274,553	4,668,021	1,929,012	2,739,009	25,260	15,503	9,757	919,396	393,579	525,787
Total 4-year.....	8,175,008	3,912,277	4,262,731	8,436,050	3,047,819	3,388,231	267,096	186,685	100,411	1,471,862	697,773	774,089
Full-time.....	5,666,311	2,842,564	2,845,747	4,893,979	2,387,188	2,506,791	241,836	151,182	90,654	552,466	304,194	248,302
Part-time.....	2,468,697	1,069,713	1,416,984	1,542,071	660,831	881,440	25,260	15,503	9,757	919,396	393,579	525,787
Total 2-year.....	4,868,110	2,085,927	2,782,183	4,868,110	2,085,927	2,782,183	—	—	—	—	—	—
Full-time.....	1,742,180	817,546	924,634	1,742,180	817,546	924,634	—	—	—	—	—	—
Part-time.....	3,125,950	1,268,381	1,857,549	3,125,950	1,268,381	1,857,549	—	—	—	—	—	—
Public, total.....	10,156,375	4,606,813	5,549,562	9,098,747	4,111,848	4,987,099	106,935	66,194	42,741	946,693	426,971	519,722
Full-time.....	5,409,096	2,655,466	2,753,630	4,949,470	2,399,093	2,550,377	104,844	63,884	40,960	354,782	192,489	162,293
Part-time.....	4,747,279	1,951,347	2,795,932	4,149,277	1,712,555	2,436,722	4,091	2,310	1,781	591,911	234,482	357,429
Public 4-year.....	5,543,967	2,632,528	2,911,459	4,486,359	2,137,363	2,348,996	106,935	66,194	42,741	946,693	426,971	519,722
Full-time.....	3,838,878	1,908,282	1,929,394	3,379,050	1,652,909	1,726,141	104,844	63,884	40,960	354,782	192,489	162,293
Part-time.....	1,705,311	723,246	982,065	1,107,309	464,454	692,855	4,091	2,310	1,781	591,911	234,482	357,429
Public 2-year.....	4,812,388	1,974,285	2,838,103	4,812,388	1,974,285	2,838,103	—	—	—	—	—	—
Full-time.....	1,570,420	748,184	824,236	1,570,420	748,184	824,236	—	—	—	—	—	—
Part-time.....	3,041,968	1,226,101	1,813,867	3,041,968	1,226,101	1,813,867	—	—	—	—	—	—
Private, total.....	2,886,743	1,391,391	1,495,352	2,205,413	1,022,098	1,183,315	158,161	100,491	57,870	523,169	266,802	254,367
Full-time.....	2,021,375	1,004,844	1,016,731	1,666,669	805,641	881,028	136,992	87,298	49,694	197,714	111,705	86,009
Part-time.....	865,368	386,747	478,621	518,744	216,457	302,287	21,169	13,193	7,978	325,455	155,097	168,358
Private 4-year.....	2,631,021	1,279,749	1,351,272	1,949,891	910,456	1,039,235	158,161	100,491	57,870	523,169	266,802	254,367
Full-time.....	1,849,635	933,282	916,353	1,514,929	734,279	780,650	136,992	87,298	49,694	197,714	111,705	86,009
Part-time.....	781,386	346,467	434,919	434,782	176,177	258,585	21,169	13,193	7,978	325,455	155,097	168,358
Private 2-year.....	255,722	111,642	144,080	255,722	111,642	144,080	—	—	—	—	—	—
Full-time.....	171,740	71,382	100,378	171,740	71,382	100,378	—	—	—	—	—	—
Part-time.....	83,982	40,260	43,702	83,982	40,260	43,702	—	—	—	—	—	—

<sup>1</sup> Revised from previously published data.  
<sup>2</sup> Preliminary data.  
 --Data not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" survey. (This table was prepared February 1990.)

**Table 163.—Total enrollment in institutions of higher education, by type and control of institution, attendance status, and sex of student: Fall 1970 to fall 1988**

Type and control of institution, sex and attendance status of student	1970	1975	1980	1982	1983	1984	1985	1986 <sup>1</sup>	1987 <sup>1</sup>	1988 <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11
<b>Total</b> .....	<b>8,580,887</b>	<b>11,184,859</b>	<b>12,096,895</b>	<b>12,425,780</b>	<b>12,464,661</b>	<b>12,241,940</b>	<b>12,247,055</b>	<b>12,503,511</b>	<b>12,766,642</b>	<b>13,043,118</b>
Full-time .....	5,818,290	8,841,334	7,097,958	7,220,818	7,281,050	7,098,388	7,075,221	7,119,550	7,231,085	7,430,471
Men .....	3,504,095	3,926,753	3,669,244	3,752,955	3,759,787	3,647,509	3,607,720	3,599,047	3,810,888	3,660,110
Women .....	2,312,195	2,914,581	3,408,714	3,467,863	3,501,263	3,450,879	3,467,501	3,520,503	3,920,197	3,770,361
Part-time .....	2,764,597	4,343,525	4,998,937	5,205,182	5,203,811	5,143,552	5,171,834	5,383,961	5,535,557	5,612,647
Men .....	1,539,547	2,222,244	2,185,130	2,278,429	2,263,938	2,218,065	2,210,730	2,285,468	2,321,168	2,338,094
Women .....	1,225,050	2,121,281	2,813,807	2,926,733	2,939,873	2,927,487	2,961,104	3,098,493	3,214,389	3,274,553
<b>4-year, total</b> .....	<b>8,261,502</b>	<b>7,214,740</b>	<b>7,570,608</b>	<b>7,854,074</b>	<b>7,741,195</b>	<b>7,711,187</b>	<b>7,715,978</b>	<b>7,823,983</b>	<b>7,990,420</b>	<b>8,175,008</b>
Full-time .....	4,587,379	5,080,256	5,344,163	5,380,793	5,434,249	5,394,599	5,384,814	5,423,289	5,522,418	5,688,311
Men .....	2,732,798	2,991,192	2,809,528	2,822,274	2,845,083	2,806,181	2,781,412	2,774,496	2,790,721	2,842,584
Women .....	1,854,583	2,189,064	2,534,635	2,558,519	2,589,166	2,588,438	2,603,202	2,648,793	2,731,695	2,845,747
Part-time .....	1,874,123	2,134,484	2,226,445	2,273,281	2,306,948	2,318,588	2,331,364	2,400,874	2,468,004	2,486,697
Men .....	638,189	1,082,481	1,017,813	1,038,948	1,047,533	1,040,813	1,034,804	1,049,087	1,068,512	1,069,713
Women .....	737,934	1,042,023	1,208,632	1,234,333	1,259,413	1,275,755	1,296,580	1,351,587	1,399,492	1,416,984
Public 4-year .....	4,232,722	4,998,142	5,128,812	5,178,434	5,223,404	5,198,273	5,209,540	5,300,202	5,432,200	5,543,987
Full-time .....	3,086,491	3,489,821	3,592,193	3,823,771	3,665,325	3,829,275	3,823,341	3,856,940	3,738,150	3,838,678
Men .....	1,813,584	1,947,823	1,873,397	1,889,326	1,910,181	1,880,078	1,863,689	1,864,507	1,882,064	1,909,282
Women .....	1,272,907	1,521,998	1,718,796	1,734,445	1,755,144	1,749,197	1,759,852	1,792,433	1,854,086	1,929,394
Part-time .....	1,148,231	1,528,321	1,538,419	1,552,663	1,558,079	1,568,998	1,586,199	1,643,282	1,896,050	1,705,311
Men .....	609,422	760,459	685,051	698,071	697,852	694,506	693,115	706,133	722,562	723,248
Women .....	538,809	767,852	851,368	854,592	860,427	874,492	893,084	937,129	973,488	982,065
Private 4-year .....	2,028,780	2,218,598	2,441,996	2,477,640	2,517,791	2,512,894	2,506,438	2,523,781	2,558,220	2,631,021
Full-time .....	1,500,888	1,810,435	1,751,970	1,757,022	1,785,924	1,785,324	1,781,273	1,766,349	1,788,268	1,849,635
Men .....	919,212	943,389	936,131	932,948	934,902	926,083	917,723	909,889	938,657	933,282
Women .....	581,676	867,066	815,839	824,074	834,022	839,241	843,550	856,360	877,609	916,353
Part-time .....	527,892	608,163	690,028	720,818	748,867	747,570	745,165	757,412	771,954	781,386
Men .....	328,787	331,992	332,762	340,877	349,681	348,307	341,689	342,954	345,950	346,487
Women .....	201,125	274,171	357,264	379,741	398,986	401,263	403,478	414,458	426,004	434,899
<b>2-year, total</b> .....	<b>2,319,385</b>	<b>3,970,119</b>	<b>4,526,287</b>	<b>4,771,706</b>	<b>4,723,466</b>	<b>4,530,773</b>	<b>4,531,077</b>	<b>4,679,548</b>	<b>4,776,222</b>	<b>4,868,110</b>
Full-time .....	1,228,911	1,781,078	1,753,793	1,839,825	1,828,801	1,703,789	1,890,807	1,898,281	1,708,669	1,742,160
Men .....	771,299	1,036,581	879,718	930,681	914,704	841,348	826,308	824,551	820,187	817,546
Women .....	457,612	725,517	874,079	909,144	912,097	862,441	864,299	871,710	888,502	924,614
Part-time .....	1,090,474	2,209,041	2,772,492	2,931,881	2,896,665	2,826,984	2,840,470	2,983,287	3,067,553	3,125,950
Men .....	603,358	1,129,785	1,187,317	1,239,481	1,218,405	1,175,252	1,175,926	1,238,381	1,252,856	1,268,381
Women .....	487,118	1,079,258	1,605,175	1,692,400	1,680,260	1,651,732	1,664,544	1,746,906	1,814,697	1,857,569
Public 2-year .....	2,195,412	3,838,366	4,328,782	4,519,853	4,459,330	4,279,097	4,269,733	4,413,891	4,541,054	4,812,388
Full-time .....	1,129,185	1,662,821	1,595,493	1,660,321	1,833,760	1,518,331	1,496,905	1,505,873	1,530,912	1,570,420
Men .....	720,440	988,701	811,871	850,602	826,886	782,112	742,873	741,973	744,110	748,184
Women .....	408,725	873,920	783,622	809,719	806,904	756,219	754,232	783,900	788,802	824,236
Part-time .....	1,066,247	2,173,745	2,733,289	2,859,332	2,825,540	2,760,766	2,772,828	2,907,818	3,010,142	3,041,968
Men .....	589,439	1,107,680	1,152,268	1,194,889	1,175,319	1,137,818	1,138,011	1,182,965	1,224,730	1,228,101
Women .....	478,808	1,066,065	1,581,021	1,664,443	1,650,221	1,622,950	1,634,817	1,714,353	1,785,412	1,813,867
Private 2-year .....	123,973	133,753	<sup>3</sup> 197,505	252,053	264,138	251,878	261,344	<sup>4</sup> 285,657	<sup>4</sup> 235,168	255,722
Full-time .....	99,746	98,457	<sup>3</sup> 158,302	179,504	193,011	185,458	193,702	<sup>4</sup> 190,388	<sup>4</sup> 177,757	171,740
Men .....	50,859	48,860	<sup>3</sup> 87,845	80,079	87,818	79,236	83,635	<sup>4</sup> 82,578	<sup>4</sup> 78,057	71,362
Women .....	48,887	51,597	<sup>3</sup> 90,457	99,425	105,193	106,222	110,067	<sup>4</sup> 107,810	<sup>4</sup> 101,700	100,378
Part-time .....	24,227	35,296	<sup>3</sup> 39,203	72,549	71,125	66,218	67,642	<sup>4</sup> 75,489	<sup>4</sup> 57,411	83,982
Men .....	13,919	22,103	<sup>3</sup> 15,049	44,592	41,088	37,438	37,915	<sup>4</sup> 43,418	<sup>4</sup> 27,928	40,280
Women .....	10,308	13,193	<sup>3</sup> 24,154	27,957	30,039	28,782	29,727	<sup>4</sup> 32,053	<sup>4</sup> 29,485	43,702

<sup>1</sup> Data revised from previously published figures.<sup>2</sup> Preliminary data.<sup>3</sup> Large increase is due to the addition of schools accredited by the National Association of Trade and Technical Schools.<sup>4</sup> Because of imputation techniques, data are not consistent with figures for other years.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities," and Integrated Postsecondary Education Data Systems (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

Table 164.—Enrollment and number of institutions of higher education, by affiliation<sup>1</sup> of institution: Fall 1980 to fall 1985

Affiliation	Enrollment								Number of institutions <sup>2</sup>	
	Total, fall 1980	Total, fall 1983	Total, fall 1984	Fall 1985				Fall 1980	Fall 1985	
				Total	Full-time		Part-time			
					Men	Women	Men			Women
1	2	3	4	5	6	7	8	9	10	11
<b>All institutions</b> .....	<b>12,066,895</b>	<b>12,464,661</b>	<b>12,241,940</b>	<b>12,247,055</b>	<b>3,607,720</b>	<b>3,467,501</b>	<b>2,210,730</b>	<b>2,961,104</b>	<b>3,226</b>	<b>3,301</b>
Public institutions.....	9,457,394	9,682,734	9,477,370	9,479,273	2,606,362	2,513,884	1,831,126	2,527,901	1,493	1,493
Federal.....	50,969	54,800	54,358	55,787	48,741	8,331	539	176	12	12
State.....	5,879,057	5,964,595	5,883,571	5,924,118	1,963,955	1,884,583	887,272	1,188,308	881	881
State and local.....	2,360,972	2,538,044	2,466,058	2,439,409	389,969	421,901	668,889	958,630	379	397
State-related.....	154,964	149,385	145,992	148,094	58,644	47,325	19,852	22,273	31	31
Local.....	1,011,412	975,910	928,391	911,865	145,033	153,744	254,574	358,514	190	172
Private institutions.....	2,639,501	2,781,927	2,764,570	2,767,782	1,001,358	953,617	379,604	433,203	1,733	1,808
Independent nonprofit.....	1,521,614	1,554,187	1,528,571	1,529,779	562,590	497,668	226,639	242,882	795	811
Organized as profit making.....	111,714	192,740	190,151	195,991	78,400	74,321	32,650	12,820	164	211
Religiously affiliated.....	1,006,173	1,035,000	1,045,848	1,042,012	362,368	361,628	120,315	177,701	774	786
Advent Christian Church.....	143	142	126	103	48	48	8	3	1	1
African Methodist Episcopal Zion Church.....	1,091	939	836	702	416	278	5	3	3	2
African Methodist Episcopal.....	4,541	3,715	3,404	3,473	1,401	1,837	96	139	6	6
American Baptist.....	6,131	7,477	8,554	8,307	2,506	2,815	1,133	1,853	11	12
American Lutheran and Lutheran Church in America.....	3,092	2,999	2,770	2,730	913	798	406	613	3	3
American Lutheran.....	21,608	20,746	21,100	21,258	7,974	9,740	1,555	1,969	13	12
Assemblies of God Church.....	7,614	7,745	7,972	7,899	3,685	3,154	587	473	10	11
Baptist.....	38,231	39,559	39,152	41,183	16,958	16,316	4,020	3,869	33	36
Brethren Church.....	3,925	4,391	4,463	4,664	1,795	1,186	898	785	3	3
Brethren in Christ Church.....	1,301	1,612	1,761	1,846	650	1,117	27	52	1	1
Christian and Missionary Alliance Church.....	1,705	1,854	1,831	1,740	785	691	167	117	3	3
Christian Church (Disciples of Christ).....	14,913	15,413	15,132	15,311	4,847	5,456	2,536	2,470	12	11
Christian Churches and Churches of Christ.....	1,342	1,457	1,591	1,543	757	521	150	115	7	10
Christian Methodist Episcopal.....	2,486	1,972	1,845	1,661	813	705	60	83	4	3
Christian Reformed Church.....	5,408	5,291	5,313	5,268	2,461	2,447	192	168	3	3
Church of Christ (Scientist).....	2,773	—	—	—	—	—	—	—	6	—
Church of God of Prophecy.....	—	270	248	245	96	119	20	10	—	1
Church of God.....	6,082	6,091	6,187	5,990	2,407	2,483	598	522	9	9
Church of New Jerusalem.....	170	164	156	155	72	64	5	14	1	1
Church of the Brethren.....	8,482	8,699	9,302	8,684	2,590	2,880	1,471	1,743	6	6
Church of the Nazarene.....	11,718	11,140	10,834	10,757	4,258	4,609	843	1,047	10	10
Churches of Christ.....	9,343	11,775	11,486	10,945	4,674	4,617	895	759	9	13
Cumberland Presbyterian.....	594	659	684	636	277	221	65	73	2	2
Evangelical Congregational Church.....	60	60	53	71	13	0	48	10	1	1
Evangelical Convent Church of America.....	1,401	1,545	1,491	1,539	542	698	104	195	1	1
Evangelical Free Church of America.....	839	935	1,563	1,613	758	270	429	156	1	2
Evangelical Lutheran Church.....	743	724	575	569	339	136	107	7	3	3
Free Methodist.....	5,543	5,552	5,602	5,643	1,865	2,419	543	616	5	5
Free Will Baptist Church.....	1,132	1,198	1,242	1,191	436	442	183	130	4	3
Friends United Meeting.....	1,109	1,443	—	—	—	—	—	—	1	—
Friends.....	5,157	4,889	6,962	7,077	3,323	2,701	443	610	5	7
General Conference Mennonite Church.....	820	1,369	1,321	1,303	567	541	73	122	2	3
Greek Orthodox.....	204	303	219	161	126	22	11	2	1	1
Interdenominational.....	1,254	1,565	1,598	1,438	662	426	176	172	4	6
Jewish.....	5,738	5,191	5,444	5,472	4,226	735	278	233	24	22

**Table 164.—Enrollment and number of institutions of higher education, by affiliation<sup>1</sup> of institution: Fall 1980 to fall 1985—Continued**

Affiliation	Enrollment								Number of institutions <sup>2</sup>	
	Total, fall 1980	Total, fall 1983	Total, fall 1984	Fall 1985					Fall 1980	Fall 1985
				Total	Full-time		Part-time			
					Men	Women	Men	Women		
1	2	3	4	5	6	7	8	9	10	11
Latter Day Saints .....	39,172	39,277	38,973	39,406	15,900	14,324	4,551	4,631	4	4
Lutheran Church—Missouri Synod .....	11,727	12,209	11,940	11,507	5,029	4,983	468	1,027	15	15
Lutheran Church in America .....	23,877	22,977	23,108	22,659	9,158	9,640	1,368	2,493	20	20
Mennonite Brethren Church .....	1,344	1,510	1,561	1,548	473	432	224	442	3	3
Mennonite Church .....	4,008	2,794	2,632	2,490	993	1,234	108	155	6	5
Missionary Church Inc. ....	487	543	550	573	142	164	38	229	1	1
Moravian Church .....	2,434	2,545	2,436	2,352	655	1,086	238	373	2	2
Multiple Protestant Denominations .....	5,526	4,982	5,083	4,964	1,616	2,679	273	396	8	7
North American Baptist .....	155	147	138	133	62	19	35	17	1	1
Pentecostal Holiness Church .....	767	402	466	470	214	217	17	22	3	3
Presbyterian U.S. and United Presbyterian .....	47,144	51,483	50,679	52,290	20,499	20,960	4,642	6,189	57	58
Protestant Episcopal .....	5,396	5,258	5,323	5,344	2,344	2,626	151	223	12	13
Protestant, other .....	4,072	3,564	2,765	2,390	1,151	797	229	213	11	8
Reformed Church in America .....	2,713	5,149	5,284	5,238	2,142	2,572	264	260	4	5
Reformed Episcopal Church .....	67	—	—	—	—	—	—	—	1	—
Reformed Presbyterian Church .....	2,014	1,292	1,225	1,191	608	388	112	83	4	1
Reorganized Latter-Day Saints Church .....	4,274	4,237	4,265	4,517	1,923	1,251	879	464	2	2
Roman Catholic .....	422,842	445,030	456,936	452,992	132,519	151,173	61,954	107,346	229	234
Russian Orthodox .....	47	43	47	36	34	0	2	0	1	1
Seventh-Day Adventists .....	19,168	17,525	17,131	15,993	6,380	6,314	1,341	1,958	11	11
Southern Baptist .....	85,281	88,556	88,837	88,889	33,956	32,760	10,250	11,903	54	56
Unitarian Universalist .....	87	91	86	88	40	36	6	4	2	2
United Brethren Church .....	545	448	366	447	204	181	39	23	1	1
United Church of Christ .....	14,169	13,911	12,180	12,568	4,295	4,455	1,547	2,271	16	14
United Methodist .....	127,099	127,064	127,281	127,238	46,787	50,606	12,823	17,022	91	94
Wesleyan Church .....	3,583	2,584	2,516	2,394	918	1,067	174	235	5	4
Wisconsin Evangelical Lutheran Synod .....	808	629	559	520	173	344	2	1	1	1
Other religiously affiliated .....	462	1,866	2,663	2,818	956	848	446	368	1	7

<sup>1</sup> Affiliation as reported by institutions of higher education.

<sup>2</sup> Includes only institutions which reported enrollment.

—Data not applicable or not reported.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities" surveys. (This table was prepared August 1986.)

**Table 165.—Total first-time freshmen enrollment in institutions of higher education, by sex of student, attendance status, and type and control of institution: Fall 1955 to fall 1988**

[in thousands]

Year	Total, all freshmen	Men			Women			Type of institution, by control			
		Total	Full-time	Part-time	Total	Full-time	Part-time	4-year		2-year	
								Public	Private	Public	Private
1	2	3	4	5	6	7	8	9	10	11	12
1955 <sup>1</sup>	670	416	—	—	254	—	—	<sup>2</sup> 283	<sup>2</sup> 247	<sup>2</sup> 117	<sup>2</sup> 23
1956 <sup>1</sup>	718	443	—	—	275	—	—	<sup>2</sup> 293	<sup>2</sup> 262	<sup>2</sup> 137	<sup>2</sup> 25
1957 <sup>1</sup>	724	442	—	—	282	—	—	<sup>2</sup> 294	<sup>2</sup> 263	<sup>2</sup> 141	<sup>2</sup> 27
1958 <sup>1</sup>	775	465	—	—	310	—	—	<sup>2</sup> 328	<sup>2</sup> 272	<sup>2</sup> 146	<sup>2</sup> 29
1959 <sup>1</sup>	822	488	—	—	334	—	—	<sup>2</sup> 348	<sup>2</sup> 292	<sup>2</sup> 153	<sup>2</sup> 28
1960 <sup>1</sup>	923	540	—	—	384	—	—	<sup>2</sup> 396	<sup>2</sup> 313	<sup>2</sup> 182	<sup>2</sup> 32
1961 <sup>1</sup>	1,018	592	—	—	426	—	—	<sup>2</sup> 438	<sup>2</sup> 336	<sup>2</sup> 210	<sup>2</sup> 34
1962 <sup>1</sup>	1,031	598	—	—	432	—	—	<sup>2</sup> 445	<sup>2</sup> 325	<sup>2</sup> 225	<sup>2</sup> 36
1963 <sup>1</sup>	1,046	604	—	—	442	—	—	—	—	—	—
1964 <sup>1</sup>	1,225	702	—	—	523	—	—	<sup>2</sup> 539	<sup>2</sup> 363	<sup>2</sup> 275	<sup>2</sup> 47
1965 <sup>1</sup>	1,442	829	—	—	613	—	—	<sup>2</sup> 642	<sup>2</sup> 399	<sup>2</sup> 348	<sup>2</sup> 53
1966	1,554	890	—	—	665	—	—	<sup>2</sup> 626	<sup>2</sup> 363	<sup>2</sup> 478	<sup>2</sup> 67
1967	1,841	931	761	170	710	574	136	<sup>2</sup> 645	<sup>2</sup> 368	<sup>2</sup> 581	<sup>2</sup> 67
1968	1,893	1,082	847	235	810	624	187	<sup>2</sup> 725	<sup>2</sup> 378	<sup>2</sup> 718	<sup>2</sup> 72
1969	1,967	1,118	876	242	849	649	200	<sup>2</sup> 737	<sup>2</sup> 393	<sup>2</sup> 776	<sup>2</sup> 61
1970	2,063	1,152	898	256	911	891	221	<sup>2</sup> 754	<sup>2</sup> 397	<sup>2</sup> 854	<sup>2</sup> 58
1971	2,119	1,171	898	275	949	710	238	<sup>2</sup> 738	<sup>2</sup> 386	<sup>2</sup> 937	<sup>2</sup> 58
1972	2,153	1,158	858	299	995	718	279	680	381	1,037	55
1973	2,228	1,182	867	315	1,044	740	304	699	379	1,089	59
1974	2,368	1,244	898	348	1,122	777	345	746	366	1,176	58
1975	2,515	1,328	942	386	1,187	821	366	772	395	1,284	64
1976	2,347	1,170	855	318	1,177	808	369	717	414	1,153	63
1977	2,394	1,156	840	318	1,239	841	398	737	405	1,186	67
1978	2,390	1,142	817	324	1,248	834	414	737	407	1,174	73
1979	2,503	1,180	840	340	1,323	866	457	760	415	1,254	74
1980	2,588	1,219	862	357	1,369	887	481	785	418	1,314	91
1981	2,585	1,218	852	366	1,378	886	492	754	419	1,318	104
1982	2,505	1,199	837	362	1,308	851	455	731	404	1,254	116
1983	2,444	1,159	825	334	1,285	853	431	728	404	1,190	122
1984	2,357	1,112	786	326	1,245	827	418	714	403	1,130	110
1985	2,292	1,076	775	301	1,216	827	389	717	399	1,060	116
1986	2,219	1,047	789	278	1,173	821	352	720	392	991	<sup>3</sup> 117
1987 <sup>4</sup>	2,248	1,047	779	267	1,200	847	352	758	405	980	104
1988 <sup>5</sup>	2,376	1,100	808	294	1,277	889	388	782	425	1,052	117

<sup>1</sup> Excludes first-time freshmen in occupational programs not creditable towards a bachelor's degree.

<sup>2</sup> Data for 2-year branches of 4-year college systems are aggregated with the 4-year institutions.

<sup>3</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>4</sup> Data have been revised from previously published figures.

<sup>5</sup> Preliminary data.

—Data not available.

NOTE.—Alaska and Hawaii are included in all years. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years; "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared March 1990.)

**Table 166.—Total first-time freshmen enrollment in institutions of higher education, by attendance status, sex, control of institution, and State: Fall 1986 to fall 1988**

State or other area	Fall 1986 <sup>1</sup>	Fall 1987 <sup>1</sup>	Fall 1988 <sup>2</sup>								
			Total	Full-time			Part-time			Public institutions	Private institutions
				Total	Men	Women	Total	Men	Women		
1	2	3	4	5	6	7	8	9	10	11	12
<b>United States</b> .....	<b>2,219,208</b>	<b>2,246,358</b>	<b>2,376,296</b>	<b>1,694,650</b>	<b>805,685</b>	<b>888,765</b>	<b>681,648</b>	<b>293,674</b>	<b>387,872</b>	<b>1,434,239</b>	<b>642,067</b>
Alabama.....	39,160	40,181	43,496	34,738	15,984	18,754	8,758	3,838	4,920	37,867	5,629
Alaska.....	1,380	759	1,618	1,251	585	666	367	140	227	1,455	183
Arizona.....	56,226	56,345	64,668	25,649	14,232	11,817	38,619	18,952	21,667	61,122	3,546
Arkansas.....	16,761	16,772	16,579	16,028	7,117	8,911	2,551	848	1,703	14,483	4,116
California.....	276,140	277,766	280,052	137,911	67,184	70,727	142,141	64,486	77,655	266,254	23,796
Colorado.....	27,418	30,026	30,634	21,826	11,225	10,601	8,803	3,511	5,297	26,558	4,076
Connecticut.....	30,239	30,244	29,551	20,127	9,592	10,535	9,424	3,416	6,008	20,822	6,929
Delaware.....	7,465	7,186	7,905	8,046	2,568	3,478	1,859	702	1,157	6,724	1,181
District of Columbia.....	10,368	9,705	9,750	6,142	3,337	4,805	1,608	661	947	1,698	7,852
Florida.....	<sup>3</sup> 76,181	75,808	77,570	52,664	25,347	27,517	24,706	10,581	14,125	58,980	18,590
Georgia.....	38,062	<sup>4</sup> 45,922	50,668	39,500	18,464	21,036	11,188	5,224	5,944	37,270	13,398
Hawaii.....	8,733	6,427	6,405	5,840	2,813	3,227	2,565	1,320	1,245	6,270	2,135
Idaho.....	9,740	9,863	10,282	8,837	4,102	4,735	1,445	606	837	5,820	4,462
Illinois.....	106,077	109,599	125,551	78,620	37,694	38,926	48,931	19,974	28,957	101,544	24,007
Indiana.....	47,436	50,420	54,847	44,324	21,502	22,822	10,523	4,352	6,171	39,073	15,774
Iowa.....	35,308	35,439	37,725	31,459	15,707	15,752	8,268	2,309	3,957	28,261	9,484
Kansas.....	26,644	26,506	27,068	18,550	10,104	9,448	7,516	3,156	4,362	24,024	3,044
Kentucky.....	27,152	28,156	30,115	25,536	11,216	14,318	4,579	1,816	2,963	22,323	7,792
Louisiana.....	29,233	30,931	30,953	27,601	11,915	15,686	3,352	1,321	2,031	25,337	5,616
Maine.....	9,202	9,370	9,758	6,812	4,284	4,528	946	262	664	6,820	2,932
Maryland.....	31,714	30,763	31,699	21,938	10,066	11,840	9,781	3,724	6,037	26,938	4,761
Massachusetts.....	79,364	77,906	75,667	62,650	27,796	35,054	12,817	5,208	7,609	33,554	42,113
Michigan.....	98,115	94,593	95,821	63,714	29,330	34,384	32,107	14,041	18,066	80,031	15,790
Minnesota.....	48,235	46,716	46,262	36,089	17,262	18,827	12,173	4,343	7,830	37,514	10,748
Mississippi.....	25,369	27,067	30,291	25,766	11,053	14,713	4,525	1,570	2,955	27,733	2,556
Missouri.....	36,229	38,375	39,586	33,632	15,596	18,036	5,954	2,253	3,701	28,625	10,961
Montana.....	5,567	5,365	5,992	5,246	2,484	2,764	744	285	459	5,077	915
Nebraska.....	18,632	18,644	17,319	13,568	6,526	7,042	3,751	1,895	2,056	14,110	3,209
Nevada.....	8,000	8,655	8,182	3,817	1,777	1,840	4,565	2,097	2,468	8,145	37
New Hampshire.....	10,987	11,330	11,453	9,714	4,870	5,044	1,739	749	990	8,314	5,139
New Jersey.....	45,228	41,634	44,381	34,939	18,279	16,660	9,442	3,583	5,859	36,441	7,940
New Mexico.....	8,678	9,012	11,194	8,339	4,208	4,131	2,855	1,175	1,680	10,962	232
New York.....	165,956	163,900	170,682	147,515	68,305	79,210	23,167	9,382	13,785	105,078	65,604
North Carolina.....	67,354	62,157	65,810	54,522	25,072	29,450	11,068	5,178	5,910	49,612	15,998
North Dakota.....	6,017	6,249	6,906	6,183	4,395	3,788	723	303	420	6,256	650
Ohio.....	104,558	98,903	110,836	75,514	36,208	39,306	35,322	22,734	12,588	72,690	38,146
Oklahoma.....	29,327	31,424	30,525	21,278	10,145	11,131	9,249	3,446	5,803	25,199	5,326
Oregon.....	25,146	26,387	27,343	19,992	9,829	10,163	7,351	3,405	3,946	23,931	3,412
Pennsylvania.....	104,149	113,999	122,154	88,104	42,859	45,245	34,050	10,174	23,878	65,356	56,798
Rhode Island.....	12,571	13,700	13,419	11,957	5,908	6,049	1,462	560	902	5,552	7,867
South Carolina.....	28,874	32,124	33,985	27,284	12,327	14,957	6,701	2,826	3,875	25,915	8,070
South Dakota.....	5,689	6,623	6,085	5,517	2,551	2,966	568	203	365	4,237	1,848
Tennessee.....	32,840	34,482	37,475	33,335	15,501	17,834	4,140	1,771	2,369	25,262	12,183
Texas.....	124,574	134,478	150,516	100,157	48,847	51,310	50,361	21,813	28,548	133,645	16,873
Utah.....	21,469	15,285	16,900	14,229	6,731	7,498	4,871	2,373	2,298	13,307	5,593
Vermont.....	6,908	6,578	6,916	6,312	3,214	3,098	608	147	459	3,709	3,209
Virginia.....	48,720	48,972	50,768	42,074	18,803	23,271	8,694	4,084	4,610	37,096	13,670
Washington.....	66,690	66,450	72,493	40,562	19,830	20,732	31,931	13,063	16,868	67,434	5,059
West Virginia.....	13,586	15,568	16,569	13,939	6,921	7,016	2,630	633	1,797	14,047	2,522
Wisconsin.....	52,410	51,357	54,094	43,329	20,542	22,787	10,765	4,857	5,908	46,211	7,883
Wyoming.....	5,175	5,837	6,019	4,819	2,528	2,091	1,400	522	876	5,390	629
U.S. Service Schools.....	4,151	4,891	3,955	3,955	3,518	439	—	—	—	3,955	—
<b>Outlying areas</b> .....	<b>35,383</b>	<b>29,768</b>	<b>32,999</b>	<b>30,053</b>	<b>11,833</b>	<b>16,220</b>	<b>2,946</b>	<b>1,244</b>	<b>1,702</b>	<b>13,515</b>	<b>19,484</b>
American Samoa.....	270	481	270	144	72	72	126	63	63	270	—
Guam.....	520	341	410	315	14 <sup>5</sup>	173	95	40	55	410	—
Northern Marianas.....	138	96	90	43	20	17	47	24	23	90	—
Puerto Rico.....	33,983	26,243	31,487	29,107	11,361	17,726	2,380	984	1,396	12,003	19,484
Trust Territory of the Pacific.....	214	363	561	263	161	102	298	133	185	561	—
Virgin Islands.....	258	244	181	181	51	130	—	—	—	181	—

<sup>1</sup> Data have been revised from previously published figures.

<sup>2</sup> Preliminary data.

<sup>3</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>4</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

—Data not available or not applicable.

SOURCE: U. S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment" surveys. (This table was prepared March 1990.)

Table 167.—College enrollment rates of high school graduates, by race/ethnicity: 1960 to 1988

[Numbers in thousands]

Year	High school graduates				Enrolled in college <sup>1</sup>							
	Total	White <sup>2</sup>	Black <sup>2,3</sup>	Hispanic <sup>3</sup>	Total		White <sup>2</sup>		Black <sup>2,3</sup>		Hispanic <sup>3</sup>	
					Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
1960	1,679	1,565	—	—	758	45.1	717	45.8	—	—	—	—
1961	1,783	1,812	—	—	847	48.0	798	49.5	—	—	—	—
1962	1,838	1,860	—	—	900	49.0	840	50.8	—	—	—	—
1963	1,741	1,815	—	—	784	45.0	736	45.8	—	—	—	—
1964	2,145	1,964	—	—	1,037	48.3	967	49.2	—	—	—	—
1965	2,659	2,417	—	—	1,354	50.9	1,249	51.7	—	—	—	—
1966	2,612	2,403	—	—	1,309	50.1	1,243	51.7	—	—	—	—
1967	2,525	2,267	—	—	1,311	51.9	1,202	53.0	—	—	—	—
1968	2,606	2,303	—	—	1,444	55.4	1,304	56.8	—	—	—	—
1969	2,842	2,538	—	—	1,516	53.3	1,402	55.2	—	—	—	—
1970	2,757	2,481	—	—	1,427	51.8	1,280	52.0	—	—	—	—
1971	2,872	2,596	—	—	1,535	53.4	1,402	54.0	—	—	—	—
1972	2,961	2,814	—	—	1,457	49.2	1,292	49.4	—	—	—	—
1973	3,059	2,707	—	—	1,425	46.8	1,302	48.1	—	—	—	—
1974	3,101	2,738	—	—	1,474	47.5	1,268	47.1	—	—	—	—
1975	3,186	2,825	—	—	1,815	50.7	1,448	51.2	—	—	—	—
1976	2,987	2,640	320	152	1,458	48.8	1,291	48.9	134	41.9	80	52.8
1977	3,140	2,768	335	158	1,590	50.6	1,403	50.7	166	49.8	80	51.3
1978	3,161	2,750	352	133	1,584	50.1	1,378	50.1	161	45.7	57	42.9
1979	3,160	2,776	324	154	1,559	49.3	1,378	49.8	147	45.4	69	44.8
1980	3,089	2,682	361	129	1,524	49.3	1,339	49.9	151	41.8	68	52.7
1981	3,053	2,626	359	146	1,646	53.9	1,434	54.6	154	42.9	76	52.1
1982	3,100	2,644	364	174	1,568	50.8	1,378	52.0	140	36.5	75	43.1
1983	2,964	2,496	392	138	1,562	52.7	1,372	55.0	151	38.5	75	54.3
1984	3,012	2,514	436	185	1,662	55.2	1,455	57.9	178	40.2	82	44.3
1985	2,666	2,241	333	141	1,539	57.7	1,332	59.4	141	42.3	72	51.1
1986	2,786	2,307	366	189	1,499	53.8	1,292	56.0	141	38.5	75	44.4
1987	2,647	2,207	337	176	1,503	56.8	1,249	56.8	175	51.9	59	33.5
1988	2,673	2,187	382	179	1,575	58.9	1,326	60.7	172	45.0	102	57.0

<sup>1</sup> Enrollment in college as of October of each year for individuals age 16 to 24 who graduated from high school during the preceding 12 months.

<sup>2</sup> Includes persons of Hispanic origin.

<sup>3</sup> Due to the small sample size, data are subject to relatively large sampling errors.

—Data not available.

NOTE.—Data are based upon sample surveys of the civilian population. High school graduate data in this table differ from figures appearing in other tables because of varying survey procedures and coverage.

SOURCE: American College Testing Program, unpublished tabulations, 1967, derived from statistics collected by the U.S. Bureau of the Census; and U.S. Department of Labor, unpublished tabulations. (This table was prepared January 1990.)

Table 168.—College enrollment rates of high school graduates, by sex: 1960 to 1988

[Numbers in thousands]

Year	Total high school graduates			Enrolled in college <sup>1</sup>					
	Total	Males	Females	Total		Males		Females	
				Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10
1960.....	1,679	756	923	758	45.1	408	54.0	350	37.9
1961.....	1,763	790	973	847	48.0	445	56.3	402	41.3
1962.....	1,838	872	966	900	49.0	480	55.0	420	43.5
1963.....	1,741	794	947	784	45.0	415	52.3	369	39.0
1964.....	2,145	997	1,148	1,037	48.3	570	57.2	467	40.7
1965.....	2,659	1,254	1,405	1,354	50.9	718	57.3	636	45.3
1966.....	2,612	1,207	1,405	1,309	50.1	709	58.7	600	42.7
1967.....	2,525	1,142	1,383	1,311	51.9	658	57.6	653	47.2
1968.....	2,606	1,184	1,422	1,444	55.4	748	63.2	696	48.9
1969.....	2,842	1,352	1,490	1,516	53.3	812	60.1	704	47.2
1970.....	2,757	1,343	1,414	1,427	51.8	741	55.2	686	48.5
1971.....	2,872	1,369	1,503	1,535	53.4	788	57.6	747	49.7
1972.....	2,961	1,420	1,541	1,457	49.2	749	52.7	708	45.9
1973.....	3,059	1,458	1,601	1,425	46.6	730	50.1	695	43.4
1974.....	3,101	1,491	1,610	1,474	47.5	736	49.4	738	45.8
1975.....	3,186	1,513	1,673	1,615	50.7	766	52.6	819	49.0
1976.....	2,987	1,450	1,537	1,458	48.8	685	47.2	773	50.3
1977.....	3,140	1,482	1,658	1,590	50.6	773	52.2	817	49.3
1978.....	3,161	1,485	1,676	1,584	50.1	758	51.0	826	49.3
1979.....	3,160	1,474	1,686	1,559	49.3	743	50.4	816	48.4
1980.....	3,069	1,500	1,569	1,524	49.3	701	46.7	823	51.8
1981.....	3,053	1,490	1,563	1,646	53.9	816	54.8	830	53.1
1982.....	3,100	1,508	1,592	1,568	50.6	739	49.0	829	52.1
1983.....	2,964	1,390	1,574	1,562	52.7	721	51.9	841	53.4
1984.....	3,012	1,428	1,583	1,662	55.2	800	58.0	862	54.5
1985.....	2,666	1,286	1,380	1,539	57.7	754	58.6	785	56.9
1986.....	2,786	1,331	1,455	1,499	53.8	744	55.9	755	51.9
1987.....	2,647	1,278	1,369	1,503	56.8	746	58.4	757	55.3
1988.....	2,673	1,334	1,339	1,575	58.9	761	57.0	814	60.8

<sup>1</sup> Enrollment in college as of October of each year for individuals age 18 to 24 who graduated from high school during the preceding 12 months.

NOTE.—Data are based upon sample surveys of the civilian population. High school graduate data in this table differ from figures appearing in other tables because of varying survey procedures and coverage.

SOURCE: American College Testing Program, unpublished tabulations, 1987, derived from statistics collected by the U.S. Bureau of the Census; and U.S. Department of Labor, unpublished data. (This table was prepared January 1990.)

**Table 169.—Graduation, college preparation, and college application rates of 12th graders, by selected school characteristics: 1987-88**

Selected school characteristics	Public schools				Private schools			
	Number of schools with 12th graders	1987 graduation rate of fall 1986 12th graders	Percent of 12th graders in college preparatory courses, 1987-88	Average college application rate of 12th graders	Number of schools with 12th graders	1987 graduation rate of fall 1986 12th graders	Percent of 12th graders in college preparatory courses, 1987-88	Average college application rate of 12th graders
1	2	3	5	6	7	8	9	10
<b>Total</b> .....	<b>17,736</b>	<b>91.5</b>	<b>49.8</b>	<b>48.3</b>	<b>7,294</b>	<b>97.5</b>	<b>74.6</b>	<b>73.4</b>
<b>School enrollment</b>								
Less than 150.....	2,386	81.0	40.4	37.5	3,299	92.0	60.9	59.0
150 to 299.....	2,949	91.4	48.2	49.0	1,719	98.0	80.5	76.8
300 to 499.....	3,243	90.9	48.3	45.2	985	97.3	86.9	86.3
500 to 749.....	2,811	90.8	48.3	47.4	857	98.1	91.8	88.4
750 or more.....	8,348	91.9	55.5	54.0	634	98.3	92.5	90.0
<b>Percent minority students</b>								
Less than 5%.....	7,369	92.3	52.1	51.8	3,295	98.5	72.0	66.9
5% to 19%.....	4,115	91.4	51.7	50.8	2,307	98.4	82.2	77.1
20% to 49%.....	2,947	90.8	47.1	45.0	1,001	93.8	73.9	77.5
50% or more.....	3,304	91.2	44.7	40.3	891	97.8	82.7	74.9
<b>Community type <sup>1</sup></b>								
Rural/farming.....	8,230	91.7	49.2	48.5	1,442	97.3	77.8	69.3
Small city/town.....	3,723	91.4	46.8	46.4	1,788	97.9	65.1	64.8
Suburban.....	2,853	93.0	58.7	54.4	1,403	97.8	81.8	81.3
Urban.....	2,939	90.0	49.7	45.3	2,647	97.3	75.3	76.8

<sup>1</sup> Excludes other.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Schools and Staffing Survey, 1987-88." (This table was prepared July 1990.)

NOTE.—Data are based upon a sample survey and may not be strictly comparable with data reported elsewhere. Because of rounding and missing values in cells with too few sample cases, details may not add to totals.

**Table 170.—Enrollment rates of 18- to 24-year-olds in institutions of higher education, by race/ethnicity: 1967 to 1988**

Year	All students		White		Black		Hispanic origin <sup>1</sup>	
	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates
1	2	3	4	5	6	7	8	9
1967	25.5	33.7	26.9	34.5	13.0	23.3	—	—
1968	26.0	34.2	27.5	34.9	14.5	25.2	—	—
1969	27.3	35.0	28.7	35.6	16.0	27.2	—	—
1970	25.7	32.7	27.1	33.2	15.5	26.0	—	—
1971	26.2	33.2	27.2	33.5	18.2	29.2	—	—
1972	25.5	31.9	26.4	32.3	18.1	27.1	13.4	25.8
1973	24.0	29.7	25.0	30.2	16.0	24.0	16.0	29.1
1974	24.6	30.5	25.2	30.5	17.9	26.6	18.1	32.3
1975	26.3	32.5	26.9	32.4	20.7	32.0	20.4	35.5
1976	26.7	33.1	27.1	33.0	22.6	33.5	19.9	35.8
1977	26.1	32.5	26.5	32.2	21.3	31.5	17.2	31.5
1978	25.3	31.4	25.7	31.1	20.1	29.7	15.2	27.2
1979	25.0	31.2	25.6	31.2	19.6	29.5	16.6	30.2
1980	25.6	31.6	26.2	31.8	19.2	27.6	16.1	29.8
1981	26.2	32.5	26.7	32.5	19.9	28.0	16.7	29.9
1982	26.6	33.0	27.2	33.1	19.8	28.0	16.8	29.2
1983	26.2	32.5	27.0	32.9	19.2	27.0	17.2	31.4
1984	27.1	33.2	28.0	33.7	20.4	27.2	17.9	29.9
1985	27.8	33.7	28.7	34.4	19.8	26.1	16.9	26.9
1986	27.9	34.0	28.3	34.1	21.9	28.6	17.6	29.4
1987	29.6	36.4	30.2	36.6	22.8	30.0	17.6	28.5
1988	30.3	37.3	31.3	38.1	21.1	28.1	17.0	30.9

<sup>1</sup> Persons of Hispanic origin may be of any race.  
—Data not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 443. (This table was prepared July 1990.)

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population.

**Table 171.—Total undergraduate enrollment<sup>1</sup> in institutions of higher education, by sex of student, attendance status, and control of institution: Fall 1969 to fall 1988**

(In thousands)

Year	Total	Full-time	Part-time	Men	Women	Men		Women		Men		Women	
						Full-time	Part-time	Full-time	Part-time	Public	Private	Public	Private
1969	8,884	4,991	1,893	4,008	2,876	2,952	1,056	2,039	837	2,997	1,011	2,162	714
1970	7,376	5,280	2,096	4,254	3,122	3,097	1,157	2,183	939	3,241	1,013	2,387	735
1971	7,743	5,512	2,231	4,418	3,325	3,201	1,217	2,311	1,014	3,427	991	2,580	745
1972	7,941	5,488	2,453	4,429	3,512	3,121	1,308	2,367	1,145	3,467	962	2,756	756
1973	8,261	5,580	2,681	4,538	3,723	3,135	1,403	2,445	1,278	3,579	959	2,943	780
1974	8,798	5,726	3,072	4,765	4,033	3,191	1,574	2,535	1,498	3,799	966	3,232	801
1975	9,679	6,169	3,510	5,257	4,422	3,459	1,798	2,710	1,712	4,245	1,012	3,581	841
1976	9,429	6,030	3,399	4,902	4,527	3,242	1,660	2,788	1,739	3,949	953	3,668	859
1977	9,717	6,094	3,623	4,897	4,820	3,188	1,709	2,906	1,914	3,937	960	3,906	914
1978	9,691	5,967	3,724	4,766	4,925	3,072	1,694	2,895	2,034	3,812	954	3,974	951
1979	9,998	6,080	3,919	4,821	5,178	3,087	1,734	2,993	2,185	3,865	956	4,181	995
1980	10,475	6,362	4,113	5,000	5,475	3,227	1,773	3,135	2,340	4,014	985	4,427	1,048
1981	10,755	6,449	4,306	5,109	5,646	3,261	1,848	3,188	2,458	4,090	1,018	4,558	1,098
1982	10,825	6,484	4,341	5,170	5,655	3,299	1,871	3,184	2,470	4,140	1,031	4,573	1,081
1983	10,846	6,514	4,332	5,158	5,688	3,304	1,854	3,210	2,478	4,117	1,042	4,580	1,107
1984	10,618	6,348	4,270	5,007	5,611	3,195	1,812	3,153	2,459	3,990	1,017	4,504	1,107
1985	10,597	6,320	4,277	4,962	5,635	3,156	1,806	3,183	2,471	3,953	1,010	4,525	1,110
1986 <sup>2</sup>	10,798	6,352	4,446	5,018	5,780	3,146	1,871	3,206	2,575	4,002	1,015	4,658	1,122
1987 <sup>2</sup>	11,046	6,483	4,584	5,068	5,978	3,164	1,905	3,299	2,679	4,076	992	4,842	1,136
1988 <sup>3</sup>	11,304	6,636	4,668	5,134	6,170	3,205	1,929	3,431	2,739	4,112	1,022	4,697	1,183

<sup>1</sup> Includes unclassified undergraduate students.

<sup>2</sup> Data have been revised from previously published figures.

<sup>3</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities": and Integrated Postsecondary Education Data System, "Fall Enrollment" surveys. (This table was prepared February 1990.)

NOTE.—Because of rounding, details may not add to totals.

**Table 172.—Total graduate enrollment<sup>1</sup> in institutions of higher education, by sex of student, attendance status, and control of institution: Fall 1969 to fall 1988**

[In thousands]

Year	Total	Full-time	Part-time	Men	Women	Men		Women		Men		Women	
						Full-time	Part-time	Full-time	Part-time	Public	Private	Public	Private
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1969	955	363	593	590	366	252	338	111	255	393	197	273	93
1970	1,031	379	651	630	400	264	366	115	265	423	207	301	99
1971	1,012	368	621	615	394	269	346	119	275	415	200	296	100
1972	1,066	394	671	626	439	268	358	126	313	427	199	330	109
1973	1,123	410	715	848	477	273	375	137	340	442	206	358	119
1974	1,190	427	762	663	526	276	387	151	375	454	209	398	128
1975	1,263	453	810	700	563	290	410	163	400	481	219	425	138
1976	1,333	463	870	714	619	287	427	176	443	477	237	454	165
1977	1,319	473	845	700	617	289	411	184	434	458	243	443	174
1978	1,312	468	844	682	630	280	402	188	442	441	241	453	177
1979	1,309	476	833	669	640	280	389	196	444	427	242	457	182
1980	1,343	485	860	675	670	281	394	204	466	426	247	474	195
1981	1,343	484	859	674	669	277	397	207	462	419	255	468	201
1982	1,322	485	838	670	653	280	390	205	447	417	253	453	200
1983	1,340	497	843	677	663	286	391	211	452	418	259	454	209
1984	1,345	501	844	672	673	286	386	215	459	411	261	459	215
1985	1,376	509	867	677	700	289	388	220	479	414	263	477	223
1986 <sup>2</sup>	1,435	522	913	693	742	294	399	226	514	433	260	508	234
1987 <sup>2</sup>	1,452	527	925	693	759	284	400	233	525	429	264	516	243
1988 <sup>2</sup>	1,472	552	919	698	774	304	394	248	526	429	269	520	254

<sup>1</sup> Includes unclassified postbaccalaureate students.<sup>2</sup> Revised from previously published data.<sup>3</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

NOTE.—Because of rounding, details may not add to totals.

**Table 173.—Total first-professional enrollment in institutions of higher education, by sex of student, attendance status, and control of institution: Fall 1969 to fall 1988**

Year	Total	Full-time	Part-time	Men	Women	Men		Women		Men		Women	
						Full-time	Part-time	Full-time	Part-time	Public	Private	Public	Private
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1969	164,737	143,081	21,656	148,926	15,811	131,368	17,558	11,713	4,098	64,241	84,685	6,354	7,457
1970	173,411	157,384	16,027	158,649	14,762	144,270	14,379	13,114	1,648	68,956	89,693	6,501	6,281
1971	192,668	176,224	16,444	174,058	18,610	159,388	14,672	16,838	1,772	98,233	75,825	9,430	9,180
1972	206,859	190,039	16,820	183,443	23,218	168,990	14,453	21,049	2,167	79,723	103,720	10,842	12,374
1973	218,980	201,663	17,327	186,297	32,693	171,731	14,566	29,932	2,761	81,811	104,486	16,138	16,555
1974	235,452	216,329	19,123	194,079	41,373	178,926	15,153	37,403	3,970	84,271	109,808	20,085	21,288
1975	242,267	219,896	22,381	192,100	50,187	177,117	14,983	42,769	7,398	79,240	112,860	23,557	26,610
1976	244,292	220,124	24,168	189,810	54,482	171,967	17,843	48,157	6,325	77,673	111,937	23,468	31,014
1977	251,367	226,318	25,039	191,451	59,906	173,165	18,288	53,153	6,753	76,189	113,262	24,901	35,005
1978	258,904	232,540	24,364	192,221	64,683	174,906	17,315	57,634	7,049	77,748	114,473	26,839	37,844
1979	263,404	238,949	24,455	193,363	70,041	176,394	16,969	62,555	7,486	77,122	116,241	29,026	41,015
1980	277,767	251,359	26,408	199,344	78,423	181,448	17,896	69,911	6,512	81,022	118,322	33,415	45,038
1981	274,595	248,328	26,267	192,936	81,659	175,414	17,522	72,914	8,745	77,562	115,374	34,177	47,482
1982	278,425	252,108	26,317	191,200	87,225	173,841	17,259	76,167	9,058	76,273	114,927	37,183	50,042
1983	278,529	249,636	28,893	188,096	90,433	169,071	19,025	80,565	9,868	74,938	113,158	38,484	51,949
1984	276,596	249,708	26,890	184,949	93,649	166,286	18,663	83,422	10,227	73,722	111,227	40,166	53,483
1985	274,200	246,819	27,381	179,792	94,408	162,368	17,424	84,251	10,157	71,373	108,419	40,435	53,973
1986 <sup>1</sup>	270,401	245,647	24,754	173,851	96,550	158,557	15,294	87,090	9,480	70,326	103,525	41,699	54,851
1987 <sup>1</sup>	268,332	241,807	26,525	170,129	98,203	163,668	16,461	88,139	10,064	68,089	102,040	41,947	56,256
1988 <sup>2</sup>	267,096	241,836	25,260	166,685	100,411	151,182	15,503	90,854	9,757	66,194	100,491	42,741	57,870

<sup>1</sup> Data have been revised from previously published figures.<sup>2</sup> Preliminary data.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

Table 174.—Total enrollment in institutions of higher education, by State: Fall 1970 to fall 1988

State or other area	Fall 1970	Fall 1975	Fall 1980	Fall 1983	Fall 1984	Fall 1985	Fall 1986 <sup>1</sup>	Fall 1987 <sup>1</sup>	Fall 1988 <sup>2</sup>	Percent change, 1965 to 1988
1	2	3	4	5	6	7	8	9	10	11
United States.....	8,580,887	11,184,858	12,096,895	12,464,661	12,241,940	12,247,068	12,803,511	12,786,642	13,043,118	6.5
Alabama.....	103,936	164,700	164,308	171,381	171,631	179,343	161,443	183,348	199,813	11.4
Alaska.....	9,471	13,998	21,296	26,045	26,991	27,479	27,477	26,937	28,361	3.2
Arizona.....	109,819	173,542	202,716	213,437	210,029	216,654	226,595	237,233	257,766	18.9
Arkansas.....	52,039	65,547	77,607	78,702	76,777	77,958	79,162	79,273	84,550	6.5
California.....	1,257,245	1,767,932	1,790,993	1,730,847	1,665,155	1,650,439	1,727,295	1,768,170	1,753,564	6.2
Colorado.....	123,395	149,814	162,918	172,650	164,394	161,314	177,333	183,583	186,268	15.5
Connecticut.....	124,700	148,491	159,632	164,344	161,578	159,348	158,278	162,362	165,677	4.0
Delaware.....	25,260	32,389	32,939	31,945	31,872	31,883	33,895	36,637	36,260	20.0
District of Columbia.....	77,158	84,190	86,675	80,367	79,750	76,668	77,645	77,566	79,089	0.3
Florida.....	235,525	344,267	411,891	443,436	444,082	451,392	<sup>3</sup> 483,958	489,964	515,590	14.2
Georgia.....	126,511	173,585	184,159	201,453	196,849	196,828	195,124	<sup>4</sup> 224,066	230,762	17.2
Hawaii.....	36,582	46,871	47,161	52,065	49,981	49,937	51,697	52,291	52,297	4.7
Idaho.....	34,567	39,075	43,018	42,911	43,303	42,668	45,260	45,567	45,717	7.1
Illinois.....	452,148	584,089	644,245	673,084	661,114	676,689	692,018	686,954	686,974	1.5
Indiana.....	192,668	213,920	247,253	256,470	249,957	250,567	250,176	256,264	267,902	6.9
Iowa.....	108,902	121,878	140,449	152,968	153,069	152,697	155,369	158,230	181,174	5.4
Kansas.....	102,485	120,833	136,605	141,709	141,918	141,359	143,205	148,439	152,847	8.1
Kentucky.....	96,591	125,253	143,066	146,503	143,555	141,724	144,560	153,351	159,866	12.8
Louisiana.....	120,728	153,213	160,058	179,847	179,988	177,178	171,332	173,229	176,031	-0.6
Maine.....	34,134	40,443	43,264	53,347	52,714	52,201	46,229	48,992	47,903	-8.2
Maryland.....	149,607	205,570	225,526	239,232	234,302	231,649	233,482	239,362	249,079	7.5
Massachusetts.....	303,809	384,485	418,415	423,348	416,966	421,175	417,540	423,918	426,620	1.3
Michigan.....	392,726	436,405	520,131	515,780	505,334	507,293	520,392	535,486	542,580	7.0
Minnesota.....	160,788	184,756	206,691	214,219	215,566	221,162	226,558	237,212	244,706	10.8
Mississippi.....	73,967	99,962	102,364	109,728	104,339	101,160	101,104	105,510	112,872	11.8
Missouri.....	183,930	223,115	234,421	248,329	240,920	241,148	246,185	251,776	261,687	6.5
Montana.....	30,062	30,843	35,177	37,877	37,061	35,958	35,238	35,882	35,772	-0.5
Nebraska.....	66,915	74,705	89,488	95,162	97,422	97,789	100,401	100,828	104,617	7.0
Nevada.....	13,669	30,187	40,455	43,766	43,007	43,656	46,796	48,053	48,832	11.9
New Hampshire.....	29,400	41,030	46,794	53,143	53,049	52,283	53,682	56,183	55,334	5.8
New Jersey.....	218,121	297,114	321,810	314,468	305,330	297,658	295,271	294,433	302,640	1.7
New Mexico.....	44,481	51,844	58,283	66,094	66,507	69,295	60,271	63,074	79,450	16.3
New York.....	806,479	1,005,063	992,237	1,022,521	1,007,770	1,000,096	1,000,817	992,544	1,007,411	0.7
North Carolina.....	171,925	251,766	287,537	301,875	309,249	327,288	322,980	321,251	332,521	1.8
North Dakota.....	31,495	29,743	34,069	37,591	37,585	37,939	37,309	36,259	38,293	0.9
Ohio.....	378,267	436,052	489,145	535,592	518,435	514,745	520,479	516,464	541,737	5.2
Oklahoma.....	110,155	146,613	160,295	174,171	168,034	169,173	170,840	172,730	176,307	4.2
Oregon.....	122,177	145,281	157,458	141,172	141,810	137,967	144,785	152,657	156,159	13.2
Pennsylvania.....	411,044	470,536	507,716	545,112	526,669	533,196	545,921	554,370	573,927	7.6
Rhode Island.....	45,988	64,479	66,669	70,811	69,145	69,927	69,567	71,708	74,839	7.0
South Carolina.....	69,518	133,023	132,476	134,532	131,479	131,902	134,115	140,841	147,757	12.0
South Dakota.....	30,839	30,260	32,781	34,879	32,473	32,772	30,935	31,755	31,480	-4.0
Tennessee.....	135,103	181,435	204,581	207,777	200,937	194,845	187,071	202,006	206,406	5.9
Texas.....	442,225	624,390	701,391	795,741	795,337	769,992	776,023	801,771	847,192	10.1
Utah.....	61,667	87,323	93,987	103,324	101,663	103,994	106,218	106,792	107,538	3.4
Vermont.....	22,209	29,095	30,628	31,306	30,766	31,416	32,480	33,242	34,467	9.7
Virginia.....	151,915	244,871	280,504	288,588	283,109	292,416	306,318	319,026	321,218	9.8
Washington.....	183,544	227,168	303,603	229,639	230,667	231,553	242,379	245,872	253,068	9.3
West Virginia.....	63,153	78,819	81,973	83,202	79,009	76,669	76,781	77,258	80,379	4.9
Wisconsin.....	202,058	240,701	269,066	277,751	270,865	275,069	283,663	281,717	285,227	3.7
Wyoming.....	15,220	16,078	21,147	23,644	23,424	24,204	24,357	26,062	26,540	9.7
U.S. Service Schools.....	17,079	36,897	49,808	52,984	52,788	54,052	53,302	60,136	44,032	-16.5
Outlying areas.....	87,237	104,270	137,749	139	156,452	164,690	166,620	166,909	163,441	-0.9
American Samoa.....	—	389	676	845	871	758	759	897	759	0.1
Guam.....	2,719	3,600	3,217	3,436	4,432	4,601	4,477	4,072	3,619	-17.0
Northern Marianas.....	—	—	—	173	431	318	514	366	552	10.7
Puerto Rico.....	63,073	97,517	131,184	181,215	149,102	155,917	156,580	147,706	154,739	-0.8
Trust Territory of the Pacific.....	—	185	224	736	796	724	795	1,223	1,301	79.7
Virgin Islands.....	1,445	2,079	2,148	2,664	2,820	2,572	2,495	2,545	2,471	-3.9

<sup>1</sup> Revised from previously published data.<sup>2</sup> Preliminary data.<sup>3</sup> Because of imputation techniques, data are not consistent with figures for other years.<sup>4</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

Table 175.—Total enrollment in public institutions of higher education, by State: Fall 1970 to fall 1988

State or other area	Fall 1970	Fall 1975	Fall 1980	Fall 1983	Fall 1984	Fall 1985	Fall 1986 <sup>1</sup>	Fall 1987 <sup>1</sup>	Fall 1988 <sup>2</sup>	Percent change, 1986 to 1988
1	2	3	4	5	6	7	8	9	10	11
United States.....	6,428,134	8,834,508	9,457,984	9,882,734	9,477,370	9,479,273	9,713,893	9,973,254	10,156,375	7.1
Alabama.....	87,884	145,898	143,874	149,988	149,579	158,888	180,432	182,278	178,343	11.1
Alaska.....	8,563	13,218	20,581	25,064	28,005	26,510	26,354	25,991	27,145	2.4
Arizona.....	107,315	168,888	194,034	201,281	196,537	202,036	213,588	228,552	241,528	19.5
Arkansas.....	43,599	56,127	66,068	85,483	66,753	66,123	68,760	68,313	71,953	8.8
California.....	1,123,529	1,817,558	1,599,838	1,529,005	1,459,579	1,444,207	1,521,881	1,580,532	1,541,305	8.7
Colorado.....	108,562	136,370	145,598	152,419	144,885	142,031	157,483	161,594	162,902	14.7
Connecticut.....	73,391	93,567	97,768	102,720	100,754	98,618	98,828	102,561	108,419	7.9
Delaware.....	21,151	27,082	26,325	27,898	27,422	27,933	28,994	29,847	31,845	13.3
District of Columbia.....	12,184	15,159	13,900	14,270	13,450	12,747	11,800	10,851	12,108	-5.0
Florida.....	189,450	287,745	334,349	357,286	354,156	362,241	385,433	405,292	420,378	16.0
Georgia.....	101,900	142,593	140,158	154,142	150,035	148,956	147,269	<sup>3</sup> 174,355	177,851	19.4
Hawaii.....	32,963	43,278	43,269	46,241	43,808	43,248	42,593	42,748	42,529	-1.7
Idaho.....	27,072	31,296	34,491	34,418	34,918	33,696	35,532	34,791	35,119	4.3
Illinois.....	315,634	444,458	491,274	518,720	504,549	520,224	530,509	521,117	521,824	0.3
Indiana.....	138,739	159,453	189,224	196,917	192,618	193,833	194,132	201,457	209,233	7.9
Iowa.....	68,390	83,572	97,454	109,652	109,800	109,785	110,439	112,007	113,263	3.2
Kansas.....	68,215	107,781	121,987	127,168	127,211	127,220	129,841	133,383	130,700	9.0
Kentucky.....	77,240	105,265	114,884	118,323	112,702	110,836	115,058	122,019	129,225	16.6
Louisiana.....	101,127	132,054	136,703	155,470	154,846	153,173	148,297	148,492	149,349	-2.5
Maine.....	25,405	31,092	31,878	33,829	33,436	33,188	34,459	34,597	35,914	6.2
Maryland.....	118,988	176,544	195,051	206,704	201,694	198,992	199,433	203,711	212,322	6.7
Massachusetts.....	118,127	173,584	183,765	185,979	183,084	185,602	178,603	187,091	189,771	1.7
Michigan.....	339,025	436,955	454,147	444,229	433,134	434,270	445,731	459,313	464,275	6.9
Minnesota.....	130,567	148,630	162,379	168,259	168,726	173,984	178,790	186,096	191,186	9.9
Mississippi.....	64,968	89,919	90,601	97,864	92,641	90,704	89,925	93,284	99,997	10.2
Missouri.....	132,540	158,198	185,179	177,061	170,092	168,629	168,883	171,248	178,799	5.9
Montana.....	27,287	27,798	31,178	33,744	32,718	32,032	31,192	31,858	31,287	-2.3
Nebraska.....	51,454	61,240	73,509	77,809	80,221	81,202	84,282	84,901	87,783	8.1
Nevada.....	13,578	30,010	40,280	43,379	42,700	43,368	48,490	47,791	48,846	12.2
New Hampshire.....	15,979	24,205	24,119	26,456	27,323	26,869	26,731	30,899	30,363	13.9
New Jersey.....	145,373	227,764	247,028	250,661	243,388	237,297	235,734	235,408	243,787	2.7
New Mexico.....	40,795	47,805	55,077	63,355	64,261	66,059	78,568	81,298	77,394	17.2
New York.....	449,437	613,842	583,251	579,465	567,151	563,251	565,244	567,046	583,642	3.7
North Carolina.....	123,781	201,288	228,154	242,034	249,417	267,044	262,638	258,930	267,070	0.0
North Dakota.....	30,192	27,954	31,709	34,770	34,441	34,802	34,898	33,555	35,823	2.4
Ohio.....	281,099	338,931	381,765	395,209	381,810	378,184	384,789	391,831	401,504	5.9
Oklahoma.....	91,438	124,372	137,188	151,288	145,822	148,827	149,043	148,906	151,409	3.1
Oregon.....	106,483	129,785	140,102	122,603	123,231	119,812	125,884	133,458	136,607	14.2
Pennsylvania.....	232,982	287,438	292,499	307,387	301,172	300,523	304,190	311,210	323,525	7.7
Rhode Island.....	25,527	32,311	35,052	35,581	34,507	35,389	35,507	36,317	38,989	10.2
South Carolina.....	47,101	107,690	107,683	108,779	105,213	105,854	108,191	113,352	119,926	13.3
South Dakota.....	23,936	21,925	24,328	26,158	24,023	23,339	24,036	24,147	23,898	2.4
Tennessee.....	98,897	139,526	158,835	159,061	152,797	147,951	149,445	154,104	155,609	5.2
Texas.....	365,522	542,212	613,552	702,847	703,717	677,192	685,544	709,255	753,194	11.2
Utah.....	49,588	58,536	59,598	68,255	67,215	69,426	73,072	74,453	74,432	7.2
Vermont.....	12,536	17,145	17,984	18,656	18,192	18,844	18,734	19,380	19,967	6.0
Virginia.....	123,279	215,253	248,500	251,099	245,104	250,754	265,687	275,583	270,372	7.8
Washington.....	162,718	202,531	278,028	199,391	200,657	201,532	212,268	214,207	219,103	8.7
West Virginia.....	51,363	68,117	71,228	71,715	68,384	66,531	67,078	67,959	70,381	5.8
Wisconsin.....	170,374	210,535	235,179	241,788	235,084	238,735	244,848	240,533	241,858	1.3
Wyoming.....	15,220	18,078	21,121	23,844	23,424	24,204	23,735	25,441	25,911	7.1
U.S. Service Schools.....	17,079	36,897	49,808	52,994	52,788	54,052	53,302	60,136	44,032	-19.5
Outlying areas.....	46,680	59,923	60,692	67,611	65,134	65,411	67,979	66,785	67,431	3.1
American Samoa.....	—	889	976	845	871	758	759	897	759	0.1
Guam.....	2,719	3,800	3,217	3,436	4,432	4,601	4,477	4,072	3,819	-17.0
Northern Marianas.....	—	—	—	173	431	318	514	366	352	—
Puerto Rico.....	42,510	53,170	54,127	59,557	55,784	58,438	58,939	57,682	58,729	4.1
Trust Territory of the Pacific.....	—	185	224	736	798	724	795	1,223	1,301	79.7
Virgin Islands.....	1,445	2,079	2,148	2,864	2,820	2,572	2,495	2,545	2,471	-3.9

<sup>1</sup> Revised from previously published data.<sup>2</sup> Preliminary data.<sup>3</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

Table 176.—Total enrollment in private institutions of higher education, by State: Fall 1970 to fall 1988

State or other area	Fall 1970	Fall 1975	Fall 1980	Fall 1983	Fall 1984	Fall 1985	Fall 1986 <sup>1</sup>	Fall 1987 <sup>1</sup>	Fall 1988 <sup>2</sup>	Percent change, 1985 to 1988
1	2	3	4	5	6	7	8	9	10	11
United States.....	2,162,763	2,350,361	2,639,501	2,781,927	2,764,570	2,767,782	2,789,616	2,763,366	2,896,743	4.3
Alabama.....	18,052	19,002	20,632	21,395	22,052	20,655	21,011	21,070	23,470	13.6
Alaska.....	908	780	735	961	966	969	1,123	946	1,216	25.5
Arizona.....	2,304	4,676	8,662	12,156	13,462	14,616	13,027	6,661	16,256	9.7
Arkansas.....	8,440	9,420	11,539	11,219	12,024	11,635	10,422	10,960	12,597	6.4
California.....	133,718	170,374	191,155	201,642	205,576	206,232	205,614	207,636	212,259	2.9
Colorado.....	14,633	13,444	17,316	20,231	19,509	19,283	19,870	21,969	23,366	21.3
Connecticut.....	51,309	54,924	61,644	61,624	60,622	60,732	59,450	59,621	59,256	-2.4
Delaware.....	4,109	5,307	4,614	4,047	4,450	3,950	5,001	6,990	6,615	67.5
District of Columbia.....	64,964	69,031	72,775	66,097	66,300	66,121	65,645	66,715	66,991	1.3
Florida.....	46,075	56,522	77,542	96,150	89,906	89,151	<sup>3</sup> 96,525	64,672	95,212	6.6
Georgia.....	24,811	30,992	44,001	47,311	46,834	47,670	47,855	49,711	52,911	10.5
Hawaii.....	3,599	3,393	3,912	5,624	6,175	6,691	9,104	9,545	9,766	46.0
Idaho.....	7,495	7,777	8,527	8,493	8,385	9,002	9,726	10,776	10,566	17.7
Illinois.....	136,512	139,631	152,971	156,364	156,565	156,465	161,509	165,637	167,350	5.6
Indiana.....	55,929	54,367	58,029	59,553	57,339	56,734	56,044	54,607	56,669	3.4
Iowa.....	40,512	36,106	42,995	43,316	43,269	43,132	44,930	46,223	47,911	11.1
Kansas.....	14,270	13,072	14,618	14,543	14,705	14,139	13,364	13,056	14,147	0.1
Kentucky.....	21,351	19,988	26,162	30,160	30,853	30,858	29,504	31,337	30,643	-0.8
Louisiana.....	19,601	21,159	23,355	24,177	25,142	24,003	25,035	24,737	26,682	11.2
Maine.....	8,729	9,351	11,366	10,516	10,278	10,013	11,770	12,395	11,969	-36.9
Maryland.....	30,619	29,026	30,475	32,526	32,406	32,657	34,059	35,651	36,757	12.6
Massachusetts.....	187,682	210,921	234,650	237,369	235,662	235,573	236,937	236,625	237,649	1.0
Michigan.....	53,101	59,750	65,964	71,531	72,200	73,023	74,661	76,173	78,305	7.2
Minnesota.....	30,221	36,126	44,312	45,960	46,840	47,178	47,768	51,116	53,520	13.4
Mississippi.....	8,999	10,043	11,703	11,664	11,898	10,478	11,179	12,226	12,675	22.9
Missouri.....	51,390	64,919	69,242	71,266	70,826	72,317	77,302	80,532	82,666	14.6
Montana.....	2,775	3,045	3,999	4,133	4,345	3,926	4,046	4,024	4,465	14.2
Nebraska.....	15,461	13,465	15,979	17,553	17,201	16,567	16,139	15,927	16,834	1.5
Nevada.....	93	177	175	369	307	266	306	272	186	-35.4
New Hampshire.....	13,421	16,825	22,675	26,667	25,726	25,614	25,151	25,264	24,971	-2.5
New Jersey.....	70,748	69,350	74,582	63,607	61,942	60,361	59,537	59,025	56,873	-2.5
New Mexico.....	3,666	4,339	3,206	2,739	2,246	2,236	1,705	1,776	2,066	-6.1
New York.....	357,042	391,221	426,966	443,056	440,619	436,847	435,573	425,496	423,569	-3.0
North Carolina.....	48,184	50,496	59,393	59,641	59,832	60,244	60,342	62,321	65,451	6.4
North Dakota.....	1,303	1,769	2,360	2,621	3,144	3,137	2,411	2,704	2,670	-14.9
Ohio.....	95,168	99,121	107,380	140,363	136,625	135,561	135,690	126,633	140,233	3.4
Oklahoma.....	18,717	22,241	23,107	22,663	22,212	22,346	21,797	23,624	24,896	11.4
Oregon.....	13,694	15,496	17,356	18,569	18,579	18,355	18,921	19,199	19,562	6.5
Pennsylvania.....	176,062	163,100	215,217	237,725	227,497	232,675	241,731	243,160	250,402	7.6
Rhode Island.....	20,371	32,166	31,617	35,230	34,636	34,538	34,060	35,391	35,650	3.8
South Carolina.....	22,417	25,333	24,793	27,753	26,266	26,046	25,924	27,469	27,631	6.6
South Dakota.....	8,703	8,335	8,433	8,721	6,450	6,433	6,669	7,606	7,562	-19.8
Tennessee.....	36,206	41,909	47,746	48,716	46,140	46,894	47,626	47,902	50,797	6.3
Texas.....	76,703	82,176	87,839	92,694	91,620	92,500	90,479	92,516	93,996	1.6
Utah.....	32,099	30,767	34,369	35,069	34,646	34,566	33,146	32,339	33,106	-4.2
Vermont.....	9,673	11,950	12,644	12,660	12,594	12,572	13,726	13,662	14,500	15.3
Virginia.....	26,636	29,418	34,004	37,469	38,005	41,662	42,631	43,443	50,644	22.0
Washington.....	20,826	24,637	27,575	30,246	29,610	30,021	30,111	31,665	33,965	13.2
West Virginia.....	11,790	10,502	10,745	11,487	10,625	10,126	9,703	9,297	9,996	-1.3
Wisconsin.....	31,664	30,166	33,907	35,963	35,761	36,334	36,705	41,164	43,369	19.4
Wyoming.....	—	—	26	—	—	—	622	621	629	(4)
Outlying areas.....	20,557	44,347	77,057	101,656	93,316	99,479	97,641	90,024	96,010	-3.5
American Samoa.....	—	—	—	—	—	—	—	—	—	—
Guam.....	—	—	—	—	—	—	—	—	—	—
Northern Marianas.....	—	—	—	—	—	—	—	—	—	—
Puerto Rico.....	20,557	44,347	77,057	101,556	93,316	99,479	97,641	90,024	96,010	-3.5
Trust Territory of the Pacific.....	—	—	—	—	—	—	—	—	—	—
Virgin Islands.....	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> Revised from previously published data.

<sup>2</sup> Preliminary data.

<sup>3</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>4</sup> Percentage not shown because of introduction of a new institution in 1986.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

**Table 177.—Total enrollment in all institutions of higher education, by attendance status, sex, and State:  
Fall 1987 and fall 1988**

State or other area	Fall 1987 <sup>1</sup>					Fall 1988 <sup>2</sup>				
	Total	Full-time		Part-time		Total	Full-time		Part-time	
		Men	Women	Men	Women		Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
United States.....	12,766,643	3,610,688	3,620,197	2,321,168	3,214,389	13,043,118	3,670,110	3,770,361	2,338,064	3,274,553
Alabama.....	183,348	61,384	66,438	28,221	30,305	199,813	64,358	71,073	30,047	34,337
Alaska.....	26,937	4,063	4,388	7,313	11,173	28,361	4,672	5,135	7,494	11,060
Arizona.....	237,233	50,125	44,928	81,044	81,136	257,786	57,558	51,068	63,522	85,638
Arkansas.....	79,273	26,647	29,805	8,114	14,707	84,550	27,656	32,299	6,903	15,492
California.....	1,788,170	387,127	386,535	443,090	571,418	1,753,564	381,188	389,789	427,318	555,271
Colorado.....	183,583	56,352	53,059	30,488	43,684	186,288	57,348	54,591	30,701	43,150
Connecticut.....	162,382	40,098	42,290	31,677	48,327	165,677	40,741	43,101	31,451	50,384
Delaware.....	36,637	10,002	12,553	5,759	8,323	38,260	10,355	13,194	5,991	8,720
District of Columbia.....	77,566	22,983	24,718	14,483	15,382	79,089	23,075	28,006	14,147	15,861
Florida.....	489,964	116,717	114,428	107,802	151,017	515,590	125,224	127,456	109,262	153,648
Georgia.....	224,066	71,401	74,870	33,896	44,299	230,762	74,342	78,867	33,296	44,267
Hawaii.....	52,291	14,334	15,223	10,401	12,333	52,297	14,515	15,714	10,006	12,082
Idaho.....	15,407	45,567	15,335	8,115	8,710	45,717	15,589	15,681	6,045	6,202
Illinois.....	686,954	175,321	171,195	137,767	202,671	688,974	174,832	171,928	140,732	201,582
Indiana.....	256,264	83,987	79,935	39,925	52,417	267,902	87,349	85,750	40,586	54,209
Iowa.....	156,230	60,525	54,483	17,320	25,902	161,174	60,202	55,803	17,420	27,749
Kansas.....	146,439	43,900	40,476	24,200	37,863	152,647	45,113	42,496	24,940	40,298
Kentucky.....	153,351	46,190	51,339	20,280	35,542	159,868	47,609	54,888	20,805	36,586
Louisiana.....	173,229	61,699	64,502	18,344	26,484	176,031	60,978	67,462	18,408	29,185
Maine.....	46,992	13,910	14,832	8,689	11,581	47,903	14,337	15,443	6,865	11,258
Maryland.....	239,362	53,893	57,868	51,350	78,251	249,079	55,310	59,617	53,995	80,157
Massachusetts.....	423,916	126,361	139,304	64,919	93,332	426,620	126,483	141,814	64,333	94,010
Michigan.....	535,486	132,319	138,187	113,128	151,852	542,580	133,508	143,271	112,240	152,587
Minnesota.....	237,212	71,907	72,380	37,678	55,249	244,708	72,704	75,418	38,229	58,355
Mississippi.....	105,510	37,655	41,735	10,266	15,854	112,872	39,486	47,458	11,116	16,512
Missouri.....	251,776	73,695	71,654	44,314	62,135	261,667	75,375	75,459	45,642	65,191
Montana.....	35,982	12,956	11,802	4,548	6,582	35,772	13,113	12,711	3,931	6,017
Nebraska.....	100,828	29,169	27,616	17,837	26,206	104,617	29,366	28,764	18,970	27,517
Nevada.....	48,063	7,232	8,949	13,974	19,908	48,832	7,739	7,612	14,364	19,117
New Hampshire.....	56,163	17,113	17,937	9,133	12,090	55,334	17,524	18,449	8,019	11,342
New Jersey.....	294,433	73,063	74,847	60,975	65,548	302,640	73,730	77,404	62,543	68,983
New Mexico.....	83,074	20,927	19,910	18,083	24,154	79,450	21,782	21,775	14,351	21,562
New York.....	992,544	296,636	323,826	147,883	224,199	1,007,411	301,251	330,078	146,915	229,167
North Carolina.....	321,251	93,691	107,260	49,026	71,274	332,521	96,547	111,792	49,852	74,330
North Dakota.....	36,259	15,932	13,218	3,117	3,984	38,293	16,530	14,110	3,405	4,248
Ohio.....	518,484	157,672	157,321	92,198	111,273	541,737	160,808	165,590	103,088	112,251
Oklahoma.....	172,730	51,162	47,721	30,904	42,943	176,307	50,875	50,359	30,676	44,296
Oregon.....	152,657	43,533	40,487	29,027	39,610	156,159	48,292	44,616	27,509	37,542
Pennsylvania.....	554,370	189,472	182,185	74,991	107,722	573,927	185,414	183,613	78,956	125,944
Rhode Island.....	71,708	22,493	23,093	10,497	15,825	74,839	22,939	23,730	10,929	17,241
South Carolina.....	140,841	45,525	50,985	17,366	27,065	147,757	46,761	53,306	18,177	29,513
South Dakota.....	31,755	11,176	11,290	3,387	5,902	31,460	11,301	11,639	2,973	5,547
Tennessee.....	202,006	63,909	66,516	29,506	42,075	206,408	66,596	70,912	28,584	40,314
Texas.....	801,771	225,793	213,699	180,368	201,891	847,192	232,538	229,796	167,260	217,578
Utah.....	106,792	36,805	31,057	19,625	19,105	107,538	36,941	31,683	19,912	19,002
Vermont.....	33,242	11,120	12,019	3,080	7,043	34,467	11,447	12,219	3,291	7,510
Virginia.....	319,026	82,914	92,202	57,803	66,027	321,216	85,334	97,422	55,977	62,483
Washington.....	245,872	70,157	71,121	41,270	63,324	253,068	71,531	74,607	41,821	64,929
West Virginia.....	77,256	24,574	25,312	9,421	17,949	80,379	26,168	26,648	9,579	17,984
Wisconsin.....	281,717	90,785	94,096	41,382	55,454	285,227	90,528	97,247	41,002	56,450
Wyoming.....	26,062	8,012	7,060	3,967	7,003	26,540	8,071	7,613	3,897	6,959
U.S. Service Schools.....	60,136	50,871	8,540	219	506	44,032	38,627	5,377	7	21
Outlying areas.....	156,809	48,192	73,901	12,662	22,064	163,441	48,964	77,010	13,661	23,566
American Samoa.....	697	211	173	169	324	759	196	164	180	219
Guam.....	4,072	787	917	1,224	1,144	3,619	748	928	1,115	1,028
Northern Marianas.....	366	57	53	104	152	352	87	47	101	137
Puerto Rico.....	147,706	46,613	71,810	10,458	18,825	154,739	47,276	75,051	11,791	20,621
Trust Territory of the Pacific.....	1,223	318	369	209	327	1,301	492	254	260	295
Virgin Islands.....	2,545	206	579	478	1,282	2,471	165	566	434	1,286

<sup>1</sup> Data have been revised from previously published figures.

<sup>2</sup> Preliminary data.

<sup>3</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

**Table 178.—Total enrollment in public institutions of higher education, by attendance status, sex, and State: Fall 1987 and fall 1988**

State or other area	Fall 1987 <sup>1</sup>					Fall 1988 <sup>2</sup>				
	Total	Full-time		Part-time		Total	Full-time		Part-time	
		Men	Women	Men	Women		Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
United States.....	9,973,254	2,626,174	2,640,868	1,947,292	2,758,900	10,156,375	2,655,468	2,753,630	1,951,347	2,795,632
Alabama.....	162,278	52,940	57,138	23,956	26,244	178,343	55,549	60,851	28,198	31,745
Alaska.....	25,991	3,905	4,040	7,184	10,962	27,145	4,368	4,785	7,187	10,785
Arizona.....	228,552	44,688	42,836	80,390	80,838	241,528	48,325	48,586	82,658	83,959
Arkansas.....	68,313	22,278	24,828	7,577	13,634	71,953	22,658	26,499	8,395	14,401
California.....	1,580,532	312,487	318,663	407,439	541,923	1,541,305	302,847	317,762	394,125	526,571
Colorado.....	181,594	48,453	45,511	27,266	40,364	182,902	49,113	46,972	26,860	39,957
Connecticut.....	102,581	22,170	24,482	20,599	35,310	106,419	22,747	25,371	20,793	37,506
Delaware.....	29,847	8,484	10,577	4,397	8,189	31,645	9,028	11,309	4,704	8,604
District of Columbia.....	10,851	1,781	1,782	3,419	3,909	12,108	2,003	2,003	3,586	4,518
Florida.....	405,292	84,068	89,710	92,985	138,529	420,378	88,225	97,784	94,192	140,177
Georgia.....	<sup>3</sup> 174,355	52,214	53,587	29,412	39,142	177,851	53,781	57,002	28,323	38,745
Hawaii.....	42,748	11,143	12,427	8,251	10,925	42,529	11,072	12,714	8,019	10,724
Idaho.....	34,791	11,849	10,203	5,209	7,850	35,119	11,713	10,595	5,456	7,355
Illinois.....	521,117	119,763	118,880	111,705	170,769	521,624	118,223	118,312	114,512	170,577
Indiana.....	201,457	60,279	59,478	38,304	45,396	209,233	62,155	62,842	36,928	47,308
Iowa.....	112,007	42,754	37,829	12,679	18,945	113,263	42,402	38,517	13,005	19,339
Kansas.....	133,383	39,069	35,532	22,925	35,857	138,700	39,884	37,213	23,543	38,080
Kentucky.....	122,019	35,284	39,513	17,297	29,925	129,225	36,890	43,059	18,025	31,261
Louisiana.....	148,492	52,192	55,066	16,013	25,221	149,349	50,905	56,808	15,961	25,875
Maine.....	34,597	9,884	9,547	5,794	9,372	35,914	10,267	10,185	8,050	9,432
Maryland.....	203,711	44,402	47,258	44,870	67,391	212,322	45,883	48,878	46,829	70,732
Massachusetts.....	187,091	48,252	53,975	33,743	53,121	188,771	48,320	54,723	33,983	53,745
Michigan.....	459,313	110,873	112,289	101,937	134,414	464,275	111,413	118,151	100,918	135,783
Minnesota.....	186,096	52,048	50,690	33,892	49,666	191,126	52,828	53,037	33,589	51,752
Mississippi.....	93,284	34,094	36,669	8,697	13,594	99,997	35,753	42,388	7,879	13,977
Missouri.....	171,248	47,713	48,830	29,399	45,304	178,799	49,566	51,633	30,422	47,178
Montana.....	31,858	11,956	10,543	3,797	5,562	31,287	12,004	11,077	3,180	5,026
Nebraska.....	84,901	23,584	21,797	18,175	23,345	87,783	23,841	22,528	17,341	24,273
Nevada.....	47,791	7,098	8,899	13,938	19,656	48,648	7,833	7,575	14,342	19,096
New Hampshire.....	30,899	8,635	9,735	5,742	8,787	30,363	8,873	9,955	4,748	8,789
New Jersey.....	235,408	54,812	58,178	50,374	72,244	243,787	55,473	60,301	52,218	75,777
New Mexico.....	81,298	20,353	19,392	17,768	23,785	77,394	21,166	21,170	13,826	21,232
New York.....	567,046	151,741	174,299	93,745	147,261	583,842	155,890	160,920	94,351	152,981
North Carolina.....	258,930	68,165	79,985	45,410	65,370	267,070	73,111	83,049	45,870	68,040
North Dakota.....	33,555	14,645	12,035	2,971	3,704	35,623	15,523	13,027	3,206	3,667
Ohio.....	391,831	118,218	118,403	66,482	90,748	401,504	118,451	123,531	87,898	91,624
Oklahoma.....	146,906	41,557	39,855	27,783	39,711	151,409	40,865	41,875	27,883	40,986
Oregon.....	133,458	35,240	33,449	27,253	37,518	136,607	37,881	37,314	25,947	35,485
Pennsylvania.....	311,210	100,060	97,700	45,038	68,412	323,525	103,240	103,231	48,173	70,981
Rhode Island.....	36,317	8,484	10,620	8,135	11,078	38,989	8,813	10,994	8,645	12,737
South Carolina.....	113,352	35,238	37,738	15,562	24,814	119,926	36,198	39,931	18,538	27,259
South Dakota.....	24,147	9,126	8,052	2,689	4,300	23,898	9,291	8,452	2,256	3,899
Tennessee.....	154,104	44,711	45,853	26,390	37,150	155,809	46,282	48,806	25,339	35,182
Texas.....	709,255	190,147	180,336	148,107	190,685	753,194	196,564	194,759	155,324	206,547
Utah.....	74,453	24,463	19,540	15,661	14,789	74,432	24,370	20,545	15,225	14,292
Vermont.....	19,380	8,012	8,581	2,124	4,663	19,967	8,167	6,485	2,321	4,974
Virginia.....	275,583	87,709	72,898	54,462	80,514	270,372	88,770	75,792	50,307	75,503
Washington.....	214,207	59,514	58,818	37,350	58,527	219,103	60,041	81,240	37,847	59,975
West Virginia.....	87,959	21,583	21,708	8,451	18,217	70,381	22,843	22,982	8,523	16,033
Wisconsin.....	240,533	78,310	79,514	38,720	47,969	241,858	75,778	81,545	36,019	48,518
Wyoming.....	25,441	7,397	7,074	3,967	7,003	25,911	7,445	7,810	3,897	6,959
U.S. Service Schools.....	60,136	50,871	8,540	219	506	44,032	38,827	5,377	7	21
Outlying areas.....	66,785	19,803	30,474	5,667	10,641	87,431	19,861	31,392	5,600	10,678
American Samoa.....	897	211	173	189	324	759	196	164	160	219
Guam.....	4,072	787	917	1,224	1,144	3,819	748	928	1,115	1,026
Northern Marianas.....	360	57	53	104	152	352	87	47	101	137
Puerto Rico.....	57,682	18,224	28,383	3,683	7,412	58,729	18,173	29,433	3,410	7,713
Trust Territory of the Pacific.....	1,223	318	369	209	327	1,301	492	254	260	295
Virgin Islands.....	2,545	206	579	478	1,292	2,471	185	566	434	1,266

<sup>1</sup> Data have been revised from previously published figures.

<sup>2</sup> Preliminary data.

<sup>3</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

**Table 179.—Total enrollment in private institutions of higher education, by attendance status, sex, and State:  
Fall 1987 and fall 1988**

State or other area	Fall 1987 <sup>1</sup>					Fall 1988 <sup>2</sup>				
	Total <sup>3</sup>	Full-time		Part-time		Total	Full-time		Part-time	
		Men	Women	Men	Women		Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
United States.....	2,793,388	984,714	878,308	373,878	455,488	2,806,743	1,004,644	1,016,731	388,747	478,821
Alabama.....	21,070	6,444	9,300	1,265	2,081	23,470	6,807	10,222	1,849	2,592
Alaska.....	946	258	348	129	211	1,216	284	350	307	275
Arizona.....	6,681	5,437	2,092	654	498	16,258	9,233	4,482	864	1,679
Arkansas.....	10,980	4,371	4,979	537	773	12,597	5,198	5,800	508	1,091
California.....	207,838	74,640	67,852	35,651	29,495	212,259	76,339	72,027	33,193	28,700
Colorado.....	21,989	7,899	7,548	3,222	3,320	23,388	8,733	7,619	3,641	3,193
Connecticut.....	59,821	17,928	17,798	11,076	13,017	59,258	17,994	17,730	10,658	12,678
Delaware.....	6,990	1,516	1,976	1,362	1,134	6,615	1,327	1,665	1,287	2,116
District of Columbia.....	66,715	21,222	22,968	11,094	11,473	66,981	21,072	24,003	10,561	11,345
Florida.....	64,672	32,649	24,716	14,617	12,488	95,212	36,999	29,672	15,070	13,471
Georgia.....	49,711	19,187	21,083	4,284	5,157	52,911	20,561	21,865	4,983	5,522
Hawaii.....	9,545	3,191	2,798	2,150	1,408	9,768	3,443	3,000	1,987	1,338
Idaho.....	10,776	3,758	5,132	826	1,060	10,598	3,676	5,266	599	847
Illinois.....	165,837	55,558	52,315	26,082	31,902	167,350	56,609	53,518	28,220	31,006
Indiana.....	54,607	23,708	20,457	3,621	7,021	58,669	25,194	22,918	3,658	6,901
Iowa.....	46,223	17,771	16,854	4,641	6,957	47,911	17,800	17,288	4,415	6,410
Kansas.....	13,056	4,831	4,944	1,275	2,006	14,147	5,249	5,263	1,397	2,218
Kentucky.....	31,332	10,906	11,826	2,963	5,617	30,643	10,729	11,629	2,780	5,305
Louisiana.....	24,737	9,436	9,436	2,331	3,263	26,682	10,071	10,854	2,447	3,310
Maine.....	12,395	4,028	5,285	695	2,189	11,969	4,070	5,278	615	1,826
Maryland.....	35,651	9,491	10,610	6,680	6,870	36,757	9,427	10,739	7,186	9,425
Massachusetts.....	236,825	80,109	85,329	31,176	40,211	237,849	80,143	87,091	30,360	40,266
Michigan.....	76,173	21,646	25,698	11,191	17,436	78,305	22,693	27,120	11,322	17,770
Minnesota.....	51,116	19,859	21,990	3,984	5,583	53,520	19,676	22,361	4,660	6,603
Mississippi.....	12,226	3,561	4,836	1,589	2,260	12,675	3,733	5,070	1,537	2,536
Missouri.....	60,532	25,982	22,804	14,915	16,831	62,668	25,809	23,826	15,220	16,013
Montana.....	4,024	994	1,259	751	1,020	4,485	1,109	1,634	751	991
Nebraska.....	15,927	5,585	5,619	1,662	2,661	16,834	5,725	6,236	1,629	3,244
Nevada.....	272	134	50	38	52	188	108	37	22	21
New Hampshire.....	25,264	8,476	8,102	3,391	5,293	24,971	8,651	8,494	3,273	4,553
New Jersey.....	59,025	18,451	18,669	10,601	13,304	58,673	18,257	17,103	10,327	13,166
New Mexico.....	1,776	574	516	315	369	2,056	586	605	525	330
New York.....	425,498	144,895	149,527	54,138	76,938	423,569	145,581	149,158	52,564	76,266
North Carolina.....	62,321	25,526	27,275	3,616	5,904	65,451	26,436	28,743	3,962	6,290
North Dakota.....	2,704	1,067	1,181	146	290	2,870	1,007	1,083	199	361
Ohio.....	126,833	41,454	38,916	25,736	20,525	140,233	42,367	42,059	35,190	20,627
Oklahoma.....	23,824	9,605	7,866	3,121	3,232	24,896	9,610	6,684	3,095	3,308
Oregon.....	19,199	6,293	7,036	1,774	2,094	19,552	6,411	7,502	1,562	2,077
Pennsylvania.....	243,160	89,412	84,465	29,953	39,310	250,402	82,174	80,382	32,783	55,083
Rhode Island.....	35,391	14,008	12,473	4,362	4,547	35,650	14,326	12,736	4,284	4,604
South Carolina.....	27,489	10,287	13,147	1,804	2,251	27,831	10,563	13,375	1,639	2,264
South Dakota.....	7,808	2,050	3,238	716	1,802	7,562	2,010	3,187	717	1,648
Tennessee.....	47,902	19,198	20,663	3,116	4,925	50,797	20,314	22,106	3,245	5,132
Texas.....	92,516	35,648	33,363	12,281	11,226	93,998	35,974	35,037	11,956	11,031
Utah.....	32,339	12,342	11,517	4,164	4,316	33,108	12,571	11,138	4,667	4,710
Vermont.....	13,982	5,108	5,458	936	2,380	14,500	5,260	5,734	970	2,536
Virginia.....	43,443	15,205	19,364	3,341	5,513	50,644	16,564	21,630	5,670	6,980
Washington.....	31,665	10,643	12,305	3,920	4,797	33,985	11,490	13,567	3,974	4,854
West Virginia.....	9,297	2,991	3,604	970	1,732	9,998	3,325	3,668	1,056	1,951
Wisconsin.....	41,184	14,475	14,582	4,682	7,465	43,369	14,752	15,702	4,983	7,932
Wyoming.....	821	615	6	0	0	829	626	3	0	0
Outlying areas.....	90,024	26,369	43,427	6,795	11,413	96,010	29,103	45,616	6,361	12,908
American Samoa.....	—	—	—	—	—	—	—	—	—	—
Guam.....	—	—	—	—	—	—	—	—	—	—
Northern Marianas.....	—	—	—	—	—	—	—	—	—	—
Puerto Rico.....	90,024	26,369	43,427	6,795	11,413	96,010	29,103	45,616	6,361	12,908
Trust Territory of the Pacific.....	—	—	—	—	—	—	—	—	—	—
Virgin Islands.....	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> Data have been revised from previously published figures.

<sup>2</sup> Preliminary data.

<sup>3</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

**Table 180.—Total enrollment in institutions of higher education, by control and type of institution and State: Fall 1987 and fall 1988**

State or other area	Fall 1987 <sup>1</sup>				Fall 1988 <sup>2</sup>			
	Public 4-year	Public 2-year	Private 4-year	Private 2-year	Public 4-year	Public 2-year	Private 4-year	Private 2-year
1	2	3	4	5	6	7	8	9
<b>United States.....</b>	<b>5,432,200</b>	<b>4,641,064</b>	<b>2,668,220</b>	<b>235,168</b>	<b>5,643,967</b>	<b>4,612,368</b>	<b>2,631,021</b>	<b>265,722</b>
Alabama.....	105,914	56,364	17,468	3,602	115,700	60,643	18,777	4,693
Alaska.....	11,341	14,660	946	—	22,115	5,030	1,218	—
Arizona.....	89,373	139,179	8,888	1,793	93,146	148,382	14,269	1,969
Arkansas.....	53,685	14,428	9,025	1,935	55,352	18,601	9,812	2,785
California.....	503,253	1,077,279	196,348	11,290	484,181	1,057,124	201,539	10,720
Colorado.....	106,571	55,023	17,708	4,281	105,270	57,632	18,347	5,039
Connecticut.....	62,024	40,537	58,090	1,731	64,501	41,918	57,467	1,791
Delaware.....	21,466	8,191	8,990	—	22,328	9,317	8,815	—
District of Columbia.....	10,851	—	66,715	—	12,108	—	66,981	—
Florida.....	150,918	254,378	80,590	4,082	157,549	262,829	90,055	5,157
Georgia.....	124,991	<sup>3</sup> 49,364	41,651	8,060	129,892	48,159	42,560	10,351
Hawaii.....	22,404	20,342	9,545	—	22,550	19,973	9,768	—
Idaho.....	29,781	5,010	2,397	8,379	29,779	5,340	2,480	8,138
Illinois.....	197,057	324,060	156,401	9,436	193,368	328,236	157,965	9,385
Indiana.....	166,736	34,721	51,397	3,410	173,499	35,734	55,431	3,238
Iowa.....	69,335	42,872	42,898	3,325	68,872	44,391	45,017	2,894
Kansas.....	85,848	47,537	11,809	1,247	87,368	51,332	12,633	1,314
Kentucky.....	93,857	26,162	23,236	8,096	97,895	31,330	23,170	7,473
Louisiana.....	134,148	14,344	23,596	1,141	133,830	15,519	24,170	2,512
Maine.....	29,325	5,272	11,437	958	30,198	5,718	10,919	1,070
Maryland.....	107,196	96,515	34,799	852	109,281	103,041	35,882	875
Massachusetts.....	113,440	73,651	220,962	15,843	112,800	75,971	223,640	14,209
Michigan.....	244,288	215,025	72,557	3,818	249,457	214,818	73,399	4,906
Minnesota.....	132,318	53,780	45,306	4,810	133,905	57,281	48,821	4,899
Mississippi.....	50,382	42,902	9,914	2,312	53,344	48,853	10,258	2,817
Missouri.....	111,911	59,335	77,303	3,229	118,420	62,379	80,065	2,763
Montana.....	27,234	4,624	3,312	712	27,403	3,964	3,305	1,180
Nebraska.....	55,552	29,349	15,474	453	57,107	30,878	18,370	484
Nevada.....	23,425	24,366	247	25	25,179	23,487	181	25
New Hampshire.....	22,812	6,287	23,058	2,206	23,686	8,877	24,187	804
New Jersey.....	131,859	103,549	56,471	2,554	133,123	110,644	55,937	2,936
New Mexico.....	47,471	33,627	1,778	—	47,396	29,998	2,056	—
New York.....	342,436	224,810	394,534	30,964	352,554	231,288	393,310	30,259
North Carolina.....	135,340	123,590	55,535	8,786	140,025	127,045	59,265	8,186
North Dakota.....	26,565	8,990	2,466	238	27,932	7,991	2,859	11
Ohio.....	270,187	121,874	103,198	23,435	278,424	123,060	106,639	33,594
Oklahoma.....	93,819	55,287	18,464	5,360	94,687	58,722	18,434	8,464
Oregon.....	66,818	66,842	18,870	329	68,432	68,175	19,220	332
Pennsylvania.....	222,583	88,627	209,846	33,314	229,235	94,290	212,873	37,529
Rhode Island.....	23,210	13,137	35,391	—	24,274	14,715	35,850	—
South Carolina.....	74,799	38,553	22,381	5,108	79,252	40,874	22,963	4,868
South Dakota.....	24,147	—	8,900	708	23,898	—	7,180	362
Tennessee.....	102,702	51,402	42,302	5,600	103,791	51,818	45,087	5,710
Texas.....	376,078	333,179	88,975	3,541	392,103	361,091	90,024	3,974
Utah.....	52,822	21,831	31,220	1,119	52,631	21,801	32,080	1,028
Vermont.....	15,390	3,970	11,809	2,073	15,782	4,205	12,383	2,117
Virginia.....	151,589	123,994	42,011	1,432	154,185	118,207	47,766	3,078
Washington.....	77,722	136,485	30,258	1,407	78,070	141,033	32,337	1,648
West Virginia.....	58,311	9,648	7,105	2,192	60,733	9,648	7,488	2,510
Wisconsin.....	151,329	89,204	39,821	1,563	151,146	90,712	42,211	1,158
Wyoming.....	10,401	15,040	—	821	10,773	15,138	—	829
U.S. Service Schools.....	19,826	40,310	—	—	17,678	26,354	—	—
<b>Outlying areas.....</b>	<b>57,506</b>	<b>9,277</b>	<b>80,536</b>	<b>9,488</b>	<b>57,825</b>	<b>9,906</b>	<b>86,158</b>	<b>9,852</b>
American Samoa.....	—	897	—	—	—	759	—	—
Guam.....	2,210	1,862	—	—	2,096	1,723	—	—
Northern Marianas.....	—	366	—	—	—	352	—	—
Puerto Rico.....	52,753	4,929	80,538	9,488	53,258	5,471	86,158	9,852
Trust Territory of the Pacific.....	—	1,223	—	—	—	1,301	—	—
Virgin Islands.....	2,545	—	—	—	2,471	—	—	—

<sup>1</sup> Data have been revised from previously published figures.

<sup>2</sup> Preliminary data.

<sup>3</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

**Table 181.—Total enrollment in institutions of higher education, by level of enrollment and State:  
Fall 1986 to fall 1988**

State or other area	Fall 1986 <sup>1</sup>			Fall 1987 <sup>1</sup>			Fall 1988 <sup>2</sup>				
	Under-graduate	First-professional	Graduate	Total	Under-graduate	First-professional	Graduate	Total	Under-graduate	First-professional	Graduate
1	2	3	4	5	6	7	8	9	10	11	12
<b>United States.....</b>	<b>10,797,975</b>	<b>270,401</b>	<b>1,435,135</b>	<b>12,766,642</b>	<b>11,048,235</b>	<b>266,332</b>	<b>1,452,075</b>	<b>13,043,118</b>	<b>11,304,160</b>	<b>267,086</b>	<b>1,471,882</b>
Alabama.....	162,635	2,955	15,853	183,348	164,041	3,009	16,298	199,813	178,954	3,160	17,699
Alaska.....	25,677	—	1,600	26,937	25,894	—	1,243	28,361	27,346	—	1,015
Arizona.....	202,154	1,447	22,994	237,233	213,799	1,451	21,983	257,786	230,262	1,476	26,048
Arkansas.....	70,895	1,320	6,966	79,273	72,069	1,315	5,869	84,550	77,275	1,411	5,864
California.....	1,533,032	29,511	164,652	1,788,170	1,588,445	29,567	170,158	1,753,584	1,560,106	30,108	163,350
Colorado.....	151,280	3,434	22,619	183,583	158,146	3,003	22,434	186,288	164,747	2,988	18,553
Connecticut.....	125,352	3,275	29,651	162,362	128,126	3,363	30,693	165,877	130,931	3,266	31,480
Delaware.....	30,980	—	2,915	36,637	32,711	1,029	2,897	38,260	34,065	1,180	3,015
District of Columbia.....	48,072	6,825	22,748	77,566	48,267	8,587	22,712	79,089	48,469	8,437	22,183
Florida.....	<sup>3</sup> 431,606	6,989	45,363	489,964	438,128	7,232	44,604	515,590	460,804	7,197	47,589
Georgia.....	161,904	6,939	26,281	<sup>4</sup> 224,066	189,716	7,437	26,911	230,762	196,276	7,445	27,041
Hawaii.....	45,629	496	5,572	52,291	47,100	475	4,718	52,297	46,080	432	5,785
Idaho.....	39,668	265	5,327	45,567	39,906	296	5,366	45,717	40,181	433	5,123
Illinois.....	584,064	17,111	80,843	686,954	587,099	17,022	82,833	688,974	590,929	17,276	80,767
Indiana.....	215,068	5,490	29,598	256,264	221,107	5,312	29,645	267,902	231,918	5,260	30,724
Iowa.....	133,586	5,945	15,838	158,230	135,016	6,094	17,120	161,174	137,768	5,922	17,484
Kansas.....	121,923	2,275	19,007	148,439	125,625	2,219	18,595	152,647	131,581	2,118	19,148
Kentucky.....	123,930	4,516	16,112	153,351	131,422	4,484	17,445	159,868	137,796	4,522	17,548
Louisiana.....	145,806	6,028	19,500	173,229	147,524	5,466	20,239	178,031	150,771	5,716	19,544
Maine.....	43,028	548	2,653	46,992	43,624	550	2,618	47,903	43,756	575	3,572
Maryland.....	200,662	3,713	29,117	239,362	204,581	3,778	31,005	249,079	212,645	3,940	32,494
Massachusetts.....	335,638	13,094	68,808	423,916	342,575	13,189	66,172	426,820	343,625	12,933	70,062
Michigan.....	458,103	9,881	52,408	536,486	471,061	9,602	54,823	542,580	477,704	9,788	55,068
Minnesota.....	198,374	5,912	22,272	237,212	207,882	5,702	23,828	244,706	214,285	5,553	24,868
Mississippi.....	91,010	1,662	8,432	105,510	95,206	1,631	6,673	112,872	101,515	1,729	9,828
Missouri.....	207,597	6,197	30,391	251,778	210,717	9,415	31,646	261,667	220,566	6,310	32,782
Montana.....	31,361	771	3,066	35,882	32,340	217	3,325	35,772	32,250	210	3,312
Nebraska.....	67,318	2,697	10,388	100,828	87,803	2,633	10,392	104,617	91,629	2,631	10,357
Nevada.....	43,790	255	2,751	48,063	44,058	165	3,820	48,832	44,517	183	4,132
New Hampshire.....	47,168	631	6,065	56,163	48,161	745	7,237	55,334	47,596	837	7,099
New Jersey.....	250,888	5,969	36,414	294,433	249,369	6,163	36,861	302,640	256,695	6,113	39,832
New Mexico.....	69,756	612	9,903	83,074	71,939	625	10,510	79,450	69,603	627	10,220
New York.....	620,091	25,862	154,864	992,544	812,195	26,202	154,147	1,007,411	819,446	27,065	160,900
North Carolina.....	290,340	5,965	26,875	321,251	287,980	6,068	27,163	332,521	288,835	5,948	27,938
North Dakota.....	33,541	420	3,348	36,259	33,670	407	2,182	38,293	35,444	425	2,424
Ohio.....	450,651	12,737	57,091	518,464	449,360	12,078	57,026	541,737	471,644	11,926	56,165
Oklahoma.....	146,166	3,653	20,819	172,730	148,293	3,672	20,785	176,307	151,995	3,502	20,810
Oregon.....	127,665	3,459	13,461	152,657	133,594	3,340	15,723	156,159	137,363	3,339	15,457
Pennsylvania.....	466,145	13,943	65,833	554,370	471,730	13,950	68,890	573,927	489,422	13,602	70,903
Rhode Island.....	60,899	293	6,375	71,708	62,814	268	6,606	74,839	65,954	291	6,594
South Carolina.....	118,350	2,620	15,145	140,841	120,968	2,496	17,357	147,757	127,468	2,381	17,686
South Dakota.....	27,135	459	3,341	31,755	28,178	423	3,154	31,460	28,308	423	2,729
Tennessee.....	171,328	5,517	20,226	202,006	175,569	5,247	21,190	206,408	180,156	5,428	20,821
Texas.....	657,771	17,778	100,474	801,771	693,351	15,374	93,048	847,192	739,128	15,426	92,638
Utah.....	95,438	1,258	9,522	106,792	95,676	1,276	9,840	107,536	96,586	1,212	9,740
Vermont.....	28,796	355	3,309	33,242	29,492	369	3,381	34,467	30,590	355	3,522
Virginia.....	265,773	6,041	36,504	319,026	276,121	6,084	36,821	321,216	276,339	6,048	36,829
Washington.....	221,913	3,138	17,328	245,872	224,660	3,054	16,158	253,088	231,422	3,003	18,663
West Virginia.....	66,706	1,229	8,644	77,256	67,415	1,232	8,609	80,379	70,143	1,288	8,948
Wisconsin.....	252,579	3,779	27,295	281,717	251,259	3,706	26,752	285,227	256,235	3,647	25,345
Wyoming.....	22,451	191	1,715	26,062	24,149	206	1,707	26,540	24,894	206	1,640
U.S. Service Schools.....	50,042	641	2,619	60,136	58,442	1,048	648	44,032	41,540	—	2,492
Outlying areas.....	153,367	3,172	9,061	166,809	145,196	2,312	9,301	163,441	150,795	3,049	9,597
American Samoa.....	759	—	—	897	897	—	—	759	759	—	—
Guam.....	4,058	—	419	4,072	3,808	—	264	3,819	3,604	—	215
Northern Marianas.....	514	—	—	366	366	—	—	352	352	—	—
Puerto Rico.....	144,920	3,172	6,488	147,706	136,541	2,312	6,853	154,739	142,510	3,049	9,180
Trust Territory of the Pacific.....	795	—	—	1,223	1,223	—	—	1,301	1,301	—	—
Virgin Islands.....	2,321	—	174	2,545	2,361	—	184	2,471	2,269	—	202

<sup>1</sup> Data have been revised from previously published figures.

<sup>2</sup> Preliminary data.

<sup>3</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>4</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared March 1990.)

Table 182.—Total enrollment in institutions of higher education, by control, level of enrollment, and State: Fall 1988<sup>1</sup>

State or other area	Public					Private				
	Undergraduate			First-professional	Graduate	Undergraduate			First-professional	Graduate
	Total	4-year	2-year			Total	4-year	2-year		
1	2	3	4	5	6	7	8	9	10	11
United States.....	9,098,747	4,466,359	4,612,388	106,935	948,993	2,206,413	1,949,691	255,722	156,161	523,169
Alabama.....	157,845	97,002	60,843	2,099	18,599	21,309	18,818	4,693	1,061	1,100
Alaska.....	26,315	21,285	5,030	—	830	1,031	1,031	—	—	185
Arizona.....	218,851	70,469	148,382	1,475	21,202	11,411	9,422	1,989	1	4,846
Arkansas.....	85,107	48,506	18,601	1,326	5,520	12,168	9,383	2,785	85	344
California.....	1,439,379	382,255	1,057,124	7,845	94,061	120,727	110,007	10,720	22,263	69,269
Colorado.....	147,773	80,141	57,632	1,578	13,551	16,974	11,835	5,039	1,410	5,002
Connecticut.....	90,197	48,279	41,918	1,218	15,004	40,734	38,943	1,791	2,048	16,472
Delaware.....	29,124	19,807	9,317	—	2,521	4,941	4,941	—	1,180	494
District of Columbia.....	10,886	10,886	—	—	1,222	37,583	37,583	—	8,437	20,961
Florida.....	388,874	124,045	262,829	3,033	30,471	73,930	68,773	5,157	4,164	17,118
Georgia.....	153,381	105,222	48,159	2,904	21,566	42,896	32,544	10,351	4,541	5,475
Hawaii.....	36,982	17,003	19,979	432	5,115	9,098	9,098	—	—	670
Idaho.....	29,969	24,629	5,340	404	4,740	10,192	2,054	8,138	29	377
Illinois.....	475,557	147,321	328,236	4,253	41,814	115,372	105,987	9,385	13,025	38,953
Indiana.....	180,384	144,650	35,734	3,222	25,627	51,534	48,298	3,238	2,038	5,097
Iowa.....	87,795	53,404	44,391	2,655	12,813	39,973	37,079	2,894	3,267	4,671
Kansas.....	118,130	66,798	51,332	2,021	18,549	13,451	12,137	1,314	97	599
Kentucky.....	111,989	80,659	31,330	2,577	14,659	25,809	18,336	7,473	1,945	2,889
Louisiana.....	130,672	115,153	15,519	2,713	15,964	20,069	17,587	2,512	3,003	3,580
Maine.....	32,619	26,903	5,716	206	3,067	11,137	10,067	1,070	367	485
Maryland.....	189,780	86,749	103,041	3,022	19,510	22,855	21,980	875	918	12,964
Massachusetts.....	189,871	93,900	75,971	407	18,493	173,754	159,545	14,209	12,526	51,569
Michigan.....	408,378	193,580	214,818	8,298	49,599	69,326	64,420	4,906	3,490	5,489
Minnesota.....	170,846	113,565	57,281	2,409	17,931	43,439	38,540	4,899	3,144	6,637
Mississippi.....	90,873	44,220	46,653	1,206	7,918	10,642	6,025	2,817	523	1,710
Missouri.....	159,528	97,149	62,379	2,529	16,742	61,037	58,254	2,783	5,781	16,050
Montana.....	27,838	23,954	3,884	210	3,239	4,412	3,232	1,180	—	73
Nebraska.....	78,770	48,094	30,878	1,293	9,720	14,859	14,395	464	1,338	637
Nevada.....	44,331	20,864	23,467	183	4,132	186	161	25	—	—
New Hampshire.....	27,470	20,793	6,677	—	2,893	20,128	19,324	804	637	4,206
New Jersey.....	215,165	104,521	111,644	3,293	25,309	41,530	38,594	2,936	2,820	14,523
New Mexico.....	66,632	36,634	29,998	627	10,135	1,971	1,971	—	—	85
New York.....	517,817	286,529	231,288	4,977	61,048	301,629	271,370	30,259	22,068	99,852
North Carolina.....	242,202	115,157	127,045	2,448	22,420	56,433	50,247	6,186	3,500	5,518
North Dakota.....	32,944	25,253	7,691	425	2,254	2,500	2,489	11	—	170
Ohio.....	351,345	228,265	123,080	7,651	42,508	120,299	86,705	33,594	4,277	15,657
Oklahoma.....	131,017	74,295	56,722	2,035	18,357	20,978	14,514	6,464	1,487	2,453
Oregon.....	122,298	54,123	68,175	1,181	13,128	15,085	14,733	332	2,158	2,329
Pennsylvania.....	285,055	180,785	94,290	4,249	34,221	204,367	166,838	37,529	9,353	36,682
Rhode Island.....	34,034	19,319	14,715	4	4,951	31,920	31,920	—	287	3,643
South Carolina.....	101,652	60,978	40,674	1,864	18,410	25,836	20,968	4,868	517	1,476
South Dakota.....	21,014	21,014	—	354	2,530	7,294	6,912	382	69	199
Tennessee.....	137,230	85,412	51,818	2,482	15,897	42,926	37,218	5,710	2,947	4,924
Texas.....	665,785	304,694	361,091	9,605	77,804	73,343	69,369	3,974	5,821	14,834
Utah.....	67,048	45,247	21,801	754	8,830	29,538	26,512	1,026	458	3,110
Vermont.....	18,039	13,834	4,205	355	1,573	12,551	10,434	2,117	—	1,849
Virginia.....	233,897	117,690	116,207	4,202	32,273	42,442	39,364	3,078	1,846	6,556
Washington.....	204,659	63,626	141,033	1,837	12,807	26,763	25,115	1,648	1,366	5,856
West Virginia.....	60,555	50,907	9,648	1,287	8,539	9,568	7,078	2,510	1	409
Wisconsin.....	219,430	128,718	90,712	1,779	20,849	36,805	35,647	1,158	1,668	4,696
Wyoming.....	24,065	8,927	15,138	206	1,640	629	—	829	—	—
U.S. Service Schools.....	41,540	15,186	26,354	—	2,492	—	—	—	—	—
Outlying areas.....	61,086	51,480	9,606	1,358	4,967	69,709	79,657	9,852	1,691	4,810
American Samoa.....	759	—	759	—	—	—	—	—	—	—
Guam.....	3,604	1,881	1,723	—	215	—	—	—	—	—
Northern Marianas.....	352	—	352	—	—	—	—	—	—	—
Puerto Rico.....	52,801	47,330	5,471	1,358	4,570	69,709	79,657	9,852	1,691	4,810
Trust Territory of the Pacific.....	1,301	—	1,301	—	—	—	—	—	—	—
Virgin Islands.....	2,289	2,289	—	—	202	—	—	—	—	—

<sup>1</sup> Preliminary data.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1988" survey. (This table was prepared March 1990.)

Table 183.—Total enrollment in institutions of higher education, by control, level of enrollment, and State: Fall 1987

State or other area	Public					Private				
	Undergraduate			First-professional	Graduate	Undergraduate			First-professional	Graduate
	Total	4-year	2-year			Total	4-year	2-year		
1	2	3	4	5	6	7	8	9	10	11
United States.....	8,918,689	4,377,635	4,641,054	110,036	844,629	2,127,848	1,692,478	235,168	158,296	907,446
Alabama.....	144,866	88,502	56,364	2,071	15,341	19,175	15,573	3,602	938	957
Alaska.....	24,922	10,272	14,650	—	1,069	772	772	—	—	174
Arizona.....	206,491	87,312	139,179	1,445	20,818	7,308	5,515	1,793	8	1,367
Arkansas.....	61,463	47,035	14,428	1,315	5,535	10,628	8,691	1,935	—	334
California.....	1,470,112	392,833	1,077,279	8,189	102,231	118,333	107,049	11,290	21,376	67,927
Colorado.....	141,268	86,265	55,023	1,596	18,710	18,858	12,577	4,281	1,407	3,724
Connecticut.....	86,959	48,422	40,537	1,199	14,403	41,167	39,436	1,731	2,184	18,490
Delaware.....	27,205	19,014	8,191	—	2,442	5,506	5,506	—	1,029	455
District of Columbia.....	9,858	9,858	—	—	993	36,409	36,409	—	6,587	21,719
Florida.....	372,961	118,605	254,378	2,939	29,372	65,147	81,065	4,082	4,293	15,232
Georgia.....	150,114	100,750	49,364	2,841	21,400	39,604	31,544	8,060	4,596	5,511
Hawaii.....	38,118	17,776	20,342	484	4,164	8,982	8,982	—	11	552
Idaho.....	29,536	24,526	5,010	267	4,988	10,370	1,991	8,379	29	377
Illinois.....	473,660	149,620	324,060	4,220	43,217	113,419	103,963	9,436	12,802	39,818
Indiana.....	173,583	138,862	34,721	3,282	24,592	47,524	44,114	3,410	2,030	5,253
Iowa.....	96,467	53,815	42,672	2,652	12,868	38,529	35,204	3,325	3,442	4,252
Kansas.....	113,263	65,726	47,537	2,066	18,054	12,362	11,115	1,247	153	541
Kentucky.....	105,029	78,667	28,162	2,545	14,445	26,393	18,297	8,096	1,939	3,000
Louisiana.....	129,249	114,905	14,344	2,820	16,623	18,275	17,134	1,141	2,846	3,816
Maine.....	32,212	26,940	5,272	212	2,173	11,412	10,454	958	338	645
Maryland.....	182,669	86,174	96,515	2,892	18,130	21,892	21,040	852	884	12,675
Massachusetts.....	168,615	94,964	73,651	409	18,087	173,960	158,117	15,843	12,760	50,106
Michigan.....	403,752	188,727	215,025	6,290	49,271	67,309	63,893	3,818	3,312	5,552
Minnesota.....	166,239	112,459	53,780	2,562	17,295	41,643	36,833	4,810	3,140	6,333
Mississippi.....	84,660	41,958	42,902	1,168	7,256	10,346	8,034	2,312	463	1,417
Missouri.....	152,312	92,977	59,335	2,538	16,396	58,405	55,176	3,229	8,677	15,250
Montana.....	29,395	23,771	4,624	217	3,248	3,945	3,233	712	—	79
Nebraska.....	73,817	44,468	29,349	1,303	9,781	13,986	13,533	453	1,330	611
Nevada.....	43,787	19,421	24,366	185	3,819	271	248	25	—	1
New Hampshire.....	27,939	19,652	8,287	—	2,980	20,242	18,036	2,206	745	4,277
New Jersey.....	207,799	104,250	103,549	3,313	24,296	41,570	39,018	2,554	2,670	14,585
New Mexico.....	70,238	36,411	33,627	825	10,435	1,701	1,701	—	—	75
New York.....	506,555	281,945	224,610	4,718	55,775	305,640	274,678	30,964	21,488	98,372
North Carolina.....	234,600	111,010	123,590	2,453	21,877	53,380	48,594	8,786	3,635	5,306
North Dakota.....	31,080	24,090	6,990	407	2,068	2,590	2,352	238	—	114
Ohio.....	342,779	221,115	121,664	7,721	41,331	106,581	83,146	23,435	4,357	15,695
Oklahoma.....	128,337	73,050	55,287	2,124	18,445	19,956	14,596	5,360	1,548	2,320
Oregon.....	119,046	62,204	66,842	1,178	13,238	14,548	14,219	329	2,184	2,467
Pennsylvania.....	273,724	185,097	88,827	4,357	33,129	198,006	164,892	33,314	9,593	35,561
Rhode Island.....	31,494	18,387	13,107	2	4,821	31,320	31,320	—	288	3,785
South Carolina.....	95,535	56,982	38,553	1,898	15,919	25,453	20,345	5,108	598	1,438
South Dakota.....	20,841	20,841	—	358	2,948	7,337	8,829	708	65	206
Tennessee.....	135,037	83,635	51,402	2,463	18,804	40,532	34,932	5,600	2,764	4,566
Texas.....	621,720	288,541	333,179	9,569	77,966	71,631	66,090	3,541	5,805	15,060
Utah.....	58,557	44,726	21,831	803	7,093	29,119	28,000	1,119	473	2,747
Vermont.....	17,592	13,622	3,970	369	1,399	11,900	9,827	2,073	—	1,982
Virginia.....	239,095	115,101	123,994	4,247	32,241	37,026	35,594	1,432	1,837	4,560
Washington.....	200,166	67,661	136,485	1,650	12,391	24,484	23,067	1,407	1,404	5,767
West Virginia.....	58,492	48,654	9,648	1,232	6,235	8,923	8,731	2,192	—	374
Wisconsin.....	216,111	126,907	89,204	1,814	22,608	35,148	33,585	1,563	1,692	4,144
Wyoming.....	23,528	8,468	15,040	206	1,707	821	—	821	—	—
U.S. Service Schools.....	58,442	18,132	40,310	1,046	648	—	—	—	—	—
Outlying areas.....	60,669	51,412	9,277	1,326	4,770	84,507	75,019	9,488	966	4,531
American Samoa.....	897	—	897	—	—	—	—	—	—	—
Guam.....	3,806	1,948	1,862	—	264	—	—	—	—	—
Northern Marianas.....	366	—	366	—	—	—	—	—	—	—
Puerto Rico.....	52,034	47,105	4,929	1,326	4,322	84,507	75,019	9,488	966	4,531
Trust Territory of the Pacific.....	1,223	—	1,223	—	—	—	—	—	—	—
Virgin Islands.....	2,361	2,361	—	—	184	—	—	—	—	—

—Data not reported or not applicable.

NOTE.—Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1987" survey. (This table was prepared March 1990.)

**Table 184.—Full-time-equivalent enrollment in institutions of higher education, by control and type of institution: Fall 1970 to fall 1988**

Year	All institutions			Public institutions			Private institutions		
	Total	4-year	2-year	Total	4-year	2-year	Total	4-year	2-year
1	2	3	4	5	6	7	8	9	10
1970 <sup>1</sup>	6,737,819	5,219,855	1,517,964	4,953,144	3,540,559	1,412,585	1,784,675	1,679,296	105,379
1971 <sup>1</sup>	7,148,575	5,429,703	1,718,872	5,344,356	3,731,009	1,613,347	1,804,219	1,698,694	105,525
1972	7,253,739	5,406,821	1,846,918	5,452,848	3,706,239	1,746,609	1,800,891	1,700,582	100,309
1973	7,453,448	5,439,218	2,014,230	5,629,555	3,721,031	1,908,524	1,823,893	1,718,187	105,706
1974	7,805,453	5,606,249	2,199,204	5,944,804	3,847,550	2,097,254	1,860,649	1,758,699	101,950
1975	8,479,685	5,900,401	2,579,284	6,522,310	4,056,500	2,465,810	1,957,375	1,843,901	113,474
1976	8,312,502	5,848,001	2,484,501	6,349,903	3,996,450	2,351,453	1,982,599	1,849,551	113,048
1977	8,415,339	5,935,076	2,480,263	6,396,476	4,039,071	2,357,405	2,018,863	1,896,005	122,858
1978	8,348,482	5,932,573	2,415,909	6,279,199	3,996,126	2,283,073	2,069,283	1,936,447	132,836
1979	8,487,317	6,018,072	2,471,245	6,392,617	4,059,304	2,333,313	2,094,700	1,956,768	137,932
1980	8,819,013	6,161,372	2,657,641	6,642,294	4,158,267	2,484,027	2,176,719	2,003,105	<sup>2</sup> 173,614
1981	9,014,521	6,249,847	2,784,674	6,781,300	4,206,506	2,572,794	2,233,221	2,041,341	<sup>2</sup> 191,860
1982	9,091,648	6,248,923	2,842,725	6,850,589	4,220,648	2,629,941	2,241,059	2,026,275	212,784
1983	9,166,399	6,325,223	2,841,178	6,881,480	4,265,806	2,615,672	2,284,919	2,059,415	225,504
1984	8,951,695	6,292,711	2,858,984	6,684,664	4,237,895	2,446,769	2,267,031	2,054,616	212,215
1985	8,943,433	6,294,339	2,649,094	6,667,781	4,239,622	2,426,159	2,275,652	2,054,717	220,935
1986 <sup>3</sup>	9,064,168	6,360,324	2,703,844	6,778,048	4,295,495	2,482,551	2,286,122	2,064,829	<sup>4</sup> 221,283
1987 <sup>3</sup>	9,229,736	6,466,510	2,743,225	6,937,690	4,395,731	2,541,958	2,292,046	2,090,779	201,267
1988 <sup>4</sup>	9,453,114	6,660,180	2,792,924	7,094,153	4,502,516	2,591,637	2,358,961	2,157,674	201,287

<sup>1</sup> Data for 2-year branch campuses of 4-year systems are included with the 4-year institutions.

<sup>2</sup> Large increases are due to the addition of schools accredited by the National Association of Trade and Technical Schools in 1980 and 1981.

<sup>3</sup> Data have been revised from previously published figures.

<sup>4</sup> Because of imputation techniques, data are not consistent with figures for other years.

<sup>5</sup> Preliminary data.

NOTE.—Because of a revision in data compilation procedures, figures for 1986 to 1988 are not directly comparable to data for earlier years.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared March 1990.)

**Table 185.—Full-time-equivalent enrollment in institutions of higher education, by control, type of institution, and State: Fall 1986 to fall 1988**

State or other area	Public 4-year			Public 2-year			Private 4-year			Private 2-year		
	1986	1987	1988 <sup>1</sup>	1986	1987	1988 <sup>1</sup>	1986	1987	1988 <sup>1</sup>	1986	1987	1988 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>United States</b> .....	<b>4,295,495</b>	<b>4,395,731</b>	<b>4,502,516</b>	<b>2,492,551</b>	<b>2,541,958</b>	<b>2,591,637</b>	<b>2,084,829</b>	<b>2,099,779</b>	<b>2,157,874</b>	<b>221,293</b>	<b>201,267</b>	<b>201,267</b>
Alabama.....	86,157	87,892	95,178	42,377	41,310	43,212	14,914	15,733	16,655	4,054	3,332	4,143
Alaska.....	7,736	8,022	13,984	7,140	8,265	2,124	833	739	863	—	—	—
Arizona.....	89,864	71,834	75,006	59,534	64,400	70,393	10,405	8,189	12,714	1,937	1,793	1,969
Arkansas.....	45,488	45,882	47,309	8,728	9,099	10,245	8,099	8,231	8,950	1,485	1,757	2,445
California.....	402,115	413,474	405,135	522,873	544,184	531,298	157,822	158,191	165,140	10,486	10,365	9,810
Colorado.....	86,508	89,982	90,001	26,908	28,214	30,066	12,443	14,307	14,287	3,657	3,741	4,838
Connecticut.....	44,606	48,728	48,396	19,946	19,963	20,629	43,873	43,846	43,659	1,341	1,295	1,357
Delaware.....	17,809	18,193	18,963	4,652	4,738	5,496	3,247	4,926	4,813	—	—	—
District of Columbia.....	7,309	8,455	7,239	—	—	—	52,027	53,108	53,774	—	—	—
Florida.....	113,346	114,505	120,978	130,951	140,240	148,970	66,856	64,043	72,934	<sup>2</sup> 13,266	4,021	4,463
Georgia.....	94,894	100,978	104,956	19,820	<sup>2</sup> 30,057	30,665	33,505	36,977	37,741	8,284	7,043	8,970
Hawaii.....	18,508	18,188	18,368	12,151	12,200	12,053	7,155	7,390	7,753	—	—	—
Idaho.....	22,264	23,218	23,417	4,526	3,549	3,751	2,112	2,137	2,193	8,480	7,518	7,548
Illinois.....	160,812	181,655	159,405	178,270	174,451	175,372	118,804	122,325	124,395	8,129	8,486	8,262
Indiana.....	127,274	130,757	136,242	19,089	19,882	20,591	45,793	45,327	49,433	3,669	3,066	2,260
Iowa.....	60,778	59,859	59,778	30,489	31,878	32,710	35,640	36,201	37,448	3,148	2,993	2,871
Kansas.....	66,093	68,978	70,397	25,148	26,721	26,720	10,295	9,954	10,787	1,144	1,124	1,197
Kentucky.....	71,984	74,863	78,578	15,872	17,486	19,645	17,328	18,921	19,168	7,785	7,253	8,624
Louisiana.....	112,682	114,219	113,975	8,496	8,664	9,377	20,007	20,247	20,822	1,897	1,135	2,428
Maine.....	21,684	21,854	22,773	3,433	3,466	3,819	9,164	9,688	9,489	898	838	905
Maryland.....	81,165	82,738	84,008	47,577	48,760	52,481	24,260	25,382	25,853	878	764	773
Massachusetts.....	83,721	87,240	88,784	41,949	44,520	46,062	182,015	182,274	185,136	13,067	11,459	10,078
Michigan.....	191,982	197,775	202,021	105,348	108,373	108,930	53,084	56,069	57,121	5,260	2,948	3,898
Minnesota.....	101,564	98,395	100,046	31,682	35,667	37,796	38,398	40,919	42,471	4,207	4,390	4,090
Mississippi.....	44,512	44,628	47,493	31,436	34,323	36,469	7,495	7,777	7,947	1,508	2,137	2,459
Missouri.....	90,048	91,051	94,799	31,478	32,395	34,348	55,490	58,287	60,042	2,680	3,041	2,871
Montana.....	24,279	23,384	23,821	2,063	2,600	2,330	2,317	2,522	2,625	721	436	814
Nebraska.....	43,784	43,993	44,949	15,534	15,950	18,242	12,842	12,789	13,490	333	402	399
Nevada.....	15,440	18,227	17,331	9,525	9,795	9,843	256	194	135	25	25	25
New Hampshire.....	17,954	18,604	19,213	3,958	4,326	3,900	18,357	18,381	19,524	1,988	1,624	686
New Jersey.....	97,286	97,755	98,601	59,231	59,252	63,219	43,055	42,547	42,367	1,898	2,006	2,262
New Mexico.....	36,401	37,313	37,949	18,357	17,190	18,935	1,175	1,362	1,538	—	—	—
New York.....	264,786	260,835	268,202	157,222	153,872	159,122	321,057	318,533	316,662	31,093	27,392	26,652
North Carolina.....	112,418	114,125	117,798	75,393	72,948	75,735	48,919	50,087	53,377	8,231	8,497	5,500
North Dakota.....	23,724	23,839	24,902	8,186	5,741	8,264	1,967	2,227	2,306	83	214	11
Ohio.....	215,155	222,912	230,184	70,073	68,833	69,764	84,662	85,069	87,803	16,935	13,770	16,582
Oklahoma.....	75,022	75,585	78,204	29,749	29,927	30,933	14,853	15,799	15,841	3,094	4,242	4,498
Oregon.....	52,578	53,550	57,104	37,321	37,920	39,872	15,922	16,526	17,020	366	329	331
Pennsylvania.....	183,371	188,138	194,106	68,433	50,890	54,839	168,225	169,959	172,406	28,373	31,157	24,303
Rhode Island.....	17,308	18,127	18,810	7,098	7,174	7,781	28,956	29,977	30,512	—	—	—
South Carolina.....	58,656	61,931	64,759	25,585	25,547	27,178	19,375	20,304	20,856	4,296	4,752	4,538
South Dakota.....	19,884	19,903	20,155	—	—	—	5,205	5,734	5,866	438	475	267
Tennessee.....	81,978	83,023	85,700	28,808	30,571	31,250	38,048	37,846	40,538	5,184	5,219	4,955
Texas.....	290,961	301,826	318,212	176,899	188,811	203,134	75,268	74,905	78,286	3,295	3,406	3,751
Utah.....	40,129	40,844	40,909	17,719	14,769	15,089	26,285	26,235	26,533	1,185	965	875
Vermont.....	13,014	13,241	13,414	1,730	1,812	1,924	10,288	10,173	10,600	1,498	1,698	1,773
Virginia.....	122,272	128,018	129,185	57,991	61,874	59,548	35,240	36,759	40,278	2,337	1,306	2,870
Washington.....	69,872	70,318	70,842	80,251	80,880	83,928	23,899	25,012	26,969	1,204	1,372	1,604
West Virginia.....	45,875	46,877	49,071	1,900	5,936	8,029	8,125	8,115	8,328	1,898	1,560	1,863
Wisconsin.....	133,057	130,128	130,838	59,021	55,977	56,922	30,851	32,501	34,526	1,134	1,323	1,001
Wyoming.....	8,780	9,104	9,815	8,254	9,153	9,180	—	—	—	622	821	829
U.S. Service Schools.....	18,589	19,393	17,861	34,817	40,310	26,354	—	—	—	—	—	—
<b>Outlying areas</b> .....	<b>50,988</b>	<b>49,548</b>	<b>50,014</b>	<b>7,107</b>	<b>7,048</b>	<b>7,429</b>	<b>75,199</b>	<b>70,271</b>	<b>74,143</b>	<b>9,818</b>	<b>8,723</b>	<b>9,023</b>
American Samoa.....	—	—	—	494	558	494	—	—	—	—	—	—
Guam.....	2,105	1,702	1,661	915	845	777	—	—	—	—	—	—
Northern Marianas.....	—	—	—	308	198	194	—	—	—	—	—	—
Puerto Rico.....	47,432	46,358	48,917	4,893	4,582	5,032	75,199	70,271	74,143	9,818	8,723	9,023
Trust Territory of the Pacific	—	—	—	897	887	932	—	—	—	—	—	—
Virgin Islands.....	1,451	1,488	1,437	—	—	—	—	—	—	—	—	—

<sup>1</sup> Preliminary data.

<sup>2</sup> Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

<sup>3</sup> Because of imputation techniques, data are not consistent with figures for other years.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared March 1990.)

**Table 186.—Full-time-equivalent enrollment in institutions of higher education, by control and State:  
Fall 1980 to fall 1988**

State or other area	Total					Public			Private		
	1980	1985	1986	1987 <sup>1</sup>	1988 <sup>1</sup>	1986	1987 <sup>1</sup>	1988 <sup>1</sup>	1986	1987 <sup>1</sup>	1988 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12
<b>United States.....</b>	<b>8,019,013</b>	<b>8,943,433</b>	<b>9,064,168</b>	<b>9,229,736</b>	<b>9,463,114</b>	<b>6,776,046</b>	<b>6,937,690</b>	<b>7,084,153</b>	<b>2,286,122</b>	<b>2,292,046</b>	<b>2,356,961</b>
Alabama.....	136,910	149,895	147,502	148,267	159,185	128,534	129,203	138,368	18,968	19,065	20,797
Alaska.....	10,073	14,098	15,709	15,026	16,971	14,878	14,287	18,108	833	739	663
Arizona.....	127,114	134,954	141,739	144,217	160,103	129,397	136,235	145,400	12,341	7,982	14,703
Arkansas.....	64,307	63,230	63,800	64,948	68,948	54,218	54,961	57,553	9,584	9,967	11,395
California.....	1,099,559	1,062,439	1,093,096	1,126,215	1,111,181	924,768	957,658	936,431	108,308	169,558	174,750
Colorado.....	123,589	121,804	129,517	136,243	139,192	113,418	118,196	120,067	18,101	18,048	19,125
Connecticut.....	112,612	107,603	106,766	111,831	113,941	84,752	86,691	89,025	45,013	45,141	44,918
Delaware.....	26,284	25,750	25,706	27,857	29,072	22,481	22,931	24,459	3,247	4,926	4,613
District of Columbia.....	62,126	59,193	59,336	59,563	61,013	7,309	8,455	7,239	52,027	53,108	53,774
Florida.....	290,647	308,315	324,419	322,809	345,344	244,297	254,748	267,948	60,122	68,063	77,397
Georgia.....	152,369	161,952	156,304	175,052	182,032	114,515	131,033	135,621	41,789	44,019	46,411
Hawaii.....	35,859	36,986	37,813	37,778	38,174	30,659	30,388	30,421	7,155	7,390	7,753
Idaho.....	33,938	32,649	35,303	36,418	36,908	26,791	26,785	27,168	8,572	9,653	9,740
Illinois.....	432,365	450,504	465,014	466,897	467,424	337,082	336,106	334,776	127,933	130,791	132,648
Indiana.....	193,445	195,630	195,825	199,031	206,526	146,383	150,639	156,834	49,482	48,392	51,692
Iowa.....	120,083	128,492	130,033	130,931	132,605	91,245	91,737	92,485	38,788	39,194	40,120
Kansas.....	101,147	100,807	104,680	106,777	111,081	93,241	95,699	99,117	11,439	11,078	11,964
Kentucky.....	113,709	110,539	112,969	118,522	124,013	87,856	92,348	98,221	25,113	26,174	25,792
Louisiana.....	132,760	146,983	143,084	144,285	148,802	121,180	122,864	123,352	21,904	21,382	23,250
Maine.....	34,471	37,993	35,379	35,846	36,768	25,317	25,320	26,392	10,063	10,527	10,394
Maryland.....	149,202	148,091	153,699	157,644	163,115	128,781	131,496	136,489	24,938	26,148	26,626
Massachusetts.....	315,937	321,022	320,771	325,493	328,037	125,670	131,760	132,825	195,102	193,733	195,211
Michigan.....	366,058	354,890	355,674	365,184	371,861	297,330	306,147	310,951	58,344	59,036	60,930
Minnesota.....	162,559	170,958	175,851	179,371	184,402	133,248	134,062	137,842	42,605	45,309	46,560
Mississippi.....	85,621	86,846	84,951	88,965	96,368	75,947	78,951	85,862	9,004	9,914	10,406
Missouri.....	180,156	178,090	179,895	184,754	191,861	121,525	123,446	129,148	58,170	61,308	62,713
Montana.....	29,428	29,992	29,379	28,943	29,590	26,342	25,984	26,151	3,038	2,959	3,439
Nebraska.....	68,505	70,778	72,492	72,834	75,080	59,318	59,643	61,191	13,175	13,191	13,669
Nevada.....	22,487	23,093	25,247	26,241	27,334	24,965	26,022	27,174	281	219	160
New Hampshire.....	39,456	41,733	42,257	42,936	43,324	21,912	22,930	23,114	20,345	20,006	20,210
New Jersey.....	218,838	201,270	201,470	201,583	208,489	156,517	157,007	161,820	44,953	44,556	44,649
New Mexico.....	43,722	47,169	53,933	55,865	56,423	52,758	54,503	54,684	1,175	1,362	1,538
New York.....	760,305	763,596	774,158	760,465	772,858	422,008	414,507	427,324	352,150	345,957	345,333
North Carolina.....	235,266	249,901	242,961	243,654	252,110	187,811	187,070	193,233	55,150	56,584	58,877
North Dakota.....	30,188	32,466	31,962	31,821	33,504	29,890	29,300	31,186	2,072	2,441	2,317
Ohio.....	369,342	383,896	388,824	390,584	408,334	285,228	291,745	299,948	103,596	98,840	106,385
Oklahoma.....	115,701	126,391	122,718	125,553	127,478	104,771	105,512	107,137	17,947	20,041	20,339
Oregon.....	110,649	102,247	106,186	108,325	114,127	89,899	91,499	96,778	18,268	18,855	17,351
Pennsylvania.....	404,192	422,349	428,402	439,943	445,454	231,804	238,828	248,745	196,598	201,115	196,709
Rhode Island.....	50,628	53,016	53,382	55,279	57,083	24,407	25,302	26,571	28,956	29,977	30,512
South Carolina.....	109,348	109,303	107,912	112,534	117,331	84,240	87,478	91,937	23,972	25,056	25,394
South Dakota.....	27,873	26,988	25,528	26,112	26,288	19,864	19,903	20,155	5,644	6,210	6,133
Tennessee.....	161,058	152,967	154,018	156,859	162,444	110,788	113,594	116,950	43,233	43,065	45,494
Texas.....	527,724	566,736	546,422	569,749	599,383	467,860	490,437	519,346	78,583	78,312	80,037
Utah.....	78,199	84,095	85,319	82,813	83,406	57,648	55,413	55,998	27,470	27,200	27,406
Vermont.....	25,572	25,649	26,531	26,924	27,711	14,744	15,053	15,338	11,786	11,871	12,374
Virginia.....	199,549	204,928	217,641	225,954	231,661	160,283	167,890	168,713	37,578	38,064	42,948
Washington.....	194,440	171,668	175,225	177,580	183,343	150,123	151,196	154,770	25,102	26,384	28,573
West Virginia.....	60,394	58,438	59,596	60,267	63,290	51,575	52,613	55,099	8,021	7,675	8,191
Wisconsin.....	206,790	211,749	223,863	219,930	223,087	192,079	186,106	187,561	31,785	33,825	35,527
Wyoming.....	14,725	17,037	17,856	18,877	19,424	17,034	18,256	18,795	822	621	829
U.S. Service Schools.....	49,736	53,968	53,206	59,703	44,015	53,206	59,703	44,015	—	—	—
<b>Outlying areas.....</b>	<b>117,637</b>	<b>145,530</b>	<b>142,910</b>	<b>135,588</b>	<b>140,606</b>	<b>58,095</b>	<b>56,594</b>	<b>57,443</b>	<b>84,815</b>	<b>78,894</b>	<b>83,166</b>
American Samoa.....	824	497	494	556	494	494	556	494	—	—	—
Guam.....	2,115	3,049	3,020	2,547	2,437	3,020	2,547	2,437	—	—	—
Northern Marianas.....	—	183	308	196	194	308	196	194	—	—	—
Puerto Rico.....	113,265	139,827	136,940	129,935	135,114	56,125	50,940	51,949	64,815	78,994	83,166
Trust Territory of the Pacific.....	195	680	897	867	932	697	687	932	—	—	—
Virgin Islands.....	1,218	1,494	1,451	1,488	1,437	1,451	1,488	1,437	—	—	—

<sup>1</sup> Preliminary data.  
—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared March 1990.)

**Table 137.—Residence and migration of all freshmen students<sup>1</sup> in institutions of higher education, by State: Fall 1988**

State or other area	Students enrolled in State <sup>2</sup>	Student residents of State <sup>3</sup>	Students remaining in State <sup>4</sup>	Ratio of students remaining to—		Migration of students		
				Students enrolled	Student residents	Out of	Into	Net (column 8—column 7)
1	2	3	4	5	6	7	8	9
<b>United States</b> .....	<b>2,337,354</b>	<b>2,337,354</b>	<b>1,095,942</b>	<b>0.81</b>	<b>0.81</b>	<b>441,412</b>	<b>441,412</b>	<b>0</b>
Alabama.....	41,827	35,685	32,855	0.79	0.92	2,830	8,972	6,142
Alaska.....	1,615	2,965	1,266	0.78	0.43	1,899	349	-1,350
Arizona.....	69,814	62,577	60,338	0.87	0.96	2,239	9,276	7,037
Arkansas.....	17,065	18,769	14,463	0.85	0.86	2,306	2,602	296
California.....	283,290	268,770	255,962	0.90	0.95	12,808	27,326	14,520
Colorado.....	30,932	30,158	24,234	0.78	0.80	5,924	6,698	774
Connecticut.....	29,086	36,491	22,620	0.78	0.82	13,871	6,466	-7,405
Delaware.....	7,961	6,137	4,568	0.57	0.74	1,569	3,393	1,824
District of Columbia.....	9,674	3,489	1,733	0.18	0.50	1,756	7,941	6,185
Florida.....	71,524	67,131	55,704	0.78	0.83	11,427	15,820	4,393
Georgia.....	48,301	46,811	38,786	0.80	0.83	8,025	9,515	1,490
Hawaii.....	7,804	8,932	6,908	0.88	0.77	2,026	898	-1,128
Idaho.....	8,891	7,444	5,836	0.59	0.78	1,608	4,055	2,447
Illinois.....	123,073	132,931	113,039	0.92	0.85	19,892	10,034	-9,858
Indiana.....	50,414	42,834	37,814	0.75	0.88	5,020	12,600	7,580
Iowa.....	37,243	35,068	30,818	0.83	0.88	4,248	6,425	2,177
Kansas.....	26,274	24,082	21,557	0.82	0.90	2,525	4,717	2,192
Kentucky.....	34,702	33,582	30,387	0.88	0.90	3,195	4,315	1,120
Louisiana.....	23,191	27,899	24,327	0.83	0.87	3,572	4,864	1,292
Maine.....	9,209	9,370	6,546	0.71	0.70	2,824	2,663	-161
Maryland.....	39,595	43,935	32,819	0.83	0.75	11,116	6,776	-4,340
Massachusetts.....	72,194	61,761	48,798	0.68	0.79	12,963	23,396	10,433
Michigan.....	98,891	92,227	83,888	0.85	0.91	8,339	15,003	6,664
Minnesota.....	46,743	45,814	37,617	0.80	0.82	8,197	9,126	929
Mississippi.....	26,396	26,771	24,899	0.87	0.92	2,072	3,697	1,625
Missouri.....	38,393	35,603	30,156	0.79	0.85	5,447	8,237	2,790
Montana.....	5,533	6,538	4,738	0.86	0.72	1,798	795	-1,003
Nebraska.....	17,496	17,670	15,082	0.86	0.85	2,588	2,414	-174
Nevada.....	9,167	9,459	8,128	0.89	0.86	1,331	1,039	-292
New Hampshire.....	11,470	9,612	5,810	0.49	0.58	4,002	5,860	1,858
New Jersey.....	44,323	65,328	38,088	0.86	0.58	27,240	6,235	-21,005
New Mexico.....	11,503	11,793	9,704	0.84	0.82	2,089	1,799	-290
New York.....	176,311	142,764	114,131	0.64	0.80	28,639	64,180	35,547
North Carolina.....	63,403	54,974	51,422	0.81	0.94	3,552	11,981	8,429
North Dakota.....	9,049	7,603	6,384	0.71	0.84	1,219	2,665	1,446
Ohio.....	90,960	90,017	78,335	0.86	0.87	11,682	12,625	943
Oklahoma.....	27,708	28,190	25,309	0.91	0.90	2,881	2,399	-482
Oregon.....	38,911	34,877	31,815	0.82	0.92	2,862	7,096	4,234
Pennsylvania.....	99,050	92,302	76,073	0.77	0.82	18,229	22,977	6,748
Rhode Island.....	12,890	8,092	5,693	0.44	0.70	2,399	7,197	4,798
South Carolina.....	30,412	27,424	24,307	0.80	0.89	3,117	6,105	2,988
South Dakota.....	6,124	6,063	4,385	0.72	0.72	1,678	1,739	61
Tennessee.....	35,574	33,022	27,952	0.79	0.85	5,070	7,822	2,552
Texas.....	159,808	155,522	147,079	0.92	0.95	8,443	12,529	4,086
Utah.....	18,899	13,372	12,014	0.64	0.90	1,358	6,685	5,327
Vermont.....	6,832	4,654	2,950	0.43	0.63	1,704	3,882	2,178
Virginia.....	49,019	42,843	33,298	0.68	0.78	9,545	15,721	6,176
Washington.....	71,759	69,114	63,877	0.89	0.92	5,237	7,882	2,645
West Virginia.....	17,009	14,106	12,051	0.71	0.85	2,055	4,958	2,903
Wisconsin.....	54,253	51,656	45,634	0.84	0.88	6,022	8,619	2,597
Wyoming.....	5,389	5,134	4,147	0.77	0.81	987	1,242	255
State unknown <sup>5</sup> .....	—	130,193	—	—	—	130,193	—	-130,193

<sup>1</sup> Includes students who are enrolled at the reporting institution for the first time at the undergraduate level.

<sup>2</sup> "Students enrolled in State" are all of the new students reported by the institutions in that State, i.e., all immigrants and "remaining" students.

<sup>3</sup> "Student residents of State" are all students from a State in which they were residing when first admitted to an institution in any State at the current student level.

<sup>4</sup> "Students remaining in State" are students who attend institutions in their home State.

<sup>5</sup> Students are reported in "State unknown" when an institution is unable to determine the student's home State.

NOTE.—Data for U.S. Service Schools are included in State totals. Excludes students from foreign countries and the outlying areas.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Residence of First-Time Students" survey, 1988. (This table was prepared May 1990.)

**Table 188.—Residence and migration of all freshmen students <sup>1</sup> graduating from high school in the past 12 months, by State: Fall 1968**

State or other area	Students enrolled in State <sup>2</sup>	Student residents of State <sup>3</sup>	Students remaining in State <sup>4</sup>	Ratio of students remaining to—		Migration of students		
				Students enrolled	Student residents	Out of	Into	Net (column 6—column 7)
1	2	3	4	5	6	7	8	9
<b>United States.....</b>	<b>1,328,604</b>	<b>1,328,604</b>	<b>1,094,671</b>	<b>0.82</b>	<b>0.82</b>	<b>233,933</b>	<b>233,933</b>	<b>0</b>
Alabama.....	26,404	22,620	20,640	0.78	0.91	1,980	5,764	3,784
Alaska.....	541	1,619	477	0.88	0.29	1,142	64	-1,078
Arizona.....	19,759	17,482	15,977	0.81	0.91	1,505	3,782	2,277
Arkansas.....	12,431	11,932	10,253	0.82	0.88	1,679	2,176	500
California.....	158,585	158,936	150,361	0.95	0.95	8,555	6,204	-351
Colorado.....	17,728	16,720	12,515	0.71	0.75	4,205	5,213	1,008
Connecticut.....	14,868	19,632	9,922	0.67	0.50	9,910	4,966	-4,944
Delaware.....	5,065	3,163	1,969	0.39	0.62	1,194	3,096	1,902
District of Columbia.....	5,116	1,708	460	0.09	0.27	1,248	4,656	3,408
Florida.....	42,186	42,216	33,611	0.80	0.80	6,405	6,375	-30
Georgia.....	31,567	31,765	25,943	0.82	0.82	5,822	5,624	-198
Hawaii.....	4,872	5,960	4,521	0.93	0.76	1,439	351	-1,088
Idaho.....	5,765	4,105	3,134	0.54	0.76	971	2,651	1,680
Illinois.....	62,927	73,211	57,326	0.91	0.78	15,885	5,601	-10,284
Indiana.....	37,165	30,905	27,396	0.74	0.69	3,509	9,769	6,260
Iowa.....	24,230	22,303	19,021	0.79	0.65	3,262	5,209	1,927
Kansas.....	16,893	15,157	13,407	0.79	0.88	1,750	3,486	1,736
Kentucky.....	24,610	23,007	20,903	0.85	0.91	2,104	3,707	1,603
Louisiana.....	20,935	19,674	17,216	0.82	0.88	2,458	3,719	1,261
Maine.....	2,499	3,446	1,396	0.56	0.41	2,050	1,103	-947
Maryland.....	20,526	24,851	16,223	0.79	0.65	8,628	4,303	-4,325
Massachusetts.....	45,167	36,562	27,577	0.61	0.75	6,965	17,590	6,605
Michigan.....	55,236	57,751	52,045	0.94	0.90	5,706	3,191	-2,515
Minnesota.....	27,778	29,155	22,320	0.80	0.77	6,835	5,458	-1,377
Mississippi.....	15,329	15,119	13,541	0.88	0.90	1,578	1,788	210
Missouri.....	26,252	25,501	21,351	0.81	0.84	4,150	4,901	751
Montana.....	2,728	3,548	2,376	0.87	0.67	1,172	352	-820
Nebraska.....	12,051	12,288	10,244	0.85	0.83	2,042	1,807	-235
Nevada.....	3,629	4,091	3,245	0.85	0.79	846	584	-262
New Hampshire.....	7,140	5,422	3,049	0.43	0.56	2,373	4,091	1,718
New Jersey.....	19,441	39,020	17,562	0.90	0.45	21,456	1,679	-19,579
New Mexico.....	6,659	6,975	5,479	0.82	0.79	1,496	1,180	-316
New York.....	60,029	66,315	67,203	0.84	0.76	21,112	12,826	-8,286
North Carolina.....	44,682	37,408	34,974	0.78	0.93	2,434	9,708	7,274
North Dakota.....	6,681	5,121	4,540	0.68	0.69	581	2,141	1,560
Ohio.....	57,363	57,550	46,692	0.85	0.85	8,658	6,671	-187
Oklahoma.....	11,991	12,017	10,033	0.84	0.83	1,984	1,958	-26
Oregon.....	16,293	15,575	13,533	0.83	0.67	2,042	2,760	718
Pennsylvania.....	68,391	64,002	51,724	0.76	0.61	12,278	16,667	4,389
Rhode Island.....	5,267	4,765	3,003	0.57	0.63	1,762	2,264	502
South Carolina.....	19,605	16,175	15,743	0.80	0.67	2,432	3,862	1,430
South Dakota.....	3,622	3,714	2,565	0.71	0.69	1,149	1,057	-92
Tennessee.....	25,883	24,358	20,433	0.79	0.77	3,925	5,450	1,525
Texas.....	69,534	69,966	63,741	0.94	0.83	6,225	5,793	-432
Utah.....	6,077	6,119	5,235	0.86	0.66	864	642	-12
Vermont.....	4,906	3,624	2,416	0.49	0.67	1,208	2,490	1,282
Virginia.....	34,972	33,536	26,051	0.74	0.78	7,485	6,921	1,436
Washington.....	25,624	26,525	23,260	0.91	0.88	3,265	2,364	-901
West Virginia.....	12,224	9,620	6,161	0.67	0.65	1,459	4,063	2,604
Wisconsin.....	35,977	33,967	29,326	0.82	0.86	4,641	6,651	2,010
Wyoming.....	3,161	2,955	2,358	0.75	0.60	597	803	206
State unknown <sup>5</sup> .....	—	5,250	—	—	—	5,250	—	-5,250

<sup>1</sup> Freshmen students who are enrolled at the reporting institution for the first time.

<sup>2</sup> "Students enrolled in State" are all of the new students reported by the institutions in that State; i.e., all immigrants and "remaining" students.

<sup>3</sup> "Student residents of State" are all students from a State in which they were residing when first admitted to an institution in any State at the current student level.

<sup>4</sup> "Students remaining in State" are students who attend institutions in their home State.

<sup>5</sup> Students are reported in "State unknown" when an institution is unable to determine the student's home State.

NOTE.—Data for U.S. Service Schools are included in State totals. Excludes students from foreign countries and the outlying areas.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Residence of First-Time Students" survey, 1968. (This table was prepared May 1969.)

**Table 189.—Residence and migration of all freshmen students<sup>1</sup> in 4-year colleges graduating from high school in the past 12 months, by State: Fall 1988**

State or other area	Students enrolled in State <sup>2</sup>	Student residents of State <sup>3</sup>	Students remaining in State <sup>4</sup>	Ratio of students remaining to—		Migration of students		
				Students enrolled	Student residents	Out of	Into	Net (column 8—column 7)
1	2	3	4	5	6	7	8	9
<b>United States.....</b>	<b>665,384</b>	<b>665,384</b>	<b>654,055</b>	<b>0.76</b>	<b>0.76</b>	<b>211,329</b>	<b>211,329</b>	<b>0</b>
Alabama.....	18,298	12,842	11,089	0.68	0.68	1,753	5,209	3,456
Alaska.....	520	1,447	489	0.90	0.32	978	51	-927
Arizona.....	8,647	5,339	4,072	0.81	0.78	1,267	2,575	1,308
Arkansas.....	10,325	9,559	8,335	0.81	0.87	1,224	1,990	766
California.....	59,785	59,582	51,787	0.91	0.87	7,775	4,998	-2,777
Colorado.....	15,819	14,103	10,488	0.87	0.74	3,815	5,131	1,516
Connecticut.....	10,439	14,824	5,743	0.55	0.39	8,881	4,896	-4,185
Delaware.....	5,065	3,097	1,969	0.39	0.64	1,128	3,099	1,968
District of Columbia.....	5,118	1,824	460	0.09	0.28	1,164	4,856	3,492
Florida.....	21,163	22,042	14,341	0.68	0.85	7,701	8,822	-879
Georgia.....	24,357	24,299	19,007	0.78	0.78	5,292	5,350	58
Hawaii.....	2,494	3,483	2,182	0.87	0.82	1,301	332	-969
Idaho.....	2,421	2,717	1,860	0.77	0.68	857	561	-296
Illinois.....	35,981	45,898	30,590	0.85	0.87	15,108	5,391	-9,717
Indiana.....	33,375	26,857	23,809	0.71	0.89	3,048	9,566	6,518
Iowa.....	15,176	13,561	10,530	0.89	0.78	3,031	4,648	1,815
Kansas.....	11,241	10,226	8,822	0.77	0.84	1,604	2,619	1,015
Kentucky.....	15,837	14,279	12,355	0.78	0.87	1,924	3,482	1,558
Louisiana.....	19,897	17,914	15,999	0.81	0.89	1,925	3,708	1,783
Maine.....	1,707	2,489	641	0.38	0.26	1,858	1,066	-792
Maryland.....	10,574	14,993	6,812	0.63	0.44	8,381	3,982	-4,419
Massachusetts.....	35,195	27,284	18,738	0.53	0.69	8,526	18,457	7,931
Michigan.....	34,935	37,332	32,041	0.92	0.86	5,291	2,894	-2,397
Minnesota.....	20,224	21,584	15,190	0.75	0.70	8,394	5,034	-1,360
Mississippi.....	3,943	4,166	2,758	0.70	0.66	1,408	1,185	-223
Missouri.....	21,704	20,989	17,202	0.79	0.82	3,787	4,502	735
Montana.....	2,407	2,948	2,071	0.86	0.70	875	338	-539
Nebraska.....	9,890	9,828	8,080	0.83	0.82	1,768	1,630	-138
Nevada.....	3,244	3,288	2,878	0.82	0.81	612	568	-44
New Hampshire.....	8,106	4,237	2,182	0.38	0.51	2,055	3,924	1,869
New Jersey.....	9,038	27,980	7,309	0.81	0.26	20,871	1,727	-18,944
New Mexico.....	4,875	5,282	4,029	0.83	0.78	1,253	848	-407
New York.....	54,334	82,237	42,107	0.77	0.68	20,130	12,227	-7,903
North Carolina.....	31,745	24,988	22,754	0.72	0.91	2,234	8,991	6,757
North Dakota.....	5,114	3,718	3,249	0.64	0.87	489	1,865	1,396
Ohio.....	47,901	47,878	39,406	0.82	0.83	8,272	8,495	223
Oklahoma.....	9,407	9,280	7,643	0.81	0.83	1,817	1,764	147
Oregon.....	9,726	8,968	7,208	0.74	0.80	1,758	2,518	760
Pennsylvania.....	55,681	51,482	39,963	0.72	0.78	11,519	15,718	4,199
Rhode Island.....	3,734	3,184	1,571	0.42	0.49	1,613	2,163	550
South Carolina.....	13,781	12,386	10,127	0.74	0.82	2,259	3,634	1,375
South Dakota.....	3,608	3,525	2,551	0.71	0.72	974	1,057	83
Tennessee.....	20,088	18,447	14,774	0.74	0.80	3,873	5,314	1,841
Texas.....	52,244	53,408	47,878	0.91	0.89	5,730	4,568	-1,162
Utah.....	3,779	3,482	3,108	0.82	0.89	374	871	297
Vermont.....	3,663	2,534	1,504	0.41	0.59	1,030	2,159	1,129
Virginia.....	27,157	25,522	18,595	0.68	0.73	8,927	8,562	1,835
Washington.....	11,828	12,528	9,831	0.85	0.78	2,897	1,787	-900
West Virginia.....	10,778	8,218	8,956	0.85	0.85	1,260	3,820	2,560
Wisconsin.....	27,358	25,118	20,824	0.78	0.83	4,232	6,534	2,242
Wyoming.....	1,484	1,451	1,022	0.69	0.70	429	462	33
State unknown <sup>5</sup> .....	—	1,837	—	—	—	1,837	—	-1,837

<sup>1</sup> Freshmen students who are enrolled at the reporting institution for the first time.

<sup>2</sup> "Students enrolled in State" are all of the new students reported by the institutions in that State; i.e., all immigrants and "remaining" students.

<sup>3</sup> "Student residents of State" are all students from a State in which they were residing when first admitted to an institution in any State at the current student level.

<sup>4</sup> "Students remaining in State" are students who attend institutions in their home State.

<sup>5</sup> Students are reported in "State unknown" when an institution is unable to determine the student's home State.

NOTE.—Data for U.S. Service Schools are included in State totals. Excludes students from foreign countries and the outlying areas.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Residence of First-Time Students" survey, 1988. (This table was prepared May 1990.)

**Table 190.—Total enrollment in institutions of higher education, by type and control of institution and race/ethnicity of student: Fall 1976 to fall 1988**

Type and control of institution and race/ethnicity of student	Number, in thousands							Percent distribution by type and control <sup>1</sup>					
	1976	1978	1980	1982	1984	1986 <sup>2</sup>	1988 <sup>3</sup>	1976	1980	1982	1984	1986	1988
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>All students</b>													
Total.....	10,985.8	11,231.2	12,086.8	12,387.9	12,233.0	12,503.5	13,043.1	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic.....	9,078.1	9,184.0	9,833.0	9,997.1	9,814.7	9,920.8	10,283.2	84.3	83.5	82.9	82.5	81.6	81.1
Total minority.....	1,890.8	1,784.8	1,948.8	2,059.5	2,083.8	2,238.2	2,398.8	15.7	16.5	17.1	17.5	18.4	18.9
Black, non-Hispanic.....	1,033.0	1,054.4	1,106.8	1,101.5	1,075.8	1,082.3	1,129.8	9.8	9.4	9.1	9.0	8.9	8.9
Hispanic.....	383.8	417.3	471.7	519.3	534.9	618.0	680.0	3.6	4.0	4.3	4.5	5.1	5.4
Asian or Pacific Islander.....	197.9	235.1	286.4	351.0	389.5	447.8	496.7	1.8	2.4	2.9	3.3	3.7	3.9
American Indian/Alaskan Native.....	78.1	77.9	83.9	87.7	83.6	90.1	92.5	0.7	0.7	0.7	0.7	0.7	0.7
Nonresident alien.....	218.7	262.6	305.0	331.3	334.8	344.7	361.2	—	—	—	—	—	—
<b>4-year</b>													
Total.....	7,106.5	7,202.4	7,565.4	7,848.0	7,706.1	7,824.0	8,175.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic.....	5,999.0	6,027.1	6,274.5	6,305.6	6,300.4	6,337.0	6,561.6	86.6	85.7	85.5	84.9	84.1	83.6
Total minority.....	931.0	974.7	1,049.9	1,072.7	1,123.6	1,194.9	1,291.8	13.4	14.3	14.5	15.1	15.9	16.4
Black, non-Hispanic.....	603.7	611.8	634.3	612.3	617.0	615.1	656.3	8.7	8.7	8.3	8.3	8.2	8.3
Hispanic.....	173.8	190.4	218.8	228.7	246.1	278.4	296.0	2.5	3.0	3.1	3.3	3.7	3.8
Asian or Pacific Islander.....	118.7	137.8	162.1	193.1	222.4	261.8	297.4	1.7	2.2	2.6	3.0	3.5	3.8
American Indian/Alaskan Native.....	35.0	34.8	36.9	38.8	38.1	39.8	42.1	0.5	0.5	0.5	0.5	0.5	0.5
Nonresident alien.....	178.5	200.5	240.9	269.8	262.1	292.1	301.5	—	—	—	—	—	—
<b>Public</b>													
Total.....	4,892.9	4,896.1	5,127.8	5,175.5	5,196.0	5,300.2	5,544.0	89.1	88.0	88.0	87.7	86.0	86.1
White, non-Hispanic.....	4,120.2	4,065.1	4,243.0	4,257.9	4,229.9	4,275.1	4,454.8	59.5	57.9	57.7	57.0	56.8	56.6
Total minority.....	686.7	891.4	740.8	756.1	795.9	849.6	907.7	9.8	10.1	10.2	10.7	11.3	11.5
Black, non-Hispanic.....	421.8	424.9	439.2	420.7	426.7	423.7	448.5	6.1	6.0	5.7	5.7	5.6	5.7
Hispanic.....	129.3	140.2	156.4	164.1	178.8	205.9	215.6	1.9	2.1	2.2	2.4	2.7	2.7
Asian or Pacific Islander.....	87.5	99.1	117.2	140.3	160.3	188.2	210.2	1.3	1.8	1.9	2.2	2.5	2.7
American Indian/Alaskan Native.....	28.2	27.2	29.0	30.1	31.7	33.3	33.3	0.4	0.4	0.4	0.4	0.4	0.4
Nonresident alien.....	106.0	119.5	143.8	181.4	170.1	175.5	181.4	—	—	—	—	—	—
<b>Private</b>													
Total.....	2,213.8	2,306.3	2,437.8	2,472.8	2,510.2	2,523.8	2,631.0	30.9	32.0	32.0	32.3	32.0	31.9
White, non-Hispanic.....	1,878.8	1,942.0	2,031.5	2,047.7	2,070.5	2,061.9	2,126.6	27.1	27.7	27.8	27.9	27.4	27.0
Total minority.....	284.3	283.3	309.2	318.8	327.7	345.3	384.1	3.8	4.2	4.3	4.4	4.6	4.9
Black, non-Hispanic.....	182.0	186.9	196.1	191.8	190.4	191.4	207.6	2.6	2.7	2.6	2.6	2.5	2.6
Hispanic.....	44.3	50.1	60.2	64.5	67.3	72.8	80.2	0.6	0.8	0.9	0.9	1.0	1.0
Asian or Pacific Islander.....	31.2	38.7	44.9	52.8	62.1	73.5	87.2	0.5	0.8	0.7	0.8	1.0	1.1
American Indian/Alaskan Native.....	8.8	7.8	7.9	7.6	7.9	7.8	8.8	0.1	0.1	0.1	0.1	0.1	0.1
Nonresident alien.....	70.5	81.0	97.1	108.4	112.0	116.8	120.1	—	—	—	—	—	—
<b>2-year</b>													
Total.....	3,879.1	4,028.8	4,521.4	4,739.8	4,526.9	4,679.5	4,868.1	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic.....	3,077.1	3,166.9	3,558.5	3,891.5	3,514.3	3,593.8	3,701.5	80.2	78.8	78.9	78.5	77.5	77.0
Total minority.....	759.8	809.9	898.9	966.8	960.1	1,043.4	1,106.9	19.8	20.2	21.1	21.5	22.5	23.0
Black, non-Hispanic.....	429.3	442.6	472.5	489.2	458.7	487.2	473.3	11.2	10.6	10.5	10.3	10.1	9.8
Hispanic.....	210.2	226.9	255.1	290.8	288.8	339.6	383.9	5.5	5.7	6.2	6.5	7.3	8.0
Asian or Pacific Islander.....	79.2	97.2	124.3	157.9	187.1	186.0	199.3	2.1	2.8	3.4	3.7	4.0	4.1
American Indian/Alaskan Native.....	41.2	43.1	47.0	49.1	45.5	50.5	50.4	1.1	1.1	1.1	1.0	1.1	1.0
Nonresident alien.....	42.2	52.0	64.1	61.5	52.5	52.8	59.8	—	—	—	—	—	—
<b>Public</b>													
Total.....	3,748.1	3,873.7	4,328.8	4,519.7	4,260.4	4,413.7	4,612.4	96.7	95.8	95.4	94.1	94.3	94.7
White, non-Hispanic.....	2,974.3	3,051.0	3,413.1	3,526.8	3,312.5	3,378.8	3,509.0	77.5	76.6	75.4	74.0	73.0	73.0
Total minority.....	734.5	774.5	855.4	935.8	899.0	986.0	1,047.0	19.1	19.2	20.0	20.1	21.3	21.8
Black, non-Hispanic.....	409.5	414.8	437.9	452.4	417.3	430.1	432.8	10.7	9.8	9.7	9.3	9.3	9.0
Hispanic.....	207.5	222.3	249.8	281.5	277.3	326.0	371.1	5.4	5.6	6.0	6.2	7.0	7.7
Asian or Pacific Islander.....	78.2	96.3	122.5	155.3	162.4	182.5	195.5	2.0	2.7	3.3	3.6	3.9	4.1
American Indian/Alaskan Native.....	39.3	41.3	45.2	46.4	42.0	47.4	47.6	1.0	1.0	1.0	0.9	1.0	1.0
Nonresident alien.....	39.2	48.2	60.3	57.2	48.9	48.9	56.4	—	—	—	—	—	—
<b>Private</b>													
Total.....	131.0	155.1	192.8	220.2	266.4	265.9	255.7	3.3	4.2	4.6	5.9	5.7	5.3
White, non-Hispanic.....	102.8	115.9	145.4	164.8	201.8	204.8	192.8	2.7	3.3	3.5	4.5	4.4	4.0
Total minority.....	25.3	35.4	43.5	51.1	61.2	57.3	60.0	0.7	1.0	1.1	1.4	1.2	1.2
Black, non-Hispanic.....	19.8	26.0	34.8	38.8	41.4	37.1	40.7	0.5	0.8	0.8	0.9	0.8	0.8
Hispanic.....	2.8	4.6	5.3	9.1	11.6	13.8	12.9	0.1	0.1	0.2	0.3	0.3	0.3
Asian or Pacific Islander.....	0.9	0.9	1.8	2.8	4.7	3.5	3.8	0.0	0.0	0.1	0.1	0.1	0.1
American Indian/Alaskan Native.....	1.8	1.9	1.8	2.7	3.5	3.1	2.7	0.0	0.0	0.1	0.1	0.1	0.1
Nonresident alien.....	3.0	3.8	3.7	4.3	3.5	3.7	3.2	—	—	—	—	—	—

<sup>1</sup> Distribution for U.S. citizens only.

<sup>2</sup> Data revised from previously published figures.

<sup>3</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared February 1990.)

NOTE.—Because of underreporting and nonreporting of racial/ethnic data, figures are slightly lower than corresponding data in other tables. Because of rounding, details may not add to totals.

**Table 191.—Total enrollment in institutions of higher education, by level of study and race/ethnicity of student:  
Fall 1976 to fall 1988**

Level of study, sex, and race/ethnicity of student	Number, in thousands							Percent distribution by level of study <sup>1</sup>					
	1976	1978	1980	1982	1984	1986 <sup>2</sup>	1988 <sup>2</sup>	1976	1980	1982	1984	1986	1988
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>All students</b>													
Men.....	5,794.4	5,621.5	5,866.1	5,999.2	5,656.3	5,884.5	5,998.2	52.4	48.0	47.6	47.3	46.5	45.4
White, non-Hispanic.....	4,613.7	4,613.1	4,772.9	4,830.4	4,689.9	4,847.1	4,711.6	44.7	40.5	40.1	39.4	38.2	37.2
Total minority.....	826.6	828.9	884.4	936.6	937.9	1,004.7	1,051.3	7.7	7.5	7.6	7.9	8.3	8.3
Black, non-Hispanic.....	489.9	453.3	483.7	457.9	436.8	436.1	442.7	4.4	3.9	3.6	3.7	3.6	3.5
Hispanic.....	209.7	212.5	231.6	251.6	253.8	290.1	310.3	1.9	2.0	2.1	2.1	2.4	2.4
Asian or Pacific Islander.....	108.4	126.3	151.3	169.0	210.0	239.1	259.2	1.0	1.3	1.6	1.8	2.0	2.0
American Indian/Alaskan Native.....	36.5	36.8	37.8	39.9	37.4	39.4	39.1	0.4	0.3	0.3	0.3	0.3	0.3
Nonresident alien.....	154.1	179.5	210.6	230.3	230.4	232.7	235.3	—	—	—	—	—	—
Women.....	5,191.2	5,609.6	6,216.7	6,366.6	6,374.7	6,619.0	7,044.9	47.6	52.0	52.2	52.7	53.5	54.6
White, non-Hispanic.....	4,262.4	4,580.9	5,090.1	5,166.7	5,124.7	5,273.5	5,571.6	39.6	42.9	42.9	43.1	43.4	43.9
Total minority.....	864.2	955.7	1,084.4	1,120.9	1,146.8	1,233.5	1,347.4	8.0	9.0	9.3	9.6	10.1	10.6
Black, non-Hispanic.....	563.1	601.1	643.0	643.6	639.0	646.2	666.9	5.2	5.5	5.3	5.4	5.3	5.4
Hispanic.....	174.1	204.7	240.1	267.5	261.2	327.9	369.6	1.6	2.0	2.2	2.4	2.7	2.9
Asian or Pacific Islander.....	89.4	108.7	135.2	162.0	179.5	208.7	237.5	0.6	1.1	1.3	1.5	1.7	1.9
American Indian/Alaskan Native.....	37.6	41.0	46.1	47.6	46.1	50.6	53.4	0.3	0.4	0.4	0.4	0.4	0.4
Nonresident alien.....	64.6	73.1	94.2	101.0	104.1	112.0	125.9	—	—	—	—	—	—
<b>Undergraduate</b>													
Total.....	9,419.0	9,665.8	10,469.1	10,768.7	10,810.8	10,798.0	11,304.2	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic.....	7,740.5	7,670.6	8,480.7	8,678.1	8,484.0	8,557.0	8,906.7	83.4	82.7	82.1	81.6	80.6	80.2
Total minority.....	1,535.3	1,625.1	1,776.5	1,889.3	1,911.0	2,035.9	2,192.4	16.6	17.3	17.9	18.4	19.2	19.8
Black, non-Hispanic.....	943.4	866.5	1,018.6	1,019.7	994.9	996.2	1,038.6	10.2	9.9	9.7	9.6	9.4	9.4
Hispanic.....	352.9	384.0	433.1	480.1	495.2	563.2	631.2	3.6	4.2	4.5	4.6	5.3	5.7
Asian or Pacific Islander.....	169.3	202.6	248.7	306.2	343.0	393.0	436.6	1.6	2.4	2.9	3.3	3.7	3.9
American Indian/Alaskan Native.....	69.7	71.9	77.9	81.3	77.8	83.5	85.9	0.6	0.6	0.6	0.7	0.6	0.6
Nonresident alien.....	143.2	170.1	209.9	223.2	215.8	204.5	205.0	—	—	—	—	—	—
Women.....	4,522.1	4,915.0	5,471.7	5,649.0	5,806.4	5,780.5	6,170.4	48.2	52.7	52.6	53.2	53.9	54.9
White, non-Hispanic.....	3,688.3	3,986.6	4,425.6	4,542.2	4,476.9	4,579.6	4,652.9	39.6	43.1	43.0	43.1	43.2	43.7
Total minority.....	787.0	874.5	975.6	1,032.6	1,066.0	1,126.3	1,236.5	8.5	9.5	9.8	10.2	10.6	11.1
Black, non-Hispanic.....	512.7	550.2	590.6	590.2	590.2	593.7	630.6	5.5	5.8	5.8	5.7	5.6	5.7
Hispanic.....	161.2	189.6	221.6	246.1	261.3	299.2	344.0	1.7	2.2	2.3	2.5	2.8	3.1
Asian or Pacific Islander.....	76.2	96.1	120.2	145.1	161.4	186.4	212.2	0.8	1.2	1.4	1.6	1.6	1.9
American Indian/Alaskan Native.....	34.9	36.4	43.1	44.6	43.2	47.0	49.7	0.4	0.4	0.4	0.4	0.4	0.4
Nonresident alien.....	46.8	53.7	70.1	74.0	73.5	74.4	61.1	—	—	—	—	—	—
<b>Graduate</b>													
Total.....	1,322.5	1,310.4	1,340.9	1,320.8	1,343.7	1,435.1	1,471.9	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic.....	1,115.6	1,094.1	1,104.7	1,074.7	1,087.3	1,132.5	1,153.2	89.2	88.5	88.4	88.5	87.2	87.3
Total minority.....	134.5	136.6	144.0	141.1	141.1	166.6	167.2	10.8	11.5	11.6	11.5	12.6	12.7
Black, non-Hispanic.....	78.5	78.4	75.1	68.9	67.4	72.0	76.5	6.3	6.0	5.7	5.5	5.5	5.8
Hispanic.....	26.4	26.0	32.1	31.7	31.7	45.6	39.5	2.1	2.6	2.6	2.6	3.5	3.0
Asian or Pacific Islander.....	24.5	27.5	31.6	35.0	37.1	43.4	45.7	2.0	2.5	2.9	3.0	3.3	3.6
American Indian/Alaskan Native.....	5.1	4.9	5.2	5.4	4.6	5.5	5.6	0.4	0.4	0.4	0.4	0.4	0.4
Nonresident alien.....	72.4	79.5	92.2	105.0	115.3	136.0	151.4	—	—	—	—	—	—
Women.....	614.6	630.2	668.7	652.4	672.6	742.0	774.1	47.8	51.7	51.5	52.3	54.3	55.3
White, non-Hispanic.....	526.5	537.9	566.2	549.2	566.0	613.3	636.6	42.1	45.3	45.2	46.1	47.2	48.2
Total minority.....	70.8	73.5	79.0	76.9	76.9	92.2	93.9	5.7	6.3	6.3	6.3	7.1	7.1
Black, non-Hispanic.....	46.5	46.5	46.9	42.8	42.5	45.6	49.1	3.7	3.6	3.5	3.5	3.5	3.7
Hispanic.....	11.6	13.5	16.4	17.0	17.1	25.3	22.0	0.9	1.3	1.4	1.4	1.9	1.7
Asian or Pacific Islander.....	10.1	11.1	13.0	14.2	14.7	17.9	14.5	0.8	1.0	1.2	1.2	1.4	1.6
American Indian/Alaskan Native.....	2.4	2.4	2.7	2.9	2.6	3.2	3.3	0.2	0.2	0.2	0.2	0.2	0.2
Nonresident alien.....	17.3	16.7	23.5	26.3	29.7	36.5	43.4	—	—	—	—	—	—
<b>First-professional</b>													
Total.....	244.1	255.0	276.8	276.3	278.5	270.4	267.1	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic.....	220.0	229.3	247.7	246.2	243.4	230.5	223.2	91.3	90.4	89.5	88.5	86.6	85.1
Total minority.....	21.1	22.6	26.3	29.0	31.7	35.7	39.1	6.7	6.6	10.5	11.5	13.4	14.9
Black, non-Hispanic.....	11.2	11.4	12.6	12.9	13.4	14.1	14.3	4.6	4.7	4.7	4.9	5.3	5.6
Hispanic.....	4.5	5.4	6.5	7.4	6.0	9.1	9.3	1.9	2.4	2.7	2.9	3.4	3.6
Asian or Pacific Islander.....	4.1	4.6	6.1	7.7	9.3	11.4	14.4	1.7	2.2	2.6	3.4	4.3	5.6
American Indian/Alaskan Native.....	1.3	1.1	0.8	0.9	1.0	1.1	1.1	0.5	0.3	0.3	0.4	0.4	0.4
Nonresident alien.....	3.1	3.0	2.9	3.1	3.4	4.1	4.7	—	—	—	—	—	—
Women.....	54.5	64.5	78.4	67.2	63.6	66.6	100.4	22.4	26.4	31.4	33.7	35.8	37.7
White, non-Hispanic.....	47.6	56.3	68.1	75.3	79.6	80.4	82.0	19.7	24.9	27.4	29.0	30.2	31.2
Total minority.....	8.4	7.6	9.6	11.2	12.9	15.0	17.1	2.6	3.5	4.1	4.7	5.6	6.5
Black, non-Hispanic.....	3.9	4.4	5.5	5.7	6.3	6.8	7.2	1.6	2.0	2.1	2.3	2.5	2.7
Hispanic.....	1.0	1.4	1.9	2.4	2.8	3.4	3.6	0.4	0.7	0.9	1.0	1.3	1.4
Asian or Pacific Islander.....	1.1	1.5	2.0	2.7	3.5	4.4	5.8	0.5	0.7	1.0	1.3	1.6	2.2
American Indian/Alaskan Native.....	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.2	0.2
Nonresident alien.....	0.5	0.6	0.6	0.6	0.9	1.1	1.4	—	—	—	—	—	—

<sup>1</sup> Distribution for U.S. citizens only.

<sup>2</sup> Data revised from previously published figures.

<sup>3</sup> Preliminary data.

NOTE.—Because of underreporting and nonreporting of racial/ethnic data, figures are slightly lower than corresponding data in other tables. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1986" survey and unpublished tabulations. (This table was prepared February 1990.)

**Table 192.—Total enrollment in institutions of higher education, by race/ethnicity of student and by State: Fall 1988<sup>1</sup>**

State or other area	Total	White non-Hispanic	Minority enrollment, by race/ethnicity					Nonresident alien	
			Total	Percent minority <sup>2</sup>	Black, non-Hispanic	Hispanic	Asian/Pacific Islander		American Indian/Alaskan Native
1	2	3	4	5	6	7	8	9	10
<b>United States.....</b>	<b>13,043,118</b>	<b>10,283,176</b>	<b>2,396,764</b>	<b>18.9</b>	<b>1,129,580</b>	<b>679,962</b>	<b>496,688</b>	<b>92,534</b>	<b>361,778</b>
Alabama.....	199,613	153,664	42,133	21.5	38,978	1,121	1,596	436	3,796
Alaska.....	26,361	23,613	4,587	16.3	1,040	522	764	2,233	161
Arizona.....	257,766	203,746	46,966	18.7	7,263	26,062	5,340	8,301	7,062
Arkansas.....	64,550	70,180	12,775	15.4	11,361	366	668	360	1,595
California.....	1,753,664	1,131,731	556,314	33.0	114,388	215,397	205,929	20,600	65,519
Colorado.....	186,288	157,962	24,234	13.3	5,078	13,452	4,050	1,654	4,072
Connecticut.....	165,677	143,934	17,680	10.9	8,930	4,824	3,528	398	4,063
Delaware.....	38,260	32,315	5,262	14.0	4,313	356	545	66	663
District of Columbia.....	79,069	41,348	26,668	40.9	23,926	2,114	2,494	134	9,073
Florida.....	515,590	366,687	113,749	22.7	48,396	54,513	9,331	1,599	15,154
Georgia.....	230,762	176,235	49,030	21.8	43,029	2,336	3,237	426	5,497
Hawaii.....	52,297	15,700	33,003	67.8	957	644	31,006	194	3,594
Idaho.....	45,717	42,695	1,847	4.1	280	653	541	373	1,176
Illinois.....	688,974	521,510	153,644	22.8	63,090	40,784	27,796	1,972	13,620
Indiana.....	267,902	239,057	22,342	8.5	14,723	3,666	3,329	604	8,503
Iowa.....	181,174	147,933	7,426	4.8	3,511	1,402	2,056	457	5,815
Kansas.....	152,647	134,678	13,125	8.9	6,300	2,910	2,069	1,826	4,844
Kentucky.....	159,868	148,703	11,484	7.3	9,298	683	1,076	427	1,661
Louisiana.....	176,031	123,362	47,827	27.9	41,213	3,283	2,507	624	5,042
Maine.....	47,903	46,748	893	1.9	263	135	260	235	262
Maryland.....	249,079	188,900	54,507	22.4	39,530	4,327	9,962	688	5,672
Massachusetts.....	426,620	362,797	44,293	10.9	17,777	11,828	13,731	1,157	19,530
Michigan.....	542,580	458,184	70,941	13.4	51,494	7,718	8,607	3,122	13,446
Minnesota.....	244,706	229,422	10,441	4.4	3,274	1,507	3,929	1,731	4,843
Mississippi.....	112,872	79,451	31,624	28.5	30,367	316	604	337	1,797
Missouri.....	261,667	226,721	27,482	10.7	20,110	2,610	3,922	640	5,464
Montana.....	35,772	32,472	2,813	7.4	141	269	135	2,066	667
Nebraska.....	104,617	97,630	5,313	5.2	2,520	1,220	848	625	1,674
Nevada.....	48,632	41,304	6,636	14.2	2,242	2,324	1,603	667	692
New Hampshire.....	55,334	52,433	1,989	3.7	811	647	541	190	912
New Jersey.....	302,640	232,047	58,768	20.2	28,831	17,694	11,196	647	11,825
New Mexico.....	79,450	50,647	27,363	35.1	1,667	20,221	929	4,546	1,440
New York.....	1,007,411	742,572	229,401	23.8	111,000	70,739	44,043	3,619	35,438
North Carolina.....	332,521	260,563	67,489	20.6	58,267	2,249	4,353	2,620	4,489
North Dakota.....	38,293	35,231	2,050	5.5	215	137	212	1,466	1,012
Ohio.....	541,737	476,222	50,094	9.5	38,130	4,552	6,140	1,272	13,421
Oklahoma.....	176,307	145,466	25,112	14.7	11,777	2,534	2,767	6,014	5,709
Oregon.....	156,159	138,077	12,160	8.1	2,013	2,572	6,055	1,540	6,902
Pennsylvania.....	573,927	504,972	56,055	10.0	38,415	6,139	10,583	916	12,900
Rhode Island.....	74,639	68,139	5,002	6.8	2,165	1,197	1,402	216	1,666
South Carolina.....	147,757	113,939	31,634	21.7	29,247	663	1,266	236	2,184
South Dakota.....	31,460	28,529	2,305	7.5	226	69	122	1,868	629
Tennessee.....	206,406	170,510	31,792	15.7	28,494	1,166	1,728	404	4,104
Texas.....	647,192	597,400	227,654	27.8	75,478	125,776	23,842	2,756	22,138
Utah.....	107,538	97,575	5,166	5.0	619	1,743	1,736	1,066	4,777
Vermont.....	34,467	32,953	1,016	3.0	277	234	407	98	496
Virginia.....	321,218	257,686	57,717	18.3	44,164	3,783	9,032	738	5,613
Washington.....	253,068	219,643	28,270	11.4	6,504	6,630	13,492	3,444	5,175
West Virginia.....	80,379	75,128	3,907	4.9	2,676	335	577	119	1,344
Wisconsin.....	285,227	261,147	18,487	6.6	9,060	3,497	4,033	1,697	5,563
Wyoming.....	26,540	24,666	1,371	5.3	267	646	82	376	501
<b>U.S. Service Schools.....</b>	<b>44,032</b>	<b>36,478</b>	<b>7,043</b>	<b>16.2</b>	<b>5,459</b>	<b>755</b>	<b>699</b>	<b>130</b>	<b>611</b>
<b>Outlying areas.....</b>	<b>163,441</b>	<b>630</b>	<b>161,766</b>	<b>99.6</b>	<b>1,667</b>	<b>154,677</b>	<b>5,164</b>	<b>38</b>	<b>1,045</b>
American Samoa.....	759	0	622	100.0	0	0	607	15	137
Guam.....	3,619	335	3,060	90.1	26	43	2,976	15	424
Northern Mariana.....	352	24	270	91.6	0	0	270	0	56
Puerto Rico.....	154,739	19	154,559	100.0	17	154,536	6	0	181
Trust Territory of the Pacific.....	1,301	0	1,301	100.0	0	0	1,301	0	0
Virgin Islands.....	2,471	252	1,954	88.8	1,824	98	24	8	266

<sup>1</sup> Preliminary data.

<sup>2</sup> Percent minority based on U.S. citizen enrollment (total enrollment less enrollment of nonresident aliens).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1988" survey. (This table was prepared March 1990.)

NOTE.—Because of adjustments to underreported and nonreported racial/ethnic data, figures are slightly different from corresponding data in other tables.

**Table 193.—Disabled students enrolled in postsecondary institutions, by type of disability: Fall 1986**

Type of disability	Disabled students		Percent of disabled students by condition
	Enrollment	Percent of all students	
1	2	3	4
<b>Disabled students.....</b>	<b>1,319,229</b>	<b>10.5</b>	<b>—</b>
Specific learning disability.....	160,878	1.3	12.2
Visual handicap.....	514,681	4.1	39.0
Hard of hearing.....	265,484	2.1	20.1
Deafness.....	80,910	0.6	6.1
Speech disability.....	62,525	0.5	4.7
Orthopedic handicap.....	231,491	1.6	17.6
Health impairment.....	320,272	2.6	24.3

—Data not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "The 1987 National Postsecondary Student Aid Study." (This table was prepared March 1989.)

NOTE.—Disabled students are students who reported that they had one or more of the following conditions: a specific learning disability, a visual handicap, hard of hearing, deafness, a speech disability, an orthopedic handicap, or a health impairment. Details do not sum to total since some students reported two or more disabilities.

**Table 194.—Students enrolled in postsecondary institutions, by disability status and selected student characteristics: Fall 1986**

Selected student characteristics	Disabled students <sup>1</sup>	Nondisabled students	Selected student characteristics	Disabled students <sup>1</sup>	Nondisabled students
Sex.....	100.0	100.0	Level of study.....	100.0	100.0
Male.....	50.8	44.7	Undergraduate.....	91.6	88.8
Female.....	49.2	55.3	Graduate.....	6.8	8.7
Race/ethnicity.....	100.0	100.0	First-professional.....	1.6	2.5
White, non-Hispanic.....	78.5	78.2	Undergraduate.....	100.0	100.0
Black, non-Hispanic.....	8.0	9.0	Arts and humanities.....	7.4	6.4
Hispanic.....	7.5	6.5	Business.....	24.4	28.1
Asian American.....	4.1	5.5	Education.....	9.3	6.6
American Indian.....	1.9	.8	Engineering.....	9.8	9.5
Age.....	100.0	100.0	Health.....	7.8	9.7
15 to 23.....	49.8	55.8	Liberal/general studies.....	7.3	6.9
24 to 29.....	17.5	19.8	Natural sciences <sup>2</sup> .....	10.7	10.7
30 or older.....	32.7	24.4	Social sciences.....	8.6	7.3
Veteran status.....	100.0	100.0	Trade/industrial.....	3.2	2.5
Veteran.....	11.4	6.0	All other.....	11.4	10.4
Not a veteran.....	88.6	94.0	Graduate.....	100.0	100.0
Dependency status.....	100.0	100.0	Arts and humanities.....	10.7	9.6
Dependent.....	55.9	59.5	Business.....	13.6	21.4
Independent.....	44.1	40.5	Education.....	25.4	22.4
Housing status.....	100.0	100.0	Engineering.....	4.6	6.4
School-owned.....	19.1	18.9	Natural sciences <sup>2</sup> .....	10.2	12.0
Off-campus, not with parents.....	55.2	53.5	Social sciences.....	9.9	9.5
With parents.....	25.7	27.6	All other.....	25.6	18.7
Attendance status.....	100.0	100.0	First-professional.....	100.0	100.0
Full-time.....	82.8	61.0	Law.....	49.9	38.9
Part-time.....	37.2	39.0	Medicine.....	25.4	38.6
			Other medical <sup>3</sup> .....	19.9	17.5
			Theology.....	4.8	4.9

<sup>1</sup> Disabled students are those who reported that they had one or more of the following conditions: a specific learning disability, a visual handicap, hard of hearing, deafness, a speech disability, an orthopedic handicap, or a health impairment.

<sup>2</sup> Includes students who majored in life sciences, physical sciences, mathematics, or computer sciences.

<sup>3</sup> Includes chiropractic medicine, dentistry, optometry, osteopathic medicine, pharmacy, podiatry, and veterinary medicine.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "The 1987 National Postsecondary Student Aid Study." (This table was prepared March 1989.)

**Table 195.—Enrollment of persons 14 to 34 years of age<sup>1</sup> in institutions of higher education, by race/ethnicity, sex, and year of college: October 1965 to October 1989**

Characteristic	1965	1970	1975	1978	1979	1980	1981 <sup>2</sup>	1982	1983	1984	1985	1986	1987	1988	1989
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Numbers in thousands															
All students.....	5,675	7,413	9,697	9,838	9,978	10,180	10,734	10,919	10,825	10,859	10,863	10,605	10,918	10,937	11,068
White															
Total.....	5,317	8,759	8,514	8,514	8,709	8,875	9,162	9,328	9,242	9,269	9,334	8,943	9,148	9,244	9,378
Men.....	3,326	4,066	4,771	4,508	4,400	4,438	4,820	4,650	4,718	4,709	4,633	4,485	4,563	4,484	4,513
Women.....	1,991	2,693	3,743	4,006	4,309	4,437	4,543	4,679	4,524	4,559	4,701	4,459	4,583	4,780	4,863
Black															
Total.....	274	522	948	1,022	1,002	1,007	1,133	1,127	1,102	1,138	1,049	1,138	1,198	1,115	1,141
Men.....	128	253	442	452	434	437	505	482	497	544	458	488	525	426	433
Women.....	146	269	506	569	568	570	628	645	605	594	591	649	671	689	708
Hispanic origin <sup>3</sup>															
Total.....	—	—	411	377	440	443	510	493	523	524	579	877	667	654	640
Men.....	—	—	219	196	228	222	258	218	253	232	280	331	369	313	311
Women.....	—	—	192	181	214	221	252	278	270	292	299	348	298	341	330
Year of college															
First.....	1,861	2,212	2,886	2,766	2,885	2,957	3,098	2,990	2,987	3,024	2,958	2,965	2,915	3,131	2,983
Second.....	1,256	1,739	2,378	2,286	2,291	2,411	2,560	2,817	2,824	2,454	2,585	2,564	2,745	2,598	2,680
Third.....	896	1,248	1,492	1,858	1,853	1,716	1,799	1,815	1,805	1,981	1,931	1,803	2,011	1,979	2,017
Fourth.....	803	1,074	1,354	1,445	1,458	1,403	1,598	1,688	1,595	1,599	1,642	1,640	1,557	1,631	1,878
Fifth or higher..	859	1,140	1,589	1,681	1,891	1,892	1,682	1,810	1,814	1,802	1,749	1,633	1,689	1,598	1,711
Percentage distribution															
All students.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White															
Total.....	93.7	91.2	87.8	86.5	87.3	87.2	85.4	85.4	85.4	85.4	85.9	84.3	83.8	84.5	84.7
Men.....	58.8	54.8	49.2	45.8	44.1	43.8	43.0	42.8	43.8	43.4	42.8	42.3	41.8	40.8	40.8
Women.....	35.1	36.3	38.6	40.7	43.2	43.6	42.3	42.9	41.6	42.0	43.3	42.0	42.0	43.7	43.9
Black															
Total.....	4.8	7.0	9.8	10.4	10.0	9.9	10.8	10.3	10.2	10.5	9.7	10.7	11.0	10.2	10.3
Men.....	2.2	3.4	4.8	4.8	4.3	4.3	4.7	4.4	4.8	5.0	4.2	4.8	4.8	3.9	3.9
Women.....	2.8	3.8	5.2	5.8	5.7	5.8	5.9	5.9	5.8	5.5	5.4	6.1	6.1	6.3	6.4
Hispanic origin <sup>3</sup>															
Total.....	—	—	4.2	3.8	4.4	4.4	4.8	4.5	4.8	4.8	5.3	8.4	6.1	6.0	5.8
Men.....	—	—	2.3	2.0	2.3	2.2	2.4	2.0	2.3	2.1	2.8	3.1	3.4	2.9	2.8
Women.....	—	—	2.0	1.8	2.1	2.2	2.3	2.5	2.5	2.7	2.8	3.3	2.7	3.1	3.0
Year of college															
First.....	32.8	29.8	29.8	28.1	28.9	29.0	28.8	27.4	27.6	27.6	27.2	28.0	28.7	28.8	27.0
Second.....	22.1	23.5	24.5	23.2	23.0	23.7	23.8	24.0	24.2	22.8	23.8	24.2	25.1	23.8	24.2
Third.....	15.8	18.8	15.4	18.9	18.8	18.9	18.8	18.8	18.7	18.2	17.8	17.0	18.4	18.1	18.2
Fourth.....	14.1	14.5	14.0	14.7	14.8	13.8	14.9	15.5	14.7	14.7	15.1	15.5	14.3	14.9	15.1
Fifth or higher..	15.1	15.4	18.4	17.1	18.9	16.8	15.7	18.8	18.8	18.8	18.1	15.4	15.5	14.8	15.5

<sup>1</sup> Totals differ from those shown in other tables. This table presents data collected in sample surveys of households rather than surveys of institutions. Excludes persons age 35 and over.

<sup>2</sup> Data for 1981 and later years are controlled to 1980 census base.

<sup>3</sup> Persons of Hispanic origin may be of any race.

—Data not available.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 403. (This table was prepared April 1990.)

Table 196.—Total enrollment in selected major fields of study in 4-year institutions of higher education, by sex: Fall 1976 to fall 1988

Selected major fields of study	1976	1978 <sup>1</sup>		1980			1984 <sup>2</sup>			1986			1988 <sup>3</sup>			
	Total	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total enrollment.....	7,126,515	7,239,369	3,754,579	3,475,801	7,570,808	3,827,341	3,743,267	7,822,867	3,797,607	3,825,060	7,823,963	3,823,563	4,000,399	8,175,008	3,912,277	4,262,731
Percent.....	100.0	100.0	51.9	48.1	100.0	50.6	49.4	100.0	48.8	50.2	100.0	48.9	51.1	100.0	47.9	52.1
Agriculture and natural resources																
Enrollment.....	124,903	125,312	68,235	37,077	113,376	78,158	35,218	—	—	—	—	—	—	—	—	—
Percent.....	100.0	100.0	70.4	29.6	100.0	66.9	31.1	—	—	—	—	—	—	—	—	—
Architecture and environmental design																
Enrollment.....	58,149	57,673	42,106	15,567	59,660	42,302	17,358	56,806	37,632	19,264	56,766	36,876	19,878	61,767	38,481	23,286
Percent.....	100.0	100.0	73.0	27.0	100.0	70.9	29.1	100.0	66.1	33.9	100.0	65.0	35.0	100.0	62.3	37.7
Business and management																
Enrollment.....	951,945	1,112,511	728,011	384,500	1,240,258	742,859	497,399	1,292,868	715,415	577,453	1,270,187	690,588	579,599	1,348,148	736,577	611,569
Percent.....	100.0	100.0	65.4	34.6	100.0	59.9	40.1	100.0	55.3	44.7	100.0	54.4	45.6	100.0	54.6	45.4
Chemistry																
Enrollment.....	20,272	21,793	18,735	3,058	22,668	18,812	3,856	19,997	15,217	4,780	17,773	12,916	4,857	15,362	10,639	4,723
Percent.....	100.0	100.0	86.0	14.0	100.0	83.0	17.0	100.0	76.1	23.9	100.0	72.7	27.3	100.0	69.3	30.7
Engineering																
Enrollment.....	374,815	440,038	392,871	47,167	503,980	441,965	61,995	514,257	439,444	74,813	485,857	414,973	70,884	447,820	381,256	66,564
Percent.....	100.0	100.0	89.3	10.7	100.0	87.7	12.3	100.0	85.5	14.5	100.0	85.4	14.6	100.0	85.1	14.9
Law																
Enrollment.....	119,581	118,298	82,302	35,996	118,993	78,569	40,424	117,873	71,443	46,230	105,985	62,789	43,176	114,338	66,743	48,295
Percent.....	100.0	100.0	68.6	30.4	100.0	66.0	34.0	100.0	60.7	39.3	100.0	59.3	40.7	100.0	57.8	42.2
Life sciences																
Enrollment.....	289,906	272,560	154,971	117,589	241,807	132,087	109,740	233,333	118,651	114,682	216,001	108,044	109,957	223,022	109,034	113,988
Percent.....	100.0	100.0	56.9	43.1	100.0	54.8	45.4	100.0	50.9	49.1	100.0	49.6	50.4	100.0	48.9	51.1
Mathematics																
Enrollment.....	—	—	—	—	—	—	—	98,772	56,041	40,731	89,434	51,086	38,348	6,726	48,569	35,657
Percent.....	—	—	—	—	—	—	—	100.0	57.9	42.1	100.0	57.1	42.9	100.0	56.6	43.4
Medicine																
Enrollment.....	58,085	66,713	51,241	15,472	74,132	55,060	19,072	67,877	46,492	21,385	65,482	43,680	21,782	64,199	41,791	22,408
Percent.....	100.0	100.0	78.6	23.2	100.0	74.3	25.7	100.0	68.5	31.5	100.0	66.7	33.3	100.0	65.1	34.9
Physical sciences																
Enrollment.....	146,025	146,432	114,166	34,266	154,092	114,919	39,173	143,514	105,412	38,102	128,979	92,483	36,496	121,172	86,274	34,898
Percent.....	100.0	100.0	78.9	23.1	100.0	74.6	25.4	100.0	73.5	26.5	100.0	71.7	28.3	100.0	71.2	28.8
Veterinary medicine																
Enrollment.....	6,126	7,166	4,762	2,424	8,164	4,960	3,184	9,190	4,762	4,428	8,707	4,092	4,615	8,504	3,661	4,843
Percent.....	100.0	100.0	66.3	33.7	100.0	61.0	39.0	100.0	51.8	48.2	100.0	47.0	53.0	100.0	43.1	56.9
All other																
Enrollment.....	4,976,706	4,859,664	2,077,179	2,762,685	5,033,496	2,117,650	2,915,848	5,070,290	2,187,096	2,883,192	4,537,842	4,230,054	4,307,768	4,568,452	4,239,952	4,329,500
Percent.....	100.0	100.0	42.7	57.3	100.0	42.1	57.9	100.0	43.1	56.9	100.0	42.9	57.1	100.0	42.0	58.0

<sup>1</sup> Excludes approximately 0.1 percent of students whose major field of study was not reported.

<sup>2</sup> Excludes approximately 1.2 percent of students whose major field of study was not reported.

<sup>3</sup> Preliminary data.

<sup>4</sup> Includes students whose major field of study was not reported.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Institutions of Higher Education"; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared November 1989.)

**Table 197.—Total enrollment in selected major fields of study in 4-year institutions of higher education, by level, sex, and attendance status: Fall 1988<sup>1</sup>**

Level, sex, and attendance status of student	All fields	Archite- ture and environ- mental design	Business and manage- ment	Dentistry	Engine- ing	Law	Life sciences	Mathe- matics	Medicine	Physical sciences	Veteri- nary medicine	All other fields <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>All students.....</b>	<b>6,175,006</b>	<b>61,797</b>	<b>1,348,146</b>	<b>15,362</b>	<b>447,920</b>	<b>114,338</b>	<b>223,022</b>	<b>82,226</b>	<b>64,199</b>	<b>121,172</b>	<b>6,504</b>	<b>6,689,462</b>
<b>Men.....</b>	<b>3,912,277</b>	<b>38,481</b>	<b>736,577</b>	<b>10,639</b>	<b>381,256</b>	<b>66,043</b>	<b>109,034</b>	<b>46,569</b>	<b>41,791</b>	<b>66,274</b>	<b>3,661</b>	<b>2,391,952</b>
Full-time.....	2,842,564	33,203	519,070	10,590	300,787	56,162	92,030	36,311	41,403	66,506	3,625	1,680,877
Part-time.....	1,069,713	5,278	217,507	49	80,469	9,881	17,004	10,258	388	17,768	36	711,075
<b>Women.....</b>	<b>4,262,731</b>	<b>23,286</b>	<b>611,569</b>	<b>4,723</b>	<b>66,564</b>	<b>48,295</b>	<b>113,988</b>	<b>35,657</b>	<b>22,408</b>	<b>34,898</b>	<b>4,843</b>	<b>3,296,500</b>
Full-time.....	2,845,747	18,830	407,932	4,697	53,606	41,127	94,629	28,506	22,186	27,772	4,795	2,141,665
Part-time.....	1,416,984	4,456	203,637	26	12,958	7,168	19,359	7,151	222	7,126	48	1,154,835
<b>Undergraduate students.....</b>	<b>6,436,050</b>	<b>50,050</b>	<b>1,116,496</b>	<b>—</b>	<b>354,447</b>	<b>—</b>	<b>160,811</b>	<b>55,250</b>	<b>—</b>	<b>79,562</b>	<b>—</b>	<b>4,589,434</b>
<b>Men.....</b>	<b>3,047,819</b>	<b>31,015</b>	<b>589,602</b>	<b>—</b>	<b>299,888</b>	<b>—</b>	<b>85,713</b>	<b>35,258</b>	<b>—</b>	<b>54,731</b>	<b>—</b>	<b>1,951,612</b>
Full-time.....	2,387,188	27,197	487,804	—	258,063	—	75,490	29,211	—	46,034	—	1,485,389
Part-time.....	660,631	3,818	121,798	—	43,825	—	10,223	8,047	—	8,697	—	466,223
<b>Women.....</b>	<b>3,388,231</b>	<b>19,035</b>	<b>526,894</b>	<b>—</b>	<b>54,559</b>	<b>—</b>	<b>95,098</b>	<b>29,992</b>	<b>—</b>	<b>24,831</b>	<b>—</b>	<b>2,637,822</b>
Full-time.....	2,506,791	15,484	382,610	—	47,357	—	82,132	25,545	—	20,916	—	1,932,565
Part-time.....	881,440	3,571	144,284	—	7,202	—	12,966	4,447	—	3,913	—	705,257
<b>Graduate students.....</b>	<b>1,471,662</b>	<b>11,877</b>	<b>231,358</b>	<b>—</b>	<b>93,372</b>	<b>—</b>	<b>42,211</b>	<b>16,976</b>	<b>—</b>	<b>41,810</b>	<b>—</b>	<b>1,034,668</b>
<b>Men.....</b>	<b>697,773</b>	<b>7,439</b>	<b>146,774</b>	<b>—</b>	<b>61,367</b>	<b>—</b>	<b>23,321</b>	<b>11,311</b>	<b>—</b>	<b>31,543</b>	<b>—</b>	<b>396,018</b>
Full-time.....	304,194	5,979	51,104	—	44,724	—	16,540	7,100	—	22,472	—	156,275
Part-time.....	393,579	1,460	95,670	—	36,643	—	6,781	4,211	—	9,071	—	239,743
<b>Women.....</b>	<b>774,089</b>	<b>4,238</b>	<b>84,584</b>	<b>—</b>	<b>12,005</b>	<b>—</b>	<b>18,890</b>	<b>5,665</b>	<b>—</b>	<b>10,067</b>	<b>—</b>	<b>638,640</b>
Full-time.....	249,302	3,353	25,053	—	6,251	—	12,497	2,961	—	6,654	—	191,333
Part-time.....	525,787	885	59,531	—	5,754	—	6,393	2,704	—	3,213	—	447,307
<b>First-professional students.....</b>	<b>267,096</b>	<b>40</b>	<b>292</b>	<b>15,362</b>	<b>1</b>	<b>114,338</b>	<b>—</b>	<b>—</b>	<b>64,199</b>	<b>—</b>	<b>6,504</b>	<b>64,360</b>
<b>Men.....</b>	<b>166,685</b>	<b>27</b>	<b>201</b>	<b>10,639</b>	<b>1</b>	<b>66,043</b>	<b>—</b>	<b>—</b>	<b>41,791</b>	<b>—</b>	<b>3,661</b>	<b>44,322</b>
Full-time.....	151,182	27	162	10,590	—	56,162	—	—	41,403	—	3,625	39,213
Part-time.....	15,503	—	39	49	1	9,881	—	—	388	—	36	5,109
<b>Women.....</b>	<b>100,411</b>	<b>13</b>	<b>91</b>	<b>4,723</b>	<b>—</b>	<b>48,295</b>	<b>—</b>	<b>—</b>	<b>22,408</b>	<b>—</b>	<b>4,843</b>	<b>20,038</b>
Full-time.....	90,654	13	69	4,697	—	41,127	—	—	22,186	—	4,795	17,767
Part-time.....	9,757	—	22	26	—	7,168	—	—	222	—	48	2,271

<sup>1</sup> Preliminary data.<sup>2</sup> Includes students whose major field of study was not reported.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1988" survey. (This table was prepared November 1989.)

**Table 198.—Graduate enrollment in science and engineering programs in institutions of higher education, by field of study: United States and outlying areas, 1977 to 1988**

Field of engineering or science	1977	1979	1980	1981	1982	1983 <sup>1</sup>	1984 <sup>1</sup>	1985 <sup>1</sup>	1986	1987	1988	Percent change, 1982 to 1988
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total, all fields.....</b>	<b>358,323</b>	<b>373,194</b>	<b>383,100</b>	<b>391,640</b>	<b>398,982</b>	<b>413,210</b>	<b>426,215</b>	<b>434,340</b>	<b>444,995</b>	<b>449,588</b>	<b>445,595</b>	<b>11.7</b>
<b>Engineering, total.....</b>	<b>69,142</b>	<b>72,262</b>	<b>75,084</b>	<b>80,479</b>	<b>84,594</b>	<b>93,135</b>	<b>96,820</b>	<b>99,941</b>	<b>105,093</b>	<b>106,922</b>	<b>104,060</b>	<b>23.0</b>
Aerospace.....	1,518	1,481	1,737	1,883	1,941	2,408	2,431	2,642	2,907	3,104	3,316	70.9
Agricultural.....	709	740	742	802	875	969	954	941	1,054	1,004	1,039	18.7
Biomedical.....	900	1,051	1,011	1,057	1,118	1,244	1,367	1,373	1,549	1,716	1,755	57.3
Chemical.....	5,201	5,605	6,015	6,496	7,189	7,563	7,445	7,156	8,963	7,200	6,818	-7.9
Civil.....	12,712	13,217	13,507	14,515	14,523	15,406	15,740	15,351	15,474	15,311	15,056	3.7
Electrical.....	17,406	17,769	19,227	20,193	22,017	25,213	26,848	28,540	30,223	31,263	32,232	48.4
Engineering science.....	1,737	1,681	1,798	1,965	2,130	2,261	2,191	2,127	2,391	2,368	2,415	13.4
Industrial.....	10,438	10,714	9,870	10,026	9,870	10,712	11,175	12,532	13,393	13,973	12,036	21.9
Mechanical.....	6,722	9,251	9,888	10,618	11,487	12,911	13,924	14,111	15,504	16,182	16,216	41.4
Metallurgical/materials.....	2,559	2,756	2,910	3,125	3,124	3,447	3,664	3,939	4,192	4,309	4,272	36.7
Mining.....	452	369	413	462	449	524	502	489	512	513	489	8.9
Nuclear.....	1,491	1,318	1,241	1,283	1,301	1,203	1,234	1,220	1,265	1,279	1,303	0.2
Petroleum.....	379	424	503	521	586	737	744	782	747	650	742	26.6
Other engineering.....	4,918	5,846	6,229	7,533	6,006	6,537	6,605	6,739	8,920	7,848	6,569	-17.9
<b>All sciences, total.....</b>	<b>289,181</b>	<b>300,936</b>	<b>308,016</b>	<b>311,161</b>	<b>314,388</b>	<b>320,075</b>	<b>329,395</b>	<b>334,399</b>	<b>339,903</b>	<b>342,662</b>	<b>289,520</b>	<b>-7.9</b>
<b>Physical sciences, total.....</b>	<b>26,855</b>	<b>26,700</b>	<b>26,952</b>	<b>27,382</b>	<b>28,199</b>	<b>29,466</b>	<b>30,487</b>	<b>31,184</b>	<b>32,657</b>	<b>33,203</b>	<b>33,047</b>	<b>17.2</b>
Astronomy.....	649	652	626	597	632	618	639	671	689	722	731	15.7
Chemistry.....	16,020	16,101	16,222	16,347	17,015	17,901	17,973	18,487	19,018	19,110	18,632	9.5
Physics.....	9,833	9,699	9,696	10,150	10,306	10,811	11,517	11,660	12,526	12,851	13,312	29.2
Other physical sciences.....	253	246	204	258	246	236	358	377	427	511	372	51.2
<b>Environmental sciences, total.....</b>	<b>13,658</b>	<b>13,654</b>	<b>14,208</b>	<b>14,422</b>	<b>15,174</b>	<b>15,592</b>	<b>16,803</b>	<b>16,741</b>	<b>15,342</b>	<b>14,744</b>	<b>14,128</b>	<b>-6.9</b>
Atmospheric sciences.....	924	852	889	882	889	898	907	964	961	952	940	5.7
Geosciences.....	8,071	8,532	8,668	8,808	9,521	10,321	10,368	10,383	9,848	9,047	6,563	-11.0
Oceanography.....	1,957	1,867	1,992	2,082	2,091	2,063	2,191	2,090	2,082	2,109	2,033	-2.8
Other environmental sciences.....	2,706	2,603	2,659	2,850	2,573	2,312	2,339	2,304	2,351	2,636	2,592	0.7
<b>Mathematical sciences, total.....</b>	<b>18,089</b>	<b>15,063</b>	<b>15,360</b>	<b>15,915</b>	<b>17,199</b>	<b>17,418</b>	<b>17,831</b>	<b>18,106</b>	<b>18,364</b>	<b>19,061</b>	<b>19,044</b>	<b>10.7</b>
<b>Computer sciences, total.....</b>	<b>9,108</b>	<b>11,690</b>	<b>13,578</b>	<b>16,437</b>	<b>19,812</b>	<b>23,817</b>	<b>25,364</b>	<b>29,522</b>	<b>30,576</b>	<b>30,217</b>	<b>32,961</b>	<b>66.4</b>
<b>Life sciences, total.....</b>	<b>95,472</b>	<b>99,827</b>	<b>102,504</b>	<b>103,124</b>	<b>102,889</b>	<b>103,665</b>	<b>105,548</b>	<b>106,653</b>	<b>106,162</b>	<b>109,641</b>	<b>111,345</b>	<b>8.2</b>
<b>Agricultural sciences, total.....</b>	<b>11,520</b>	<b>12,069</b>	<b>12,254</b>	<b>12,100</b>	<b>12,314</b>	<b>12,890</b>	<b>12,065</b>	<b>11,475</b>	<b>11,343</b>	<b>10,948</b>	<b>11,008</b>	<b>-10.6</b>
<b>Biological sciences, total.....</b>	<b>49,556</b>	<b>48,503</b>	<b>47,890</b>	<b>48,979</b>	<b>48,310</b>	<b>45,991</b>	<b>47,008</b>	<b>47,576</b>	<b>48,587</b>	<b>48,838</b>	<b>48,322</b>	<b>4.3</b>
Anatomy.....	1,188	1,133	1,082	1,072	1,074	1,037	1,029	993	973	1,038	1,068	-0.6
Biochemistry.....	3,938	4,034	4,063	4,061	4,124	4,234	4,465	4,667	4,896	4,792	4,956	20.2
Biology.....	17,005	15,754	14,992	14,203	13,397	13,251	13,783	13,687	13,779	13,540	12,664	-5.5
Biometry/epidemiology.....	1,058	1,126	1,259	1,182	1,166	1,156	1,004	1,360	1,469	1,523	1,631	39.9
Biophysics.....	570	525	485	463	440	450	433	441	547	591	592	34.5
Botany.....	3,865	3,658	3,617	3,498	3,644	3,450	3,405	3,333	3,313	3,169	3,083	-15.4
Cell biology.....	625	694	965	1,016	1,143	1,182	1,256	1,429	1,716	1,990	2,063	82.2
Ecology.....	1,067	1,064	1,181	1,101	1,051	1,007	1,101	1,037	1,022	998	1,028	-2.2
Entomology/parasitology.....	1,802	1,897	1,722	1,664	1,540	1,475	1,438	1,342	1,306	1,244	1,240	-19.5
Genetics.....	1,030	970	984	937	990	1,035	1,012	1,075	1,219	1,273	1,269	30.2
Microbiology.....	4,480	4,163	4,178	4,070	4,130	4,262	4,355	4,480	4,387	4,820	4,810	18.5
Nutrition.....	3,818	3,920	4,125	4,355	4,359	4,358	4,339	4,485	4,424	4,181	4,241	-2.7
Pathology.....	1,357	1,456	1,429	1,444	1,460	1,482	1,468	1,355	1,398	1,467	1,400	-4.1
Pharmacology.....	1,794	2,004	2,015	2,024	2,084	2,069	2,050	2,107	2,080	2,078	2,210	6.0
Physiology.....	2,122	2,192	2,104	2,144	2,058	1,994	2,160	2,211	2,261	2,219	2,220	7.9
Zoology.....	3,076	2,800	2,866	2,825	2,503	2,430	2,308	2,136	2,079	2,105	2,034	-18.7
Other biosciences.....	763	1,011	1,033	1,118	1,147	1,139	1,147	1,430	1,729	1,831	1,761	55.3
<b>Health sciences, total.....</b>	<b>34,396</b>	<b>39,255</b>	<b>42,360</b>	<b>44,045</b>	<b>44,265</b>	<b>45,384</b>	<b>46,475</b>	<b>47,602</b>	<b>48,232</b>	<b>48,855</b>	<b>52,015</b>	<b>17.5</b>
Dentistry.....	966	1,029	1,002	942	836	776	850	835	938	1,057	1,065	29.8
Neurology.....	233	261	249	191	204	261	317	337	383	479	605	196.6
Nursing.....	10,943	12,796	13,877	15,703	16,254	16,945	18,411	18,367	18,133	16,013	19,060	17.3
Pharmaceutical sciences.....	2,472	2,441	2,434	2,549	2,519	2,841	2,519	2,553	2,677	2,606	2,592	2.9
Preventive medicine/community health.....	4,555	6,428	7,103	7,226	6,816	6,188	6,327	6,748	6,688	7,091	7,118	4.4
Speech pathology/audiology.....	8,162	8,298	8,615	8,596	8,683	8,832	7,883	8,153	8,007	7,488	7,611	-10.0
Veterinary sciences.....	487	535	511	481	471	466	557	637	630	736	752	59.7
Other clinical medicine.....	1,480	1,431	1,617	1,810	1,747	1,643	1,493	1,643	1,611	2,121	2,056	17.7
Other health related.....	5,078	6,038	6,952	6,747	6,735	7,831	8,118	8,326	8,965	9,292	10,936	52.4
<b>Psychology, total.....</b>	<b>38,826</b>	<b>39,786</b>	<b>40,636</b>	<b>40,691</b>	<b>40,098</b>	<b>41,068</b>	<b>44,201</b>	<b>43,844</b>	<b>43,658</b>	<b>44,912</b>	<b>44,605</b>	<b>11.2</b>
<b>Social sciences, total.....</b>	<b>69,391</b>	<b>94,016</b>	<b>94,778</b>	<b>93,190</b>	<b>91,017</b>	<b>89,230</b>	<b>90,161</b>	<b>89,339</b>	<b>91,142</b>	<b>91,884</b>	<b>86,405</b>	<b>-5.1</b>
Agricultural economics.....	2,219	2,221	2,343	2,262	2,267	2,295	2,270	2,254	2,230	2,193	2,259	-0.4
Anthropology.....	6,728	6,343	6,322	6,116	5,948	5,644	5,605	5,617	5,836	5,697	5,956	0.2
Economics (except agricultural).....	12,063	12,130	13,132	13,344	13,735	13,687	13,065	12,999	12,677	12,699	12,329	-10.2
Geography.....	3,375	3,043	3,204	3,187	3,166	3,060	3,106	2,986	3,062	3,198	3,211	1.4
History and phil. sci./ly of science.....	300	265	260	248	256	253	274	314	299	325	296	12.5
Linguistics.....	2,668	3,063	3,007	3,139	2,803	3,022	3,073	2,937	3,001	3,239	3,273	16.6
Political science.....	27,199	30,735	31,212	30,791	29,907	28,262	27,360	28,730	28,568	28,690	27,697	-7.4
Sociology.....	6,864	6,159	6,001	7,816	7,248	6,949	6,861	6,592	6,536	7,020	7,035	-2.9
Sociology/anthropology.....	1,396	1,236	1,206	1,110	1,133	1,200	1,090	1,063	1,062	1,000	961	-12.5
Other social sciences.....	24,577	24,821	26,071	25,175	24,556	24,938	27,458	25,844	27,849	27,435	23,364	-4.9

<sup>1</sup> Revised from previously published data.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: National Science Foundation, Division of Science Resources Studies, *Academic Science/Engineering: Graduate Enrollment and Support, Fall 1988*. (This table was prepared May 1990.)

**Table 199.—Institutions of higher education and branches, by type, control, and size of enrollment: Fall 1988<sup>1</sup>**

Control of institution and size of total enrollment	All institutions		Universities		All other 4-year institutions		2-year institutions	
	Number <sup>2</sup>	Enrollment	Number <sup>2</sup>	Enrollment	Number <sup>2</sup>	Enrollment	Number <sup>2</sup>	Enrollment
1	2	3	4	5	6	7	8	9
<b>Public and private institutions.....</b>	<b>3,604</b>	<b>13,043,118</b>	<b>156</b>	<b>2,976,288</b>	<b>1,957</b>	<b>5,198,720</b>	<b>1,391</b>	<b>4,868,110</b>
Under 200.....	413	45,350	0	0	285	30,828	128	14,722
200 to 499.....	435	148,370	0	0	242	82,994	193	85,378
500 to 999.....	526	377,108	0	0	323	232,911	203	144,195
1,000 to 2,499.....	904	1,478,872	0	0	564	898,951	340	579,721
2,500 to 4,999.....	468	1,659,239	8	25,444	242	857,078	220	778,717
5,000 to 9,999.....	398	2,817,580	32	251,396	181	1,254,115	185	1,312,069
10,000 to 19,999.....	248	3,411,444	53	782,797	100	1,345,880	95	1,302,787
20,000 to 29,999.....	77	1,838,193	37	904,586	18	428,829	22	504,778
30,000 or more.....	35	1,267,164	28	1,032,065	2	87,334	5	187,765
<b>Public institutions.....</b>	<b>1,551</b>	<b>10,156,375</b>	<b>94</b>	<b>2,227,808</b>	<b>499</b>	<b>3,316,179</b>	<b>958</b>	<b>4,612,388</b>
Under 200.....	9	1,079	0	0	2	235	7	844
200 to 499.....	41	15,591	0	0	10	3,733	31	11,858
500 to 999.....	128	98,491	0	0	28	22,454	100	76,037
1,000 to 2,499.....	409	711,486	0	0	110	193,949	299	517,537
2,500 to 4,999.....	315	1,127,196	0	0	98	359,668	217	767,538
5,000 to 9,999.....	330	2,348,573	8	87,915	138	978,283	184	1,304,375
10,000 to 19,999.....	218	2,993,171	29	444,438	93	1,283,704	94	1,285,029
20,000 to 29,999.....	72	1,717,816	33	807,582	18	428,829	21	481,405
30,000 or more.....	31	1,111,112	24	907,873	2	87,334	5	187,765
<b>Private institutions.....</b>	<b>1,953</b>	<b>2,886,743</b>	<b>62</b>	<b>748,480</b>	<b>1,458</b>	<b>1,882,541</b>	<b>433</b>	<b>255,722</b>
Under 200.....	404	44,271	0	0	283	30,393	121	13,878
200 to 499.....	394	132,779	0	0	232	79,261	162	53,518
500 to 999.....	398	278,815	0	0	295	210,457	103	68,158
1,000 to 2,499.....	495	787,186	0	0	454	705,002	41	82,184
2,500 to 4,999.....	153	532,043	8	25,444	144	497,420	3	9,179
5,000 to 9,999.....	68	488,007	24	183,481	43	277,832	1	7,894
10,000 to 19,999.....	32	418,273	24	318,359	7	82,178	1	17,738
20,000 to 29,999.....	5	120,377	4	97,004	0	0	1	23,373
30,000 or more.....	4	124,192	4	124,192	0	0	0	0

<sup>1</sup> These preliminary data represent the institutions and enrollments reported in the "Fall Enrollment" survey.  
<sup>2</sup> Because some institutions do not report enrollment data, counts of institutions in this table are somewhat lower than figures appearing in other tables.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1988" survey. (This table was prepared February 1990.)

Table 200.—Selected statistics for college and university campuses enrolling more than 14,500 students in 1988

Institution	State	Control <sup>1</sup>	Type <sup>2</sup>	Total enrollment, fall 1985	Total enrollment, fall 1986	Total enrollment, fall 1987	Total enrollment, fall 1988	Enrollment, by sex, fall 1988		Enrollment, by attendance status, fall 1988	
								Men	Women	Full-time	Part-time
1	2	3	4	5	6	7	8	9	10	11	12
United States, all institutions.....	--	--	--	12,247,055	12,503,511	12,766,642	13,043,118	5,996,204	7,044,914	7,430,471	5,612,647
Colleges with enrollment over 14,500.....	--	--	--	4,382,586	4,461,379	4,537,013	4,610,620	2,239,289	2,371,331	2,747,782	1,882,838
Auburn University, Main Campus.....	Ala.	1	1	19,056	19,363	19,363	20,553	11,653	8,900	17,879	2,874
University of Alabama.....	Ala.	1	1	15,577	16,210	17,166	18,510	9,347	9,163	15,766	2,744
Arizona State University.....	Ariz.	1	1	40,529	42,014	42,968	43,426	22,062	21,364	27,451	15,975
Glendale Community College.....	Ariz.	1	2	13,377	15,299	15,826	19,200	8,396	10,804	4,830	14,370
Mesa Community College.....	Ariz.	1	2	18,789	18,233	19,443	19,827	8,892	10,735	5,418	14,209
Pima Community College.....	Ariz.	1	2	20,801	22,959	24,866	26,810	12,358	14,452	8,120	20,890
Northern Arizona University.....	Ariz.	1	1	12,726	13,154	13,396	14,995	8,684	8,311	11,070	3,925
University of Arizona.....	Ariz.	1	1	30,664	31,563	33,009	34,725	17,978	16,747	25,226	9,499
American River College.....	Calif.	1	2	17,413	19,264	19,318	18,718	8,090	10,826	3,929	14,790
California Polytechnic State U., Obispo.....	Calif.	1	1	15,968	15,867	16,049	15,912	8,948	8,968	13,427	2,485
California State Polytechnic U., Pomona.....	Calif.	1	1	17,024	17,871	18,317	17,905	10,295	7,810	12,261	5,644
California State University, Chico.....	Calif.	1	1	14,198	14,854	15,434	14,979	7,323	7,858	12,486	2,493
California State University, Fresno.....	Calif.	1	1	18,454	17,748	18,364	17,467	8,021	9,446	12,702	4,765
California State University, Fullerton.....	Calif.	1	1	23,034	24,271	24,317	23,378	10,488	12,888	13,914	9,482
California State University, Long Beach.....	Calif.	1	1	31,124	33,580	34,926	33,179	15,147	18,032	20,174	13,005
California State University, Los Angeles.....	Calif.	1	1	19,578	20,764	20,977	17,990	7,755	10,205	9,818	8,342
California State University, Northridge.....	Calif.	1	1	28,144	29,873	29,719	29,401	12,681	18,720	18,130	11,271
California State University, Sacramento.....	Calif.	1	1	22,483	23,670	24,128	23,478	10,185	13,313	15,630	7,848
Cerritos College.....	Calif.	1	2	17,418	18,278	18,110	15,886	6,985	8,901	3,839	12,047
Cabrillo College.....	Calif.	1	2	17,882	19,895	19,417	19,705	9,228	10,479	4,822	15,083
City College of San Francisco.....	Calif.	1	2	22,418	23,178	24,641	24,408	10,980	13,428	8,667	17,741
De Anza College.....	Calif.	1	2	23,743	24,347	25,036	21,948	10,127	11,821	8,439	15,509
Diablo Valley College.....	Calif.	1	2	18,668	18,990	20,043	20,255	8,772	11,485	8,456	13,799
El Camino College.....	Calif.	1	2	24,179	25,755	25,485	25,789	11,770	14,019	5,523	20,266
Fresno City College.....	Calif.	1	2	13,240	14,851	15,177	14,710	8,837	8,073	5,188	9,522
Fullerton College.....	Calif.	1	2	18,596	18,702	17,235	17,548	8,494	9,054	4,364	13,184
Groesmont College.....	Calif.	1	2	14,214	15,290	15,715	15,357	8,601	8,756	4,973	10,384
Long Beach City College.....	Calif.	1	2	22,245	20,720	20,585	18,378	8,479	9,899	3,704	14,874
Los Angeles Pierce College.....	Calif.	1	2	17,135	18,518	18,318	18,970	8,052	8,918	5,095	11,875
Los Angeles Valley College.....	Calif.	1	2	18,048	18,178	18,139	18,457	7,275	9,182	3,895	12,762
Mount San Antonio College.....	Calif.	1	2	20,314	20,290	19,840	20,583	9,600	10,983	5,966	14,588
Orange Coast College.....	Calif.	1	2	21,925	22,554	24,167	22,365	11,204	11,161	7,022	15,343
Palomar College.....	Calif.	1	2	15,261	14,838	15,404	16,707	7,479	9,228	3,953	12,754
Pasadena City College.....	Calif.	1	2	17,818	20,087	20,178	19,581	9,039	10,542	8,068	13,493
Rancho Santiago College.....	Calif.	1	2	20,843	21,512	20,608	20,532	9,908	10,824	3,521	17,011
Riverside Community College.....	Calif.	1	2	13,647	14,420	15,033	15,683	8,495	9,188	2,728	12,955
Saddleback College.....	Calif.	1	2	21,493	15,052	14,772	14,527	6,010	8,517	2,703	11,824
San Diego Mesa College.....	Calif.	1	2	17,989	17,984	21,336	23,410	10,790	12,620	7,173	18,237
San Diego State University.....	Calif.	1	1	33,898	35,004	36,290	34,155	15,951	18,204	22,042	12,113
San Francisco State University.....	Calif.	1	1	24,170	25,866	26,002	24,138	9,966	14,152	15,040	9,098
San Joaquin Delta College.....	Calif.	1	2	14,430	14,735	14,988	14,792	6,485	8,307	4,517	10,275
San Jose State University.....	Calif.	1	1	24,843	26,504	27,649	26,456	12,498	13,958	18,667	9,789
Santa Monica College.....	Calif.	1	2	19,270	17,747	17,413	18,108	8,083	10,025	3,818	14,490
Santa Rosa Junior College.....	Calif.	1	2	18,804	20,475	21,305	20,475	8,523	11,952	4,818	15,859
University of California, Berkeley.....	Calif.	1	1	31,007	31,481	32,055	30,102	18,459	13,643	26,740	3,362
University of California, Davis.....	Calif.	1	1	19,534	18,804	20,847	20,733	10,332	10,401	18,496	2,237
University of California, Irvine.....	Calif.	1	1	12,684	14,523	15,139	14,772	7,444	7,328	13,710	1,062
University of California, Los Angeles.....	Calif.	1	1	34,501	34,417	35,435	34,371	17,500	18,871	31,213	3,158
University of California, San Diego.....	Calif.	1	1	14,295	15,914	16,589	18,410	9,208	7,202	15,352	1,058
University of California, Santa Barbara.....	Calif.	1	1	18,935	17,999	17,879	17,743	8,812	8,831	18,885	858
University of Southern California.....	Calif.	2	1	30,373	30,831	30,504	30,831	16,603	12,228	19,878	11,153
Colorado State University.....	Colo.	1	1	18,644	18,644	19,192	19,201	10,030	8,171	18,922	2,279
Metropolitan State College.....	Colo.	1	1	14,814	15,011	15,710	15,733	7,401	8,332	8,680	7,053
University of Colorado at Boulder.....	Colo.	1	1	22,787	23,580	23,551	24,065	13,123	10,942	21,856	2,409
University of Connecticut.....	Conn.	1	1	23,063	23,657	24,552	25,374	12,066	13,308	17,993	7,381
University of Delaware.....	Del.	1	1	18,182	18,631	19,067	19,818	8,874	10,944	15,008	4,809
George Washington University.....	D.C.	2	1	18,790	18,707	19,500	19,232	10,288	8,944	10,096	9,136
Broward Community College.....	Fla.	1	2	19,324	18,373	21,821	21,682	8,754	12,928	7,429	14,253
Florida Community College of Jacksonville.....	Fla.	1	2	14,533	15,072	11,998	16,778	8,994	8,784	4,990	11,788
Florida International University.....	Fla.	1	1	18,966	18,744	18,819	18,128	7,863	10,265	7,826	10,502
Florida State University.....	Fla.	1	1	21,537	22,990	23,826	25,907	12,262	13,645	20,787	5,120
Hillsborough Community College.....	Fla.	1	2	12,503	13,269	14,248	15,573	8,314	9,259	4,528	11,045
Miami-Dade Community College.....	Fla.	1	2	37,062	39,980	42,663	43,880	18,638	25,244	18,035	27,845
Saint Petersburg Junior College.....	Fla.	1	2	18,064	18,118	18,784	18,870	7,364	11,506	6,578	12,292
University of Central Florida.....	Fla.	1	1	16,519	18,833	17,527	18,342	8,929	9,413	9,654	8,688
University of Florida.....	Fla.	1	1	35,334	35,172	33,568	33,282	17,901	15,381	28,127	5,155
University of South Florida.....	Fla.	1	1	28,032	28,439	29,069	29,912	13,425	18,487	15,474	14,438
Valencia Community College.....	Fla.	1	2	12,158	12,574	13,773	14,840	8,460	8,380	4,756	10,084
Georgia State University.....	Ga.	1	1	21,812	21,835	22,070	22,178	9,501	12,875	9,495	12,681
University of Georgia.....	Ga.	1	1	25,408	25,898	26,547	27,178	12,794	14,382	23,269	3,907
University of Hawaii at Manoa.....	Hi	1	1	19,606	18,918	18,382	18,424	8,420	10,004	13,181	5,243
College of Du Page.....	Ill.	1	2	22,537	23,155	24,474	26,489	11,121	15,368	7,235	19,254
DePaul University.....	Ill.	2	1	12,836	13,132	13,688	14,899	7,227	7,472	8,797	7,902

Table 200.—Selected statistics for college and university campuses enrolling more than 14,500 students in 1988—Continued

Enrollment, by level, fall 1988		Earned degrees conferred, 1987-88					Financial statistics, 1986-87, <sup>1</sup> in thousands			Full-time-equivalent enrollment, fall 1988	Full-time-equivalent enrollment, fall 1988
Undergraduate	Postbaccalaureate	Associate	Bachelor's	First professional	Master's	Doctor's	Current-fund revenues	Current-fund expenditures	Educational and general expenditures	23	24
13	14	15	16	17	18	19	20	21	22	23	24
11,904,160	1,736,958	435,537	993,362	70,415	296,733	34,639	\$108,809,827	\$105,783,557	\$62,955,555	9,084,168	9,453,114
3,812,903	797,817	84,453	416,212	24,967	134,838	22,735	43,647,890	42,263,183	33,307,368	3,321,461	3,427,077
18,084	2,489	—	3,437	94	485	113	224,877	213,748	188,369	17,791	18,909
315,342	3,168	—	2,000	156	925	109	183,903	159,526	132,003	14,803	16,820
32,253	11,173	—	5,305	142	1,271	158	318,348	309,424	264,640	32,740	33,593
19,200	—	521	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7,458	9,657
19,827	—	879	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	9,113	10,191
26,810	—	899	—	—	—	—	41,908	40,305	37,901	10,938	13,069
11,921	3,374	—	1,598	—	488	47	95,488	92,041	78,983	10,883	12,548
26,695	8,130	—	3,660	282	1,299	290	487,368	458,237	374,683	26,231	26,875
18,718	—	946	—	—	—	—	40,440	39,381	36,424	9,203	8,894
14,931	981	—	2,915	—	210	—	183,656	153,118	117,688	14,378	14,411
18,082	1,823	—	2,347	—	275	—	138,237	125,061	101,894	14,307	14,482
13,236	1,743	—	2,545	—	177	—	127,095	118,459	104,102	13,193	13,458
14,273	3,194	—	2,598	—	328	—	158,308	131,785	108,979	14,819	14,549
19,434	3,942	—	3,503	—	838	—	133,310	118,707	105,686	17,820	17,815
27,122	8,057	—	4,337	—	853	—	183,128	171,144	147,862	24,973	25,248
13,235	4,725	—	1,649	—	529	3	141,198	124,967	112,148	14,352	12,844
23,833	5,588	—	3,159	—	597	—	171,410	141,141	125,287	22,136	22,515
18,890	4,788	—	3,499	—	582	—	158,420	143,913	123,137	18,486	18,883
15,886	—	811	—	—	—	—	40,123	39,182	36,477	8,984	7,885
19,705	—	753	—	—	—	—	34,236	36,909	32,419	9,540	9,688
24,408	—	1,032	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	12,225	12,626
21,948	—	724	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	12,267	11,648
20,255	—	574	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	10,288	11,091
25,789	—	1,152	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	12,542	12,330
14,710	—	964	—	—	—	—	29,481	29,108	25,045	8,190	8,366
17,548	—	985	—	—	—	—	33,225	31,553	28,258	8,081	7,792
15,357	—	651	—	—	—	—	26,890	26,068	25,596	8,317	8,461
18,378	—	873	—	—	—	—	43,664	44,152	43,845	10,342	8,833
16,970	—	788	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	9,967	9,064
18,457	—	829	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	8,896	7,982
20,563	—	1,104	—	—	—	—	41,548	40,441	40,106	10,519	10,868
22,365	—	1,131	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	12,024	12,175
16,707	—	511	—	—	—	—	34,686	33,688	30,865	7,646	8,237
19,581	—	893	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	10,869	10,820
20,532	—	311	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	9,754	9,235
15,683	—	784	—	—	—	—	28,220	25,526	22,588	8,887	7,079
14,527	—	839	—	—	—	—	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7,188	8,874
23,410	—	718	—	—	—	—	34,301	24,789	21,230	10,037	12,627
27,720	8,435	—	4,296	—	1,156	10	274,273	251,862	197,287	27,025	26,766
18,620	5,518	—	2,853	—	791	2	153,950	136,263	120,797	19,096	19,565
14,792	—	781	—	—	—	—	34,283	33,604	30,922	7,812	7,968
20,879	5,577	—	3,198	—	947	—	189,604	170,863	139,027	19,669	20,473
18,108	—	647	—	—	—	—	36,438	35,297	32,233	8,772	8,485
20,475	—	765	—	—	—	—	36,325	33,858	32,598	9,943	9,943
21,341	8,781	—	5,327	336	1,788	742	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	29,481	28,051
15,900	4,833	—	2,880	348	589	238	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	18,554	19,383
12,342	2,430	—	2,135	90	240	84	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	14,007	14,132
23,213	11,158	—	4,547	528	1,879	508	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	32,896	32,441
13,424	2,986	—	1,966	88	268	186	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	15,489	15,773
15,926	1,817	—	3,000	—	413	108	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	17,448	17,219
18,528	14,303	—	2,774	857	2,955	354	555,753	549,118	486,332	23,975	23,975
18,273	2,928	—	2,810	134	718	198	226,415	221,588	194,647	17,470	17,826
15,733	—	—	1,824	—	—	—	37,234	37,241	37,241	10,496	11,526
19,626	4,439	—	3,770	180	820	231	264,570	250,489	212,926	21,183	22,588
18,224	7,150	—	2,842	210	1,084	180	228,649	226,586	203,237	19,380	20,830
17,596	2,222	10	2,900	—	444	107	222,984	203,477	178,239	15,965	16,908
7,944	11,288	66	1,484	597	2,081	177	378,985	380,905	201,043	13,317	13,865
21,692	—	1,555	—	—	—	—	44,196	42,796	39,484	10,827	12,216
18,778	—	1,211	—	—	—	—	49,348	50,856	50,856	8,014	8,949
14,558	3,570	—	1,953	—	323	—	92,413	89,264	81,315	10,507	11,751
20,554	5,353	429	3,514	172	925	250	220,025	212,457	174,983	19,911	22,758
15,573	—	1,038	—	—	—	—	28,261	27,426	25,489	7,212	8,238
43,880	—	3,611	—	—	—	—	129,787	118,139	111,084	22,740	25,388
18,870	—	2,061	—	—	—	—	36,770	34,805	34,805	8,835	10,707
14,927	3,415	379	2,711	—	428	13	98,045	95,658	78,920	11,754	13,041
25,320	7,982	1,932	5,001	858	1,271	315	558,171	549,953	495,424	31,523	30,112
22,691	7,221	316	3,950	90	1,077	69	236,999	227,994	207,932	20,359	21,088
14,840	—	1,389	—	—	—	—	29,706	29,137	26,920	6,600	8,143
15,653	8,523	48	2,137	135	1,219	135	121,073	119,995	118,918	14,099	14,494
21,448	5,730	5	3,810	273	988	316	394,450	390,836	360,677	23,207	24,779
12,877	5,547	73	2,518	126	830	111	247,350	241,825	216,446	15,520	15,176
26,489	—	1,335	—	—	—	—	48,390	40,105	37,485	11,872	13,702
9,198	5,501	—	1,317	253	1,086	14	78,452	73,177	64,833	8,834	9,901

Table 200.—Selected statistics for college and university campuses enrolling more than 14,500 students in 1988—Continued

Institution	State	Control <sup>1</sup>	Type <sup>2</sup>	Total enrollment, fall 1985	Total enrollment, fall 1986	Total enrollment, fall 1987	Total enrollment, fall 1988	Enrollment, by sex, fall 1988		Enrollment, by attendance status, fall 1988	
								Men	Women	Full-time	Part-time
								9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12
Illinois State University.....	Ill.	1	1	21,178	21,924	23,141	22,322	9,921	12,401	16,461	3,861
Northern Illinois University.....	Ill.	1	1	24,311	24,680	25,455	24,255	10,815	13,440	17,102	7,153
Northwestern University.....	Ill.	2	1	15,845	16,226	16,437	16,592	6,798	7,794	13,174	3,418
Triton College.....	Ill.	1	2	18,668	17,871	16,022	17,691	6,352	9,339	5,038	12,653
University Of Illinois, Urbana Campus.....	Ill.	1	1	35,997	39,265	38,970	38,337	21,578	16,759	32,626	5,711
University of Illinois at Chicago.....	Ill.	1	1	24,158	25,318	23,924	23,986	12,458	11,528	17,066	6,920
University of Southern Ill., Carbondale.....	Ill.	1	1	22,553	23,448	24,160	24,217	14,858	9,359	19,150	5,067
William Rainey Harper College.....	Ill.	1	2	16,511	15,954	16,034	16,121	8,498	6,623	4,481	11,660
Ball State University.....	Ind.	1	1	17,033	18,531	19,080	18,732	8,480	10,252	15,300	3,432
Indiana University, Bloomington.....	Ind.	1	1	32,816	32,417	33,421	33,778	16,009	17,767	28,528	5,248
Indiana U.-Purdue U. at Indianapolis.....	Ind.	1	1	23,430	23,468	23,818	24,808	10,854	14,154	9,825	14,983
Purdue University, Main Campus.....	Ind.	1	1	32,822	32,984	34,069	36,517	21,495	15,022	30,676	5,841
Iowa State University.....	Iowa	1	1	27,182	27,073	26,600	26,475	15,701	10,774	22,293	4,212
University of Iowa.....	Iowa	1	1	30,611	30,670	29,995	30,001	15,332	14,669	22,747	7,254
Kansas State U. of Ag. and App. Sci.....	Kans.	1	1	17,570	17,687	18,049	19,301	10,455	8,846	15,186	4,135
University of Kansas, Main Campus.....	Kans.	1	1	24,774	25,822	26,306	26,020	12,946	13,074	20,406	5,614
Wichita State University.....	Kans.	1	1	16,309	16,248	16,407	16,673	7,658	8,815	7,505	9,168
University of Kentucky.....	Ky.	1	1	20,421	20,692	21,869	22,230	10,814	11,816	16,811	5,289
University of Louisville.....	Ky.	1	1	19,603	20,143	20,497	21,313	10,169	11,144	11,536	9,776
Louisiana State University.....	La.	1	1	29,727	28,421	28,011	27,348	13,699	13,649	22,300	4,962
University of New Orleans.....	La.	1	1	15,967	16,083	16,109	16,076	7,313	8,763	9,589	6,487
University of Southwestern Louisiana.....	La.	1	1	16,275	15,510	15,419	15,033	8,967	6,068	11,229	3,804
Towson State University.....	Md.	1	1	14,987	15,421	15,542	15,169	5,953	9,216	10,088	5,101
University of Maryland, College Park.....	Md.	1	1	38,679	38,639	38,058	36,681	19,166	17,495	27,221	9,460
Boston College.....	Mass.	2	1	14,473	13,976	14,318	14,594	6,318	8,276	10,621	3,973
Boston University.....	Mass.	2	1	27,181	27,055	26,308	26,555	13,936	14,819	21,114	7,441
Harvard University.....	Mass.	2	1	20,711	23,730	23,691	24,194	13,227	10,967	17,310	3,884
Northeastern University.....	Mass.	2	1	35,271	34,093	33,042	32,385	17,461	14,924	17,717	14,668
University of Massachusetts at Amherst.....	Mass.	1	1	27,652	27,797	26,118	27,916	13,705	14,213	21,774	6,144
Central Michigan University.....	Mich.	1	1	17,070	17,983	19,141	19,024	7,963	11,081	14,854	4,170
Eastern Michigan University.....	Mich.	1	1	20,166	21,338	22,375	23,060	9,166	13,674	12,933	10,127
Henry Ford Community College.....	Mich.	1	2	15,577	14,595	15,261	15,791	8,139	7,652	3,265	12,526
Lansing Community College.....	Mich.	1	2	19,548	20,405	21,153	21,470	9,357	12,113	5,745	15,725
Macomb Community College.....	Mich.	1	2	29,491	31,316	32,141	31,482	14,842	16,620	5,779	25,693
Michigan State University.....	Mich.	1	1	42,746	44,068	43,960	44,480	21,515	22,965	35,960	8,500
Oakland Community College.....	Mich.	1	2	26,553	26,670	26,251	26,854	11,153	15,701	5,480	21,374
University of Michigan, Ann Arbor.....	Mich.	1	1	34,456	34,972	35,823	36,001	20,031	15,970	31,976	4,025
Wayne State University.....	Mich.	1	1	28,424	28,764	30,377	30,751	14,250	16,501	14,417	16,334
Western Michigan University.....	Mich.	1	1	20,963	21,747	23,336	24,661	11,278	13,583	15,767	9,094
Mankato State University.....	Minn.	1	1	14,195	14,766	15,365	15,944	7,248	8,696	11,533	4,411
Saint Cloud State University.....	Minn.	1	1	12,973	14,220	15,520	16,252	7,328	6,924	12,466	3,766
U. of Minnesota, Minneapolis-Saint Paul.....	Minn.	1	1	63,067	63,994	62,223	61,556	30,670	30,686	27,270	34,286
Saint Louis Community College.....	Mo.	1	2	6,773	6,137	6,110	30,291	12,609	17,682	7,831	22,460
Southwest Missouri State University.....	Mo.	1	1	15,511	15,233	16,085	17,006	7,753	9,253	12,568	4,438
University of Missouri, Columbia.....	Mo.	1	1	23,047	22,727	22,958	23,568	12,129	11,439	19,397	4,171
University of Nebraska at Omaha.....	Nebr.	1	1	13,789	13,907	14,210	14,985	6,943	8,042	6,955	8,030
University of Nebraska, Lincoln.....	Nebr.	1	1	24,020	23,899	23,469	23,985	13,058	10,927	16,261	5,724
University of Nevada-Las Vegas.....	Nev.	1	1	12,011	12,847	13,476	14,673	6,904	7,719	6,818	8,055
Rutgers University, New Brunswick.....	N.J.	1	1	33,524	33,969	33,157	32,901	15,467	17,414	24,101	8,800
University of New Mexico, Main Campus.....	N.Mex.	1	1	26,628	24,124	24,856	24,433	11,346	13,087	14,613	9,820
City University of New York, Brooklyn College.....	N.Y.	1	1	14,426	14,625	14,661	15,933	6,329	9,604	7,910	8,023
City University of New York, Hunter College.....	N.Y.	1	1	16,608	19,581	19,657	20,755	5,572	15,183	9,367	11,388
City University of New York, Queens College.....	N.Y.	1	1	16,243	16,134	16,613	16,944	6,382	10,562	8,545	8,399
City University of N.Y., Bernard Baruch College.....	N.Y.	1	1	15,753	16,126	16,587	16,463	7,270	9,193	9,339	7,124
Columbia University, New York.....	N.Y.	2	1	17,523	17,574	18,066	17,296	9,484	7,812	13,959	3,337
Nassau Community College.....	N.Y.	1	2	20,320	19,383	19,692	20,130	8,692	11,438	9,920	10,210
New York University.....	N.Y.	2	1	32,266	31,665	31,691	30,750	13,758	16,992	16,429	12,321
Saint John's University, New York.....	N.Y.	2	1	19,248	19,211	19,234	19,143	9,200	9,943	14,275	4,866
State University of N.Y. at Buffalo, Main Campus.....	N.Y.	1	1	22,896	23,977	24,449	26,005	15,202	12,803	19,841	6,164
State University of New York at Albany.....	N.Y.	1	1	15,978	16,112	16,219	16,561	7,829	8,732	12,653	3,908
State University of New York at Stony Brook.....	N.Y.	1	1	14,360	14,527	14,524	16,726	6,162	6,566	12,566	4,142
Syracuse University, Main Campus.....	N.Y.	2	1	20,960	21,120	21,334	22,066	11,004	11,082	16,166	5,920
University of the State of New York Regents.....	N.Y.	1	1	17,221	17,201	14,829	16,460	8,173	8,307	4,019	12,481
Central Piedmont Community College.....	N.C.	1	2	26,550	17,544	16,166	16,442	7,041	9,401	4,091	12,351
East Carolina University.....	N.C.	1	1	15,267	15,264	16,501	16,501	6,925	6,576	12,582	3,919
North Carolina State U. at Raleigh.....	N.C.	1	1	24,294	24,887	24,349	25,725	15,756	9,969	17,071	8,654
University Of North Carolina, Chapel Hill.....	N.C.	1	1	22,066	22,826	22,958	23,626	10,211	13,415	19,424	4,202

Table 200.—Selected statistics for college and university campuses enrolling more than 14,500 students in 1988—Continued

Enrollment, by level, fall 1988		Earned degrees conferred, 1987-88					Financial statistics, 1986-87, <sup>3</sup> in thousands			Full-time-equivalent enrollment, fall 1986	Full-time-equivalent enrollment, fall 1988
Undergraduate	Postbaccalaureate	Associate	Bachelor's	First professional	Master's	Doctor's	Current-fund revenues	Current-fund expenditures	Educational and general expenditures	23	24
13	14	15	16	17	18	19	20	21	22	23	24
19,351	2,971	—	3,855	—	547	49	130,793	131,568	104,366	19,741	19,935
18,122	8,133	—	3,568	80	1,174	92	180,407	161,522	123,640	20,054	19,769
9,373	7,219	—	1,938	457	1,802	313	402,614	378,580	355,783	14,247	14,506
17,691	—	910	—	—	—	—	39,401	37,106	33,758	9,114	9,288
28,293	10,044	—	8,201	266	2,097	646	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	35,421	34,799
15,949	8,037	—	2,870	500	1,149	148	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	20,671	19,723
20,119	4,098	663	4,442	185	727	165	223,899	222,568	194,523	20,505	21,081
18,121	—	1,159	—	—	—	—	41,582	35,306	29,955	8,078	8,377
16,478	2,256	288	2,635	—	817	88	150,933	137,765	120,010	16,078	16,621
26,139	7,837	83	4,698	245	1,709	319	436,038	427,118	286,936	29,343	30,532
18,333	6,475	889	1,921	550	570	37	403,586	404,226	199,023	14,989	15,753
30,395	8,122	651	4,817	74	1,212	386	445,769	437,417	374,259	30,256	32,948
21,449	5,026	—	4,159	113	869	309	354,725	355,050	247,227	24,690	23,884
20,823	9,178	—	3,887	494	1,353	312	579,366	541,899	304,278	25,989	25,517
15,811	3,890	15	2,570	107	801	156	181,783	163,186	147,220	15,494	16,750
19,185	8,635	—	2,935	170	1,029	213	203,640	198,274	165,737	22,157	22,506
13,215	3,458	230	1,475	—	521	7	78,471	77,327	68,720	10,627	11,065
17,156	5,074	—	2,689	281	714	156	420,554	400,376	289,373	17,795	18,987
18,609	4,704	196	1,686	324	674	49	231,173	233,251	199,115	14,855	15,376
22,245	5,103	—	3,095	283	853	169	313,545	308,177	247,645	25,377	24,321
13,190	2,866	9	1,201	—	429	25	65,915	64,324	55,428	12,052	12,116
13,393	1,640	132	1,857	—	300	15	66,371	67,061	53,501	13,217	12,717
13,878	1,293	—	2,234	—	188	—	77,432	74,296	55,367	11,898	12,078
27,902	6,779	—	5,711	—	1,149	364	422,179	375,725	322,041	32,487	30,824
10,535	4,059	—	2,235	268	727	100	169,479	155,400	119,860	11,800	12,165
18,913	9,642	14	3,164	870	2,076	245	460,173	440,870	378,567	22,490	24,019
10,485	13,709	8	1,862	823	2,553	465	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	19,596	19,993
27,563	4,822	329	3,240	144	1,109	54	226,203	210,799	195,290	24,120	23,482
21,196	8,722	101	4,192	—	962	281	316,768	309,372	245,688	24,067	24,090
15,878	3,346	—	2,699	—	1,699	1	121,300	114,124	89,112	15,855	16,419
17,957	5,103	—	2,392	—	915	—	109,086	103,436	86,892	15,423	16,836
15,791	—	1,103	—	—	—	—	31,156	31,168	28,784	6,966	7,472
21,470	—	1,262	—	—	—	—	45,246	43,709	43,000	10,209	11,027
31,482	—	2,347	—	—	—	—	51,551	51,271	47,562	14,081	14,405
34,999	9,511	—	6,896	271	1,758	427	573,334	554,383	458,897	38,423	39,212
26,854	—	—	—	—	—	—	54,352	45,455	44,911	12,374	12,859
23,044	12,957	—	4,995	704	2,618	564	1,184,877	1,002,385	553,936	32,358	33,491
19,746	11,005	—	2,343	435	1,337	137	273,165	255,277	247,336	19,680	20,754
18,703	8,158	—	2,917	—	1,083	47	145,129	140,906	111,389	16,839	19,227
13,361	2,583	67	1,920	—	389	—	64,432	63,622	54,827	12,182	13,236
14,429	1,823	73	1,878	—	203	—	64,122	61,222	51,896	12,255	13,927
47,817	13,739	186	5,518	730	2,013	527	1,030,459	943,556	894,433	48,991	40,855
30,291	—	1,788	—	—	—	—	19,631	22,017	20,700	3,051	15,375
15,732	1,274	40	1,889	—	240	—	89,636	465,249	455,989	12,532	14,313
17,525	6,043	—	3,292	304	967	227	401,243	394,036	256,734	20,178	20,969
12,672	2,313	—	1,176	—	405	—	48,969	48,854	43,570	9,413	10,104
19,755	4,230	88	2,770	115	722	233	232,228	227,663	183,904	20,493	20,483
12,666	2,007	88	972	—	212	8	48,130	66,366	59,862	8,437	9,796
25,331	7,570	—	4,866	—	1,199	311	530,433	494,252	435,841	28,075	27,444
17,304	7,129	120	1,914	164	921	156	186,090	175,932	155,604	17,523	18,502
11,595	4,338	—	802	—	356	—	73,406	73,316	73,316	10,183	10,981
18,090	4,665	—	1,310	—	908	—	87,943	87,836	87,836	13,183	13,798
13,558	3,386	—	1,616	—	718	—	91,957	91,841	91,841	11,456	11,807
13,606	2,857	—	1,561	—	482	—	89,506	89,705	89,041	11,580	12,122
5,836	11,460	—	919	—	3,186	463	635,635	622,114	597,115	15,123	15,249
20,130	—	2,833	—	—	—	—	77,803	76,367	76,367	13,048	13,349
14,609	16,141	272	2,764	715	3,827	421	626,459	609,980	549,080	23,399	23,192
14,380	4,763	524	2,802	392	705	42	139,659	84,951	90,568	16,218	16,217
19,276	8,727	77	2,519	253	1,229	240	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	19,866	22,968
12,062	4,499	—	2,361	—	1,004	132	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	13,611	14,121
11,252	5,476	—	2,194	—	744	196	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	12,566	14,152
14,953	7,133	15	2,763	238	1,348	156	270,145	262,724	204,129	17,544	16,480
13,669	2,611	1,925	2,302	—	—	—	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	18,099	8,985
16,442	—	616	—	—	—	—	34,393	34,201	31,475	6,537	6,239
13,537	2,964	—	1,952	62	553	4	183,194	180,463	141,594	13,052	14,076
21,865	3,860	77	3,215	69	722	239	356,724	349,733	304,974	20,093	20,483
15,738	7,888	—	3,196	447	1,157	301	560,490	538,118	436,134	20,382	20,991

Table 200.—Selected statistics for college and university campuses enrolling more than 14,500 students in 1988—Continued

Institution	State	Control	Type <sup>1</sup>	Total enrollment, fall 1985	Total enrollment, fall 1986	Total enrollment, fall 1987	Total enrollment, fall 1988	Enrollment, by sex, fall 1988		Enrollment, by attendance status, fall 1988	
								Men	Women	Full-time	Part-time
1	2	3	4	5	6	7	8	9	10	11	12
Bowling Green State U., Main Campus.....	Ohio	1	1	17,691	17,799	17,960	18,345	7,615	10,730	15,642	2,503
Cleveland Institute of Electronics.....	Ohio	2	2	23,373	23,373	15,377	* 23,373	22,205	1,168	—	23,373
Cleveland State University.....	Ohio	1	1	17,540	17,951	17,714	17,346	6,775	6,571	9,290	6,066
Cuyahoga Community College District.....	Ohio	1	2	24,159	23,318	22,025	22,010	7,690	14,130	6,487	15,523
Kent State University, Main Campus.....	Ohio	1	1	20,406	20,846	21,521	22,753	9,677	12,676	16,061	6,092
Miami University, Oxford Campus.....	Ohio	1	1	15,761	15,968	15,960	16,027	7,439	8,588	11,549	1,476
Ohio State University, Main Campus.....	Ohio	1	1	53,199	53,673	53,115	53,661	29,648	25,015	42,267	11,374
Ohio University, Main Campus.....	Ohio	1	1	13,217	16,021	16,693	17,836	9,046	6,790	16,241	1,566
Sinclair Community College.....	Ohio	1	2	14,483	16,094	16,344	16,632	6,314	10,316	4,031	12,601
University of Akron, Main Campus.....	Ohio	1	1	26,025	25,944	27,069	27,816	13,690	13,936	16,675	11,143
University of Cincinnati, Main Campus.....	Ohio	1	1	30,205	30,213	31,233	31,432	16,529	14,903	21,213	10,219
University of Toledo.....	Ohio	1	1	21,236	21,176	21,740	22,606	11,138	11,968	14,676	6,126
Wright State University, Main Campus.....	Ohio	1	1	15,424	16,075	16,123	16,149	7,752	8,367	9,831	6,316
Youngstown State University.....	Ohio	1	1	15,026	15,015	14,675	14,710	6,999	7,721	9,577	5,133
Oklahoma State University, Main Campus.....	Okla.	1	1	21,639	21,676	21,062	21,256	11,494	9,764	16,562	4,696
Tulsa Junior College.....	Okla.	1	2	15,210	15,292	16,011	16,776	6,494	10,284	3,465	13,313
University of Oklahoma, Norman Campus.....	Okla.	1	1	21,748	22,313	22,352	22,224	12,269	9,935	15,766	6,436
Oregon State University.....	Oreg.	1	1	15,717	15,199	15,749	16,042	9,253	6,769	14,163	1,879
Portland Community College.....	Oreg.	1	2	17,915	19,494	20,492	20,904	9,843	11,061	6,013	14,691
Portland State University.....	Oreg.	1	1	14,766	15,640	17,316	17,316	7,994	9,322	6,251	9,065
University of Oregon.....	Oreg.	1	1	15,375	17,142	16,195	16,840	9,076	9,764	15,769	3,071
Center for Degree Studies.....	Pa.	2	2	5,621	13,909	13,466	17,736	3,519	14,169	0	17,736
Community College of Allegheny County.....	Pa.	1	2	16,426	17,251	17,255	16,211	7,763	10,426	7,590	10,621
Pennsylvania State U., Main Campus.....	Pa.	1	1	35,649	35,261	36,271	37,269	21,051	16,216	32,833	4,436
Temple University.....	Pa.	1	1	20,277	30,615	30,431	32,139	15,934	16,205	21,276	10,663
University of Pennsylvania.....	Pa.	2	1	21,670	21,742	21,675	22,169	12,036	10,133	17,672	4,297
University of Pittsburgh, Main Campus.....	Pa.	1	1	26,710	28,449	28,364	28,524	14,575	13,949	16,462	10,062
Community College of Rhode Island.....	R.I.	1	2	12,617	13,066	13,107	14,715	5,321	9,394	4,244	10,471
University of Rhode Island.....	R.I.	1	1	14,235	14,967	15,170	15,843	7,269	6,574	10,672	4,971
Clemson University.....	S.C.	1	1	12,693	13,062	13,665	14,794	6,351	6,443	12,542	2,252
University of South Carolina, Columbia.....	S.C.	1	1	23,263	22,965	25,504	26,435	11,539	14,696	16,570	9,666
Memphis State University.....	Tenn.	1	1	20,749	20,043	20,470	20,267	9,457	10,810	12,535	7,732
University of Tennessee, Knoxville.....	Tenn.	1	1	25,397	25,642	25,966	24,965	13,112	11,673	18,966	6,017
Austin Community College.....	Tex.	1	2	17,549	16,340	19,905	21,416	10,215	11,203	5,026	16,392
El Paso Community College.....	Tex.	1	2	13,612	13,827	14,676	14,820	6,275	6,545	7,003	7,617
Houston Community College.....	Tex.	1	2	25,415	26,002	27,196	30,236	13,697	16,539	5,866	24,380
San Antonio College.....	Tex.	1	2	22,041	20,790	21,616	21,593	9,456	12,137	6,941	14,662
Southwest Texas State University.....	Tex.	1	1	19,266	19,778	20,039	20,505	9,776	10,729	15,545	4,960
Tarrant County Junior College District.....	Tex.	1	2	24,135	24,091	24,490	25,946	11,848	14,096	6,902	19,344
Texas A. & M. University.....	Tex.	1	1	35,675	36,617	39,079	39,163	22,634	16,329	34,664	4,269
Texas Tech University.....	Tex.	1	1	23,457	23,479	23,564	24,605	13,103	11,502	19,536	5,069
University of Houston, University Park.....	Tex.	1	1	29,944	28,164	28,907	30,372	15,557	14,615	17,413	12,969
University of North Texas.....	Tex.	1	1	20,998	21,269	22,379	24,466	11,424	13,074	16,322	6,176
University of Texas at Arlington.....	Tex.	1	1	23,109	23,247	22,760	23,363	12,959	10,424	13,333	10,050
University of Texas at Austin.....	Tex.	1	1	47,638	48,146	47,743	50,106	26,928	23,176	43,363	6,743
Brigham Young University, Main Campus.....	Utah	2	1	29,800	30,226	29,674	* 30,226	16,090	14,136	22,207	6,019
University of Utah.....	Utah	1	1	24,770	24,726	24,124	23,756	13,299	10,457	15,220	6,536
George Mason University.....	Va.	1	1	17,094	17,652	18,112	18,965	6,495	10,470	9,995	6,970
Northern Virginia Community College.....	Va.	1	2	32,282	33,662	34,664	31,896	13,957	17,939	7,473	24,423
Old Dominion University.....	Va.	1	1	15,665	15,483	15,640	16,364	7,803	6,561	10,616	5,746
Tidewater Community College.....	Va.	1	2	13,926	15,531	16,616	16,557	7,006	9,549	4,146	12,411
University of Virginia, Main Campus.....	Va.	1	1	17,417	21,615	21,268	20,802	10,003	10,799	16,323	4,479
Virginia Commonwealth University.....	Va.	1	1	19,556	19,641	20,485	20,645	6,420	12,225	12,666	7,967
Virginia Polytechnic Institute & St. University.....	Va.	1	1	24,193	24,637	24,977	24,260	14,455	9,825	20,916	3,364
University of Washington.....	Wash.	1	1	34,066	33,674	33,302	33,460	17,252	16,208	26,954	6,506
Washington State University.....	Wash.	1	1	16,139	16,193	16,484	16,405	9,081	7,344	14,902	1,503
West Virginia University.....	W.Ve.	1	1	16,031	17,174	17,270	16,746	9,631	6,915	15,090	3,656
Milwaukee Area Voc./Tech. District.....	Wis.	1	2	23,173	20,032	20,761	19,693	9,181	10,512	6,064	13,629
University of Wisconsin, Madison.....	Wis.	1	1	45,050	44,584	43,368	43,364	22,204	21,160	36,617	6,747
University of Wisconsin, Milwaukee.....	Wis.	1	1	26,213	25,930	25,210	25,212	11,805	13,407	13,452	11,760
Community College of the Air Force.....	U.S.	1	2	35,212	34,617	40,310	26,364	22,822	3,532	26,354	0

Table 200.—Selected statistics for college and university campuses enrolling more than 14,500 students in 1988—Continued

Enrollment, by level, fall 1988		Earned degrees conferred, 1987-88					Financial statistics, 1986-87, <sup>3</sup> in thousands			Full-time-equivalent enrollment, fall 1988	Full-time-equivalent enrollment, fall 1988
Undergraduates	Postbaccalaureate	Associate	Bachelor's	First professional	Master's	Doctor's	Current-fund revenues	Current-fund expenditures	Educational and general expenditures	23	24
13	14	15	18	17	18	19	20	21	22	23	24
15,823	2,522	28	2,665	—	604	87	140,793	137,432	104,878	18,275	16,795
23,373	—	71	—	—	—	—	8,790	8,224	8,224	9,571	9,571
12,684	4,662	—	1,616	240	824	13	93,170	92,158	86,402	12,634	12,435
22,010	—	1,787	—	—	—	—	60,437	77,252	72,422	12,198	11,701
18,527	4,226	—	2,319	—	822	112	149,674	137,142	104,925	17,232	18,994
14,429	1,598	215	3,165	—	517	34	139,987	123,895	100,668	15,124	15,118
40,534	13,127	154	6,749	809	2,159	542	845,700	833,066	574,560	47,085	46,697
15,078	2,760	28	2,489	93	739	74	153,466	147,532	120,354	15,097	16,865
16,632	—	1,008	—	—	—	—	37,032	32,612	29,937	7,999	8,263
22,893	4,925	729	2,526	155	590	63	135,243	126,583	115,579	19,444	21,057
24,905	8,527	473	2,574	324	888	168	505,574	462,510	277,655	23,089	25,225
19,665	3,141	855	2,043	178	489	45	118,478	116,247	100,435	16,261	17,889
12,626	3,523	—	1,539	102	665	32	111,071	110,071	102,605	12,091	12,276
13,538	1,172	401	1,545	—	260	—	62,133	66,729	59,303	11,667	11,605
16,278	4,980	83	2,713	85	658	184	197,489	193,097	146,055	18,995	18,326
16,778	—	841	—	—	—	—	29,993	28,671	25,959	7,073	7,937
16,463	5,781	—	2,318	229	1,017	118	226,037	214,792	120,543	18,169	18,232
12,940	3,093	—	2,636	35	600	153	224,354	224,218	200,894	14,364	14,879
20,904	—	1,340	—	—	—	—	55,723	50,057	45,478	10,402	11,015
13,107	4,209	—	1,875	—	662	28	71,670	70,924	62,511	10,927	11,778
14,488	4,352	—	2,478	146	732	167	138,948	141,683	117,021	15,603	16,949
17,738	—	233	—	—	—	—	7,094	4,331	4,331	10,898	7,264
18,211	—	1,915	—	—	—	—	24,895	24,800	23,501	10,179	11,157
31,251	6,018	58	7,086	—	1,144	379	565,408	539,407	411,848	32,799	34,539
22,446	9,693	109	3,176	605	1,094	277	480,704	466,532	261,809	23,951	25,436
11,658	10,511	25	2,523	567	1,757	319	905,962	920,243	488,581	18,968	19,548
18,661	9,663	—	3,105	454	1,630	390	470,120	462,319	355,937	21,899	22,332
14,715	—	1,079	—	—	—	—	35,260	34,931	32,812	7,098	7,761
12,746	3,095	13	1,800	2	415	81	147,447	144,809	122,204	11,479	12,795
11,774	3,020	—	1,927	—	605	71	201,744	205,925	183,018	11,760	13,363
15,962	10,473	17	2,818	314	1,858	191	212,382	214,119	178,643	18,472	20,269
16,100	4,088	—	1,791	146	714	58	121,372	117,472	103,668	15,147	15,545
16,770	8,215	—	3,366	217	1,121	217	318,889	387,821	341,842	21,845	21,266
21,418	—	601	—	—	—	—	41,182	32,373	32,046	8,760	10,532
14,820	—	806	—	—	—	—	37,324	33,842	32,853	9,040	9,629
30,236	—	582	—	—	—	—	80,736	56,096	56,017	11,970	14,045
21,593	—	951	—	—	—	—	47,635	44,773	42,494	11,370	11,862
18,046	2,459	21	2,928	—	395	—	83,049	80,419	55,423	10,995	17,482
25,946	—	1,106	—	—	—	—	47,923	46,769	42,292	11,699	13,099
31,843	7,320	—	5,899	187	1,135	382	550,991	506,804	426,056	33,961	36,534
20,486	4,119	—	2,890	171	559	126	192,079	192,317	154,852	20,466	21,477
23,113	7,259	—	2,272	455	1,141	153	191,533	197,409	165,529	20,599	22,527
18,171	8,327	—	2,278	—	1,124	164	118,636	116,876	93,967	18,730	19,456
17,845	5,536	—	2,560	—	819	41	110,827	112,665	96,373	17,200	17,246
38,144	11,962	—	8,708	533	1,975	588	471,733	576,381	503,107	42,644	48,023
27,030	3,196	97	4,789	142	1,033	131	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	25,362	25,362
19,630	4,126	—	2,807	238	843	209	439,679	417,026	268,489	19,040	18,620
12,674	8,091	—	1,662	195	578	22	85,949	62,963	66,667	12,351	13,447
31,896	—	1,978	—	—	—	—	56,077	55,351	55,351	16,026	15,876
11,867	4,497	—	2,005	—	541	31	66,386	66,863	72,970	11,933	12,784
16,557	—	1,017	—	—	—	—	24,583	24,251	24,251	7,631	8,315
12,205	6,597	—	2,839	498	1,244	229	497,854	482,212	269,004	18,160	17,993
15,106	5,539	3	1,956	259	747	105	460,178	436,133	201,484	14,756	15,778
16,207	8,073	—	3,877	79	1,075	287	330,909	328,567	295,497	22,393	22,161
24,570	8,890	—	5,155	395	1,750	392	760,747	740,748	580,087	29,578	29,509
13,853	2,552	—	2,668	91	468	149	233,484	232,439	193,209	15,356	15,477
13,789	4,977	—	2,368	212	1,075	131	205,285	207,632	172,444	15,138	16,462
19,893	—	1,306	—	—	—	—	84,708	84,299	79,261	11,078	10,642
32,142	11,222	—	6,135	527	2,042	684	827,157	831,721	637,165	40,057	39,262
20,666	4,526	—	2,495	—	947	56	155,204	155,882	135,599	19,289	18,057
26,354	—	8,709	—	—	—	—	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	34,817	26,354

<sup>1</sup> Publicly controlled institutions are identified by a "1"; privately controlled, by a "2."

<sup>2</sup> The types of institutions are identified as follows: "1", 4-year institutions; "2", 2-year institutions.

<sup>3</sup> Totals for the United States and the colleges enrolling more than 14,500 students include estimates for nonrespondents.

<sup>4</sup> Data not reported.

<sup>5</sup> Includes data for branch campuses.

<sup>6</sup> Data not reported.

—Data not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education," "Fall Enrollment in Institutions of Higher Education" surveys; and Integrated Postsecondary Education Data System (IPEDS), "Completions" and "Fall Enrollment" surveys. (This table was prepared May 1990.)

Table 201.—Enrollment of the 120 largest college and university campuses<sup>1</sup>: Fall 1988

Institution	State	Rank	Control <sup>2</sup>	Type <sup>3</sup>	Total enrollment, fall 1988	Institution	State	Rank	Control <sup>2</sup>	Type <sup>3</sup>	Total enrollment, fall 1988
1	2	3	4	5	6	1	2	3	4	5	6
U. of Minnesota, Minneapolis-Saint Paul	Minn.	1	1	1	81,556	University of New Mexico, Main Campus	N. Mex.	61	1	1	24,433
Ohio State University, Main Campus	Ohio	2	1	1	53,661	City College of San Francisco	Calif.	62	1	2	24,408
University of Texas at Austin	Tex.	3	1	1	50,106	Virginia Polytechnic Institute & St. University	Va.	63	1	1	24,280
Michigan State University	Mich.	4	1	1	44,480	Northern Illinois University	Ill.	64	1	1	24,255
Miami-Dade Community College	Fla.	5	2	2	43,880	University of Southern Ill., Carbondale	Ill.	65	1	1	24,217
Arizona State University	Ariz.	6	1	1	43,426	Harvard University	Mass.	66	2	1	24,194
University of Wisconsin, Madison	Wisc.	7	1	1	43,364	San Francisco State University	Calif.	67	1	1	24,138
Texas A. & M. University	Tex.	8	1	1	39,163	University of Colorado at Boulder	Colo.	68	1	1	24,085
University of Illinois, Urbana Campus	Ill.	9	1	1	38,337	University of Illinois at Chicago	Ill.	69	1	1	23,986
Pennsylvania State U., Main Campus	Pa.	10	1	1	37,269	University of Nebraska, Lincoln	Nebr.	70	1	1	23,985
University of Maryland, College Park	Md.	11	1	1	36,681	University of Utah	Utah	71	1	1	23,756
Purdue University, Main Campus	Ind.	12	1	1	36,517	University of North Carolina, Chapel Hill	N.C.	72	1	1	23,626
University of Michigan, Ann Arbor	Mich.	13	1	1	36,001	University of Missouri, Columbia	Mo.	73	1	1	23,568
University of Arizona	Ariz.	14	1	1	34,725	California State University, Sacramento	Calif.	74	1	1	23,478
University of California, Los Angeles	Calif.	15	1	1	34,371	San Diego Mesa College	Calif.	75	1	2	23,410
San Diego State University	Calif.	16	1	1	34,155	University of Texas at Arlington	Tex.	76	1	1	23,383
Indiana University, Bloomington	Ind.	17	1	1	33,776	California State University, Fullerton	Calif.	77	1	1	23,376
University of Washington	Wash.	18	1	1	33,460	Eastern Michigan University	Mich.	78	1	1	23,060
University of Florida	Fla.	19	1	1	33,282	University of Toledo	Ohio	79	1	1	22,606
California State University, Long Beach	Calif.	20	1	1	33,179	Kent State University, Main Campus	Ohio	80	1	1	22,753
Rutgers University, New Brunswick	N.J.	21	1	1	32,901	Orange Coast College	Calif.	81	1	2	22,365
Northeastern University	Mass.	22	2	1	32,385	Illinois State University	Ill.	82	1	1	22,322
Temple University	Pa.	23	1	1	32,139	University of Kentucky	Ky.	83	1	1	22,230
Northern Virginia Community College	Va.	24	2	2	31,896	University of Oklahoma, Norman Campus	Okla.	84	1	1	22,224
Macomb Community College	Mich.	25	1	2	31,482	Georgia State University	Ga.	85	1	1	22,178
University of Cincinnati, Main Campus	Ohio	26	1	1	31,432	University of Pennsylvania	Pa.	86	2	1	22,189
Wayne State University	Mich.	27	1	1	30,751	Syracuse University, Main Campus	N.Y.	87	2	1	22,066
New York University	N.Y.	28	2	1	30,750	Cuyahoga Community College District	Ohio	88	1	2	22,010
University of Houston, University Park	Tex.	29	1	1	30,372	De Anza College	Calif.	89	1	2	21,948
Saint Louis Community College	Mo.	30	1	2	30,291	Broward Community College	Fla.	90	1	2	21,682
Houston Community College	Tex.	31	1	2	30,236	San Antonio College	Tex.	91	1	2	21,593
University of California, Berkeley	Calif.	32	1	1	30,102	Lansing Community College	Mich.	92	1	2	21,470
University of Iowa	Iowa	33	1	1	30,001	Austin Community College	Tex.	93	1	2	21,418
University of South Florida	Fla.	34	1	1	29,912	University of Louisville	Ky.	94	1	1	21,313
California State University, Northridge	Calif.	35	1	1	29,401	Oklahoma State University, Main Campus	Okla.	95	1	1	21,258
Boston University	Mass.	36	2	1	28,555	Portland Community College	Oreg.	96	1	2	20,904
University of Pittsburgh, Main Campus	Pa.	37	1	1	28,524	University of Virginia, Main Campus	Va.	97	1	1	20,802
State University of N.Y. at Buffalo, Main Campus	N.Y.	38	1	1	28,005	City University of New York, Hunter College	N.Y.	98	1	1	20,755
University of Massachusetts at Amherst	Mass.	39	1	1	27,916	University of California, Davis	Calif.	99	1	1	20,733
University of Akron, Main Campus	Ohio	40	1	1	27,818	Virginia Commonwealth University	Va.	100	1	1	20,645
Louisiana State University	La.	41	1	1	27,348	Mount San Antonio College	Calif.	101	1	2	20,563
University of Georgia	Ga.	42	1	1	27,176	Auburn University, Main Campus	Ala.	102	1	1	20,553
Pima Community College	Ariz.	43	1	2	26,810	Rancho Santiago College	Calif.	103	1	2	20,532
College of Du Page	Ill.	44	1	2	26,489	Southwest Texas State University	Tex.	104	1	1	20,505
Iowa State University	Iowa	45	1	1	26,475	Memphis State University	Tenn.	105	1	1	20,267
San Jose State University	Calif.	46	1	1	26,456	Diablo Valley College	Calif.	106	1	2	20,255
University of South Carolina, Columbia	S.C.	47	1	1	26,435	Nassau Community College	N.Y.	107	1	2	20,130
Community College of the Air Force	U.S.	48	1	2	26,354	University of Delaware	Del.	108	1	1	19,818
University of Kansas, Main Campus	Kans.	49	1	1	26,020	Chabot College	Calif.	109	1	2	19,705
Tarrant County Junior College District	Tex.	50	1	2	25,946	Milwaukee Area Voc./Tech. District	Wisc.	110	1	2	19,693
Florida State University	Fla.	51	1	1	25,907	Mesa Community College	Ariz.	111	1	2	19,627
El Camino College	Calif.	52	1	2	25,789	Pasadena City College	Calif.	112	1	2	19,581
North Carolina State U. at Raleigh	N.C.	53	1	1	25,725	Kansas State U. of Ag. and App. Sci.	Kans.	113	1	1	19,301
University of Connecticut	Conn.	54	1	1	25,374	George Washington University	D.C.	114	2	1	19,232
University of Wisconsin, Milwaukee	Wisc.	55	1	1	25,212	Colorado State University	Colo.	115	1	1	19,201
University of Tennessee, Knoxville	Tenn.	56	1	1	24,985	Glendale Community College	Ariz.	116	1	2	19,200
Western Michigan University	Mich.	57	1	1	24,861	Saint John's University, New York	N.Y.	117	2	1	19,143
Indiana U.-Purdue U. at Indianapolis	Ind.	58	1	1	24,808	Central Michigan University	Mich.	118	1	1	19,024
Texas Tech University	Tex.	59	1	1	24,605	George Mason University	Va.	119	1	1	18,965
University of North Texas	Tex.	60	1	1	24,498	Saint Petersburg Junior College	Fla.	120	1	2	18,870

<sup>1</sup> College and university campuses ranked in fall 1988. Data are preliminary.

<sup>2</sup> Publicly controlled institutions are identified by a "1"; privately controlled, by a "2."

<sup>3</sup> The types of institutions are identified as follows: "1"; 4-year institutions; "2"; 2-year institutions.

NOTE.—Institutions which did not report or which did report enrollment data for branch campuses were excluded from this tabulation. The institutions (estimated 1988

enrollment) are University of Southern California (30,831); Brigham Young University, Main Campus (30,226); Oakland Community College (26,854); Cleveland Institute of Electronics (23,373); and Santa Rosa Junior College (20,475).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment", 1988 survey. (This table was prepared May 1990.)

**Table 202.—Selected statistics on traditionally black institutions of higher education: <sup>1</sup> 1985-86, 1987-88, and fall 1987**

Item	Total	Public		Private	
		4-year	2-year	4-year	2-year
1	2	3	4	5	6
Number of institutions, fall 1987.....	99	38	5	49	7
Total enrollment, fall 1985.....	213,776	148,111	8,050	60,292	1,323
Men.....	94,998	65,617	2,370	26,387	624
Women.....	118,778	80,494	3,680	33,905	699
Total enrollment, fall 1987.....	211,867	148,412	6,442	57,475	1,538
Men.....	89,983	62,798	2,400	24,127	638
Women.....	121,904	83,614	4,042	33,348	900
Full-time enrollment, fall 1987.....	163,859	105,755	4,717	51,827	1,360
Men.....	71,481	47,494	1,692	21,719	578
Women.....	92,178	58,261	3,025	30,108	784
Part-time enrollment, fall 1987.....	48,208	40,657	1,725	5,648	178
Men.....	18,482	15,304	708	2,408	62
Women.....	29,726	25,353	1,017	3,240	116
Earned degrees conferred, 1987-88					
Associate.....	1,765	1,071	336	182	196
Men.....	597	360	81	92	64
Women.....	1,168	711	255	90	132
Bachelor's.....	19,711	12,980	—	6,731	—
Men.....	8,185	5,611	—	2,554	—
Women.....	11,548	7,369	—	4,177	—
Master's.....	4,038	3,184	—	852	—
Men.....	1,611	1,252	—	359	—
Women.....	2,425	1,932	—	493	—
Doctor's.....	203	54	—	149	—
Men.....	110	27	—	83	—
Women.....	93	27	—	66	—
First-professional.....	775	264	—	511	—
Men.....	455	153	—	302	—
Women.....	320	111	—	209	—
Financial statistics, 1985-86, in thousands of dollars					
Current-fund revenues.....	\$1,096,778	\$1,096,481	\$29,529	\$827,517	\$11,251
Tuition and fees.....	364,622	150,588	2,917	206,037	3,081
Federal Government <sup>2</sup> .....	403,162	134,818	4,743	261,114	2,487
State governments <sup>2</sup> .....	575,813	548,340	18,830	12,643	0
Local governments <sup>2</sup> .....	74,322	71,863	1,438	1,021	0
Private gifts, grants, and contracts.....	93,950	9,304	771	60,787	3,088
Endowment income.....	22,630	1,391	40	20,890	309
Sales and services.....	396,067	156,341	1,732	226,296	1,719
Other sources.....	46,191	27,637	1,057	16,729	569
Current-fund expenditures.....	1,954,606	1,078,351	27,851	839,074	9,330
Educational and general expenditures.....	1,599,158	921,003	26,550	613,560	8,042
Auxiliary enterprises.....	235,211	157,348	1,298	75,278	1,288
Hospitals.....	150,237	—	—	150,237	—
Endowment, market value.....	436,773	20,187	1,149	416,766	670
Buildings, replacement value.....	4,186,359	2,836,038	57,391	1,466,530	24,400

<sup>1</sup> Includes institutions, mainly in the southern and border States, which were established prior to 1964 for the education of black students during legal segregation.

<sup>2</sup> Includes appropriations, grants, and contracts.

—Data not reported or not applicable.

NOTE.—Enrollment data for fall 1987 and degree data for 1985-87 are preliminary. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Institutions of Higher Education," and "Financial Statistics of Institutions of Higher Education, Fiscal Year 1986" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" and "Completions" surveys. (This table was prepared April 1989.)

**BEST COPY AVAILABLE**

**Table 203.—Employees in institutions of higher education, by primary occupation, employment status, and control of institution: Fall 1976 and fall 1987**

Primary occupation and control of institution	Fall 1976						Fall 1987					
	Total staff				Full-time equivalent staff		Total staff				Full-time equivalent staff	
	Number	Per- cent	Full-time	Part-time	Total	FTE stu- dents per FTE staff	Number	Per- cent	Full-time	Part-time	Total	FTE stu- dents per FTE staff
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total, all institutions</b> .....	<b>1,863,790</b>	<b>100.0</b>	<b>1,339,911</b>	<b>523,879</b>	<b>1,541,399</b>	<b>5.4</b>	<b>2,337,534</b>	<b>100.0</b>	<b>1,699,999</b>	<b>649,485</b>	<b>1,937,334</b>	<b>4.8</b>
Professional staff .....	1,073,119	57.6	709,400	363,719	845,456	9.8	1,437,975	61.5	947,733	490,242	1,131,266	6.2
Executive/administrative/managerial .....	101,263	5.4	97,003	4,260	99,972	84.0	133,719	5.7	126,809	4,910	131,075	70.4
Faculty (instruction and research) .....	633,210	34.0	434,071	199,139	500,533	18.6	793,070	33.9	523,420	269,650	613,319	15.0
Instruction and research assistants .....	160,066	8.6	28,007	132,079	62,684	100.5	161,464	6.9	—	161,464	66,716	136.3
Non-faculty professionals .....	176,560	9.6	150,319	26,241	163,267	50.9	349,722	15.0	265,504	54,218	320,154	26.6
Nonprofessional staff .....	790,571	42.4	630,511	160,160	695,883	11.9	699,559	38.5	741,336	158,223	606,068	11.5
<b>Public, total</b> .....	<b>1,329,122</b>	<b>100.0</b>	<b>946,354</b>	<b>382,768</b>	<b>1,092,556</b>	<b>5.8</b>	<b>1,566,261</b>	<b>100.0</b>	<b>1,119,759</b>	<b>406,502</b>	<b>1,296,602</b>	<b>5.3</b>
Professional staff .....	769,836	57.9	502,325	267,511	601,942	10.5	997,226	62.9	633,942	363,264	769,264	9.0
Executive/administrative/managerial .....	60,733	4.6	58,649	2,084	59,679	106.6	74,170	4.7	71,660	2,510	72,760	95.3
Faculty (instruction and research) .....	448,733	33.6	313,367	135,366	357,761	17.7	552,749	34.6	364,157	188,592	426,007	16.3
Instruction and research assistants .....	127,925	9.6	19,076	108,849	63,420	100.1	136,370	8.6	—	136,370	55,556	124.9
Non-faculty professionals .....	132,445	10.0	111,233	21,212	121,182	52.4	233,937	14.7	196,126	35,812	214,922	32.3
Nonprofessional staff .....	559,266	42.1	444,029	115,237	490,616	12.9	569,035	37.1	485,817	103,216	527,536	13.2
<b>Private, total</b> .....	<b>534,668</b>	<b>100.0</b>	<b>393,557</b>	<b>141,111</b>	<b>448,781</b>	<b>4.4</b>	<b>751,273</b>	<b>100.0</b>	<b>599,310</b>	<b>161,963</b>	<b>640,532</b>	<b>3.6</b>
Professional staff .....	303,283	56.7	207,075	96,208	243,514	6.1	440,749	58.7	313,791	126,958	362,002	6.3
Executive/administrative/managerial .....	40,530	7.6	38,354	2,176	39,393	49.8	59,549	7.9	57,149	2,400	56,295	39.3
Faculty (instruction and research) .....	184,477	34.5	120,704	63,773	142,772	13.7	240,321	32.0	159,263	81,058	187,312	12.2
Instruction and research assistants .....	32,161	6.0	6,931	23,230	19,264	101.9	25,094	3.3	—	25,094	11,162	205.3
Non-faculty professionals .....	46,115	8.6	39,066	7,029	42,066	46.6	116,765	15.4	97,379	16,406	105,232	21.8
Nonprofessional staff .....	231,385	43.3	166,482	44,903	205,267	9.6	310,524	41.3	255,519	55,005	276,530	6.2

—Data not available or not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Staff, 1976" survey; and Integrated Postsecondary Education Data System (IPEDS), "Staff, 1987" survey. (This table was prepared May 1990.)

**Table 204.—Employees in institutions of higher education, by primary occupation, employment status, sex, and by type or control of institution: Fall 1987**

Primary occupation and type and control of institution	Total					Full-time				Part-time		
	Total		Men	Women		Total		Men	Women	Total	Men	Women
	Number	Per-cent		Number	Per-cent women	Number	Per-cent full-time					
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total, all institutions</b> .....	<b>2,337,634</b>	<b>100.0</b>	<b>1,164,087</b>	<b>1,173,467</b>	<b>50.2</b>	<b>1,699,099</b>	<b>72.3</b>	<b>840,237</b>	<b>848,632</b>	<b>648,488</b>	<b>323,890</b>	<b>324,698</b>
Professional staff.....	1,437,975	61.5	850,451	587,524	40.9	947,733	65.9	576,028	371,705	490,242	274,423	216,819
Executive/administrative/managerial.....	139,719	5.7	82,882	50,837	38.0	126,609	98.3	80,524	46,265	4,910	2,358	2,552
Faculty (instruction and research).....	793,070	33.9	529,413	263,657	33.2	523,420	66.0	373,548	149,874	269,650	155,967	113,783
Instruction and research assistants.....	161,464	6.9	96,808	82,656	38.9	—	—	—	—	161,464	96,808	82,656
Non-faculty professionals.....	349,722	15.0	139,548	210,174	60.1	295,504	64.5	121,958	173,548	54,216	17,590	36,628
Nonprofessional staff.....	899,659	38.5	313,616	585,943	65.1	741,336	62.4	264,209	477,127	158,223	49,407	108,816
Technical and paraprofessionals.....	167,377	7.2	68,390	96,937	59.1	136,034	81.3	57,152	78,882	31,343	11,236	20,106
Clerical and secretarial.....	435,434	18.6	44,270	391,164	69.8	350,129	80.4	28,597	321,532	65,305	15,873	69,632
Skilled crafts.....	60,511	2.6	57,204	3,307	5.5	57,684	95.7	55,363	2,521	2,627	1,641	788
Service and maintenance.....	236,237	10.1	143,752	92,485	39.1	197,289	63.5	123,097	74,192	36,948	20,655	18,293
<b>Public, total</b> .....	<b>1,586,261</b>	<b>100.0</b>	<b>804,882</b>	<b>781,379</b>	<b>49.3</b>	<b>1,119,769</b>	<b>70.8</b>	<b>571,486</b>	<b>548,273</b>	<b>486,502</b>	<b>233,396</b>	<b>233,106</b>
Professional staff.....	997,226	62.9	594,896	402,330	40.3	633,942	63.6	393,560	240,382	383,284	201,336	161,948
Executive/administrative/managerial.....	74,170	4.7	50,164	24,006	32.4	71,660	96.6	46,868	22,792	2,510	1,296	1,214
Faculty (instruction and research).....	552,749	34.8	357,127	186,622	33.6	384,157	65.9	260,114	104,043	188,592	108,013	82,579
Instruction and research assistants.....	136,370	8.6	82,579	53,791	39.4	—	—	—	—	136,370	82,579	53,791
Non-faculty professionals.....	233,937	14.7	96,026	137,911	59.0	196,125	64.7	64,578	113,547	35,812	11,448	24,364
Nonprofessional staff.....	589,035	37.1	209,986	379,049	64.4	485,617	62.5	177,926	307,691	103,218	32,060	71,159
Technical and paraprofessionals.....	110,612	7.0	46,589	64,023	57.9	66,220	79.8	38,397	48,823	22,392	8,192	14,200
Clerical and secretarial.....	261,159	17.7	27,370	253,789	90.3	224,692	79.9	16,971	207,721	56,467	10,399	46,066
Skilled crafts.....	43,417	2.7	40,846	2,571	5.9	41,404	95.4	39,430	1,974	2,013	1,416	597
Service and maintenance.....	153,847	9.7	95,161	58,686	38.1	131,501	85.5	63,128	46,373	22,346	12,053	10,293
<b>Private, total</b> .....	<b>751,273</b>	<b>100.0</b>	<b>359,185</b>	<b>392,088</b>	<b>52.2</b>	<b>589,310</b>	<b>75.8</b>	<b>268,751</b>	<b>300,559</b>	<b>161,963</b>	<b>90,434</b>	<b>91,529</b>
Professional staff.....	440,749	58.7	255,555	185,194	42.0	313,791	71.2	182,488	131,323	126,958	73,067	53,671
Executive/administrative/managerial.....	59,549	7.9	32,718	26,831	45.1	57,149	96.0	31,656	25,493	2,400	1,062	1,336
Faculty (instruction and research).....	240,321	32.0	163,266	77,035	32.1	159,263	66.3	113,432	48,831	81,058	49,654	31,204
Instruction and research assistants.....	25,094	3.3	16,029	9,065	36.1	—	—	—	—	25,094	16,029	9,065
Non-faculty professionals.....	115,765	15.4	43,522	72,263	62.4	97,379	64.1	37,360	59,999	18,406	6,142	12,264
Nonprofessional staff.....	310,524	41.3	103,630	206,894	66.6	255,519	62.3	86,263	169,236	55,005	17,347	37,658
Technical and paraprofessionals.....	56,785	7.6	21,801	34,984	61.6	47,614	64.2	16,755	29,059	8,951	3,046	5,906
Clerical and secretarial.....	154,275	20.5	16,900	137,375	69.0	125,437	61.3	11,826	113,911	26,838	5,274	23,564
Skilled crafts.....	17,064	2.3	16,358	706	4.3	16,480	96.4	15,933	547	614	425	189
Service and maintenance.....	62,390	11.0	46,571	33,619	41.0	65,768	79.8	39,969	25,819	16,602	6,602	8,000
<b>4-year, total</b> .....	<b>1,905,408</b>	<b>100.0</b>	<b>945,193</b>	<b>980,215</b>	<b>50.4</b>	<b>1,444,064</b>	<b>75.8</b>	<b>713,793</b>	<b>730,331</b>	<b>481,314</b>	<b>231,430</b>	<b>229,884</b>
Professional staff.....	1,130,054	59.3	673,700	456,354	40.4	791,716	70.1	480,768	310,947	336,339	192,932	145,407
Executive/administrative/managerial.....	112,274	5.9	68,871	43,403	38.7	108,523	96.7	67,094	41,429	3,751	1,777	1,974
Faculty (instruction and research).....	547,505	28.7	395,257	182,248	29.6	409,699	74.9	301,095	108,904	137,606	64,162	53,444
Instruction and research assistants.....	150,499	7.9	92,352	58,147	38.6	—	—	—	—	150,499	92,352	58,147
Non-faculty professionals.....	319,776	16.8	127,220	192,556	60.2	273,293	65.5	112,579	160,714	48,463	14,641	31,642
Nonprofessional staff.....	775,354	40.7	271,493	503,861	65.0	652,379	64.1	232,965	419,384	122,975	38,498	64,477
Technical and paraprofessionals.....	143,951	7.6	59,435	84,516	59.7	119,894	83.3	50,793	69,101	24,057	8,642	15,416
Clerical and secretarial.....	371,243	19.5	36,283	332,960	69.7	306,496	82.6	26,611	279,885	64,747	11,672	53,075
Skilled crafts.....	54,125	2.8	51,635	2,490	4.6	52,511	97.0	50,339	2,172	1,814	1,296	318
Service and maintenance.....	206,035	10.8	122,140	83,895	40.7	173,478	64.2	105,252	68,226	32,557	16,668	15,669
<b>2-year, total</b> .....	<b>432,126</b>	<b>100.0</b>	<b>218,874</b>	<b>213,262</b>	<b>49.3</b>	<b>244,875</b>	<b>56.7</b>	<b>126,474</b>	<b>118,501</b>	<b>187,151</b>	<b>92,400</b>	<b>94,751</b>
Professional staff.....	307,921	71.3	176,751	131,170	42.6	156,016	60.7	85,280	60,758	151,903	61,491	70,412
Executive/administrative/managerial.....	21,445	5.0	14,011	7,434	34.7	20,286	94.6	13,430	6,856	1,159	581	578
Faculty (instruction and research).....	245,565	56.8	144,158	101,409	41.3	113,521	46.2	72,451	41,070	132,044	71,705	60,339
Instruction and research assistants.....	10,965	2.5	6,258	4,709	42.9	—	—	—	—	10,965	6,258	4,709
Non-faculty professionals.....	29,946	6.9	12,328	17,618	58.8	22,211	74.2	9,379	12,832	7,735	2,949	4,786
Nonprofessional staff.....	124,205	28.7	42,123	82,082	66.1	88,957	71.6	31,214	57,743	35,248	10,909	24,339
Technical and paraprofessionals.....	23,426	5.4	8,955	14,471	61.6	16,140	68.9	6,369	9,781	7,286	2,596	4,690
Clerical and secretarial.....	64,191	14.9	5,987	58,204	90.7	43,633	68.0	1,966	41,647	20,558	4,001	16,567
Skilled crafts.....	6,386	1.5	5,569	817	12.8	5,373	84.1	5,024	349	1,013	545	466
Service and maintenance.....	30,202	7.0	21,612	8,590	28.4	23,911	76.8	17,845	5,966	6,391	3,767	2,624

---Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Staff" survey. (This table was prepared May 1990.)

**Table 205.—Employees in institutions of higher education, by primary occupation, employment status, sex, and by type and control of institution: Fall 1987**

Primary occupation and type and control of institution	Total					Full-time				Part-time		
	Total		Men	Women		Total		Men	Women	Total	Men	Women
	Number	Per-cent		Number	Per-cent woman	Number	Per-cent full-time					
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total, all employees</b> .....	<b>2,337,534</b>	<b>100.0</b>	<b>1,164,067</b>	<b>1,173,467</b>	<b>50.2</b>	<b>1,689,069</b>	<b>72.3</b>	<b>840,237</b>	<b>848,832</b>	<b>648,466</b>	<b>323,890</b>	<b>324,696</b>
Professional staff.....	1,437,975	61.5	850,451	857,524	40.9	947,733	65.9	576,028	371,705	490,242	274,423	215,619
Executive/administrative/managerial.....	133,719	5.7	82,882	10,837	38.0	128,809	96.3	80,524	48,265	4,910	2,358	2,562
Faculty (instruction and research).....	793,070	33.9	529,413	263,637	33.2	523,420	66.0	373,548	149,674	269,650	155,667	113,763
Instruction and research assistants.....	161,464	6.9	96,608	62,856	38.9	—	—	—	—	161,464	96,608	62,856
Non-faculty professionals.....	349,722	15.0	139,548	210,174	60.1	295,504	84.5	121,958	173,548	54,218	17,590	36,626
Nonprofessional staff.....	899,559	38.5	313,616	585,943	65.1	741,336	82.4	264,209	477,127	158,223	49,407	106,616
Technical and paraprofessionals.....	167,377	7.2	68,390	96,987	59.1	136,034	61.3	57,152	78,882	31,343	11,238	20,105
Clerical and secretarial.....	435,434	18.6	44,270	391,164	89.8	350,129	80.4	28,597	321,532	65,305	15,673	69,832
Skilled crafts.....	60,511	2.6	57,204	3,307	5.5	57,884	95.7	55,363	2,521	2,627	1,641	766
Service and maintenance.....	236,237	10.1	143,752	92,485	39.1	197,269	83.5	123,097	74,192	38,948	20,655	18,293
<b>Public 4-year, total</b> .....	<b>1,184,934</b>	<b>100.0</b>	<b>598,891</b>	<b>586,043</b>	<b>49.5</b>	<b>896,095</b>	<b>75.6</b>	<b>453,858</b>	<b>442,237</b>	<b>268,839</b>	<b>145,033</b>	<b>143,606</b>
Professional staff.....	711,714	60.1	428,579	283,135	39.8	492,591	69.2	305,143	187,448	219,123	123,436	95,667
Executive/administrative/managerial.....	55,967	4.7	37,792	18,175	32.5	54,473	97.3	37,018	17,455	1,494	774	720
Faculty (instruction and research).....	322,635	27.2	229,626	93,009	28.8	259,112	80.3	191,977	87,135	63,523	37,649	25,674
Instruction and research assistants.....	125,603	10.6	78,422	49,181	39.2	—	—	—	—	125,603	78,422	49,181
Non-faculty professionals.....	207,509	17.5	64,739	122,770	59.2	179,006	86.3	76,148	102,858	28,503	6,591	19,912
Nonprofessional staff.....	473,220	39.9	170,312	302,908	64.0	403,504	85.3	148,715	254,789	69,716	21,597	48,119
Technical and paraprofessionals.....	88,386	7.5	37,977	50,409	57.0	72,997	82.8	32,311	40,666	15,389	5,666	9,723
Clerical and secretarial.....	221,095	18.7	21,623	199,472	90.2	184,372	83.4	15,152	169,220	36,723	6,471	30,252
Skilled crafts.....	37,378	3.2	35,562	1,814	4.9	36,343	97.2	34,878	1,467	1,033	886	147
Service and maintenance.....	126,363	10.7	75,150	51,213	40.5	109,792	86.9	66,576	43,216	16,571	6,574	7,997
<b>Public 2-year, total</b> .....	<b>431,327</b>	<b>100.0</b>	<b>205,991</b>	<b>195,336</b>	<b>48.7</b>	<b>223,664</b>	<b>55.7</b>	<b>117,628</b>	<b>106,036</b>	<b>177,663</b>	<b>88,363</b>	<b>89,300</b>
Professional staff.....	285,512	71.1	166,317	119,195	41.7	141,351	49.5	88,417	52,934	144,161	77,900	66,261
Executive/administrative/managerial.....	18,203	4.5	12,372	5,831	32.0	17,187	94.4	11,850	5,337	1,016	522	484
Faculty (instruction and research).....	230,114	57.3	138,501	93,813	40.7	105,045	45.6	68,137	36,908	125,069	68,364	56,705
Instruction and research assistants.....	10,767	2.7	6,157	4,610	42.8	—	—	—	—	10,767	6,157	4,610
Non-faculty professionals.....	26,428	6.8	11,287	15,141	57.3	19,119	72.3	8,430	10,689	7,309	2,857	4,452
Nonprofessional staff.....	115,815	28.9	39,674	76,141	65.7	82,313	71.1	29,211	53,102	33,502	10,463	23,039
Technical and paraprofessionals.....	22,228	5.5	8,812	13,814	61.3	15,223	68.5	6,086	9,137	7,003	2,526	4,477
Clerical and secretarial.....	60,064	15.0	5,747	54,317	90.4	40,320	67.1	1,819	38,501	19,744	3,828	15,616
Skilled crafts.....	6,041	1.5	5,284	767	12.5	5,061	83.8	4,754	307	980	530	460
Service and maintenance.....	27,484	6.8	20,031	7,453	27.1	21,709	79.0	16,552	5,157	5,775	3,479	2,296
<b>Private 4-year, total</b> .....	<b>720,474</b>	<b>100.0</b>	<b>348,302</b>	<b>374,172</b>	<b>51.9</b>	<b>547,999</b>	<b>76.1</b>	<b>259,905</b>	<b>288,094</b>	<b>172,475</b>	<b>88,397</b>	<b>86,078</b>
Professional staff.....	418,340	58.1	245,121	173,219	41.4	299,124	71.5	175,825	123,499	119,216	69,496	49,720
Executive/administrative/managerial.....	56,307	7.8	31,079	25,228	44.8	54,050	96.0	30,076	23,974	2,257	1,003	1,254
Faculty (instruction and research).....	224,870	31.2	155,631	69,239	30.8	150,787	67.1	109,116	41,669	74,063	48,513	27,570
Instruction and research assistants.....	24,898	3.5	15,930	8,966	36.0	—	—	—	—	24,898	15,930	8,966
Non-faculty professionals.....	112,267	15.6	42,461	69,766	62.2	94,287	84.0	38,431	57,856	17,960	6,050	11,930
Nonprofessional staff.....	302,134	41.9	101,181	200,953	66.5	248,875	82.4	84,280	164,595	53,259	18,901	36,358
Technical and paraprofessionals.....	55,565	7.7	21,458	34,107	61.4	48,897	64.4	16,482	28,415	6,666	2,976	5,662
Clerical and secretarial.....	150,148	20.8	18,960	133,488	88.9	122,124	61.3	11,459	110,665	28,024	5,201	22,823
Skilled crafts.....	16,749	2.3	16,073	676	4.0	16,168	96.5	15,963	505	581	410	171
Service and maintenance.....	79,872	11.1	48,990	32,682	41.0	63,686	79.9	38,676	25,010	15,966	8,314	7,672
<b>Private 2-year, total</b> .....	<b>30,799</b>	<b>100.0</b>	<b>12,883</b>	<b>17,918</b>	<b>58.2</b>	<b>21,311</b>	<b>69.2</b>	<b>8,946</b>	<b>12,465</b>	<b>9,468</b>	<b>4,037</b>	<b>5,451</b>
Professional staff.....	22,409	72.8	10,434	11,975	53.4	14,667	65.5	6,843	7,824	7,742	3,591	4,151
Executive/administrative/managerial.....	3,242	10.5	1,839	1,403	49.4	3,099	95.6	1,580	1,519	143	59	84
Faculty (instruction and research).....	15,451	50.2	7,655	7,786	50.5	8,478	54.9	4,314	4,162	8,975	3,341	3,634
Instruction and research assistants.....	198	0.6	99	99	50.0	—	—	—	—	198	99	99
Non-faculty professionals.....	3,518	11.4	1,041	2,477	70.4	3,092	87.9	949	2,143	426	92	334
Nonprofessional staff.....	8,390	27.2	2,449	5,941	70.8	6,644	79.2	2,003	4,641	1,748	448	1,300
Technical and paraprofessionals.....	1,200	3.9	343	857	71.4	917	76.4	273	644	283	70	213
Clerical and secretarial.....	4,127	13.4	240	3,887	94.2	3,313	80.3	167	3,146	814	73	741
Skilled crafts.....	345	1.1	286	60	17.4	312	90.4	270	42	33	15	16
Service and maintenance.....	2,718	8.8	1,581	1,137	41.8	2,102	77.3	1,293	809	616	288	326

—Data not available or not applicable.

Integrated Postsecondary Education Data System (IPEDS), "Staff" survey. (This table was prepared May 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, In-

**Table 206.—Full-time and part-time senior instructional faculty<sup>1</sup> in institutions of higher education, by employment status and control and type of institution: Fall 1970 to fall 1987**

[In thousands]

Year	Total	Employment status		Control		Type	
		Full-time	Part-time	Public	Private	4-year	2-year
1	2	3	4	5	6	7	8
1970	474	369	104	314	160	382	92
1971 <sup>2</sup>	492	379	113	333	159	387	105
1972	500	380	120	343	157	384	116
1973 <sup>2</sup>	527	389	138	365	162	401	126
1974 <sup>2</sup>	567	406	161	397	170	427	140
1975 <sup>2</sup>	628	440	188	443	185	467	161
1976	633	434	199	450	183	467	166
1977	678	448	230	492	186	485	193
1979 <sup>2</sup>	675	445	230	488	187	484	182
1980 <sup>2</sup>	686	450	236	495	191	494	192
1981	705	461	244	509	196	493	212
1982 <sup>2</sup>	710	462	248	506	204	493	217
1983	724	471	254	512	212	504	220
1984 <sup>2</sup>	717	462	255	505	212	504	213
1985 <sup>2</sup>	715	459	256	503	212	504	211
1986 <sup>2</sup>	722	459	263	510	212	506	216
1987 <sup>3</sup>	793	523	270	553	240	548	246

<sup>1</sup> Includes faculty members with the title of professor, associate professor, assistant professor, instructor, lecturer, assisting professor, adjunct professor, or interim professor (or the equivalent). Excluded are graduate students with titles such as graduate or teaching fellow who assist senior faculty.

<sup>2</sup> Estimated on the basis of enrollment.

<sup>3</sup> Because of revised survey methods, data are not directly comparable to figures for other years.

NOTE.—Data exclude faculty employed by system offices. Some data have been revised from previously published figures. For methodological details on estimates, see

*Projections of Education Statistics to 2000*. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Employees in Institutions of Higher Education*, various years; *Projections of Education Statistics to 2000*; Integrated Postsecondary Education Data System (IPEDS), "Staff, 1987" survey; and U.S. Equal Employment Opportunity Commission, *Higher Education Staff Information Report File, 1977, 1981, and 1983*. (This table was prepared May 1990.)

**Table 207.—Full-time instructional faculty in institutions of higher education, by race/ethnicity, academic rank, and sex: Fall 1985**

Academic rank and sex	Total	Race/ethnicity				
		White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native
1	2	3	4	5	6	7
<b>Men and women, all ranks</b>	<b>464,072</b>	<b>417,036</b>	<b>19,227</b>	<b>7,704</b>	<b>18,370</b>	<b>1,735</b>
Professors	129,269	119,868	2,859	1,455	4,788	299
Associate professors	111,092	100,630	4,201	1,727	4,130	404
Assistant professors	111,308	97,496	5,895	1,968	5,469	480
Instructors	75,411	66,799	4,572	1,798	1,803	436
Lecturers	9,766	8,477	631	251	360	47
Other faculty	27,226	23,766	1,069	505	1,817	69
<b>Men, all ranks</b>	<b>336,009</b>	<b>303,953</b>	<b>10,456</b>	<b>5,360</b>	<b>14,846</b>	<b>1,394</b>
Professors	114,258	106,335	2,058	1,206	4,395	264
Associate professors	85,156	77,483	2,595	1,280	3,451	347
Assistant professors	71,463	62,582	2,923	1,316	4,240	402
Instructors	43,251	38,592	2,107	1,141	1,105	306
Lecturers	5,098	4,436	304	117	212	29
Other faculty	16,783	14,525	469	300	1,443	46
<b>Women, all ranks</b>	<b>128,063</b>	<b>113,083</b>	<b>8,771</b>	<b>2,344</b>	<b>3,524</b>	<b>341</b>
Professors	15,011	13,533	801	249	393	35
Associate professors	25,936	23,147	1,606	447	879	57
Assistant professors	39,845	34,914	2,972	652	1,229	78
Instructors	32,160	28,207	2,465	657	701	130
Lecturers	4,668	4,041	327	134	178	18
Other faculty	10,443	9,241	600	205	374	23

NOTE.—Data exclude faculty employed by system offices. Totals may differ from figures reported on other tables because of varying survey methodologies.

SOURCE: U.S. Equal Employment Opportunity Commission, *Higher Education Staff Information Report File, 1985*, unpublished data. (This table was prepared June 1989.)

**Table 208.—Full-time regular instructional faculty in institutions of higher education, by selected characteristics and type and control of institution: Fall 1987**

Selected characteristics	Number in thousands	Percent total	Public research	Private research	Public doctoral	Private doctoral	Public comprehensive	Private comprehensive	Liberal arts	Public 2-year	Private 2-year	Medical	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Total (in thousands)</b>	<b>489</b>	<b>—</b>	<b>96</b>	<b>39</b>	<b>36</b>	<b>15</b>	<b>93</b>	<b>35</b>	<b>39</b>	<b>91</b>	<b>4</b>	<b>25</b>	<b>15</b>
<b>Percent.....</b>	<b>—</b>	<b>100.0</b>	<b>19.7</b>	<b>8.0</b>	<b>7.3</b>	<b>3.0</b>	<b>19.0</b>	<b>7.2</b>	<b>8.0</b>	<b>18.7</b>	<b>0.8</b>	<b>5.2</b>	<b>3.0</b>
Percent distribution													
<b>Total.....</b>	<b>—</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Sex</b>													
Male.....	356	72.7	79.3	80.5	74.5	77.3	71.1	72.5	70.9	62.1	64.2	75.7	76.7
Female.....	133	27.3	20.7	19.5	25.5	22.7	28.9	27.5	29.1	37.9	35.8	24.3	21.3
<b>Race</b>													
White, non-Hispanic.....	438	89.5	90.4	85.4	92.0	91.3	88.0	91.2	88.9	91.0	94.1	85.3	85.1
Black, non-Hispanic.....	16	3.2	1.6	6.1	1.8	0.1	3.5	1.7	6.0	3.0	3.1	3.0	2.3
Hispanic.....	11	2.3	2.4	5.0	1.1	2.2	2.1	1.8	1.2	3.5	2.3	( <sup>1</sup> )	1.8
Asian.....	21	4.2	4.8	3.5	4.5	5.9	5.8	4.4	2.7	1.8	0.5	10.3	1.0
American Indian.....	3	0.7	0.7	( <sup>1</sup> )	0.8	0.5	0.6	1.1	1.2	0.9	( <sup>1</sup> )	1.4	( <sup>1</sup> )
<b>Age</b>													
39 or younger.....	8	1.6	1.1	0.6	1.8	1.3	1.6	2.1	2.2	1.9	9.5	0.7	1.2
30-34.....	41	8.3	7.1	11.5	10.2	4.5	7.9	6.2	8.5	5.6	6.7	22.1	5.7
35-39.....	72	14.7	16.5	21.4	14.8	17.9	12.5	16.3	14.4	12.2	4.6	10.7	17.0
40-44.....	82	16.7	15.2	17.6	14.0	11.4	15.7	18.4	19.8	18.1	36.3	16.9	17.0
45-49.....	92	18.9	18.5	15.1	18.7	17.3	21.2	18.0	19.9	21.2	3.3	13.5	16.2
50-54.....	74	15.1	14.8	12.3	15.9	18.4	15.3	16.9	9.9	18.2	19.8	10.5	15.8
55-59.....	59	12.0	12.1	8.6	13.2	10.7	13.2	10.2	13.6	13.5	12.8	8.6	9.1
60 or older.....	62	12.7	14.7	12.8	11.5	18.5	12.6	11.9	11.7	9.3	8.8	17.0	16.3
<b>Degree</b>													
Doctoral.....	263	54.7	72.1	69.1	73.0	74.4	62.7	64.0	60.3	17.5	13.8	25.9	40.6
Professional.....	61	12.7	16.3	23.9	5.4	14.9	6.2	8.1	1.8	1.5	3.2	62.7	27.6
Master's.....	134	27.9	6.5	6.2	19.2	10.7	29.9	24.3	34.6	64.9	58.1	9.8	26.5
Graduate work, no degree.....	7	1.5	0.2	0.7	1.0	( <sup>1</sup> )	0.8	1.2	2.0	4.8	6.1	( <sup>1</sup> )	1.6
Bachelor's.....	11	2.2	0.7	0.2	0.9	( <sup>1</sup> )	0.8	1.8	1.3	7.7	10.9	( <sup>1</sup> )	2.9
Less than bachelor's.....	4	0.9	( <sup>1</sup> )	( <sup>1</sup> )	0.5	( <sup>1</sup> )	( <sup>1</sup> )	0.6	( <sup>1</sup> )	3.7	8.0	1.5	0.5
<b>Academic rank</b>													
Professor.....	162	33.1	45.3	39.2	35.6	35.4	37.2	30.8	29.4	15.6	12.5	31.6	34.3
Associate professor.....	116	23.7	26.1	25.3	30.1	34.3	26.5	29.5	23.0	9.5	4.6	26.9	22.4
Assistant professor.....	111	22.8	21.2	29.1	25.9	28.3	23.4	32.7	31.2	10.9	21.9	29.0	16.3
Instructor.....	56	11.5	2.7	3.1	6.7	2.0	8.7	6.1	9.3	33.3	25.0	11.8	9.1
Lecturer.....	6	1.6	2.7	2.4	1.4	( <sup>1</sup> )	3.0	0.4	0.5	0.7	0.5	( <sup>1</sup> )	( <sup>1</sup> )
Other.....	4	0.9	0.1	0.8	0.3	( <sup>1</sup> )	1.2	0.3	0.8	1.7	0.6	0.7	3.2
No rank.....	32	6.5	( <sup>1</sup> )	0.1	( <sup>1</sup> )	0.1	( <sup>1</sup> )	0.2	5.9	28.3	34.9	( <sup>1</sup> )	14.6
<b>Base salary</b>													
Less than \$20,000.....	24	5.0	2.2	3.2	5.3	4.1	3.8	7.8	15.1	3.0	30.0	0.8	16.4
\$20,000-24,999.....	50	10.2	3.4	2.1	11.9	4.2	10.2	18.3	21.7	15.2	19.9	1.3	10.6
\$25,000-29,999.....	72	14.8	6.1	6.4	14.5	15.2	17.5	17.7	22.3	19.5	35.7	3.6	15.8
\$30,000-34,999.....	76	15.6	9.4	7.0	15.8	17.7	16.9	20.0	17.2	22.9	6.3	15.8	11.1
\$35,000-39,999.....	67	13.6	12.5	11.7	15.6	10.9	15.4	15.0	10.0	17.6	2.7	6.7	12.1
\$40,000-49,999.....	96	19.7	25.0	20.5	24.6	17.7	22.2	12.7	9.7	19.6	1.9	10.8	16.5
\$50,000-74,999.....	78	15.9	30.5	29.6	9.7	21.4	12.5	7.5	4.0	2.3	1.0	40.5	13.5
\$75,000 or more.....	24	4.9	9.0	17.2	2.4	6.9	1.6	1.0	( <sup>1</sup> )	( <sup>1</sup> )	0.4	16.5	( <sup>1</sup> )

<sup>1</sup> Less than .05 percent.  
—Data not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Survey of Postsecondary Faculty (NSOPF), 1988. (This table was prepared June 1990.)

NOTE.—Data may not add to totals because of rounding or missing data.

**Table 209.—Total regular and temporary instructional faculty in institutions of higher education, by selected characteristics and type and control of institution: Fall 1987**

Selected characteristics	Number in thousands	Percent total	Public research	Private research	Public doctoral	Private doctoral	Public comprehensive	Private comprehensive	Liberal arts	Public 2-year	Private 2-year	Medical	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total (in thousands)	770	—	119	53	45	27	130	61	60	201	6	35	32
Percent.....	—	100.0	15.5	6.9	5.9	3.5	16.9	7.9	7.8	26.1	0.8	4.6	4.2
Percent distribution													
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex													
Male .....	521	67.7	77.2	74.6	68.7	77.1	65.6	69.0	60.6	61.3	52.7	71.1	72.4
Female .....	248	32.3	22.8	25.4	31.3	22.9	34.4	32.0	39.4	38.7	47.3	28.9	27.6
Race													
White, non-Hispanic .....	690	89.7	91.3	85.2	92.8	91.4	88.2	92.7	86.9	91.0	90.2	82.0	91.6
Black, non-Hispanic .....	25	3.2	1.4	6.8	1.8	( <sup>1</sup> )	3.2	1.2	8.5	3.1	4.0	2.4	3.6
Hispanic .....	18	2.4	2.1	4.5	1.2	4.1	1.8	1.7	1.8	3.5	1.5	( <sup>1</sup> )	0.7
Asian .....	30	3.9	4.4	3.5	3.8	3.7	5.7	3.8	1.8	1.7	2.2	14.5	3.7
American Indian .....	8	0.8	0.8	0.2	0.8	0.7	1.1	0.7	1.1	0.7	2.1	1.0	0.1
Type of employment													
Temporary .....	105	13.6	10.8	10.4	10.1	16.6	11.9	25.6	13.4	14.1	5.6	13.2	16.5
Regular .....	665	86.4	89.2	89.6	89.9	83.4	88.1	74.4	86.6	85.9	94.4	86.8	83.5

<sup>1</sup> Less than .05 percent.  
—Data not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Survey of Postsecondary Faculty (NSOPF), 1988. (This table was prepared June 1990.)

NOTE.—Data may not add to totals because of rounding or missing data.

**Table 210.—Part-time regular instructional faculty in institutions of higher education, by selected characteristics and type and control of institution: Fall 1987**

Selected characteristics	Number in thousands	Percent total	Public research	Private research	Public doctoral	Private doctoral	Public comprehensive	Private comprehensive	Liberal arts	Public 2-year	Private 2-year	Medical	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total (in thousands)	174	—	10	9	5	8	22	10	13	81	2	5	11
Percent.....	—	100.0	5.8	4.9	2.9	4.5	12.4	5.8	7.4	46.4	1.1	2.9	8.1
Percent distribution													
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Sex</b>													
Male.....	99	56.7	67.0	57.8	35.8	66.9	49.9	48.5	39.4	57.6	( <sup>1</sup> )	( <sup>1</sup> )	77.2
Female.....	75	43.3	33.0	42.4	64.4	33.1	50.1	51.5	60.8	42.4	( <sup>1</sup> )	( <sup>1</sup> )	22.8
<b>Race</b>													
White, non-Hispanic.....	156	89.7	98.3	82.8	94.4	91.4	83.7	96.9	82.1	91.5	( <sup>1</sup> )	( <sup>1</sup> )	97.3
Black, non-Hispanic.....	8	3.8	0.8	11.8	1.8	( <sup>2</sup> )	2.2	( <sup>2</sup> )	14.1	3.1	( <sup>1</sup> )	( <sup>1</sup> )	1.4
Hispanic.....	4	2.5	( <sup>2</sup> )	2.0	2.4	8.8	1.5	2.8	2.4	3.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>2</sup> )
Asian.....	6	3.4	( <sup>2</sup> )	2.1	( <sup>2</sup> )	( <sup>2</sup> )	8.8	0.4	( <sup>2</sup> )	2.1	( <sup>1</sup> )	( <sup>1</sup> )	1.4
American Indian.....	2	0.9	1.1	1.5	1.8	( <sup>2</sup> )	3.8	( <sup>2</sup> )	1.4	0.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>2</sup> )
<b>Age</b>													
29 or younger.....	9	5.3	4.8	9.7	7.8	( <sup>2</sup> )	8.2	10.4	2.3	4.2	( <sup>1</sup> )	( <sup>1</sup> )	11.0
30-34.....	17	9.9	11.1	3.0	18.7	8.5	11.2	5.3	5.8	12.6	( <sup>1</sup> )	( <sup>1</sup> )	2.9
35-39.....	39	22.4	15.7	20.0	21.2	27.7	26.5	16.3	23.1	22.2	( <sup>1</sup> )	( <sup>1</sup> )	20.5
40-44.....	34	19.4	17.5	19.5	10.2	12.7	18.2	15.3	10.5	22.3	( <sup>1</sup> )	( <sup>1</sup> )	21.3
45-49.....	25	14.2	11.7	20.8	18.2	12.1	11.7	9.4	20.1	13.2	( <sup>1</sup> )	( <sup>1</sup> )	29.0
50-54.....	19	11.0	4.4	9.6	10.9	28.6	11.9	12.9	10.3	10.8	( <sup>1</sup> )	( <sup>1</sup> )	2.7
55-59.....	12	6.8	8.8	1.5	6.8	5.8	11.7	11.8	5.9	5.8	( <sup>1</sup> )	( <sup>1</sup> )	2.8
60 or older.....	19	10.9	28.0	15.7	8.5	8.9	4.7	18.5	21.9	9.1	( <sup>1</sup> )	( <sup>1</sup> )	9.7
<b>Degree</b>													
Doctoral.....	26	15.2	27.1	34.0	17.0	26.8	27.0	18.7	18.7	7.3	( <sup>1</sup> )	( <sup>1</sup> )	17.4
Professional.....	22	12.9	29.3	37.8	13.8	18.8	8.8	8.7	9.1	4.3	( <sup>1</sup> )	( <sup>1</sup> )	25.0
Master's.....	70	41.9	30.5	20.2	48.8	22.5	48.8	57.9	49.7	48.2	( <sup>1</sup> )	( <sup>1</sup> )	29.2
Graduate work, no degree.....	13	7.8	7.1	5.4	1.8	8.4	5.1	7.2	3.8	9.8	( <sup>1</sup> )	( <sup>1</sup> )	13.1
Bachelor's.....	28	18.9	4.2	2.0	21.1	22.9	10.4	7.5	19.3	22.2	( <sup>1</sup> )	( <sup>1</sup> )	13.8
Less than bachelor's.....	9	5.2	1.8	0.8	( <sup>2</sup> )	2.8	( <sup>2</sup> )	( <sup>2</sup> )	1.4	10.2	( <sup>1</sup> )	( <sup>1</sup> )	1.4

<sup>1</sup> Too few cases for reliable estimates.

<sup>2</sup> Less than .05 percent.

-Data not applicable.

NOTE.—Data may not add to totals because of rounding or missing data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Survey of Postsecondary Faculty (NSOPF), 1988. (This table was prepared June 1990.)

**Table 211.—Average salary of full-time instructional faculty in institutions of higher education, by academic rank and sex: 1972-73 to 1987-88**

Academic year and sex	Constant (1987-88) dollars <sup>1</sup>	Current dollars						
		All ranks	Professor	Associate professor	Assistant professor	Instructor	Lecturer	Undesignated or no academic rank
1	2	3	4	5	6	7	8	9
<b>1972-73</b>								
Total .....	\$37,479	\$13,850	\$19,182	\$14,572	\$12,029	\$10,737	\$11,837	\$12,878
Male .....	39,008	14,415	19,405	14,714	12,190	11,147	12,105	13,047
Female .....	32,270	11,925	17,122	13,827	11,510	10,099	10,775	11,913
<b>1975-76</b>								
Total .....	34,745	18,634	22,811	17,028	13,966	13,682	12,887	15,201
Male .....	36,320	17,388	22,868	17,167	14,154	14,440	13,577	15,764
Female .....	29,853	14,292	20,257	16,338	13,506	12,580	11,670	14,098
<b>1979-80</b>								
Total .....	31,883	21,367	28,371	21,431	17,459	14,021	16,151	20,479
Male .....	33,459	22,423	28,853	21,627	17,712	14,321	16,987	21,247
Female .....	27,449	18,395	25,910	20,642	16,971	13,749	15,142	19,069
<b>1980-81</b>								
Total .....	31,181	23,302	30,753	23,214	18,901	15,176	17,301	22,334
Male .....	32,762	24,499	31,082	23,451	19,227	15,545	18,281	23,170
Female .....	26,740	19,998	27,959	22,295	18,302	14,854	16,168	20,843
<b>1981-82</b>								
Total .....	31,326	25,449	33,437	25,278	20,808	16,450	18,758	24,331
Male .....	32,984	26,798	33,799	25,553	21,025	18,906	19,721	25,276
Female .....	26,837	21,802	30,438	24,271	19,886	16,054	17,678	22,872
<b>1982-83</b>								
Total .....	32,098	27,198	35,540	28,921	22,058	17,601	20,072	25,557
Male .....	33,831	28,664	35,956	27,282	22,586	18,160	21,225	26,541
Female .....	27,454	23,261	32,221	25,738	21,130	17,102	18,830	23,955
<b>1984-85</b>								
Total .....	33,347	30,447	39,743	29,945	24,668	20,230	22,334	27,683
Male .....	35,248	32,182	40,269	30,392	25,330	21,159	23,557	28,670
Female .....	29,412	25,941	35,824	28,517	23,575	19,362	21,004	26,050
<b>1985-86</b>								
Total .....	34,483	32,392	42,268	31,787	26,277	20,918	23,770	29,088
Male .....	36,508	34,294	42,833	32,273	27,094	21,693	25,238	30,267
Female .....	29,358	27,576	38,252	30,300	24,968	20,237	22,273	27,171
<b>1987-88</b>								
Total .....	35,901	35,901	47,046	35,232	29,109	22,726	25,982	31,534
Male .....	38,115	38,115	47,739	35,823	30,085	23,843	27,856	32,751
Female .....	30,505	30,505	42,389	33,531	27,601	21,960	24,385	29,806

<sup>1</sup> Data adjusted, using the Consumer Price Index prepared by the Bureau of Labor Statistics, averaged on an academic year time frame.

NOTE.—Data for 1972-73, 1975-76, and 1987-88 are for faculty on 9- to 10-month contracts; data for 1979-80 to 1985-86 are for faculty on 9-month contracts. Data for 1987-88 include imputations for nonrespondent institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Faculty Salaries, Tenure, and Benefits*, and Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty" survey. (This table was prepared March 1990.)

**Table 212.—Average salary of full-time instructional faculty on 9-month contracts in institutions of higher education, by academic rank and sex and by type and control of institution: 1980-81, 1982-83, 1985-86, and 1987-88**

Academic year, control, and type of institution	Average salary, all faculty	Average salary, by rank						Average salary, by sex	
		Professor	Associate professor	Assistant professor	Instructor	Lecturer	No academic rank	Men	Women
1	2	3	4	5	6	7	8	9	10
<b>1980-81</b>									
All institutions .....	\$23,302	\$30,753	\$23,214	\$18,901	\$15,178	\$17,301	\$22,334	\$24,499	\$19,996
4-year .....	23,893	31,016	23,265	18,867	15,056	17,375	17,380	24,909	19,809
University .....	25,949	33,622	24,392	19,684	15,530	17,327	17,856	27,208	20,736
Other 4-year .....	22,230	28,798	22,558	18,398	14,887	17,425	17,334	23,271	19,372
2-year .....	21,896	26,526	22,750	19,166	15,621	16,222	22,615	22,733	20,434
Public institutions .....	23,745	31,077	23,772	19,431	15,813	17,620	22,620	24,673	20,673
4-year .....	24,373	31,442	23,898	19,442	15,486	17,712	19,240	25,509	20,608
University .....	25,571	32,945	24,268	19,637	15,305	17,426	17,358	26,788	20,564
Other 4-year .....	23,500	30,097	23,639	19,315	15,567	17,997	19,798	24,499	20,833
2-year .....	22,177	26,880	22,947	19,370	15,928	16,458	22,675	22,965	20,778
Private institutions .....	22,093	29,994	21,633	17,767	14,192	15,899	15,946	23,493	18,073
4-year .....	22,325	30,089	21,887	17,816	14,316	15,971	16,706	23,669	18,326
University .....	26,897	35,227	24,730	19,792	16,197	16,956	18,933	26,251	21,176
Other 4-year .....	19,996	26,173	20,502	16,939	13,905	14,741	16,617	21,040	17,342
2-year .....	15,065	18,645	17,085	14,663	12,155	12,441	14,993	16,075	13,692
<b>1982-83</b>									
All institutions .....	27,196	35,540	26,921	22,056	17,601	20,072	25,557	28,664	23,261
4-year .....	27,758	35,889	27,013	22,055	17,440	20,116	19,824	29,240	23,139
University .....	30,710	39,373	28,502	23,398	17,956	20,170	19,850	32,269	24,396
Other 4-year .....	25,921	33,121	26,119	21,315	17,275	20,064	19,594	27,167	22,568
2-year .....	25,252	30,680	26,131	22,059	18,128	19,383	25,900	26,268	23,536
Public institutions .....	27,468	35,473	27,346	22,536	18,003	20,048	26,113	28,651	23,892
4-year .....	28,293	35,918	27,511	22,588	17,789	20,087	21,189	29,661	23,676
University .....	29,893	38,041	28,086	23,112	17,430	19,869	19,160	31,390	23,908
Other 4-year .....	27,152	34,124	27,112	22,245	17,840	20,277	22,333	28,323	23,658
2-year .....	25,567	31,058	26,349	22,260	18,484	19,547	26,189	26,524	23,917
Private institutions .....	26,393	35,701	25,876	21,054	16,675	20,176	17,786	28,159	21,451
4-year .....	26,691	35,828	25,949	21,118	16,849	20,232	19,072	26,380	21,785
University .....	32,842	42,658	29,692	24,095	19,678	21,088	22,740	34,540	26,721
Other 4-year .....	23,819	31,095	24,294	18,929	16,336	18,957	18,957	25,128	20,545
2-year .....	18,595	20,829	19,689	17,164	14,055	13,438	15,811	17,346	15,845
<b>1985-86</b>									
All institutions .....	32,392	42,268	31,787	26,277	20,918	23,770	29,088	34,294	27,576
4-year .....	33,270	42,803	31,940	26,335	20,383	23,805	24,055	35,174	27,696
University .....	36,837	46,994	33,704	28,242	20,784	23,807	24,139	38,841	29,243
Other 4-year .....	31,076	39,610	30,864	25,314	20,253	23,902	24,043	32,688	26,994
2-year .....	29,259	36,076	30,483	25,823	22,434	23,154	29,420	30,490	27,294
Public institutions .....	32,750	42,326	32,367	26,951	21,553	23,839	29,597	34,526	28,299
4-year .....	34,033	43,044	32,642	27,100	20,895	23,862	25,142	35,766	28,680
University .....	35,835	45,322	33,133	27,687	20,226	23,557	23,771	37,771	28,567
Other 4-year .....	32,757	41,170	32,296	26,597	21,160	24,101	25,705	34,260	28,742
2-year .....	29,590	36,416	30,733	26,162	22,818	23,500	29,712	30,756	27,693
Private institutions .....	31,402	42,118	30,400	24,891	19,314	23,477	21,577	33,656	25,523
4-year .....	31,732	42,260	30,486	24,967	19,483	23,574	23,394	33,900	25,889
University .....	39,519	51,355	35,307	29,125	22,743	24,540	26,603	41,690	31,106
Other 4-year .....	28,198	36,455	28,366	23,412	18,910	22,093	23,295	29,892	24,280
2-year .....	19,436	24,519	22,291	19,297	16,419	9,231	16,783	20,412	16,504
<b>1987-88</b>									
All institutions .....	35,901	47,048	35,232	29,109	22,726	25,982	31,574	36,115	30,505
4-year .....	36,970	47,660	35,399	29,209	22,256	26,003	28,000	39,189	30,760
University .....	41,476	53,096	37,702	31,784	22,779	26,408	26,000	43,834	32,966
Other 4-year .....	34,290	43,693	34,024	27,677	22,093	25,661	26,000	36,138	29,781
2-year .....	31,908	39,064	33,818	28,136	24,326	25,602	26,001	33,236	29,870
Public institutions .....	36,231	47,074	35,958	29,832	23,266	26,033	32,030	36,314	31,216
4-year .....	37,840	47,917	36,272	30,037	22,637	26,057	27,165	39,896	31,820
University .....	40,106	50,865	37,011	31,206	21,909	26,060	25,645	42,405	31,966
Other 4-year .....	36,266	45,615	35,756	29,312	22,936	26,055	28,077	38,042	31,729
2-year .....	32,209	39,445	33,908	28,520	24,666	25,679	32,144	33,476	30,230
Private institutions .....	35,061	46,982	33,653	27,749	21,522	25,788	24,828	37,616	28,643
4-year .....	35,355	47,126	33,738	27,842	21,646	25,808	26,162	37,626	28,965
University .....	44,814	58,332	39,482	33,128	25,463	27,271	37,872	47,262	35,497
Other 4-year .....	31,104	40,042	31,239	25,869	20,969	23,531	25,819	32,956	27,001
2-year .....	21,824	26,795	24,212	21,407	18,500	16,566	21,169	22,628	21,135

NOTE.—Data for 1987-88 include imputations for nonrespondent institutions.

Source: U.S. Department of Education, National Center for Education Statistics, Faculty Salaries, Tenure, and Benefits, 1980-81; and Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty" survey. (This table was prepared March 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, Faculty Salaries, Tenure, and Benefits, 1980-81; and Integrated Postsecondary Educa-

**Table 213.—Average salary of full-time instructional faculty on 9-month contracts in institutions of higher education, by type and control of institution and by State: 1987-88**

State or other area	Average, all institutions	Public institutions					Private institutions				
		Total	4-year institutions			2-year	Total	4-year institutions			2-year
			Total	University	Other 4-year			Total	University	Other 4-year	
1	2	3	4	5	6	7	8	9	10	11	12
United States.....	\$35,801	\$36,231	\$37,840	\$40,106	\$36,206	\$32,208	\$35,061	\$35,355	\$44,014	\$31,104	\$21,824
Alabama.....	31,301	31,768	32,953	36,307	30,422	28,248	29,024	29,234	—	29,234	23,355
Alaska.....	41,045	41,849	40,817	40,310	40,997	43,608	33,311	33,311	—	33,311	—
Arizona.....	36,060	36,874	41,074	41,828	37,035	33,975	27,796	28,259	—	28,259	18,035
Arkansas.....	26,911	29,520	30,572	34,266	29,292	23,135	25,354	25,411	—	25,411	14,600
California.....	42,812	43,026	47,896	53,307	46,585	37,266	40,476	42,760	50,491	34,105	24,375
Colorado.....	34,373	34,452	36,397	40,249	33,253	26,174	33,813	33,813	34,358	33,202	—
Connecticut.....	41,426	42,073	44,374	48,379	40,322	35,428	40,656	40,836	51,780	36,278	23,855
Delaware.....	35,706	36,545	37,824	38,933	29,372	29,661	29,951	29,951	—	29,951	—
District of Columbia.....	39,010	38,743	—	—	36,743	—	39,490	39,490	40,794	29,878	—
Florida.....	34,363	35,313	37,552	40,607	35,284	31,066	31,459	31,544	40,220	28,648	21,980
Georgia.....	33,171	34,251	35,342	37,378	34,727	28,176	30,040	30,538	43,750	26,770	21,346
Hawaii.....	35,489	36,289	38,449	39,747	32,331	31,526	22,900	22,900	—	22,900	—
Idaho.....	30,825	31,300	31,848	35,013	30,330	27,348	25,966	25,966	—	25,966	—
Illinois.....	35,509	34,604	35,258	38,453	32,330	34,067	36,909	37,154	46,880	30,435	21,983
Indiana.....	33,716	33,891	35,748	37,338	31,856	22,753	33,315	33,343	47,477	29,305	22,964
Iowa.....	31,961	33,935	37,182	36,541	32,965	25,696	26,329	26,426	31,828	27,973	22,440
Kansas.....	29,957	31,465	32,885	34,031	29,890	27,594	21,573	22,135	—	22,135	17,151
Kentucky.....	30,257	31,632	32,950	37,030	30,469	25,083	25,383	25,925	—	25,925	17,855
Louisiana.....	30,463	29,891	29,963	34,955	26,562	25,636	34,227	34,227	39,747	24,113	—
Maine.....	31,836	31,531	32,900	34,959	31,358	24,710	32,552	32,637	—	32,637	24,664
Maryland.....	36,874	36,543	37,886	41,867	35,600	34,109	36,077	36,114	54,324	30,760	22,421
Massachusetts.....	40,248	38,469	41,949	47,780	39,461	30,327	41,359	41,870	47,324	35,923	24,007
Michigan.....	36,947	38,456	39,294	44,036	35,248	36,211	28,688	28,990	32,820	26,582	23,914
Minnesota.....	34,711	36,199	36,911	44,272	32,901	34,129	31,249	31,469	—	31,469	25,370
Mississippi.....	28,763	27,223	29,826	31,866	28,529	23,566	22,052	22,841	—	22,841	18,670
Missouri.....	31,979	32,660	33,260	38,896	32,574	30,400	30,541	30,730	41,782	24,818	22,312
Montana.....	28,746	29,404	29,648	30,665	27,421	28,793	23,488	23,782	—	23,782	22,076
Nebraska.....	29,747	30,380	31,641	35,934	28,475	24,106	27,661	27,820	33,010	24,695	20,975
Nevada.....	36,250	36,306	37,854	38,467	36,963	31,157	31,361	31,361	—	31,361	—
New Hampshire.....	34,333	33,334	35,124	37,147	31,782	25,874	35,489	35,764	—	35,764	13,818
New Jersey.....	40,151	40,084	42,197	48,906	40,591	34,768	40,307	40,307	47,815	35,113	—
New Mexico.....	31,066	31,284	33,100	34,067	30,169	25,360	26,496	26,496	—	26,496	—
New York.....	39,756	40,668	42,719	47,895	42,015	36,759	36,666	38,916	45,215	34,384	20,796
North Carolina.....	32,808	34,889	36,514	40,897	34,495	28,802	28,616	29,136	33,417	27,171	22,512
North Dakota.....	28,501	29,156	29,959	30,813	28,111	26,591	22,758	23,272	—	23,272	19,547
Ohio.....	36,076	37,963	40,061	40,887	36,972	29,817	31,230	31,241	43,554	29,795	19,876
Oklahoma.....	30,461	30,670	31,763	33,719	30,069	27,143	29,609	29,947	35,903	27,018	20,449
Oregon.....	31,606	31,933	33,981	34,966	32,737	29,289	30,165	30,165	—	30,165	—
Pennsylvania.....	36,148	36,359	37,233	40,818	35,220	32,137	35,904	36,330	48,741	32,871	21,669
Rhode Island.....	36,907	36,408	38,127	40,658	33,874	31,108	31,306	37,306	—	37,306	—
South Carolina.....	30,379	31,288	34,051	37,015	30,726	22,484	27,817	28,056	—	28,056	23,090
South Dakota.....	27,388	28,958	28,958	29,592	28,103	—	22,608	22,753	—	22,753	19,330
Tennessee.....	32,935	33,759	35,396	38,979	35,984	26,660	31,022	31,373	45,489	25,454	19,106
Texas.....	33,990	33,955	35,993	39,990	32,291	29,972	34,136	34,221	40,896	29,048	21,241
Utah.....	32,208	32,342	33,060	36,346	28,574	26,460	25,557	25,557	—	25,557	—
Vermont.....	32,235	34,876	35,520	37,875	27,913	27,525	29,642	30,670	—	30,670	22,235
Virginia.....	35,987	37,760	40,036	43,706	37,372	30,747	29,828	29,758	—	29,758	20,173
Washington.....	33,182	33,524	37,295	39,663	33,299	29,267	30,417	30,417	—	30,417	—
West Virginia.....	28,267	23,223	29,825	33,929	27,888	23,644	23,296	23,520	—	23,520	19,248
Wisconsin.....	35,034	35,765	37,780	45,832	35,118	32,285	31,090	31,090	38,949	27,965	—
Wyoming.....	32,619	32,619	37,053	37,053	—	27,889	—	—	—	—	—
U.S. Service Schools.....	42,419	42,419	42,419	—	42,419	—	—	—	—	—	—
Outlying areas.....	17,343	22,411	22,294	22,804	21,410	24,736	7,750	8,657	—	3,657	6,321
American Samoa.....	—	—	—	—	—	—	—	—	—	—	—
Guam.....	9,336	9,336	9,336	—	9,336	—	—	—	—	—	—
Northern Marianas.....	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico.....	18,717	21,771	21,593	22,804	19,045	25,160	7,750	8,657	—	8,657	6,321
Trust Territory of the Pacific.....	12,468	12,468	—	—	—	12,468	—	—	—	—	—
Virgin Islands.....	33,500	33,500	33,500	—	33,500	—	—	—	—	—	—

—Data not reported or not applicable.

NOTE.—Data include imputations for nonrespondent institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty, 1987-88" survey. (This table was prepared April 1990.)

**Table 214.—Average salary of full-time instructional faculty on 9-month contracts in 4-year institutions of higher education, by control of institution and rank of faculty and by State: 1987-88**

State or other area	Public university			Public other 4-year			Private university			Private other 4-year		
	Professor	Associate professor	Assistant professor	Professor	Associate professor	Assistant professor	Professor	Associate professor	Assistant professor	Professor	Associate professor	Assistant professor
1	2	3	4	5	6	7	8	9	10	11	12	13
United States.....	\$50,865	\$37,011	\$31,208	\$45,815	\$35,756	\$29,312	\$58,332	\$39,482	\$33,128	\$40,042	\$31,239	\$25,889
Alabama.....	48,815	35,557	29,838	38,703	31,948	27,878	—	—	—	40,836	29,270	24,728
Alaska.....	51,182	41,753	33,208	50,337	41,817	34,277	—	—	—	50,892	38,577	35,295
Arizona.....	52,551	39,096	33,037	47,020	37,157	30,138	—	—	—	36,830	31,059	25,407
Arkansas.....	43,984	32,458	27,843	38,995	31,369	26,785	—	—	—	31,722	26,837	23,303
California.....	63,715	41,725	36,338	53,068	40,002	32,873	63,012	43,607	36,448	43,776	33,130	26,825
Colorado.....	46,986	36,228	31,875	39,274	32,264	27,891	42,380	32,751	28,194	44,866	30,598	25,080
Connecticut.....	57,868	42,759	35,199	48,057	39,181	32,075	68,005	41,358	33,029	48,506	35,221	29,138
Delaware.....	53,580	37,908	30,512	39,862	30,979	26,009	—	—	—	32,521	33,432	29,187
District of Columbia.....	—	—	—	45,510	38,989	30,003	53,633	38,041	30,361	40,834	32,133	26,724
Florida.....	49,501	34,218	31,134	43,843	34,067	29,970	50,784	37,029	30,813	38,663	29,758	24,474
Georgia.....	50,724	35,812	30,123	44,365	34,932	29,390	58,096	39,752	30,154	34,481	27,451	23,141
Hawaii.....	48,998	37,683	31,195	40,472	32,887	28,235	—	—	—	30,085	24,249	20,759
Idaho.....	40,702	32,228	30,043	35,747	30,361	26,099	—	—	—	32,047	25,258	22,873
Illinois.....	49,981	35,595	30,181	39,585	32,367	27,925	60,470	39,877	34,488	37,843	30,637	25,920
Indiana.....	47,584	36,005	29,518	41,878	33,338	27,260	60,712	42,428	35,753	38,018	29,124	24,802
Iowa.....	48,896	37,021	31,361	41,799	34,289	29,222	36,186	29,760	25,585	36,137	27,071	23,476
Kansas.....	42,728	31,891	27,274	35,922	29,341	25,735	—	—	—	26,408	22,805	20,319
Kentucky.....	45,992	33,792	28,962	38,859	31,018	26,450	—	—	—	32,864	26,088	22,635
Louisiana.....	47,834	34,878	30,098	35,252	30,073	26,004	50,258	37,952	31,190	29,237	24,788	22,541
Maine.....	44,905	34,303	27,978	38,932	32,204	25,845	—	—	—	45,323	33,217	28,094
Maryland.....	55,230	39,771	32,389	48,100	37,113	30,602	64,788	44,189	39,578	38,936	32,402	26,348
Massachusetts.....	56,265	44,135	34,269	45,437	39,895	32,545	82,711	41,108	34,009	47,869	35,306	29,266
Michigan.....	54,334	40,529	34,968	42,531	35,250	29,747	39,108	32,857	27,556	35,270	28,992	23,847
Minnesota.....	53,217	37,986	32,443	41,533	33,733	27,306	—	—	—	41,049	31,589	26,288
Mississippi.....	39,535	31,645	28,175	38,739	31,181	26,181	—	—	—	29,182	23,408	20,079
Missouri.....	44,708	33,480	30,498	40,764	33,522	28,281	51,819	35,789	31,544	30,410	25,898	22,438
Montana.....	35,839	29,295	25,864	33,421	28,005	24,128	—	—	—	28,930	24,666	21,219
Nebraska.....	2,894	32,768	28,571	38,047	29,330	24,909	45,531	32,508	26,755	30,540	25,635	22,360
Nevada.....	47,283	37,150	31,781	46,855	38,482	32,080	—	—	—	48,465	34,555	27,140
New Hampshire.....	48,198	35,503	29,413	38,830	31,065	26,750	—	—	—	48,820	32,829	28,327
New Jersey.....	62,641	43,907	34,578	51,803	41,221	32,470	64,034	39,300	31,928	44,588	35,508	28,879
New Mexico.....	42,800	32,045	28,119	35,748	30,893	26,822	—	—	—	24,329	22,538	19,757
New York.....	60,495	44,153	34,248	53,800	41,249	32,711	57,715	40,204	33,303	44,717	34,838	28,294
North Carolina.....	54,323	38,866	32,835	43,395	35,718	30,121	48,136	29,953	27,849	34,101	27,815	23,874
North Dakota.....	38,021	31,039	26,604	33,442	29,758	25,519	—	—	—	31,645	26,051	20,753
Ohio.....	51,777	39,043	32,032	48,338	37,535	29,758	55,223	40,027	33,263	38,889	29,839	24,865
Oklahoma.....	42,528	33,209	29,095	35,813	32,570	28,282	47,609	36,664	29,128	34,295	27,859	24,559
Oregon.....	43,612	34,709	29,055	38,559	31,981	27,293	—	—	—	38,631	29,103	24,369
Pennsylvania.....	52,227	38,710	32,115	44,815	36,234	28,912	59,631	41,299	34,949	42,597	32,723	26,923
Rhode Island.....	47,668	37,070	32,021	39,870	34,252	28,850	—	—	—	45,098	35,502	28,400
South Carolina.....	47,743	34,780	30,357	38,815	32,932	26,818	—	—	—	35,973	28,086	23,039
South Dakota.....	37,054	29,180	24,888	35,408	28,472	25,517	—	—	—	29,865	24,481	21,885
Tennessee.....	47,219	35,302	30,315	41,850	33,954	28,329	59,553	40,538	33,537	31,864	25,430	22,532
Texas.....	52,555	38,643	31,404	40,830	33,588	28,487	53,852	38,082	31,949	35,980	29,014	24,866
Utah.....	45,000	33,380	28,484	35,129	28,859	25,285	—	—	—	29,243	27,232	23,647
Vermont.....	49,801	38,184	30,957	34,057	29,214	24,689	—	—	—	43,584	30,708	25,839
Virginia.....	58,119	40,688	34,193	48,588	37,347	31,217	—	—	—	38,918	30,298	24,574
Washington.....	48,397	34,300	31,809	37,142	31,747	25,989	—	—	—	37,504	30,367	25,821
West Virginia.....	41,930	33,474	27,822	33,708	28,700	23,901	—	—	—	28,545	23,788	20,821
Wisconsin.....	52,250	37,713	33,321	42,289	34,130	29,486	52,268	38,713	32,547	34,936	28,715	23,320
Wyoming.....	45,468	34,022	30,345	—	—	—	—	—	—	—	—	—
U.S. Service Schools.....	—	—	—	48,052	41,665	31,166	—	—	—	—	—	—
Outlying areas.....	29,213	23,841	19,908	33,715	24,772	21,110	—	—	—	24,448	18,202	18,309
American Samoa.....	—	—	—	—	—	—	—	—	—	—	—	—
Guam.....	—	—	—	—	9,189	12,320	—	—	—	—	—	—
Northern Marianas.....	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico.....	29,213	23,841	19,908	28,548	22,280	18,644	—	—	—	24,448	18,202	18,309
Trust Territory of the Pacific.....	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands.....	—	—	—	40,821	36,419	30,334	—	—	—	—	—	—

—Data not reported or not applicable.

NOTE.—Data include imputations for nonrespondent institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty, 1987-88" survey. (This table was prepared April 1990.)

**Table 215.—Full-time instructional faculty with tenure for institutions reporting tenure status, by academic rank, sex, and type and control of institution: 1980-81, 1982-83, 1985-86, and 1987-88**

Academic year, type, and control of institution	Percent with tenure, by rank							Percent with tenure, by sex	
	All ranks	Professor	Associate professor	Assistant professor	Instructor	Lecturer	No academic rank	Men	Women
	2	3	4	5	6	7	8	9	10
<b>1980-81</b>									
All institutions.....	64.8	95.8	82.9	27.9	9.2	11.9	77.4	70.0	49.7
4-year.....	62.7	95.8	82.2	24.1	6.6	10.7	24.7	66.3	44.0
University.....	64.5	96.7	83.7	15.3	5.4	4.3	3.5	70.0	41.0
Other 4-year.....	61.3	94.9	61.2	29.7	7.1	17.8	32.4	67.0	45.5
2-year.....	74.5	95.6	89.2	58.9	18.6	34.8	81.1	78.8	66.6
Public institutions.....	68.0	96.6	85.9	32.5	11.8	14.3	79.4	72.8	54.0
4-year.....	65.7	96.6	85.3	27.6	8.7	12.8	12.2	71.1	47.5
University.....	66.0	96.9	86.5	16.8	6.1	4.9	4.5	71.3	42.8
Other 4-year.....	65.5	96.3	64.4	35.5	10.0	21.4	17.2	70.9	50.2
2-year.....	75.2	95.9	89.5	58.5	20.3	35.8	61.8	79.3	67.5
Private institutions.....	55.9	93.8	75.2	17.5	3.0	1.5	43.4	62.2	37.2
4-year.....	56.0	93.8	75.2	17.4	2.8	1.5	37.5	62.2	37.2
University.....	60.4	96.3	75.8	11.5	3.5	1.8	0.8	66.3	36.5
Other 4-year.....	53.6	92.0	74.9	20.2	2.6	1.2	43.4	59.8	37.4
2-year.....	49.5	84.7	77.3	35.2	6.6	0.0	52.2	57.3	39.5
<b>1982-83</b>									
All institutions.....	65.4	95.6	82.1	26.8	9.0	11.0	77.2	70.4	51.0
4-year.....	63.2	95.6	81.4	23.1	6.2	9.8	23.6	68.9	45.2
University.....	65.5	96.8	83.8	14.6	4.9	3.6	0.7	70.9	42.9
Other 4-year.....	61.8	94.4	79.6	28.4	6.7	16.3	32.7	67.3	46.4
2-year.....	75.0	95.3	88.9	59.4	19.9	32.3	81.2	78.9	66.2
Public institutions.....	68.9	96.4	85.5	31.8	11.3	13.3	79.2	73.6	55.7
4-year.....	66.7	96.5	84.9	27.0	7.9	11.9	11.1	72.0	49.0
University.....	67.5	97.2	87.0	16.5	5.5	4.3	0.9	72.7	45.0
Other 4-year.....	66.1	95.7	83.3	34.6	9.0	19.1	19.4	71.4	51.4
2-year.....	75.7	95.7	89.1	59.0	20.3	32.6	81.7	79.4	69.0
Private institutions.....	55.9	93.4	73.8	16.3	3.6	1.2	43.3	62.0	38.1
4-year.....	56.0	93.5	73.8	16.1	3.2	1.2	35.8	62.1	38.0
University.....	60.3	95.8	74.9	10.3	3.2	1.4	0.0	66.0	37.6
Other 4-year.....	53.7	91.9	73.2	18.8	3.2	0.9	40.9	59.8	38.1
2-year.....	49.9	78.9	77.2	25.6	13.7	0.0	56.7	55.8	42.2
<b>1985-86</b>									
All institutions.....	66.0	95.8	82.2	25.1	10.7	9.3	75.3	71.3	51.7
4-year.....	64.1	95.8	81.5	21.5	5.7	8.3	20.0	69.9	48.4
University.....	66.8	97.0	85.0	13.0	5.0	3.2	0.3	72.3	45.4
Other 4-year.....	62.2	94.8	79.2	26.6	6.0	13.0	27.0	68.1	48.8
2-year.....	75.1	95.1	88.5	58.4	27.3	28.6	80.4	79.1	68.5
Public institutions.....	68.9	96.5	85.4	29.1	13.4	10.9	77.2	73.9	55.6
4-year.....	66.9	96.6	84.9	24.4	7.3	9.7	11.1	72.5	49.3
University.....	68.1	97.1	87.2	14.0	5.8	3.4	0.3	73.5	48.4
Other 4-year.....	66.0	96.2	82.7	31.8	8.0	15.0	18.3	71.8	51.1
2-year.....	75.7	95.2	89.0	57.4	26.0	28.7	80.8	79.5	69.2
Private institutions.....	57.6	93.8	73.6	16.0	2.7	2.1	40.3	63.9	40.3
4-year.....	57.7	93.9	73.9	15.9	2.5	2.1	32.1	64.0	40.3
University.....	63.0	96.7	76.6	10.1	2.2	2.8	0.0	66.4	42.7
Other 4-year.....	55.1	92.0	72.6	18.3	2.5	1.0	34.6	61.8	39.5
2-year.....	48.4	89.9	63.6	24.9	9.3	0.0	57.5	56.1	39.3
<b>1987-88</b>									
All institutions.....	64.9	95.7	81.5	22.2	7.1	8.8	73.2	70.5	50.2
4-year.....	63.6	95.8	81.0	19.4	4.8	7.8	20.8	69.6	48.1
University.....	66.3	97.0	84.8	11.1	3.8	3.2	1.1	71.9	45.1
Other 4-year.....	61.7	94.9	78.4	24.3	4.9	11.7	33.3	67.8	46.6
2-year.....	73.7	93.4	86.9	53.8	18.4	32.9	78.7	77.7	67.5
Public institutions.....	67.4	96.2	84.2	25.7	8.6	10.3	75.2	72.7	53.4
4-year.....	65.9	96.4	83.8	22.0	5.6	9.1	11.7	71.7	48.3
University.....	67.5	97.2	87.6	12.0	4.3	3.1	0.8	73.2	45.6
Other 4-year.....	64.6	95.8	80.8	29.0	6.4	13.3	23.1	70.4	49.7
2-year.....	74.2	93.5	87.3	54.5	18.7	33.1	80.2	76.1	68.3
Private institutions.....	58.3	94.4	74.8	14.4	2.3	2.6	41.8	64.6	41.6
4-year.....	58.4	94.5	74.9	14.3	2.1	2.6	35.0	64.8	41.6
University.....	62.8	96.6	78.6	9.0	1.9	3.3	2.4	68.2	43.2
Other 4-year.....	36.1	93.0	73.9	16.7	2.2	1.3	43.3	62.5	41.0
2-year.....	49.3	91.0	63.3	26.9	10.3	0.0	57.3	57.4	40.7

NOTE—Data exclude tenure imputations for nonrespondent institutions. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Faculty Salaries, Tenure, and Benefits*; and Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty" survey. (This table was prepared March 1990.)

Table 216.—Institutions of higher education, by control and type of institution: 1949-50 to 1989-90

Year	All institutions			Publicly controlled			Privately controlled		
	Total	4-year	2-year	Total	4-year	2-year	Total	4-year	2-year
1	2	3	4	5	6	7	8	9	10
<b>Excluding branch campuses</b>									
1949-50.....	1,851	1,327	524	641	344	297	1,210	983	227
1950-51.....	1,852	1,312	540	636	341	295	1,218	971	245
1951-52.....	1,832	1,326	506	641	350	291	1,191	978	215
1952-53.....	1,882	1,355	527	639	349	290	1,243	1,006	237
1953-54.....	1,863	1,345	518	662	389	293	1,201	978	225
1954-55.....	1,849	1,333	518	648	353	295	1,201	960	221
1955-56.....	1,850	1,347	503	630	360	290	1,200	987	213
1956-57.....	1,878	1,355	523	656	359	297	1,222	996	226
1957-58.....	1,930	1,390	540	666	366	300	1,264	1,024	240
1958-59.....	1,947	1,394	553	673	366	307	1,274	1,028	248
1959-60.....	2,004	1,422	582	695	387	328	1,309	1,055	254
1960-61.....	2,021	1,431	590	700	368	332	1,321	1,063	258
1961-62.....	2,033	1,443	590	718	374	344	1,315	1,069	248
1962-63.....	2,093	1,468	625	740	376	364	1,353	1,092	261
1963-64.....	2,132	1,499	633	760	366	374	1,372	1,113	259
1964-65.....	2,175	1,521	654	799	393	406	1,378	1,128	248
1965-66.....	2,230	1,551	679	821	401	420	1,409	1,150	259
1966-67.....	2,329	1,577	752	880	403	477	1,449	1,174	275
1967-68.....	2,374	1,588	786	934	414	520	1,440	1,174	266
1968-69.....	2,483	1,619	864	1,011	417	594	1,472	1,202	270
1969-70.....	2,525	1,639	886	1,060	426	634	1,485	1,213	252
1970-71.....	2,556	1,665	891	1,089	435	654	1,487	1,230	237
1971-72.....	2,606	1,675	931	1,137	440	697	1,469	1,235	234
1972-73.....	2,665	1,701	964	1,182	449	733	1,483	1,252	231
1973-74.....	2,720	1,717	1,003	1,200	440	760	1,520	1,277	243
1974-75.....	2,747	1,744	1,003	1,214	447	787	1,533	1,297	236
1975-76.....	2,765	1,767	998	1,219	447	772	1,548	1,320	226
1976-77.....	2,795	1,783	1,002	1,231	452	779	1,554	1,331	223
1977-78.....	2,826	1,808	1,018	1,241	454	787	1,565	1,354	231
1978-79.....	2,954	1,843	1,111	1,308	463	845	1,648	1,380	266
1979-80.....	2,975	1,863	1,112	1,310	464	848	1,665	1,399	246
1980-81.....	3,056	1,861	1,195	1,334	485	869	1,722	1,396	1,326
1981-82.....	3,083	1,883	1,200	1,340	471	869	1,743	1,412	1,331
1982-83.....	3,111	1,887	1,224	1,336	472	864	1,775	1,415	1,360
1983-84.....	3,117	1,914	1,203	1,325	474	851	1,792	1,440	352
1984-85.....	3,148	1,911	1,235	1,329	461	868	1,817	1,450	367
1985-86.....	3,155	1,915	1,240	1,328	461	865	1,820	1,454	375
<b>Including branch campuses</b>									
1974-75.....	3,004	1,866	1,138	1,433	537	696	1,571	1,329	242
1975-76.....	3,026	1,898	1,128	1,442	545	697	1,584	1,353	231
1976-77.....	3,046	1,913	1,133	1,455	550	905	1,591	1,363	228
1977-78.....	3,095	1,938	1,157	1,473	552	921	1,622	1,366	236
1978-79.....	3,134	1,941	1,183	1,474	550	924	1,660	1,391	269
1979-80.....	3,152	1,957	1,195	1,475	549	926	1,677	1,408	269
1980-81.....	3,231	1,957	1,274	1,497	552	945	1,734	1,405	1,329
1981-82.....	3,253	1,979	1,274	1,498	558	940	1,755	1,421	1,334
1982-83.....	3,280	1,984	1,286	1,493	560	933	1,787	1,424	1,363
1983-84.....	3,284	2,013	1,271	1,481	565	918	1,803	1,448	355
1984-85.....	3,331	2,025	1,306	1,501	566	935	1,830	1,459	371
1985-86.....	3,340	2,029	1,311	1,498	566	932	1,842	1,463	379
1986-87 <sup>2</sup> .....	3,406	2,070	1,336	1,533	573	960	1,873	1,497	378
1987-88 <sup>2</sup> .....	3,587	2,135	1,452	1,591	599	992	1,996	1,536	460
1988-89 <sup>2</sup> .....	3,565	2,129	1,436	1,582	598	984	1,983	1,531	452
1989-90 <sup>2</sup> .....	3,535	2,127	1,408	1,563	595	968	1,972	1,532	440

<sup>1</sup> Large increases are due to the addition of schools accredited by the National Association of Trade and Technical Schools between 1979 and 1982.

<sup>2</sup> Because of revised survey procedures, data are not entirely comparable with figures for earlier years. The number of branch campuses reporting separately has increased.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Education Directory, Colleges and Universities*; "Fall Enrollment in Higher Education" and "Institutional Characteristics of Colleges and Universities" surveys; Integrated Post-secondary Education Data System, "Institutional Characteristics" survey. (This table was prepared June 1990.)

**Table 217.—Institutions of higher education and branches, by control of institution, highest level of offering, and sex of student body: 1985-86**

Highest level of offering and sex of student body	Total	Public					Private				
		Federal <sup>1</sup>	State	Local (city, county, or district)	State and local	State-related	Independent nonprofit	Organized as profit making	Religious group		
									Protestant	Catholic	Other <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11	12
<b>All institutions</b> .....	<b>3,340</b>	<b>13</b>	<b>883</b>	<b>173</b>	<b>398</b>	<b>31</b>	<b>828</b>	<b>220</b>	<b>524</b>	<b>235</b>	<b>35</b>
Coeducational.....	3,126	13	881	173	398	31	726	218	505	168	13
Men only.....	99	0	1	0	0	0	47	0	3	30	18
Women only.....	102	0	1	0	0	0	48	2	14	34	3
Coordinate <sup>3</sup> .....	13	0	0	0	0	0	7	0	2	3	1
<b>Less than 4 years beyond high school</b> .....	<b>1,309</b>	<b>3</b>	<b>356</b>	<b>170</b>	<b>383</b>	<b>20</b>	<b>121</b>	<b>190</b>	<b>43</b>	<b>20</b>	<b>3</b>
Coeducational.....	1,282	3	356	170	383	20	107	188	40	13	2
Men only.....	6	0	0	0	0	0	4	0	0	2	0
Women only.....	20	0	0	0	0	0	9	2	3	5	1
Coordinate <sup>3</sup> .....	1	0	0	0	0	0	1	0	0	0	0
<b>4- or 5-year baccalaureate degree</b> .....	<b>707</b>	<b>5</b>	<b>73</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>242</b>	<b>19</b>	<b>286</b>	<b>70</b>	<b>4</b>
Coeducational.....	627	5	72	1	5	2	209	19	275	37	2
Men only.....	31	0	1	0	0	0	10	0	2	16	2
Women only.....	46	0	0	0	0	0	22	0	8	16	0
Coordinate <sup>3</sup> .....	3	0	0	0	0	0	1	0	1	1	0
<b>First-professional degree</b> .....	<b>93</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>2</b>	<b>11</b>	<b>2</b>	<b>2</b>
Coeducational.....	80	0	9	0	0	0	58	2	10	1	0
Men only.....	12	0	0	0	0	0	9	0	0	1	2
Women only.....	1	0	0	0	0	0	0	0	1	0	0
Coordinate <sup>3</sup> .....	0	0	0	0	0	0	0	0	0	0	0
<b>Master's degree</b> .....	<b>588</b>	<b>2</b>	<b>148</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>196</b>	<b>5</b>	<b>103</b>	<b>105</b>	<b>3</b>
Coeducational.....	525	2	148	1	0	3	181	5	100	82	3
Men only.....	12	0	0	0	0	0	4	0	0	8	0
Women only.....	24	0	0	0	0	0	9	0	2	13	0
Coordinate <sup>3</sup> .....	5	0	0	0	0	0	2	0	1	2	0
<b>Beyond master's but less than doctorate</b> .....	<b>153</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>13</b>	<b>9</b>	<b>2</b>
Coeducational.....	148	0	100	0	4	0	22	0	13	7	0
Men only.....	5	0	0	0	0	0	1	0	0	2	2
Women only.....	2	0	0	0	0	0	2	0	0	0	0
Coordinate <sup>3</sup> .....	0	0	0	0	0	0	0	0	0	0	0
<b>Doctorate</b> .....	<b>473</b>	<b>3</b>	<b>197</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>153</b>	<b>1</b>	<b>68</b>	<b>29</b>	<b>9</b>
Coeducational.....	462	3	198	1	6	6	148	1	67	28	6
Men only.....	4	0	0	0	0	0	0	0	1	1	2
Women only.....	3	0	1	0	0	0	2	0	0	0	0
Coordinate <sup>3</sup> .....	4	0	0	0	0	0	3	0	0	0	1
<b>Undergraduate nondegree-granting</b> .....	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>
Coeducational.....	2	0	0	0	0	0	1	1	0	0	0
Men only.....	7	0	0	0	0	0	6	0	0	0	1
Women only.....	6	0	0	0	0	0	4	0	0	0	2
Coordinate <sup>3</sup> .....	0	0	0	0	0	0	0	0	0	0	0
<b>Graduate nondegree-granting</b> .....	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>
Coeducational.....	0	0	0	0	0	0	0	0	0	0	0
Men only.....	22	0	0	0	0	0	13	0	0	0	9
Women only.....	0	0	0	0	0	0	0	0	0	0	0
Coordinate <sup>3</sup> .....	0	0	0	0	0	0	0	0	0	0	0

<sup>1</sup> Includes 10 U.S. Service Schools, Haskell Indian Junior College, Institute of American Indian Arts, and Oglala Sioux Community College.

<sup>2</sup> Includes Jewish, Latter-Day Saints, Greek Orthodox, Russian Orthodox, and Unitarian.

<sup>3</sup> Institutions with separate colleges for men and women.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Institutional Characteristics of Colleges and Universities, 1985-86" survey. (This table was prepared September 1986.)

Table 218.—Institutions of higher education and branches, by type, control of institution, and State: 1989-90

State or other area	Total	All institutions		4-year institutions							2-year institutions		
		Public	Private	All 4-year institutions			Universities		Other 4-year institutions		Total	Public	Private
				Total	Public	Private	Public	Private	Public	Private			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>United States</b> .....	<b>3,535</b>	<b>1,563</b>	<b>1,972</b>	<b>2,127</b>	<b>595</b>	<b>1,532</b>	<b>93</b>	<b>62</b>	<b>502</b>	<b>1,470</b>	<b>1,408</b>	<b>968</b>	<b>440</b>
Alabama.....	87	55	32	38	18	18	2	0	18	18	51	37	14
Alaska.....	8	3	5	7	3	4	1	0	2	4	1	0	1
Arizona.....	37	20	17	17	3	14	2	0	1	14	20	17	3
Arkansas.....	37	20	17	20	10	10	1	0	9	10	17	10	7
California.....	310	138	172	171	31	140	2	4	29	138	139	107	32
Colorado.....	54	28	26	30	13	17	2	1	11	18	24	15	9
Connecticut.....	48	24	24	28	7	21	1	1	8	20	20	17	3
Delaware.....	10	5	5	7	2	5	1	0	1	5	3	3	0
District of Columbia.....	17	2	15	17	2	15	0	5	2	10	0	0	0
Florida.....	95	38	57	53	10	43	2	1	8	42	42	28	14
Georgia.....	95	47	48	51	19	32	1	1	18	31	44	28	18
Hawaii.....	14	9	5	8	3	5	1	0	2	5	8	8	0
Idaho.....	11	8	5	7	4	3	1	0	3	3	4	2	2
Illinois.....	166	59	107	103	12	91	3	4	9	87	63	47	18
Indiana.....	78	28	50	55	14	41	4	1	10	40	23	14	9
Iowa.....	58	18	40	37	3	34	2	1	1	33	21	15	8
Kansas.....	54	29	25	30	8	22	3	0	5	22	24	21	3
Kentucky.....	59	22	37	32	8	24	2	0	8	24	27	14	13
Louisiana.....	34	20	14	24	14	10	1	2	13	8	10	6	4
Maine.....	31	13	18	21	8	13	1	0	7	13	10	5	5
Maryland.....	57	33	24	35	14	21	1	1	13	20	22	19	3
Massachusetts.....	117	30	87	85	14	71	1	7	13	64	32	18	18
Michigan.....	97	44	53	63	15	48	3	1	12	47	34	29	5
Minnesota.....	81	38	45	44	10	34	1	0	9	34	37	28	11
Mississippi.....	47	29	18	21	9	12	2	0	7	12	26	20	8
Missouri.....	89	27	62	65	13	52	1	2	12	50	24	14	10
Montana.....	19	13	8	9	8	3	2	0	4	3	10	7	3
Nebraska.....	38	20	18	21	7	14	1	1	8	13	15	13	2
Nevada.....	8	8	2	3	2	1	1	0	1	1	5	4	1
New Hampshire.....	29	12	17	17	5	12	1	0	4	12	12	7	5
New Jersey.....	82	33	29	39	14	25	1	2	13	23	23	19	4
New Mexico.....	26	22	4	10	8	4	2	0	4	4	16	18	0
New York.....	328	90	235	228	42	186	2	12	40	174	98	48	50
North Carolina.....	126	74	52	53	16	37	2	2	14	35	73	58	15
North Dakota.....	20	15	5	10	8	4	2	0	4	4	10	9	1
Ohio.....	152	81	91	90	25	65	8	1	17	64	82	38	28
Oklahoma.....	47	28	19	27	14	13	2	1	12	12	20	14	8
Oregon.....	48	21	25	32	8	24	2	0	8	24	14	13	1
Pennsylvania.....	217	81	158	148	43	103	2	4	41	99	71	18	53
Rhode Island.....	11	3	8	10	2	8	1	0	1	8	1	1	0
South Carolina.....	64	33	31	32	12	20	2	0	10	20	32	21	11
South Dakota.....	19	7	12	17	7	10	2	0	5	10	2	0	2
Tennessee.....	88	24	62	52	10	42	1	1	9	41	34	14	20
Texas.....	174	107	87	98	40	56	8	4	34	52	78	67	11
Utah.....	14	9	5	8	4	2	2	1	2	1	8	5	3
Vermont.....	22	6	16	17	4	13	1	0	3	13	5	2	3
Virginia.....	78	39	39	48	15	33	3	0	12	33	30	24	8
Washington.....	55	33	22	28	8	20	2	0	4	20	29	27	2
West Virginia.....	28	18	12	21	12	9	1	0	11	9	7	4	3
Wisconsin.....	81	30	31	41	13	28	1	1	12	27	20	17	3
Wyoming.....	9	8	1	1	1	0	1	0	0	0	8	7	1
U.S. Service Schools.....	9	9	0	8	8	0	0	0	8	0	1	1	0
Outlying areas <sup>1</sup> .....	63	23	40	44	14	30	1	0	13	30	19	9	10
American Samoa.....	1	1	0	0	0	0	0	0	0	0	1	1	0
Guam.....	2	2	0	1	1	0	0	0	1	0	1	1	0
Northern Marianas.....	1	1	0	0	0	0	0	0	0	0	1	1	0
Palau.....	2	2	0	0	0	0	0	0	0	0	2	2	0
Puerto Rico.....	55	15	40	41	11	30	1	0	10	30	14	4	10
Virgin Islands.....	2	2	0	2	2	0	0	0	2	0	0	0	0

<sup>1</sup> Excludes Federated States of Micronesia.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Institutional Characteristics, 1989-90" survey. (This table was prepared June 1990.)

NOTE.—Because of revised survey procedures, data are not entirely comparable with figures for earlier years. The number of branch campuses reporting separately has increased.

**Table 219.—Institutions of higher education that have closed their doors, by control and type of institution: 1960-61 to 1989-90**

Year	All institutions			Publicly controlled			Privately controlled		
	Total	4-year	2-year	Total	4-year	2-year	Total	4-year	2-year
1	2	3	4	5	6	7	8	9	10
<b>Excluding branch campuses:</b>									
<b>Total, 1960-61 to 1989-90</b>	<b>323</b>	<b>168</b>	<b>155</b>	<b>38</b>	<b>1</b>	<b>37</b>	<b>285</b>	<b>167</b>	<b>118</b>
1960-61	6	1	7	1	—	1	7	1	6
1961-62	2	1	1	—	—	—	2	1	1
1962-63	—	—	—	—	—	—	—	—	—
1963-64	7	1	6	1	—	1	6	1	5
1964-65	8	1	7	4	—	4	4	1	3
1965-66	8	2	6	4	—	4	4	2	2
1966-67	9	2	7	3	—	3	6	2	4
1967-68	14	6	8	—	—	—	14	6	8
1968-69	21	11	10	1	—	1	20	11	9
1969-70	18	8	10	3	—	3	15	8	7
1970-71	32	9	23	9	—	9	23	9	14
1971-72	12	3	9	3	—	3	9	3	6
1972-73	19	12	7	2	—	2	17	12	5
1973-74	18	11	7	—	—	—	18	11	7
1974-75	17	13	4	3	—	3	14	13	1
1975-76	8	6	2	2	1	1	6	5	1
1976-77	8	5	3	—	—	—	8	5	3
1977-78	12	9	3	—	—	—	12	9	3
1978-79	9	4	5	—	—	—	9	4	5
1979-80	6	5	1	—	—	—	6	5	1
1980-81	4	3	1	—	—	—	4	3	1
1981-82	7	6	1	—	—	—	7	6	1
1982-83	7	4	3	—	—	—	7	4	3
1983-84	4	4	—	—	—	—	4	4	—
1984-85	4	4	—	—	—	—	4	4	—
1985-86	10	6	4	1	—	1	9	6	3
1986-87 and 1987-88	25	19	6	1	—	1	24	19	5
1988-89	14	6	8	—	—	—	14	6	8
1989-90	12	6	6	—	—	—	12	6	6
<b>Including branch campuses:</b>									
<b>Total, 1969-70 to 1989-90</b>	<b>275</b>	<b>156</b>	<b>119</b>	<b>33</b>	<b>4</b>	<b>29</b>	<b>242</b>	<b>152</b>	<b>90</b>
1969-70	24	10	14	5	1	4	19	9	10
1970-71	35	10	25	11	—	11	24	10	14
1971-72	14	5	9	3	—	3	11	5	6
1972-73	21	12	9	4	—	4	17	12	5
1973-74	20	12	8	1	—	1	19	12	7
1974-75	16	13	5	4	—	4	14	13	1
1975-76	9	7	2	2	1	1	7	6	1
1976-77	9	6	3	—	—	—	9	6	3
1977-78	12	9	3	—	—	—	12	9	3
1978-79	9	4	5	—	—	—	9	4	5
1979-80	6	5	1	—	—	—	6	5	1
1980-81	4	3	1	—	—	—	4	3	1
1981-82	7	6	1	—	—	—	7	6	1
1982-83	7	4	3	—	—	—	7	4	3
1983-84	5	5	—	1	1	—	4	4	—
1984-85	4	4	—	—	—	—	4	4	—
1985-86	12	8	4	1	1	—	11	7	4
1986-87 and 1987-88	26	19	7	1	—	1	25	19	6
1988-89	14	6	8	—	—	—	14	6	8
1989-90	19	6	11	—	—	—	19	6	11

—Data not applicable or not available.

NOTE.—This table indicates the year in which the institution closed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Education Directory, Higher Education, 1960-81 to 1974-75; Education Directory,*

*Colleges and Universities, 1975-76 to 1983-84; 1982-83 Supplement to the Education Directory, Colleges and Universities; and Integrated Postsecondary Education Data System, "Institutional Characteristics" survey, 1987, unpublished data. (This table was prepared April 1990.)*

**Table 220.—Earned degrees conferred by institutions of higher education, by level of degree and sex of student: 1869–70 to 1994–95**

Year	Associate degrees			Bachelor's degrees			Master's degrees			First-professional degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1869-70	—	—	—	1 9,371	1 7,993	1 1,378	0	0	0	(2)	(2)	(2)	1	1	0
1879-80	—	—	—	1 12,886	1 10,411	1 2,485	678	688	11	(2)	(2)	(2)	54	51	3
1889-90	—	—	—	1 15,539	1 12,857	1 2,682	1,015	821	194	(2)	(2)	(2)	149	147	2
1899-1900	—	—	—	1 27,410	1 22,173	1 5,237	1,583	1,260	303	(2)	(2)	(2)	382	359	23
1909-10	—	—	—	1 37,199	1 28,782	1 8,437	2,113	1,555	558	(2)	(2)	(2)	443	399	44
1919-20	—	—	—	1 48,622	1 31,980	1 16,642	4,279	2,985	1,294	(2)	(2)	(2)	615	522	93
1929-30	—	—	—	1 122,484	1 73,615	1 48,869	14,969	8,925	6,044	(2)	(2)	(2)	2,299	1,946	353
1939-40	—	—	—	1 186,500	1 109,548	1 76,954	26,731	16,508	10,223	(2)	(2)	(2)	3,280	2,661	429
1949-50	—	—	—	1 432,058	1 326,841	1 103,217	58,183	41,220	16,963	(2)	(2)	(2)	6,420	5,804	616
1959-60	—	—	—	1 392,440	1 254,063	1 138,377	74,435	50,898	23,537	(2)	(2)	(2)	9,829	8,901	1,028
1960-61	—	—	—	389,995	226,500	141,495	81,090	55,267	26,423	25,253	24,577	678	10,575	9,463	1,112
1961-62	—	—	—	388,680	234,671	154,009	88,414	59,710	26,704	25,807	24,836	771	11,822	10,377	1,245
1962-63	—	—	—	416,928	248,129	170,799	95,470	64,196	31,272	26,590	25,753	837	12,622	11,448	1,374
1963-64	—	—	—	466,944	270,319	196,825	105,551	70,339	35,212	27,209	26,357	652	14,490	12,955	1,535
1964-65	—	—	—	501,713	289,093	212,710	117,152	77,544	39,608	28,290	27,263	1,007	16,467	14,892	1,775
1965-66	111,807	83,779	47,628	520,923	299,671	221,052	140,548	93,063	47,465	30,124	28,982	1,142	16,237	16,121	2,116
1966-67	139,183	78,356	60,627	558,652	322,948	235,904	157,707	103,092	54,815	31,695	30,401	1,294	20,617	10,183	2,454
1967-68	159,441	90,317	69,124	632,758	358,105	274,653	178,749	113,519	63,230	33,939	32,402	1,537	23,089	20,183	2,906
1968-69	183,279	105,661	77,616	729,071	410,785	318,266	193,756	121,531	72,225	35,114	33,595	1,519	26,188	22,752	3,436
1969-70	206,023	117,432	88,591	792,656	451,380	341,278	208,291	125,624	82,667	34,578	32,794	1,784	29,666	25,890	3,976
1970-71	252,610	144,395	106,215	839,730	475,594	364,136	230,509	138,146	92,363	37,946	35,544	2,402	32,107	27,530	4,577
1971-72	292,119	166,317	125,602	887,273	500,590	386,683	251,633	149,550	102,063	43,411	40,723	2,688	33,363	28,090	5,273
1972-73	316,174	175,413	140,781	922,362	516,191	404,171	263,371	154,468	106,903	50,016	46,469	3,529	34,777	28,571	6,206
1973-74	343,924	188,591	155,333	945,776	527,313	416,463	277,033	157,842	119,191	53,616	48,530	5,266	33,616	27,365	6,451
1974-75	360,171	191,017	169,154	922,933	504,841	416,082	292,450	161,570	130,880	55,916	48,956	6,960	34,083	26,617	7,266
1975-76	391,454	209,996	161,456	925,746	504,925	420,821	311,771	187,248	144,523	62,649	52,692	9,757	34,064	26,267	7,797
1976-77	406,377	210,842	195,535	919,549	495,545	424,004	317,164	187,783	149,381	64,359	52,374	11,985	33,232	25,142	8,090
1977-78	412,246	204,718	207,526	921,204	487,347	433,857	311,820	181,212	150,406	66,581	52,270	14,311	32,131	23,658	8,473
1978-79	402,702	192,091	210,611	921,390	477,344	444,046	301,079	153,370	147,709	68,848	52,652	16,196	32,730	23,541	9,169
1979-80	400,910	183,737	217,173	929,417	473,611	455,806	296,061	150,749	147,332	70,131	52,716	17,415	32,615	22,943	9,672
1980-81	416,377	188,638	227,739	935,140	489,883	465,257	295,739	147,043	148,896	71,956	52,792	19,164	32,958	22,711	10,247
1981-82	434,515	196,939	237,578	952,996	473,364	479,634	295,546	145,532	150,014	72,032	52,223	19,609	32,707	22,224	10,463
1982-83	456,441	207,141	249,300	969,510	479,140	490,370	289,921	144,697	145,224	73,136	51,310	21,826	32,775	21,902	10,673
1983-84	452,416	202,782	248,854	974,309	482,319	491,990	284,263	143,595	140,668	74,407	51,334	23,073	33,209	22,064	11,145
1984-85	454,712	202,932	251,760	979,477	482,528	496,949	286,251	143,390	142,861	75,063	50,455	24,608	32,943	21,700	11,243
1985-86	446,047	196,166	249,881	967,623	485,923	501,900	288,567	143,506	145,059	73,910	49,261	24,649	33,653	21,619	11,834
1986-87	437,137	191,525	245,612	991,339	480,854	510,465	289,557	141,363	148,194	72,750	47,460	25,290	34,120	22,099	12,021
1987-88	435,537	190,169	245,348	993,362	478,842	516,520	296,733	144,923	153,610	70,415	45,268	25,127	34,839	22,592	12,247
1988-89	436,482	190,071	246,391	1,016,728	483,813	533,115	307,682	147,505	160,177	69,800	43,954	24,846	35,379	22,627	12,752
1989-90	457,764	200,930	256,835	1,017,252	481,397	535,855	319,749	156,266	163,483	74,150	47,649	26,501	35,566	22,566	13,019
1990-91	463,231	201,416	261,615	1,024,123	466,851	555,272	321,607	156,237	165,370	74,660	47,649	27,011	35,653	22,565	13,266
1991-92	464,534	200,506	264,028	1,059,403	502,742	556,661	322,343	155,955	166,368	75,742	48,476	27,266	35,964	22,148	13,616
1992-93	461,150	199,059	262,091	1,062,495	505,585	556,910	323,183	155,264	167,699	76,762	48,476	26,305	36,069	21,623	14,266
1993-94	458,041	198,609	260,431	1,058,536	506,174	552,363	323,444	154,330	169,114	77,963	49,303	26,560	36,183	21,457	14,726
1994-95	458,012	198,410	259,601	1,046,667	501,662	545,025	323,741	153,746	169,995	77,291	46,476	26,815	36,301	21,106	15,194

<sup>1</sup> Includes first-professional degrees.

<sup>2</sup> First-professional degrees are included with bachelor's degrees.

<sup>3</sup> Preliminary data.

<sup>4</sup> Early estimates.

<sup>5</sup> Projected.

—Data not available.

NOTE.—Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Earned Degrees Conferred; Projections of Education Statistics to 2001*; and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared May 1990.)

**Table 221.—Earned degrees conferred by institutions of higher education, by level of degree and by State: 1986-87 and 1987-88**

State or other area	1986-87					1987-88 <sup>1</sup>				
	Associate degrees	Bachelor's degrees	First-professional degrees	Master's degrees	Doctor's degrees (Ph.D., Ed.D., etc.)	Associate degrees	Bachelor's degrees	First-professional degrees	Master's degrees	Doctor's degrees (Ph.D., Ed.D., etc.)
1	2	3	4	5	6	7	8	9	10	11
<b>United States .....</b>	<b>437,137</b>	<b>991,339</b>	<b>72,750</b>	<b>289,557</b>	<b>34,120</b>	<b>435,537</b>	<b>993,362</b>	<b>70,415</b>	<b>299,733</b>	<b>34,839</b>
Alabama.....	6,183	15,981	797	3,948	279	5,974	18,270	817	4,559	289
Alaska.....	742	898	—	320	7	661	927	—	318	15
Arizona.....	5,911	12,287	352	4,819	506	5,466	12,348	404	4,970	495
Arkansas.....	2,263	7,036	319	1,883	112	2,412	7,017	369	1,748	101
California.....	48,483	90,005	8,097	31,297	4,147	47,503	88,518	7,893	31,506	4,116
Colorado.....	5,758	15,218	853	4,088	638	5,825	15,144	872	4,397	667
Connecticut.....	4,842	13,499	947	5,755	533	4,781	13,680	918	5,892	436
Delaware.....	1,153	3,246	245	588	96	1,134	3,485	284	649	107
District of Columbia.....	399	8,711	2,681	5,062	475	391	6,933	2,437	5,126	542
Florida.....	29,524	31,430	2,105	9,044	1,109	30,661	32,345	2,046	9,828	1,200
Georgia.....	6,732	19,103	1,990	5,852	654	6,653	19,481	1,875	5,883	737
Hawaii.....	2,350	3,701	137	925	145	2,309	3,724	126	969	116
Idaho.....	2,297	3,035	68	722	47	2,600	3,043	71	703	83
Illinois.....	23,913	47,387	4,429	17,075	2,062	24,720	47,958	4,353	17,783	2,152
Indiana.....	8,681	28,823	1,518	6,943	967	8,949	26,408	1,422	7,079	941
Iowa.....	7,238	18,450	1,315	2,775	608	7,013	18,747	1,318	3,001	658
Kansas.....	5,374	11,714	855	2,986	389	4,759	11,890	828	2,983	376
Kentucky.....	5,196	11,708	1,144	3,281	281	4,915	12,074	1,181	3,333	313
Louisiana.....	2,603	18,221	1,392	3,972	301	2,532	18,367	1,400	3,941	346
Maine.....	2,030	5,122	163	503	25	2,069	5,168	157	548	25
Maryland.....	7,129	18,760	968	5,334	890	7,061	17,334	1,081	5,414	717
Massachusetts.....	13,817	41,555	3,732	15,077	1,908	13,047	41,801	3,721	15,892	1,937
Michigan.....	21,834	38,181	2,504	11,534	1,321	19,298	38,939	2,341	11,904	1,238
Minnesota.....	7,654	20,667	1,529	3,807	529	7,591	21,187	1,580	3,839	549
Mississippi.....	4,332	9,173	461	2,037	272	4,504	8,486	473	2,092	241
Missouri.....	6,545	23,541	2,287	7,870	545	8,711	23,029	2,264	7,920	537
Montana.....	734	4,140	74	785	49	714	4,170	78	724	65
Nebraska.....	2,918	8,410	752	1,609	215	2,548	8,288	706	1,722	248
Nevada.....	884	1,929	42	419	32	857	1,943	46	434	28
New Hampshire.....	2,372	6,770	173	1,649	78	2,369	6,778	172	1,598	69
New Jersey.....	9,534	23,328	1,753	8,454	870	9,379	22,327	1,723	6,397	824
New Mexico.....	1,766	4,548	170	1,732	206	1,760	4,778	164	1,798	222
New York.....	47,956	86,851	8,962	32,890	3,366	46,897	87,071	8,274	33,873	3,436
North Carolina.....	10,859	24,919	1,620	5,878	788	10,333	25,688	1,594	5,938	796
North Dakota.....	1,980	4,209	117	587	78	1,866	4,110	114	584	66
Ohio.....	17,850	43,983	3,341	12,185	1,812	17,651	43,521	3,207	12,238	1,459
Oklahoma.....	5,338	13,545	999	3,935	342	5,341	13,173	1,031	4,118	349
Oregon.....	4,873	10,922	899	2,784	349	4,823	11,251	845	2,869	409
Pennsylvania.....	18,586	57,158	3,730	13,501	1,802	18,281	58,348	3,637	13,791	1,882
Rhode Island.....	3,822	7,737	78	1,720	212	3,659	7,934	84	1,625	237
South Carolina.....	4,766	12,559	738	3,289	266	4,776	12,136	683	3,535	302
South Dakota.....	793	3,738	140	719	85	831	3,827	121	756	51
Tennessee.....	5,568	17,328	1,344	4,000	578	5,908	17,159	1,308	4,435	540
Texas.....	20,816	57,438	4,456	17,174	2,079	22,348	55,575	3,999	17,559	2,067
Utah.....	3,151	11,085	385	2,403	381	3,552	10,820	378	2,574	418
Vermont.....	1,128	4,080	193	839	41	1,149	4,273	98	830	45
Virginia.....	7,037	24,010	1,643	5,589	893	8,192	25,149	1,899	6,056	748
Washington.....	12,278	17,787	901	4,066	599	11,664	17,552	898	4,262	576
West Virginia.....	2,583	7,518	329	1,751	110	2,419	7,260	308	1,824	131
Wisconsin.....	8,723	25,322	1,030	5,393	795	8,570	25,057	988	5,479	812
Wyoming.....	1,309	1,825	59	345	68	1,386	1,631	89	343	73
U.S. Service Schools.....	9,184	3,368	154	1,228	28	8,709	3,460	—	1,308	14
<b>Outlying areas.....</b>	<b>4,890</b>	<b>12,268</b>	<b>503</b>	<b>1,183</b>	<b>185</b>	<b>5,556</b>	<b>12,871</b>	<b>729</b>	<b>1,358</b>	<b>58</b>
American Samoa.....	84	—	—	—	—	—	—	—	—	—
Guam.....	87	171	—	30	—	64	227	—	35	—
Northern Marianas.....	15	—	—	—	—	23	—	—	—	—
Puerto Rico.....	4,350	11,952	503	1,120	185	5,324	12,298	719	1,291	58
Trust Territory of the Pacific.....	92	—	—	—	—	71	—	—	—	—
Virgin Islands.....	82	145	—	33	—	74	148	—	32	—

<sup>1</sup> Preliminary data.

—Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

Table 222.--1- to 4-year awards and associate degrees, by field of study: 1983-84 to 1987-88<sup>1</sup>

Field of study	1- to 4-year awards					Associate degrees				
	1983-84	1984-85	1985-86	1986-87	1987-88	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11
<b>Total</b> .....	<b>124,633</b>	<b>123,680</b>	<b>120,380</b>	<b>109,613</b>	<b>109,406</b>	<b>452,416</b>	<b>454,712</b>	<b>476,047</b>	<b>437,137</b>	<b>435,537</b>
Agriculture and natural resources, total.....	2,970	2,969	2,891	1,640	1,397	6,879	6,554	5,741	5,428	4,991
Agricultural business and agricultural production.....	2,150	2,218	2,087	1,389	1,116	4,395	4,175	3,651	3,655	3,003
Agricultural science.....	814	583	591	171	145	1,367	1,393	1,098	806	977
Renewable natural resources.....	208	170	213	144	138	1,117	986	994	967	1,011
Architecture and environmental design.....	400	411	550	593	655	1,495	1,490	1,432	1,662	1,811
Area and ethnic studies.....	15	20	64	208	124	30	32	33	19	18
Business and management.....	37,106	39,014	38,718	34,896	35,212	120,034	120,731	117,358	115,197	111,139
Accounting.....	799	680	748	776	805	8,128	5,527	5,094	5,253	4,895
Business and management, general.....	668	685	642	836	733	13,934	12,887	12,163	12,363	12,511
Business administration and management.....	609	682	825	723	800	18,683	18,530	18,988	20,401	22,307
Business and management, other.....	7,783	6,579	5,984	1,993	2,080	11,424	11,307	11,268	11,351	11,380
Business data processing.....	4,768	4,363	4,179	3,213	3,242	18,709	18,835	15,926	13,294	10,272
Secretarial and related programs.....	13,354	15,160	15,130	14,015	14,155	21,070	21,845	21,095	20,019	18,753
Business and office, other.....	2,409	3,408	3,475	3,881	3,981	14,082	14,378	15,373	14,877	15,111
Marketing and distribution.....	2,690	2,736	3,144	4,552	4,391	15,214	15,824	16,553	18,938	15,024
Consumer and personal services.....	4,028	4,721	4,589	4,897	4,925	790	798	898	701	886
Communications.....	115	154	119	481	461	1,881	1,846	2,055	1,580	1,933
Communications technologies.....	218	232	314	283	289	1,871	2,270	1,929	1,947	1,478
Computer and information sciences.....	2,327	2,453	1,889	1,977	1,824	12,824	12,877	10,704	9,098	8,647
Education.....	532	561	573	661	559	7,652	7,580	7,391	7,309	7,237
Engineering.....	521	233	485	113	227	4,459	3,881	5,258	4,518	3,858
Engineering technologies.....	32,353	31,212	28,419	28,297	27,850	57,735	59,951	58,083	58,191	58,405
Mechanics and repairers.....	14,811	14,795	13,418	12,308	12,845	9,253	8,666	10,896	11,023	10,450
Construction trades.....	4,082	3,499	3,269	3,204	3,249	2,179	2,341	2,131	2,082	2,035
Engineering technologies, other.....	13,460	12,918	11,712	12,785	11,758	48,303	48,944	44,956	45,086	45,920
Foreign languages.....	38	39	63	13	15	326	388	437	426	418
Health sciences.....	28,378	27,220	25,789	22,310	22,653	68,270	68,453	66,559	62,545	59,805
Dental assisting.....	3,037	2,912	2,623	2,595	2,585	4,389	4,160	4,051	4,017	3,681
Emergency medical technician-ambulance.....	718	573	721	668	410	139	74	88	63	79
Emergency medical technician-paramedic.....	579	598	546	454	770	186	211	267	307	277
Medical lab technician.....	85	33	110	64	89	3,037	2,788	2,609	2,205	1,836
Medical assisting.....	1,851	1,788	1,653	2,094	1,978	1,932	2,196	2,004	1,881	1,701
Nursing assisting.....	2,972	3,067	3,096	1,200	1,198	140	133	33	24	8
Practical nursing.....	12,910	12,322	10,570	8,748	8,871	1,389	1,252	991	607	561
Nursing, general.....	468	581	874	745	981	40,114	40,334	38,810	37,813	36,310
Health sciences, other.....	5,758	5,350	5,798	5,742	5,813	18,944	17,305	17,906	15,828	15,352
Home economics.....	3,991	3,762	4,099	3,603	3,874	9,247	9,811	9,469	9,311	9,744
Law.....	632	781	819	755	821	1,813	2,060	2,259	2,501	3,138
Letters.....	188	54	226	14	46	630	817	548	508	488
Liberal/general studies.....	1,273	1,343	1,754	907	870	108,019	108,396	107,672	108,207	113,159
Library and archival sciences.....	69	89	66	63	63	155	128	128	117	70
Life sciences.....	88	82	81	6	5	1,209	1,121	998	907	854
Mathematics.....	28	18	99	19	12	783	789	602	667	682
Military sciences.....	0	11	970	959	3	87	23	30	50	138
Multi/interdisciplinary studies.....	121	139	134	36	122	8,218	8,525	9,588	9,796	10,837
Parks and recreation.....	81	113	147	99	88	731	728	634	556	821
Philosophy and religion.....	12	85	161	80	21	144	138	114	100	94
Theology.....	677	724	559	480	813	712	701	705	578	627
Physical sciences.....	86	101	120	107	79	2,877	2,193	2,107	2,059	1,891
Science technologies.....	71	73	101	99	59	1,369	1,138	1,054	934	743
Physical sciences, other.....	15	28	19	8	20	1,508	1,055	1,053	1,125	1,148
Psychology.....	54	38	54	53	71	1,088	983	939	1,011	1,008
Protective services.....	1,661	1,832	2,066	2,141	3,033	11,983	12,305	12,096	11,960	11,819
Criminal justice administration and studies.....	444	444	510	597	658	5,666	5,533	5,570	5,803	5,044
Law enforcement and security services.....	841	870	1,019	502	744	4,019	4,211	4,187	3,880	4,351
Fire control and safety.....	380	373	394	380	450	1,871	1,724	1,666	1,449	1,397
Protective services, other.....	196	145	143	662	1,181	627	837	684	848	1,027
Public affairs.....	906	1,069	814	548	782	4,027	3,875	3,649	3,553	3,651
Transportation and material moving.....	558	734	298	277	548	1,601	1,561	1,338	1,284	1,327
Public affairs, other.....	348	335	318	271	214	2,426	2,114	2,311	2,269	2,324
Social sciences.....	8	15	179	127	174	2,734	2,587	2,540	2,820	2,713
Visual and performing arts.....	9,811	8,926	8,380	7,962	7,249	14,503	13,742	13,961	14,560	13,905
Fine arts, general.....	57	78	89	47	58	1,074	1,033	924	1,011	1,140
Graphic arts technician.....	181	215	237	193	158	1,972	1,886	1,855	721	766
Precision production.....	8,867	8,199	7,809	7,333	6,879	9,166	8,711	9,104	9,204	9,357
Visual and performing arts, other.....	606	436	465	389	356	2,291	2,312	2,078	3,924	2,642
Undistributed.....	0	0	0	232	454	0	2,537	1,034	148	362

<sup>1</sup> 1987-88 are preliminary data.

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

**Table 223.—Associate degrees and other subbaccalaureate awards,<sup>1</sup> by length of curriculum, sex of student, and field of study: 1987-88**

Field of study	Less than 1-year awards			1- to 4-year awards			Associate degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
<b>Total.....</b>	<b>56,770</b>	<b>30,293</b>	<b>26,477</b>	<b>109,406</b>	<b>49,370</b>	<b>61,036</b>	<b>435,537</b>	<b>190,189</b>	<b>245,348</b>
Agriculture and natural resources, total.....	2,381	1,783	598	1,397	972	425	4,991	3,370	1,621
Agricultural business and agricultural production.....	1,708	1,272	436	1,118	757	359	3,003	2,043	960
Agricultural science.....	579	426	153	145	97	48	977	471	506
Renewable natural resources.....	94	85	9	138	118	18	1,011	656	155
Architecture and environmental design.....	54	4	50	655	96	559	1,811	216	1,593
Area and ethnic studies.....	30	13	17	124	6	118	18	4	14
Business and management.....	12,493	3,302	9,191	35,212	5,807	29,805	111,139	35,184	75,955
Accounting.....	134	33	101	805	193	612	4,895	1,326	3,569
Business and management, general.....	438	206	232	733	258	475	12,511	5,191	7,320
Business administration and management.....	653	292	361	900	337	563	22,307	9,581	12,726
Business and management, other.....	1,340	726	614	2,080	909	1,171	11,380	5,841	5,539
Business data processing.....	1,756	618	1,138	3,242	1,049	2,193	10,272	4,386	5,886
Secretarial and related programs.....	3,544	120	3,424	14,155	383	13,772	18,753	255	18,498
Business and office, other.....	1,318	354	964	3,981	789	3,212	15,111	4,223	10,888
Marketing and distribution.....	2,530	881	1,649	4,391	989	3,402	15,024	3,936	11,088
Consumer and personal services.....	780	72	708	4,925	720	4,205	886	445	441
Communications.....	210	140	70	461	316	143	1,933	1,008	925
Communications technologies.....	45	34	11	289	146	141	1,478	903	573
Computer and information sciences.....	1,465	700	765	1,824	814	1,010	6,847	4,468	4,158
Education.....	182	27	135	559	41	518	7,237	2,315	4,922
Engineering.....	149	103	46	227	159	68	3,856	3,443	413
Engineering technologies.....	13,549	12,875	674	27,850	26,218	1,634	58,405	53,164	5,241
Mechanics and repairers.....	3,920	3,854	266	12,845	12,286	560	10,450	9,895	555
Construction trades.....	1,258	1,177	81	3,249	3,107	142	2,035	1,971	64
Engineering technologies, other.....	6,371	6,044	327	11,756	10,824	932	45,920	41,298	4,622
Foreign languages.....	151	59	92	15	3	12	418	225	193
Health sciences.....	13,661	3,520	10,141	22,653	3,286	19,367	59,805	6,947	52,858
Dental assisting.....	86	0	86	2,585	120	2,445	3,681	252	3,429
Emergency medical technician-ambulance.....	2,349	1,854	695	410	236	174	79	61	18
Emergency medical technician-paramedic.....	430	254	176	770	550	220	277	185	92
Medical lab technician.....	47	4	43	89	12	57	1,836	403	1,433
Medical assisting.....	510	41	469	1,976	43	1,933	1,701	42	1,659
Nursing assisting.....	4,891	484	4,407	1,198	265	933	8	2	6
Practical nursing.....	452	25	427	8,871	672	8,199	561	39	522
Nursing, general.....	90	3	87	981	82	899	36,310	2,556	33,754
Health sciences, other.....	4,806	1,055	3,751	5,813	1,306	4,507	15,352	3,407	11,945
Home economics.....	1,724	603	1,121	3,674	754	2,920	9,744	2,938	6,806
Law.....	702	88	634	821	128	695	3,138	369	2,769
Letters.....	40	6	32	46	16	30	488	165	323
Liberal/general studies.....	853	370	483	870	399	471	113,159	48,088	65,071
Library and archival sciences.....	32	1	31	63	9	54	70	8	62
Life sciences.....	121	101	20	5	3	2	854	347	507
Mathematics.....	1	0	1	12	7	5	682	432	250
Military sciences.....	0	0	0	3	3	0	138	118	20
Multi/interdisciplinary studies.....	94	9	85	122	65	57	10,837	4,921	5,916
Parks and recreation.....	28	14	14	68	46	22	821	291	330
Philosophy and religion.....	3	2	1	21	6	15	94	64	30
Theology.....	69	25	44	613	285	318	627	382	245
Physical sciences.....	28	20	8	79	51	28	1,891	1,113	778
Science technologies.....	25	18	7	59	35	24	743	435	308
Physical sciences, other.....	3	2	1	20	16	4	1,148	678	470
Psychology.....	28	1	25	71	15	56	1,008	299	709
Protective services.....	2,980	2,445	535	3,033	2,484	569	11,819	8,664	3,155
Criminal justice administration and studies.....	1,208	986	222	658	481	177	5,044	3,417	1,627
Law enforcement and security services.....	757	636	121	744	598	146	4,351	3,259	1,092
Fire control and safety.....	420	379	41	450	404	46	1,397	1,344	53
Protective services, other.....	595	444	151	1,181	981	200	1,027	644	383
Public affairs.....	2,594	2,242	352	782	521	241	3,651	1,620	2,031
Transportation and material moving.....	2,413	2,139	274	546	480	66	1,327	1,125	202
Public affairs, other.....	181	103	78	214	41	173	2,324	495	1,829
Social sciences.....	28	13	15	174	91	83	2,713	1,155	1,558
Visual and performing arts.....	1,953	1,509	444	7,249	5,703	1,546	13,905	7,834	6,071
Fine arts, general.....	31	9	22	58	26	30	1,140	394	746
Graphic arts technician.....	85	22	63	158	71	87	766	232	534
Precision production.....	1,752	1,471	281	6,879	5,423	1,256	9,357	6,036	3,321
Visual and performing arts, other.....	85	7	78	358	183	175	2,642	1,172	1,470
Undistributed.....	1,144	302	842	454	130	324	362	111	251

<sup>1</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
<b>All fields.....</b>	<b>993,362</b>	<b>476,842</b>	<b>516,520</b>	<b>299,733</b>	<b>144,923</b>	<b>153,810</b>	<b>34,839</b>	<b>22,592</b>	<b>12,247</b>
<b>Agriculture and natural resources, total.....</b>	<b>14,222</b>	<b>9,744</b>	<b>4,478</b>	<b>3,479</b>	<b>2,427</b>	<b>1,052</b>	<b>1,142</b>	<b>926</b>	<b>216</b>
<b>Agribusiness and agricultural production, total.....</b>	<b>4,800</b>	<b>3,648</b>	<b>1,152</b>	<b>710</b>	<b>536</b>	<b>174</b>	<b>199</b>	<b>182</b>	<b>37</b>
<b>Agricultural business and management, total.....</b>	<b>3,542</b>	<b>2,770</b>	<b>772</b>	<b>566</b>	<b>443</b>	<b>123</b>	<b>164</b>	<b>132</b>	<b>32</b>
<b>Agricultural business and management, general.....</b>	<b>423</b>	<b>334</b>	<b>89</b>	<b>38</b>	<b>29</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>0</b>
<b>Agricultural business.....</b>	<b>1,235</b>	<b>996</b>	<b>239</b>	<b>46</b>	<b>41</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Agricultural economics.....</b>	<b>1,758</b>	<b>1,331</b>	<b>427</b>	<b>467</b>	<b>359</b>	<b>108</b>	<b>163</b>	<b>131</b>	<b>32</b>
<b>Agricultural business and management, other.....</b>	<b>126</b>	<b>109</b>	<b>17</b>	<b>15</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Agricultural mechanics.....</b>	<b>237</b>	<b>230</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>
<b>Agricultural production.....</b>	<b>109</b>	<b>86</b>	<b>23</b>	<b>17</b>	<b>11</b>	<b>6</b>	<b>11</b>	<b>9</b>	<b>2</b>
<b>Horticulture.....</b>	<b>358</b>	<b>231</b>	<b>125</b>	<b>43</b>	<b>28</b>	<b>15</b>	<b>12</b>	<b>11</b>	<b>1</b>
<b>International agriculture.....</b>	<b>20</b>	<b>10</b>	<b>10</b>	<b>18</b>	<b>6</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Agribusiness and agricultural production, other.....</b>	<b>538</b>	<b>321</b>	<b>215</b>	<b>81</b>	<b>41</b>	<b>20</b>	<b>11</b>	<b>9</b>	<b>2</b>
<b>Agricultural sciences, total.....</b>	<b>8,392</b>	<b>3,869</b>	<b>2,523</b>	<b>1,762</b>	<b>1,204</b>	<b>558</b>	<b>728</b>	<b>588</b>	<b>138</b>
<b>Agricultural sciences, general.....</b>	<b>1,045</b>	<b>737</b>	<b>308</b>	<b>209</b>	<b>150</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Animal sciences, total.....</b>	<b>3,034</b>	<b>1,817</b>	<b>1,417</b>	<b>529</b>	<b>365</b>	<b>164</b>	<b>190</b>	<b>157</b>	<b>33</b>
<b>Animal sciences, general.....</b>	<b>2,547</b>	<b>1,302</b>	<b>1,245</b>	<b>363</b>	<b>240</b>	<b>123</b>	<b>139</b>	<b>115</b>	<b>24</b>
<b>Animal breeding and genetics.....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>12</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>0</b>
<b>Animal health.....</b>	<b>21</b>	<b>10</b>	<b>11</b>	<b>20</b>	<b>13</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>3</b>
<b>Animal nutrition.....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>9</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>1</b>
<b>Dairy.....</b>	<b>210</b>	<b>163</b>	<b>47</b>	<b>52</b>	<b>38</b>	<b>14</b>	<b>13</b>	<b>10</b>	<b>3</b>
<b>Fisheries science.....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Poultry.....</b>	<b>101</b>	<b>70</b>	<b>31</b>	<b>39</b>	<b>26</b>	<b>13</b>	<b>9</b>	<b>8</b>	<b>1</b>
<b>Animal sciences, other.....</b>	<b>155</b>	<b>72</b>	<b>83</b>	<b>34</b>	<b>27</b>	<b>7</b>	<b>9</b>	<b>8</b>	<b>1</b>
<b>Food sciences.....</b>	<b>589</b>	<b>270</b>	<b>319</b>	<b>247</b>	<b>109</b>	<b>138</b>	<b>114</b>	<b>85</b>	<b>29</b>
<b>Plant sciences, total.....</b>	<b>1,573</b>	<b>1,146</b>	<b>427</b>	<b>668</b>	<b>493</b>	<b>175</b>	<b>336</b>	<b>273</b>	<b>63</b>
<b>Plant sciences, general.....</b>	<b>240</b>	<b>169</b>	<b>71</b>	<b>72</b>	<b>53</b>	<b>19</b>	<b>25</b>	<b>18</b>	<b>7</b>
<b>Agronomy.....</b>	<b>638</b>	<b>543</b>	<b>95</b>	<b>333</b>	<b>282</b>	<b>71</b>	<b>226</b>	<b>191</b>	<b>35</b>
<b>Horticulture science.....</b>	<b>565</b>	<b>341</b>	<b>224</b>	<b>182</b>	<b>101</b>	<b>61</b>	<b>57</b>	<b>41</b>	<b>16</b>
<b>Ornamental horticulture.....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Plant breeding and genetics.....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Plant pathology (applied).....</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Plant protection (pest management).....</b>	<b>28</b>	<b>15</b>	<b>11</b>	<b>24</b>	<b>16</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>0</b>
<b>Range management.....</b>	<b>87</b>	<b>66</b>	<b>21</b>	<b>66</b>	<b>51</b>	<b>15</b>	<b>23</b>	<b>18</b>	<b>5</b>
<b>Plant sciences, other.....</b>	<b>17</b>	<b>12</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>Soil sciences.....</b>	<b>102</b>	<b>75</b>	<b>27</b>	<b>94</b>	<b>78</b>	<b>18</b>	<b>78</b>	<b>68</b>	<b>10</b>
<b>Agricultural sciences, other.....</b>	<b>49</b>	<b>24</b>	<b>25</b>	<b>15</b>	<b>9</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>3</b>
<b>Renewable natural resources, total.....</b>	<b>3,030</b>	<b>2,227</b>	<b>803</b>	<b>1,007</b>	<b>687</b>	<b>320</b>	<b>217</b>	<b>178</b>	<b>41</b>
<b>Renewable natural resources, general.....</b>	<b>798</b>	<b>523</b>	<b>275</b>	<b>236</b>	<b>145</b>	<b>91</b>	<b>29</b>	<b>23</b>	<b>6</b>
<b>Conservation and regulation.....</b>	<b>213</b>	<b>148</b>	<b>70</b>	<b>22</b>	<b>14</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>Fishing and fisheries.....</b>	<b>146</b>	<b>124</b>	<b>22</b>	<b>127</b>	<b>94</b>	<b>33</b>	<b>33</b>	<b>25</b>	<b>8</b>
<b>Forestry production and processing.....</b>	<b>228</b>	<b>180</b>	<b>48</b>	<b>28</b>	<b>21</b>	<b>7</b>	<b>10</b>	<b>7</b>	<b>3</b>
<b>Forestry and related sciences.....</b>	<b>955</b>	<b>780</b>	<b>175</b>	<b>440</b>	<b>309</b>	<b>131</b>	<b>126</b>	<b>106</b>	<b>20</b>
<b>Wildlife management.....</b>	<b>580</b>	<b>411</b>	<b>189</b>	<b>108</b>	<b>74</b>	<b>34</b>	<b>14</b>	<b>13</b>	<b>1</b>
<b>Renewable natural resources, other.....</b>	<b>107</b>	<b>61</b>	<b>46</b>	<b>46</b>	<b>30</b>	<b>16</b>	<b>4</b>	<b>2</b>	<b>2</b>
<b>Architecture and environmental design, total.....</b>	<b>8,606</b>	<b>5,277</b>	<b>3,329</b>	<b>3,159</b>	<b>2,042</b>	<b>1,117</b>	<b>98</b>	<b>66</b>	<b>32</b>
<b>Architecture and environmental design, general.....</b>	<b>853</b>	<b>485</b>	<b>188</b>	<b>109</b>	<b>80</b>	<b>29</b>	<b>8</b>	<b>2</b>	<b>4</b>
<b>Architecture.....</b>	<b>4,266</b>	<b>3,131</b>	<b>1,135</b>	<b>1,637</b>	<b>1,166</b>	<b>471</b>	<b>26</b>	<b>21</b>	<b>5</b>
<b>City, community, and regional planning.....</b>	<b>274</b>	<b>199</b>	<b>75</b>	<b>864</b>	<b>535</b>	<b>329</b>	<b>59</b>	<b>38</b>	<b>21</b>
<b>Environmental design.....</b>	<b>873</b>	<b>474</b>	<b>199</b>	<b>45</b>	<b>30</b>	<b>15</b>	<b>2</b>	<b>2</b>	<b>0</b>
<b>Interior design.....</b>	<b>1,532</b>	<b>174</b>	<b>1,358</b>	<b>37</b>	<b>5</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Landscape architecture.....</b>	<b>814</b>	<b>554</b>	<b>260</b>	<b>284</b>	<b>137</b>	<b>147</b>	<b>2</b>	<b>2</b>	<b>0</b>
<b>Urban design.....</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>49</b>	<b>34</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Architecture and environmental design, other.....</b>	<b>393</b>	<b>279</b>	<b>114</b>	<b>134</b>	<b>55</b>	<b>79</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>Area and ethnic studies, total.....</b>	<b>3,483</b>	<b>1,393</b>	<b>2,070</b>	<b>905</b>	<b>495</b>	<b>410</b>	<b>142</b>	<b>71</b>	<b>71</b>
<b>Area studies, total.....</b>	<b>3,123</b>	<b>1,255</b>	<b>1,868</b>	<b>722</b>	<b>358</b>	<b>364</b>	<b>122</b>	<b>59</b>	<b>63</b>
<b>African studies.....</b>	<b>13</b>	<b>6</b>	<b>7</b>	<b>18</b>	<b>5</b>	<b>11</b>	<b>10</b>	<b>7</b>	<b>3</b>
<b>American studies.....</b>	<b>1,179</b>	<b>447</b>	<b>732</b>	<b>193</b>	<b>89</b>	<b>124</b>	<b>61</b>	<b>21</b>	<b>40</b>
<b>Asian studies.....</b>	<b>829</b>	<b>271</b>	<b>358</b>	<b>178</b>	<b>105</b>	<b>71</b>	<b>17</b>	<b>11</b>	<b>6</b>
<b>European studies.....</b>	<b>343</b>	<b>122</b>	<b>221</b>	<b>45</b>	<b>22</b>	<b>23</b>	<b>8</b>	<b>3</b>	<b>3</b>
<b>Latin American studies.....</b>	<b>240</b>	<b>89</b>	<b>151</b>	<b>126</b>	<b>72</b>	<b>54</b>	<b>8</b>	<b>3</b>	<b>3</b>
<b>Middle Eastern studies.....</b>	<b>63</b>	<b>35</b>	<b>28</b>	<b>58</b>	<b>24</b>	<b>34</b>	<b>18</b>	<b>11</b>	<b>5</b>
<b>Russian and Slavic studies.....</b>	<b>248</b>	<b>138</b>	<b>110</b>	<b>85</b>	<b>43</b>	<b>39</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Area studies, other.....</b>	<b>408</b>	<b>147</b>	<b>261</b>	<b>23</b>	<b>15</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>Ethnic studies, total.....</b>	<b>245</b>	<b>97</b>	<b>148</b>	<b>48</b>	<b>19</b>	<b>29</b>	<b>8</b>	<b>5</b>	<b>3</b>
<b>Afro-American (black) studies.....</b>	<b>156</b>	<b>61</b>	<b>95</b>	<b>25</b>	<b>12</b>	<b>13</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>Hispanic-American studies.....</b>	<b>53</b>	<b>25</b>	<b>28</b>	<b>11</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Ethnic studies, other.....	36	11	25	12	4	8	5	4	1
Area and ethnic studies, other.....	95	41	54	135	118	17	12	7	5
<b>Business and management, business and office, and marketing and distribution.....</b>	<b>243,344</b>	<b>129,764</b>	<b>113,580</b>	<b>69,630</b>	<b>46,282</b>	<b>23,348</b>	<b>1,109</b>	<b>653</b>	<b>256</b>
<b>Business and management, total.....</b>	<b>235,476</b>	<b>127,391</b>	<b>108,085</b>	<b>69,430</b>	<b>46,184</b>	<b>23,246</b>	<b>1,108</b>	<b>653</b>	<b>255</b>
Business and management, general.....	41,171	22,415	18,756	11,628	7,897	3,729	210	174	36
Accounting.....	42,886	20,314	22,572	3,101	1,741	1,360	57	35	22
Banking and finance.....	28,100	16,982	9,116	5,258	3,703	1,555	43	36	7
Business administration and management.....	68,544	37,665	30,879	37,609	25,374	12,235	541	417	124
Business economics.....	3,444	2,305	1,139	175	120	55	36	28	8
Human resources development.....	1,355	654	701	810	414	396	10	5	5
Institutional management.....	5,074	2,694	2,380	253	163	90	1	0	1
Insurance and risk management.....	561	354	207	31	21	10	4	4	0
International business management.....	1,231	518	713	1,709	1,128	581	6	5	1
Investments and securities.....	235	141	94	167	120	47	0	0	0
Labor/industrial relations.....	1,062	527	535	609	309	300	11	8	3
Management information systems.....	3,232	1,863	1,369	1,055	761	294	4	3	1
Management science, total.....	2,277	1,302	975	634	471	163	56	51	5
Business statistics.....	0	0	0	0	0	0	0	0	0
Operations research (quantitative methods).....	894	511	383	454	339	115	46	43	3
Management science, other.....	1,383	791	592	180	132	48	10	8	2
Marketing management and research.....	30,173	14,893	15,280	1,940	1,000	940	47	32	15
Organizational behavior.....	584	262	322	144	59	85	24	14	10
Personnel management.....	1,777	815	962	236	131	105	6	3	3
Real estate.....	835	595	240	195	151	44	1	1	0
Small business management and ownership.....	56	38	18	6	7	1	0	0	0
Taxation.....	0	0	0	832	559	273	0	0	0
Trade and industrial supervision and management.....	804	641	163	62	50	12	0	0	0
Consumer and personal services.....	39	34	5	0	0	0	0	0	0
Business and management, other.....	4,036	2,379	1,657	2,976	2,005	971	51	37	14
<b>Business and office, total.....</b>	<b>2,948</b>	<b>714</b>	<b>2,234</b>	<b>51</b>	<b>27</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>
Accounting, bookkeeping, and related programs.....	315	159	156	43	27	16	0	0	0
Business data processing and related programs.....	560	331	229	0	0	0	0	0	0
Office supervision and management.....	1,309	137	1,172	6	0	6	0	0	0
Secretarial and related programs.....	648	52	596	1	0	1	0	0	0
Business and office, other.....	116	35	81	1	0	1	0	0	0
<b>Marketing and distribution, total.....</b>	<b>4,920</b>	<b>1,659</b>	<b>3,261</b>	<b>149</b>	<b>71</b>	<b>78</b>	<b>1</b>	<b>0</b>	<b>1</b>
Apparel and accessories marketing.....	1,793	95	1,698	2	0	2	1	0	1
Business and personal services marketing.....	775	428	347	0	0	0	0	0	0
General marketing.....	1,623	799	824	45	21	24	0	0	0
Transportation and travel marketing.....	225	41	184	58	17	41	0	0	0
Marketing and distribution, other.....	504	296	208	44	33	11	0	0	0
<b>Communications and communications technologies, total.....</b>	<b>46,705</b>	<b>18,588</b>	<b>28,117</b>	<b>3,932</b>	<b>1,574</b>	<b>2,358</b>	<b>236</b>	<b>128</b>	<b>108</b>
<b>Communications, total.....</b>	<b>45,382</b>	<b>17,849</b>	<b>27,533</b>	<b>3,685</b>	<b>1,452</b>	<b>2,233</b>	<b>232</b>	<b>126</b>	<b>106</b>
Communications, general.....	21,337	8,032	13,305	1,440	557	883	167	87	80
Advertising.....	2,757	965	1,792	222	89	133	1	0	1
Communications, research.....	111	30	81	22	10	12	8	5	3
Journalism (mass communications).....	11,063	3,928	7,132	1,021	391	630	20	13	7
Public relations.....	1,434	469	965	84	22	72	0	0	0
Radio/television news broadcasting.....	945	425	520	42	21	21	0	0	0
Radio television, general.....	5,370	3,000	2,370	249	123	126	16	12	4
Communications, other.....	2,368	1,000	1,368	595	239	356	20	9	11
<b>Communications technologies, total.....</b>	<b>1,323</b>	<b>739</b>	<b>584</b>	<b>247</b>	<b>122</b>	<b>125</b>	<b>4</b>	<b>2</b>	<b>2</b>
Motion picture technology.....	77	65	12	0	0	0	0	0	0
Photographic technology.....	28	16	12	1	1	0	0	0	0
Radio and television technology.....	1,143	609	534	182	96	86	3	1	2
Communications technologies, other.....	75	49	26	64	25	39	1	1	0
<b>Computer and information sciences, total.....</b>	<b>34,548</b>	<b>23,347</b>	<b>11,201</b>	<b>9,168</b>	<b>6,702</b>	<b>2,464</b>	<b>428</b>	<b>380</b>	<b>48</b>
<b>Computer and information sciences, general.....</b>	<b>27,136</b>	<b>18,798</b>	<b>8,338</b>	<b>7,576</b>	<b>5,660</b>	<b>1,916</b>	<b>405</b>	<b>365</b>	<b>40</b>
Computer programming.....	308	250	58	120	94	26	0	0	0
Data processing.....	700	410	290	25	16	9	0	0	0
Information science and systems.....	4,513	2,881	1,622	1,067	662	405	17	10	7
Systems analysis.....	383	220	163	83	72	21	1	0	1
Computer and information sciences, other.....	1,508	978	530	285	198	87	5	5	0
<b>Education, total.....</b>	<b>91,013</b>	<b>21,005</b>	<b>70,008</b>	<b>77,704</b>	<b>19,383</b>	<b>58,321</b>	<b>6,544</b>	<b>2,944</b>	<b>3,600</b>
Education, general.....	2,113	407	1,706	7,739	2,022	5,717	949	417	532

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Bilingual/bicultural education .....	308	119	189	387	137	250	55	30	25
Curriculum and instruction .....	329	17	312	3,600	703	2,897	683	245	413
Education administration, total .....	9	0	9	9,585	4,002	5,583	1,885	953	912
Education administration, general .....	1	0	1	8,049	2,619	3,430	1,305	684	621
Administration of special education .....	3	0	3	18	3	13	11	2	9
Adult and continuing education administration .....	0	0	0	142	44	98	38	18	20
Educational supervision .....	0	0	0	803	249	554	29	9	20
Elementary and secondary education administration .....	5	0	5	1,884	723	861	51	32	19
Higher education administration .....	0	0	0	268	100	168	299	138	161
Community college education administration .....	0	0	0	98	49	49	5	1	4
Educational administration, other .....	0	0	0	525	215	310	127	69	58
Educational media .....	17	10	7	832	213	619	28	14	14
Evaluation and research, total .....	19	5	14	149	44	105	130	63	67
Evaluation and research, general .....	0	0	0	87	21	48	55	19	36
Educational statistics and research .....	5	3	2	27	11	18	32	19	13
Educational testing, evaluation, and measurement .....	0	0	0	50	10	40	29	15	14
Elementary and secondary research .....	14	2	12	0	0	0	0	0	0
Higher education research .....	0	0	0	5	2	3	14	10	4
School psychology .....	184	41	143	1,308	333	975	493	210	283
Social foundations .....	0	0	0	175	57	118	138	60	78
Special education, total .....	8,507	479	6,028	8,543	1,017	7,528	217	55	182
Special education, general .....	4,308	347	3,961	8,502	783	5,719	194	48	148
Education of the deaf and hearing impaired .....	200	4	198	180	17	163	1	0	1
Education of the gifted and talented .....	3	0	3	175	15	160	1	0	1
Education of the emotionally handicapped .....	166	12	154	210	39	171	1	0	1
Education of the mentally handicapped .....	570	41	529	157	21	136	3	2	1
Education of the multiple handicapped .....	52	1	51	109	18	91	0	0	0
Education of the physically handicapped .....	24	2	22	36	1	35	0	0	0
Education of the visually handicapped .....	22	1	21	44	13	31	0	0	0
Remedial education .....	0	0	0	24	1	23	2	1	1
Special learning disabilities .....	295	22	273	562	45	517	8	1	5
Speech correction .....	504	23	481	264	14	250	0	0	0
Special education, other .....	383	28	337	280	50	230	9	3	6
Student counseling and personnel services .....	78	25	51	9,245	2,206	7,039	442	193	249
Teacher education, general programs, total .....	48,153	4,510	43,643	18,228	2,703	15,523	430	182	260
Adult and continuing education .....	92	42	50	812	172	440	110	53	57
Elementary education .....	39,440	2,825	38,815	11,028	913	10,115	97	23	74
Junior high/middle school education .....	893	123	570	455	58	399	0	0	0
Pre-elementary education .....	4,089	82	3,987	1,514	47	1,467	24	3	21
Secondary education .....	3,533	1,391	2,142	3,398	1,195	2,203	102	45	57
Teacher education, general programs, other .....	328	47	279	1,219	320	899	97	38	59
Teacher education, specific subject areas, total .....	32,454	15,130	17,324	14,848	5,119	9,829	835	410	425
Agricultural education .....	575	445	130	292	230	62	21	20	1
Art education .....	1,021	218	805	443	94	349	33	13	20
Business education .....	1,930	402	1,528	542	95	447	24	16	8
Driver and safety education .....	41	34	7	95	80	15	3	3	0
English education .....	1,462	303	1,159	453	124	329	33	11	22
Foreign languages education .....	258	39	219	143	30	113	35	9	26
Health education .....	1,821	354	1,287	877	148	529	74	24	50
Home economics education .....	538	4	534	197	0	197	12	0	12
Industrial arts education .....	2,134	1,905	229	645	517	128	41	27	14
Marketing and distributive education .....	242	87	155	13	3	10	1	0	1
Mathematics education .....	1,817	581	1,036	828	202	424	21	7	14
Music education .....	2,904	1,204	1,700	858	371	487	64	40	24
Physical education .....	12,214	8,393	5,821	3,477	1,740	1,737	210	117	93
Reading education .....	189	14	175	3,135	171	2,964	55	8	47
Science education .....	1,393	663	730	800	334	468	38	23	15
Social science education .....	880	329	381	138	48	92	2	1	1
Social studies education .....	1,280	747	533	180	99	81	6	4	2
Technical education .....	277	199	78	146	77	69	40	17	23
Trade and industrial education .....	1,185	905	280	575	289	288	58	38	20
Teacher education, other .....	903	308	597	1,513	469	1,044	66	34	32
Teaching English as a second language .....	33	8	25	817	150	487	5	1	4
Education, other .....	811	254	557	2,350	877	1,673	298	131	185
Engineering and engineering technologies, total .....	88,791	76,607	12,184	23,426	20,503	2,923	4,191	3,888	293
Engineering, total .....	89,505	58,858	10,647	22,893	19,887	2,906	4,181	3,888	293
Engineering, general .....	2,580	2,111	479	1,050	922	128	275	261	14
Aerospace, aeronautical, and astronautical engineering .....	3,092	2,794	298	797	734	63	141	134	7
Agricultural engineering .....	480	423	37	185	187	18	60	57	3
Architectural engineering .....	461	397	64	31	29	2	0	0	0
Bioengineering and biomedical engineering .....	642	434	208	306	217	89	77	83	14
Ceramic engineering .....	332	229	103	96	73	23	25	24	1
Chemical engineering .....	3,926	2,868	1,058	1,103	906	197	579	526	53
Civil engineering .....	7,497	8,433	1,064	2,839	2,513	326	481	455	26

Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Computer engineering.....	2,115	1,799	316	760	660	100	77	71	8
Electrical, electronics, and communications engineering.....	23,598	20,428	3,172	8,892	5,979	713	880	818	42
Engineering mechanics.....	288	253	33	182	168	16	81	77	4
Engineering physics.....	340	302	38	54	50	4	24	24	0
Engineering science.....	308	240	66	268	245	23	42	29	13
Environmental health engineering.....	135	97	38	261	177	84	39	29	10
Geological engineering.....	170	129	41	68	58	10	8	5	1
Geophysical engineering.....	52	38	16	17	15	2	1	1	0
Industrial engineering.....	4,082	2,886	1,196	1,815	1,491	324	162	140	22
Materials engineering.....	418	305	113	410	317	93	226	204	22
Mechanical engineering.....	14,918	13,207	1,711	3,330	3,051	279	596	571	25
Metallurgical engineering.....	453	353	100	221	186	35	104	97	7
Mining and mineral engineering.....	227	199	28	82	81	1	11	11	0
Naval architecture and marine engineering.....	383	385	18	41	40	1	4	4	0
Nuclear engineering.....	296	261	32	212	196	16	97	94	3
Ocean engineering.....	95	80	15	90	85	5	22	22	0
Petroleum engineering.....	667	611	56	216	198	18	35	33	2
Surveying and mapping sciences, total.....	81	71	10	28	24	4	7	7	0
Systems engineering.....	308	240	68	242	191	51	24	19	5
Textile engineering.....	21	12	9	20	12	8	2	2	0
Engineering, other.....	1,554	1,294	260	1,277	1,104	173	123	110	13
Engineering and related technologies, total.....	19,288	17,749	1,537	733	618	117	10	10	0
Architectural technologies.....	841	779	62	20	16	4	0	0	0
Civil technologies.....	689	596	73	2	2	0	0	0	0
Electrical and electronic technologies.....	5,323	5,008	315	48	38	8	0	0	0
Electromechanical instrumentation and maintenance technologies.....	171	159	12	8	8	0	1	1	0
Environmental control technologies.....	150	114	36	34	22	12	0	0	0
Industrial production technologies.....	4,884	4,386	498	180	150	30	6	8	0
Quality control and safety technologies.....	247	208	41	156	127	29	0	0	0
Mechanical and related technologies.....	2,811	2,485	148	0	0	0	0	0	0
Mining and petroleum technologies.....	41	39	2	4	3	1	3	3	0
Mechanics and repairers.....	197	190	7	0	0	0	0	0	0
Construction trades.....	47	40	7	0	0	0	0	0	0
Engineering and related technologies, other.....	4,105	3,787	338	285	252	33	0	0	0
Foreign languages, total.....	10,028	2,727	7,301	1,847	589	1,256	411	180	231
Foreign languages, multiple emphasis.....	894	202	492	237	75	162	44	18	26
African (non-Semitic) languages.....	0	0	0	0	0	0	3	3	0
Asiatic languages, total.....	316	141	175	81	25	36	17	9	8
Chinese.....	103	44	59	31	11	20	9	3	8
Japanese.....	144	60	84	9	4	5	1	1	0
Asiatic languages, other.....	68	37	32	21	10	11	7	5	2
Baltic-Slavic languages, total.....	537	208	331	117	49	68	15	7	8
Baltic languages.....	0	0	0	0	0	0	0	0	0
Russian languages.....	473	174	299	54	21	33	8	5	3
Slavic languages (other than Russian).....	64	32	32	63	28	35	7	2	5
Germanic languages, total.....	1,391	504	887	257	92	165	74	33	41
German.....	1,346	486	860	241	87	154	71	31	40
Scandinavian languages.....	31	10	21	10	2	8	1	1	0
Germanic languages, other.....	14	8	6	6	3	3	2	1	1
Greek (classical).....	33	19	14	10	5	5	0	0	0
Indic languages.....	3	2	1	2	1	1	3	2	1
Italic languages, total.....	6,876	1,591	5,285	1,092	297	795	205	72	133
French.....	3,079	590	2,489	437	104	333	89	29	60
Italian.....	221	53	168	45	18	27	7	3	4
Latin.....	88	44	44	17	8	9	0	0	0
Portuguese.....	20	7	13	2	1	1	0	0	0
Spanish.....	3,408	890	2,518	559	158	401	93	32	61
Italic languages, other.....	60	7	53	32	8	24	16	8	8
Semitic languages, total.....	44	21	23	49	31	16	22	18	4
Arabic.....	9	6	3	4	2	2	0	0	0
Hebrew.....	28	12	16	30	18	12	11	9	2
Semitic languages, other.....	7	3	4	15	11	4	11	9	2
Foreign languages, other.....	134	41	93	22	14	8	28	18	10
Allied health and health sciences, total.....	60,095	8,787	51,308	18,523	4,028	14,495	1,247	540	707
Allied health, total.....	12,076	2,350	9,726	2,649	817	2,032	43	23	20
Dental services.....	727	7	720	12	2	10	0	0	0
Diagnostic and treatment services.....	752	259	493	33	23	10	0	0	0
Medical laboratory technologies.....	1,844	397	1,547	38	11	27	0	0	0
Mental health/human services.....	938	146	792	869	224	645	19	10	9

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Miscellaneous allied health services.....	712	263	449	116	29	87	0	0	0
Nursing-related services.....	136	9	127	40	26	14	0	0	0
Rehabilitative services.....	6,270	1,110	5,160	1,365	255	1,110	16	8	8
Occupational therapy.....	1,916	143	1,773	328	23	305	2	0	2
Physical therapy.....	3,320	720	2,600	664	154	510	5	3	2
Speech-language pathology/audiology.....	28	0	28	11	0	11	1	0	1
Rehabilitative services, other.....	1,006	247	759	362	78	284	8	5	3
Allied health, other.....	597	159	438	176	47	129	8	5	3
Health sciences, total.....	48,019	6,437	41,582	15,874	3,411	12,463	1,204	517	687
Audiology and speech pathology.....	2,485	106	2,379	2,810	154	2,656	82	30	52
Basic clinical health sciences.....	162	53	109	104	46	58	98	59	39
Chiropractic.....	0	0	0	0	0	0	0	0	0
Dentistry, total.....	150	79	71	404	304	100	15	8	7
Epidemiology.....	0	0	0	0	0	0	0	0	0
Health services administration, total.....	3,242	633	2,609	2,873	1,038	1,835	33	15	18
Health services administration.....	2,326	516	1,810	2,370	888	1,482	21	9	12
Health care planning.....	35	13	22	275	88	187	8	4	4
Medical records administration.....	700	41	659	0	0	0	0	0	0
Health services administration, other.....	181	63	118	228	62	166	4	2	2
Medical laboratory.....	835	179	656	66	20	46	1	0	1
Medicine, total.....	148	69	79	203	109	94	101	57	44
Nursing.....	31,569	1,624	29,945	6,400	472	5,928	283	27	258
Optometry.....	214	112	102	3	1	2	5	3	2
Osteopathic medicine.....	1	0	1	1	0	1	0	0	0
Pharmacy.....	5,277	2,253	3,024	244	142	102	178	118	60
Pre-dentistry.....	104	83	21	0	0	0	0	0	0
Pre-medicine.....	589	404	185	1	0	1	0	0	0
Pre-veterinary.....	80	39	41	0	0	0	0	0	0
Public health.....	303	95	208	1,801	721	1,080	213	81	132
Veterinary medicine.....	330	144	186	132	70	82	69	43	26
Health sciences, other.....	2,530	564	1,966	832	334	498	126	76	50
Home economics and vocational home economics, total.....	14,825	1,225	13,600	2,059	246	1,813	309	82	227
Home economics, total.....	13,574	948	12,626	1,968	229	1,739	253	70	183
Home economics, general.....	3,647	154	3,493	405	11	394	36	4	32
Business home economics.....	102	10	172	0	0	0	0	0	0
Family and community services.....	173	20	153	28	6	22	0	0	0
Family/consumer resource management.....	660	142	518	40	3	37	16	7	9
Food sciences and human nutrition.....	2,838	252	2,586	612	55	557	58	17	41
Human environment and housing.....	677	71	606	36	10	26	0	0	0
Individual and family development.....	2,399	144	2,255	720	139	581	117	39	78
Textiles and clothing.....	2,857	149	2,708	99	1	98	13	1	12
Home economics, other.....	141	6	135	28	4	24	13	2	11
Vocational home economics, total.....	1,251	277	974	91	17	74	56	12	44
Consumer and homemaking education.....	566	47	539	33	7	26	22	8	14
Institutional, home management, and supporting services.....	77	24	53	18	3	15	0	0	0
Vocational home economics, other.....	588	206	382	40	7	33	34	4	30
Law, total.....	1,303	413	890	1,880	1,386	494	89	66	23
Law.....	3	1	2	1,000	752	248	31	25	6
Pre-law.....	275	159	116	0	0	0	0	0	0
Legal assisting.....	471	61	410	2	1	1	0	0	0
Law, other.....	554	192	362	878	633	245	58	41	17
Letters, total.....	39,503	13,152	26,351	6,171	2,110	4,061	1,180	532	648
English, general.....	27,739	8,899	18,840	3,877	1,285	2,592	695	304	391
Classics.....	403	190	213	98	53	45	53	30	23
Comparative literature.....	555	148	407	196	74	122	123	48	75
Composition.....	182	66	116	4	1	3	5	1	4
Creative writing.....	481	185	296	448	178	270	3	2	1
Linguistics.....	475	129	346	527	200	327	138	72	66
Literature, American.....	35	18	17	3	1	2	6	3	3
Literature, English.....	296	416	880	189	66	123	65	23	42
Rhetoric.....	0	0	0	0	0	0	0	0	0
Speech, debate, and forensics.....	7,131	2,695	4,436	586	183	403	69	37	32
Technical and business writing.....	108	33	75	58	12	44	0	0	0
Letters, other.....	1,098	373	725	187	57	130	23	12	11
Liberal/general studies, total.....	21,796	9,498	12,298	1,342	511	831	31	16	15
Liberal arts and sciences.....	12,853	5,877	6,976	1,192	480	712	19	8	11
Liberal/general studies, other.....	8,943	3,621	5,322	150	31	119	12	8	4

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Library and archival sciences, total.....	123	17	106	3,713	790	2,923	46	22	24
Library and archival sciences, general.....	13	2	11	820	177	643	2	1	1
Library science.....	105	15	90	2,828	598	2,230	42	19	23
Library and archival sciences, other.....	5	0	5	85	15	50	2	2	0
Life sciences, total.....	38,781	18,261	18,500	4,789	2,417	2,352	3,598	2,330	1,268
Biology general.....	28,802	13,172	13,630	1,977	1,009	968	582	363	219
Biochemistry and biophysics.....	2,044	1,133	911	247	142	105	523	353	170
Botany, total.....	273	138	135	343	174	169	291	204	87
Botany, general.....	216	113	103	178	91	85	153	97	56
Bacteriology.....	31	13	18	19	7	12	7	3	4
Plant pathology.....	11	7	4	94	48	46	72	55	17
Botany, other.....	15	5	10	54	28	26	59	49	10
Cell and molecular biology, total.....	657	374	283	77	42	35	192	124	68
Cell biology.....	60	23	37	25	13	12	52	36	16
Molecular biology.....	345	207	138	39	23	16	113	72	41
Cell and molecular biology, other.....	252	144	108	13	6	7	27	16	11
Microbiology.....	1,982	909	1,073	335	156	179	367	227	140
Miscellaneous specialized areas, total.....	1,412	648	764	805	326	479	589	366	223
Anatomy.....	107	68	41	60	35	25	108	62	46
Biometrics and biostatistics.....	28	9	17	103	39	64	41	28	13
Ecology.....	372	201	171	147	62	85	85	58	27
Marine biology.....	234	132	102	68	40	28	38	30	8
Neurosciences.....	112	85	47	14	10	4	82	51	31
Nutritional sciences.....	229	31	198	256	40	216	98	42	56
Toxicology.....	88	38	50	44	20	24	55	44	11
Miscellaneous specialized areas, other.....	244	108	136	113	60	53	82	51	31
Zoology.....	2,780	1,451	1,329	814	477	337	888	585	303
Zoology, general.....	2,095	1,095	1,000	224	133	91	190	139	51
Entomology.....	92	68	24	155	117	38	137	109	28
Genetics, human and animal.....	206	96	110	93	23	70	116	85	51
Pathology, human and animal.....	22	8	14	52	29	23	98	61	35
Pharmacology, human and animal.....	15	9	6	42	20	22	186	113	73
Physiology, human and animal.....	350	175	175	248	155	93	159	97	62
Zoology, other.....	0	0	0	0	0	0	4	1	3
Life sciences, other.....	811	438	375	171	91	80	166	108	58
Mathematics, total.....	15,888	8,513	7,375	3,423	2,052	1,371	752	626	126
Mathematics, general.....	13,482	7,086	6,396	2,310	1,375	935	504	418	86
Actuarial sciences.....	192	115	77	29	14	15	0	0	0
Applied mathematics.....	1,095	639	456	428	273	156	83	74	9
Pure mathematics.....	108	68	40	24	15	9	14	13	1
Statistics.....	437	242	195	577	337	240	140	111	29
Mathematics, other.....	574	363	211	54	38	18	11	10	1
Military sciences and military technologies, total.....	349	331	18	49	48	1	0	0	0
Military sciences, total.....	349	331	18	49	48	1	0	0	0
Military technologies, total.....	0	0	0	0	0	0	0	0	0
Multi/interdisciplinary studies, total.....	17,366	8,183	9,173	3,087	1,799	1,288	261	167	94
Biological and physical sciences.....	2,152	1,262	890	252	131	121	17	10	7
Engineering and other disciplines.....	260	195	65	187	140	47	59	50	9
Humanities and social sciences.....	2,482	887	1,595	460	169	291	35	23	12
Systems science.....	29	10	19	891	738	153	7	6	1
Women's studies.....	147	2	145	8	0	8	2	0	2
Multi/interdisciplinary studies, other.....	12,296	5,837	6,459	1,299	621	678	141	78	63
Parks and recreation, total.....	4,061	1,680	2,401	461	205	256	29	19	10
Parks and recreation, general.....	1,622	637	985	157	59	98	15	10	5
Outdoor recreation.....	151	70	81	40	28	14	0	0	0
Parks and recreation management.....	1,946	793	1,153	198	85	113	9	5	4
Water resources.....	40	40	0	31	18	13	1	1	0
Parks and recreation, other.....	322	140	182	35	17	18	4	3	1
Philosophy and religion, total.....	5,959	3,858	2,101	1,088	675	423	405	306	99
Philosophy.....	3,583	2,415	1,148	464	337	127	222	172	60
Religion.....	2,171	1,296	875	532	298	234	176	128	48
Philosophy and religion, other.....	225	147	78	102	40	62	7	6	1

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Theology, total.....	5,584	4,187	1,397	4,775	3,159	1,616	1,207	1,080	127
Biblical languages.....	19	19	0	15	13	2	0	0	0
Bible studies.....	1,922	1,483	439	306	252	54	28	28	0
Missionary studies.....	242	164	78	193	135	58	28	25	1
Religious education.....	915	516	399	902	468	434	38	26	12
Religious music.....	179	98	81	100	63	37	5	4	1
Theological studies.....	1,537	1,258	279	2,091	1,450	641	887	800	87
Theology, other.....	770	649	121	1,168	778	390	223	187	28
Physical sciences and science technologies, total.....	17,776	12,375	5,401	5,727	4,315	1,412	3,804	3,119	685
Physical sciences, total.....	17,676	12,312	5,364	5,636	4,261	1,375	3,792	3,110	682
Physical sciences, general.....	477	331	146	36	20	16	1	1	0
Astronomy.....	82	77	15	64	49	15	73	63	13
Astrophysics.....	33	29	4	21	19	2	20	18	2
Atmospheric science and meteorology.....	348	291	57	191	155	36	76	64	12
Chemistry, total.....	9,025	5,439	3,586	1,694	1,144	550	1,990	1,548	442
Chemistry, general.....	8,807	5,294	3,513	1,555	1,048	507	1,847	1,440	407
Analytical chemistry.....	0	0	0	8	6	2	9	6	3
Inorganic chemistry.....	0	0	0	6	4	2	15	10	5
Organic chemistry.....	9	6	3	20	14	6	20	15	5
Pharmaceutical chemistry.....	0	0	0	35	22	13	46	34	12
Chemistry, other.....	209	139	70	70	50	20	53	43	10
Geological sciences, total.....	2,552	1,930	622	1,530	1,151	379	350	287	63
Geology.....	2,371	1,785	586	1,292	975	317	273	223	50
Geochemistry.....	6	4	2	13	8	5	4	3	1
Geophysics and seismology.....	86	73	13	99	77	22	44	42	2
Geological sciences, other.....	89	68	21	126	91	35	29	19	10
Miscellaneous physical sciences, total.....	700	520	180	310	210	100	134	108	28
Metallurgy.....	8	4	4	22	21	1	8	7	1
Oceanography.....	145	118	27	99	69	30	85	65	20
Earth science.....	508	368	140	100	58	42	27	23	4
Miscellaneous physical sciences, other.....	39	30	9	89	62	27	14	11	3
Physics, total.....	4,097	3,488	609	1,676	1,423	253	1,093	982	111
Physics, general.....	3,967	3,375	592	1,556	1,329	227	1,018	917	101
Physics, other.....	130	113	17	120	94	26	75	65	10
Physical sciences, other.....	352	207	145	114	90	24	52	41	11
Science technologies, total.....	100	63	37	91	54	37	12	9	3
Psychology, total.....	44,961	13,484	31,477	7,862	2,589	5,273	2,988	1,366	1,622
Psychology, general.....	42,162	12,605	29,557	3,879	1,301	2,578	1,584	753	811
Clinical psychology.....	72	11	61	765	237	528	857	375	482
Counseling psychology.....	167	48	119	1,884	534	1,350	177	85	92
Developmental psychology.....	249	24	225	59	13	46	34	13	21
Experimental psychology.....	186	60	126	42	17	25	89	38	53
Industrial and organizational psychology.....	132	58	76	407	205	202	42	21	21
Physiological psychology.....	123	49	74	6	3	3	30	11	19
Psychometrics and quantitative psychology.....	1	1	0	9	3	6	2	0	2
Social psychology.....	585	229	356	44	16	28	32	11	21
Psychology, other.....	1,284	401	883	767	260	507	161	61	100
Protective services, total.....	13,369	8,349	5,020	1,024	727	297	32	23	9
Criminal justice, total.....	13,208	8,204	5,004	1,022	725	297	32	23	9
Correctional administration.....	221	150	71	40	31	9	0	0	0
Corrections.....	308	107	201	59	32	27	0	0	0
Criminal justice administration.....	3,368	2,111	1,257	312	222	90	0	0	0
Criminal justice studies.....	6,844	4,200	2,644	500	364	136	32	23	9
Criminal justice technology.....	26	15	11	0	0	0	0	0	0
Forensic studies.....	239	102	137	18	10	8	0	0	0
Law enforcement.....	1,280	945	335	43	23	20	0	0	0
Law enforcement administration.....	69	54	15	30	30	0	0	0	0
Criminal justice, other.....	853	520	333	20	13	7	0	0	0
Fire protection.....	130	127	3	2	2	0	0	0	0
Protective services, other.....	31	18	13	0	0	0	0	0	0
Public affairs, total.....	14,232	4,533	9,699	17,150	6,324	10,826	470	238	232
Public affairs, general.....	784	412	372	481	256	225	15	6	9
Community services.....	997	251	746	148	50	98	8	4	4
International public service.....	147	60	87	112	72	40	0	0	0
Public administration.....	1,527	835	692	5,180	3,061	2,119	106	72	34
Public policy studies.....	208	102	106	433	229	204	93	59	34
Public works.....	0	0	0	3	3	0	0	0	0

**Table 224.—Bachelor's, master's, and doctor's degrees conferred<sup>1</sup> by institutions of higher education, by sex of student and field of study: 1987-88—Continued**

Field of study	Bachelor's degrees requiring 4 or 5 years			Master's degrees			Doctor's degrees (Ph.D., Ed.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Social work, total.....	8,471	1,167	7,304	9,344	1,736	7,608	226	89	137
Social work, general.....	7,974	1,095	6,879	8,651	1,599	7,052	204	85	119
Medical social work.....	47	7	40	75	21	54	0	0	0
Social work, other.....	450	65	385	618	116	502	22	4	18
Transportation and material moving.....	1,715	1,555	160	679	635	44	0	0	0
Public affairs, other.....	383	151	232	772	282	490	22	8	14
Social sciences, total.....	100,270	58,297	43,973	10,293	6,235	4,058	2,783	1,851	932
Social sciences, general.....	4,762	2,062	2,700	447	207	240	29	19	10
Anthropology.....	2,907	1,071	1,836	698	295	401	304	149	155
Archeology.....	88	28	60	45	19	26	20	13	7
Criminology.....	1,180	687	493	76	49	27	2	2	0
Demography.....	14	7	7	29	13	16	9	7	2
Economics.....	22,950	15,426	7,524	1,831	1,365	466	770	619	151
Geography.....	2,948	2,048	900	572	362	210	135	99	36
History.....	18,194	11,393	6,801	2,092	1,270	822	519	326	193
International relations.....	4,225	1,897	2,328	1,213	807	406	63	50	13
Political science and government.....	27,200	16,289	10,911	1,577	1,055	522	391	305	86
Sociology.....	13,000	4,052	8,948	982	423	559	452	211	241
Urban studies.....	548	285	263	292	159	133	40	20	20
Social sciences, other.....	2,254	1,052	1,202	441	211	230	49	31	18
Visual and performing arts, total.....	36,600	14,106	22,494	7,925	3,437	4,488	728	427	301
Visual and performing arts, general.....	1,739	628	1,111	191	66	125	3	0	3
Crafts.....	392	102	290	96	35	61	0	0	0
Dance.....	626	79	547	174	23	151	6	1	5
Design.....	4,590	1,768	2,802	289	132	157	0	0	0
Dramatic arts.....	4,572	1,883	2,689	1,068	536	532	76	39	37
Film arts, total.....	1,363	808	555	202	118	84	1	0	1
Cinematography/film.....	629	417	212	130	74	56	1	0	1
Photography.....	648	337	311	70	43	27	0	0	0
Film arts, other.....	86	54	32	2	1	1	0	0	0
Fine arts, total.....	15,480	5,041	10,439	2,636	966	1,670	139	51	88
Fine arts, general.....	9,804	3,243	6,561	1,479	560	919	28	14	14
Art history and appreciation.....	1,911	372	1,539	386	84	302	97	31	66
Arts management.....	91	16	73	70	26	44	1	0	1
Painting.....	713	242	471	173	81	92	0	0	0
Fine arts, other.....	2,961	1,166	1,795	528	215	313	13	6	7
Graphic arts technology.....	0	0	0	0	0	0	0	0	0
Music, total.....	6,703	3,259	3,444	3,192	1,519	1,673	502	335	167
Music, general.....	3,242	1,491	1,751	1,023	466	557	209	132	77
Music history and appreciation.....	62	29	33	55	31	24	33	21	12
Music performance.....	2,372	1,121	1,251	1,642	768	874	166	111	55
Music theory and composition.....	204	133	71	127	79	48	54	39	15
Music, other.....	823	485	338	345	175	170	40	32	8
Precision-production.....	500	244	256	5	3	2	0	0	0
Visual and performing arts, other.....	635	274	361	72	39	33	1	1	0
Not classified by field of study.....	1,801	1,131	670	4,144	1,873	2,271	579	336	243

<sup>1</sup> Preliminary data.

NOTE.—Aggregations by field of study derived from the *Classification of Instructional Programs* developed by the National Center for Education Statistics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

Table 225.—Bachelor's degrees conferred by institutions of higher education, by discipline division: 1970-71 to 1987-88

Discipline division	1970-71	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>Total</b> .....	<b>839,730</b>	<b>945,776</b>	<b>922,933</b>	<b>925,748</b>	<b>919,549</b>	<b>921,204</b>	<b>921,390</b>	<b>929,417</b>	<b>935,140</b>	<b>952,998</b>	<b>969,510</b>	<b>974,309</b>	<b>979,477</b>	<b>987,823</b>	<b>991,339</b>	<b>993,362</b>
Agriculture and natural resources .....	12,672	16,253	17,528	19,402	21,467	22,650	23,134	22,802	21,886	21,029	20,909	19,317	18,107	16,823	14,991	14,222
Architecture and environmental design.....	5,570	7,822	8,226	9,146	9,222	9,250	9,273	9,132	9,455	9,728	9,823	9,186	9,325	9,119	8,922	8,606
Area and ethnic studies.....	2,582	3,721	3,544	3,577	3,450	3,257	3,006	2,840	2,887	2,882	2,971	2,879	2,967	3,060	3,340	3,463
Business and management.....	114,865	131,766	133,010	142,379	150,964	160,187	171,764	185,381	199,338	214,001	226,893	230,031	233,351	238,160	241,156	243,344
Communications.....	10,324	16,250	18,156	20,045	21,698	23,873	24,906	26,927	29,428	32,428	36,954	38,588	40,358	41,666	43,969	45,382
Communications technologies.....	478	846	1,092	1,237	1,516	1,527	1,551	1,689	1,854	1,794	1,648	1,579	1,725	1,425	1,439	1,323
Computer and information sciences.....	2,388	4,756	5,033	5,652	6,407	7,201	8,719	11,154	15,121	20,267	24,510	32,172	38,878	41,889	39,664	34,548
Education.....	176,614	185,225	167,015	154,807	143,722	136,141	126,109	118,163	108,309	101,113	97,991	92,382	98,161	87,221	87,115	91,013
Engineering.....	44,898	42,840	39,388	38,388	40,936	46,869	53,021	58,402	63,287	67,021	72,248	75,732	77,154	76,333	73,797	69,505
Engineering technologies.....	5,148	7,146	7,464	7,943	8,347	8,785	9,354	10,491	11,713	12,984	17,022	18,712	18,951	19,620	19,277	19,286
Foreign languages.....	19,945	18,840	17,606	15,471	13,944	12,730	11,825	11,133	10,319	9,841	9,685	9,479	9,954	10,102	10,184	10,028
Health sciences.....	25,190	41,394	48,858	53,813	57,122	59,168	61,819	63,607	63,348	63,385	64,614	64,338	64,513	64,535	63,206	60,095
Home economics.....	11,167	15,336	16,772	17,409	17,439	17,621	18,300	18,411	18,370	17,872	16,705	16,316	15,555	15,288	14,942	14,825
Law.....	545	494	436	531	559	653	678	683	776	846	1,099	1,272	1,157	1,197	1,178	1,303
Letters.....	64,933	55,469	48,534	43,019	38,849	36,365	34,557	33,497	33,208	34,334	32,743	33,739	34,091	35,434	37,133	39,503
Liberal/general studies.....	5,461	9,739	13,032	14,736	16,763	19,694	19,524	20,069	18,596	18,145	18,524	18,815	19,191	19,248	21,365	21,796
Library and archival sciences.....	1,013	1,164	1,069	843	781	693	558	398	375	307	258	255	202	157	139	123
Life sciences.....	35,743	48,340	51,741	54,275	53,605	51,502	48,846	46,370	43,216	41,639	39,982	38,640	38,445	38,524	38,114	36,761
Mathematics.....	24,801	21,635	18,181	15,984	14,196	12,569	11,806	11,378	11,078	11,599	12,453	13,211	15,146	16,306	16,489	15,888
Military sciences.....	357	316	340	1,177	933	386	347	251	305	283	267	195	299	256	383	349
Multi/interdisciplinary studies.....	8,306	14,802	15,185	17,707	17,149	15,944	14,630	14,404	15,895	17,651	17,282	16,734	15,727	15,700	16,402	17,366
Parks and recreation.....	1,621	3,705	4,518	5,182	5,514	5,623	5,981	5,753	5,729	5,335	5,198	4,752	4,593	4,433	4,107	4,081
Philosophy and religion.....	8,146	9,444	8,997	8,447	8,158	7,907	7,347	7,069	6,776	6,309	6,483	6,435	6,400	6,239	5,976	5,959
Theology.....	3,744	4,218	4,809	5,520	6,109	6,319	6,091	6,207	5,841	5,998	6,053	5,914	6,039	5,802	5,710	5,584
Physical sciences.....	21,412	21,178	20,778	21,465	22,497	22,986	23,207	23,410	23,952	24,052	23,405	23,671	23,732	21,731	19,974	17,776
Psychology.....	37,880	51,821	50,988	49,908	47,373	44,559	42,461	41,962	40,833	41,031	40,364	39,872	39,811	40,521	42,868	44,961
Protective services.....	2,045	8,257	9,956	12,507	14,530	14,889	14,803	15,015	13,707	12,438	12,579	12,654	12,510	12,704	12,930	13,369
Public affairs.....	6,252	12,671	14,730	16,751	17,627	18,078	18,882	18,422	18,714	18,739	16,290	14,396	13,838	13,878	14,161	14,232
Social sciences.....	155,236	150,298	135,165	126,287	116,879	112,827	107,922	103,519	100,345	99,545	95,088	93,212	91,461	93,703	96,185	100,270
Visual and performing arts.....	30,394	39,730	40,782	42,138	41,793	40,951	40,969	40,892	40,479	40,422	39,469	39,833	37,936	36,949	36,223	36,600
Not classified by field of study.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,801

<sup>1</sup> Preliminary data.

—Data not available or not applicable.

NOTE.—Beginning in 1982-83, the taxonomy used to collect data on earned degrees by major field of study was revised. The figures for earlier years have been reclassified when necessary to make them conform to the new taxonomy.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 226.—Master's degrees conferred by institutions of higher education, by discipline division: 1970-71 to 1987-88**

Discipline division	1970-71	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>Total.....</b>	<b>230,509</b>	<b>277,033</b>	<b>292,450</b>	<b>311,771</b>	<b>317,164</b>	<b>311,620</b>	<b>301,079</b>	<b>298,081</b>	<b>295,739</b>	<b>295,546</b>	<b>289,921</b>	<b>284,263</b>	<b>286,251</b>	<b>288,567</b>	<b>289,557</b>	<b>298,733</b>
Agriculture and natural resources...	2,457	2,928	3,067	3,340	3,724	4,023	3,994	3,976	4,003	4,163	4,254	4,178	3,928	3,801	3,523	3,479
Architecture and environmental design.....	1,705	2,702	2,938	3,215	3,213	3,115	3,113	3,139	3,153	3,327	3,357	3,223	3,275	3,260	3,142	3,159
Area and ethnic studies.....	1,032	1,160	1,166	995	1,052	981	853	852	804	809	826	888	879	927	851	905
Business and management.....	26,481	32,644	36,247	42,512	46,420	48,326	50,372	55,006	57,898	61,299	65,319	66,653	67,527	67,137	67,496	69,630
Communications.....	1,770	2,503	2,644	2,961	2,870	3,077	2,654	2,911	2,896	3,104	3,502	3,513	3,460	3,500	3,666	3,685
Communications technologies.....	86	137	150	165	221	219	228	171	209	223	102	143	209	323	271	247
Computer and information sciences.....	1,588	2,276	2,299	2,603	2,798	3,038	3,055	3,647	4,218	4,935	5,321	6,190	7,101	8,070	8,491	9,166
Education.....	88,952	112,610	120,169	128,417	126,825	119,038	111,995	103,951	98,938	93,757	84,853	77,187	76,137	76,353	75,501	77,704
Engineering.....	16,309	15,170	15,127	16,014	15,961	16,038	15,227	15,904	16,386	17,526	18,830	20,094	20,926	21,059	22,081	22,693
Engineering technologies.....	134	209	221	328	284	360	268	339	323	413	520	567	631	602	612	733
Foreign languages.....	4,755	3,964	3,807	3,531	3,147	2,726	2,426	2,236	2,104	2,008	1,759	1,773	1,724	1,721	1,746	1,847
Health sciences.....	5,445	9,090	9,901	11,885	12,323	13,619	14,781	15,068	16,004	15,942	17,068	17,443	17,383	18,624	18,426	18,523
Home economics.....	1,452	1,858	1,901	2,179	2,334	2,613	2,510	2,690	2,570	2,355	2,406	2,422	2,383	2,298	2,070	2,059
Law.....	955	1,181	1,245	1,442	1,574	1,786	1,647	1,817	1,832	1,893	2,091	1,802	1,796	1,924	1,943	1,880
Letters.....	11,148	10,384	10,068	9,468	8,701	8,306	7,289	6,807	6,515	6,421	5,767	5,818	5,934	6,291	6,123	6,171
Liberal/general studies.....	549	1,593	1,630	1,758	1,492	1,387	1,251	1,373	1,085	1,094	889	1,173	1,180	1,154	1,126	1,342
Library and archival sciences.....	7,001	8,134	8,091	8,037	7,572	6,914	5,906	5,374	4,859	4,506	3,979	3,805	3,893	3,626	3,815	3,713
Life sciences.....	5,728	6,552	6,550	6,582	7,114	6,806	6,831	6,510	5,978	5,874	5,696	5,406	5,059	5,013	4,954	4,769
Mathematics.....	5,191	4,834	4,327	3,857	3,695	3,373	3,036	2,860	2,567	2,727	2,837	2,741	2,882	3,159	3,321	3,423
Military sciences.....	2	—	—	—	43	45	38	46	43	49	110	127	119	83	83	49
Multi/interdisciplinary studies.....	1,157	1,844	1,938	2,033	3,006	3,100	3,335	3,579	3,434	3,884	2,930	3,148	3,184	3,104	3,041	3,097
Parks and recreation.....	218	440	604	571	609	574	755	647	643	526	565	555	544	495	476	461
Philosophy and religion.....	1,326	1,384	1,402	1,356	1,300	1,249	1,143	1,204	1,229	1,152	1,091	1,153	1,167	1,163	1,108	1,098
Theology.....	2,710	2,898	3,228	3,290	3,625	3,329	3,558	3,922	4,220	4,064	4,782	5,106	4,352	4,467	4,881	4,775
Physical sciences.....	6,367	6,062	5,807	5,466	5,331	5,561	5,451	5,219	5,284	5,514	5,290	5,576	5,796	5,902	5,652	5,727
Psychology.....	4,431	6,588	7,066	7,811	8,301	8,160	8,003	7,806	7,998	7,791	8,378	8,002	8,408	8,293	8,204	7,862
Protective services.....	194	561	993	1,197	1,681	1,902	1,729	1,805	1,538	1,336	1,300	1,219	1,235	1,074	1,019	1,024
Public affairs.....	8,215	12,077	14,610	16,117	17,917	18,341	18,300	18,413	18,524	18,216	16,245	15,373	16,045	16,300	17,032	17,150
Social sciences.....	16,476	17,249	16,892	15,824	15,395	14,578	12,807	12,101	11,855	11,892	11,112	10,465	10,380	10,428	10,397	10,293
Visual and performing arts.....	6,675	8,001	8,362	8,817	8,636	9,036	8,524	8,708	8,629	8,746	8,742	8,520	8,714	8,416	8,506	7,925
Not classified by field of study.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,144

<sup>1</sup> Preliminary data.  
—Data not available or not applicable.

NOTE.—Beginning in 1982-83, the taxonomy used to collect data on earned degrees by major field of study was revised. The figures for earlier years have been reclassified when necessary to make them conform to the new taxonomy.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

Table 227.—Doctor's degrees conferred by institutions of higher education, by discipline division: 1970-71 to 1987-88

Discipline Division	1970-71	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>Total.....</b>	<b>32,107</b>	<b>33,816</b>	<b>34,083</b>	<b>34,064</b>	<b>33,232</b>	<b>32,131</b>	<b>32,730</b>	<b>32,615</b>	<b>32,958</b>	<b>32,707</b>	<b>32,775</b>	<b>33,209</b>	<b>32,943</b>	<b>33,653</b>	<b>34,120</b>	<b>34,839</b>
Agriculture and natural resources.....	1,086	930	991	928	893	971	950	991	1,067	1,079	1,149	1,172	1,213	1,158	1,049	1,142
Architecture and environmental design.....	36	69	69	82	73	73	96	79	93	80	97	84	89	73	92	98
Area and ethnic studies.....	144	165	165	188	153	145	135	151	162	102	153	139	137	157	132	142
Business and management.....	807	981	1,009	953	863	866	860	792	842	855	809	977	866	969	1,098	1,109
Communications.....	145	168	162	196	162	179	182	182	171	182	205	215	222	212	273	232
Communications technologies.....	—	7	3	8	9	12	10	11	11	18	9	4	6	11	2	4
Computer and information sciences.....	128	198	213	244	216	198	236	240	252	251	262	251	248	344	374	428
Education.....	6,403	7,293	7,446	7,778	7,963	7,595	7,736	7,941	7,900	7,630	7,551	7,473	7,151	7,110	6,909	6,544
Engineering.....	3,637	3,308	3,106	2,819	2,583	2,437	2,500	2,502	2,551	2,421	2,822	2,979	3,221	3,400	3,809	4,181
Engineering technologies.....	1	4	2	2	3	3	6	5	10	15	9	2	9	10	11	10
Foreign languages.....	781	923	857	864	752	649	641	549	588	536	483	462	437	448	441	411
Health sciences.....	459	568	609	577	538	638	705	771	827	910	1,155	1,163	1,199	1,241	1,213	1,247
Home economics.....	123	136	156	178	160	203	219	192	247	247	255	279	276	311	297	309
Law.....	20	27	21	76	60	39	46	40	60	22	72	121	105	54	120	89
Letters.....	1,857	2,076	1,951	1,884	1,723	1,616	1,504	1,500	1,380	1,313	1,176	1,215	1,239	1,215	1,181	1,180
Liberal/general studies.....	11	20	16	36	33	55	264	106	23	35	55	48	53	38	29	31
Library and archival sciences.....	39	60	56	71	75	67	70	73	71	84	52	74	87	62	57	46
Life sciences.....	3,645	3,439	3,384	3,392	3,397	3,309	3,542	3,626	3,718	3,743	3,341	3,437	3,432	3,358	3,423	3,598
Mathematics.....	1,199	1,031	975	856	823	805	730	724	728	681	698	695	698	742	725	752
Military sciences.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Multi/interdisciplinary studies.....	80	176	254	237	271	246	445	295	256	358	387	378	285	319	276	261
Parks and recreation.....	2	25	14	15	15	10	25	21	42	33	33	27	36	39	32	29
Philosophy and religion.....	554	557	544	554	468	444	415	374	410	364	401	442	468	477	422	405
Theology.....	312	768	872	1,033	1,125	1,160	1,232	1,318	1,276	1,288	1,208	1,202	1,140	1,183	1,236	1,207
Physical sciences.....	4,390	3,626	3,626	3,431	3,341	3,133	3,102	3,089	3,141	3,286	3,269	3,306	3,403	3,551	3,672	3,804
Psychology.....	1,782	2,338	2,442	2,581	2,761	2,587	2,662	2,768	2,955	2,780	3,108	2,973	2,908	3,088	3,123	2,988
Protective services.....	1	3	11	9	10	17	15	18	21	24	38	31	33	21	18	32
Public affairs.....	185	214	271	298	316	385	344	372	388	389	347	421	431	385	398	470
Social sciences.....	3,659	4,123	4,209	4,154	3,784	3,583	3,358	3,219	3,114	3,061	2,931	2,911	2,851	2,955	2,916	2,783
Visual and performing arts.....	621	585	649	620	662	708	700	655	654	670	692	728	693	722	792	728
Not classified by field of study.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	579

<sup>1</sup> Preliminary data.

— Data not available or not applicable.

NOTE.—Beginning in 1982-83, the taxonomy used to collect data on earned degrees by major field of study was revised. The figures for earlier years have been reclassified when necessary to make them conform to the new taxonomy.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 11, 1990.)

**Table 228.—Degrees conferred by institutions of higher education, by control of institution: 1973-74 to 1987-88**

Year	Public institutions					Private institutions				
	Associate	Bachelor's	Master's	Doctor's	First-professional	Associate	Bachelor's	Master's	Doctor's	First-professional
1	2	3	4	5	6	7	8	9	10	11
1973-74.....	303,188	851,544	184,832	21,810	23,208	40,738	294,232	92,401	12,006	30,608
1974-75.....	318,474	634,785	193,804	22,178	23,612	41,897	288,148	98,648	11,907	32,304
1975-78.....	345,006	835,181	206,298	21,751	25,766	48,448	290,585	105,473	12,313	38,883
1976-77.....	355,850	830,483	208,901	21,229	28,344	50,727	289,088	108,263	12,303	38,015
1977-78.....	358,874	627,903	202,099	20,458	27,097	53,372	293,301	109,521	11,675	39,484
1978-79.....	346,808	821,666	192,016	20,817	27,785	55,894	299,724	109,083	11,913	41,063
1979-80.....	344,538	824,084	187,499	20,608	27,942	56,374	305,333	110,582	12,007	42,189
1980-81.....	352,391	628,452	184,384	20,895	29,128	63,986	308,668	111,355	12,063	42,828
1981-82.....	366,700	838,475	182,295	20,889	29,811	87,800	316,523	113,251	11,818	42,421
1982-83.....	—	646,317	178,248	21,188	29,757	—	323,193	113,875	11,589	43,379
1983-84.....	379,000	648,013	170,893	21,141	29,586	173,000	328,296	113,570	12,068	44,821
1984-85.....	377,825	852,246	170,000	21,337	30,152	77,087	327,231	118,251	11,806	44,911
1985-86.....	389,052	858,586	189,903	21,433	29,568	76,995	329,237	118,664	12,220	44,342
1986-87.....	358,893	859,240	187,803	21,872	29,348	78,244	332,099	121,754	12,248	43,404
1987-88 <sup>2</sup> .....	354,574	657,125	173,207	22,450	28,799	80,963	336,237	125,528	12,389	41,818

<sup>1</sup> Data are approximations.  
<sup>2</sup> Preliminary data.  
 —Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 229.—Earned degrees conferred by institutions of higher education, by control of institution, level of degree, and discipline division: 1987-88<sup>1</sup>**

Discipline division	Public institutions				Private institutions			
	Associate degrees	Bachelor's degrees	Master's degrees	Doctor's degrees	Associate degrees	Bachelor's degrees	Master's degrees	Doctor's degrees
1	2	3	4	5	6	7	8	9
<b>Total.....</b>	<b>354,574</b>	<b>657,125</b>	<b>173,207</b>	<b>22,450</b>	<b>80,963</b>	<b>336,237</b>	<b>125,528</b>	<b>12,389</b>
Agriculture and natural resources.....	4,703	13,894	3,318	1,124	288	528	181	18
Architecture and environmental design.....	685	8,333	2,248	57	1,128	2,273	913	41
Area and ethnic studies.....	11	1,329	531	85	7	2,134	374	77
Business and management.....	84,479	155,240	27,530	818	26,660	88,104	42,100	293
Communications.....	1,595	32,018	2,145	175	338	12,864	1,540	57
Communications technologies.....	1,112	649	38	1	364	874	209	3
Computer and information sciences.....	5,567	21,751	4,656	287	3,080	12,797	4,510	181
Education.....	8,404	71,202	55,733	4,977	833	19,811	21,971	1,567
Engineering.....	3,197	50,483	14,919	2,723	859	19,042	7,774	1,458
Engineering technologies.....	38,720	13,444	601	10	19,685	5,842	132	—
Foreign languages.....	337	5,841	1,307	255	81	4,187	540	156
Health sciences.....	53,784	38,070	11,071	933	6,021	22,025	7,452	314
Home economics.....	8,280	12,697	1,531	240	3,464	2,128	528	89
Law.....	2,513	837	380	8	825	466	1,500	81
Letters.....	451	24,700	4,742	778	37	14,803	1,429	402
Liberal/general studies.....	103,191	15,835	603	9	9,988	5,961	739	22
Library and archival sciences.....	60	106	2,956	40	10	17	757	6
Life sciences.....	797	22,820	3,564	2,635	57	13,941	1,205	963
Mathematics.....	854	10,399	2,725	514	28	5,489	698	238
Military sciences.....	39	336	49	—	99	13	—	—
Multi/interdisciplinary studies.....	10,858	12,785	1,486	174	179	4,801	1,611	87
Parks and recreation.....	521	3,588	393	29	100	493	68	—
Philosophy and religion.....	34	1,848	339	138	60	4,113	759	289
Theology.....	2	2	—	—	625	5,582	4,775	1,207
Physical sciences.....	1,802	11,345	4,309	2,833	89	8,431	1,418	1,171
Psychology.....	927	28,131	3,759	1,509	81	18,830	4,103	1,479
Protective services.....	11,485	10,854	889	29	334	2,715	335	3
Public affairs.....	3,009	9,313	10,311	191	642	4,919	6,839	279
Social sciences.....	2,384	80,243	8,482	1,856	329	40,027	3,811	1,127
Visual and performing arts.....	8,940	20,973	4,794	466	4,865	15,827	3,131	262
Not classified by field of study.....	233	1	—	—	129	1,800	4,144	579

<sup>1</sup> Preliminary data.  
 —Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 230.—Number of institutions of higher education conferring degrees,<sup>1</sup> by level of degree and discipline division: 1987-88**

Discipline division	Total number of institutions awarding degrees				Number of public institutions awarding degrees				Number of private institutions awarding degrees			
	Associate degrees	Bachelor's degrees	Master's degrees	Doctor's degrees	Associate degrees	Bachelor's degrees	Master's degrees	Doctor's degrees	Associate degrees	Bachelor's degrees	Master's degrees	Doctor's degrees
1	2	3	4	5	6	7	8	9	10	11	12	13
Total.....	2,104	1,782	1,212	446	1,208	643	477	206	898	1,239	735	241
Agriculture and natural resources.....	397	194	100	62	370	148	91	59	27	48	9	6
Architecture and environmental design.....	142	211	115	18	90	113	86	12	52	98	29	3
Area and ethnic studies.....	10	302	90	32	7	130	53	14	3	172	37	18
Business and management.....	1,599	1,312	648	101	1,061	483	343	69	538	829	305	32
Communications.....	232	798	201	40	190	336	141	31	42	482	60	9
Communications technologies.....	148	52	13	3	122	19	4	1	24	33	9	2
Computer and information sciences.....	623	1,028	288	86	413	419	183	59	210	609	103	27
Education.....	405	1,186	735	195	318	450	408	133	81	736	327	62
Engineering.....	271	374	247	149	248	204	185	104	25	170	62	45
Engineering technologies.....	1,065	298	54	4	687	204	44	4	198	94	10	—
Foreign languages.....	56	816	185	82	51	347	129	52	5	489	56	30
Health sciences.....	1,158	919	443	114	911	412	257	82	247	507	186	32
Home economics.....	517	381	182	38	446	229	126	28	71	152	36	6
Law.....	227	101	58	11	171	37	24	3	58	84	34	6
Letters.....	107	1,190	407	139	97	483	283	68	10	727	124	51
Liberal/general studies.....	1,204	517	89	7	915	223	33	3	289	294	56	4
Library and archival sciences.....	33	34	88	16	30	28	70	12	3	6	18	4
Life sciences.....	149	1,208	438	214	137	484	307	148	12	744	131	68
Mathematics.....	125	1,120	334	131	118	455	249	91	7	685	85	40
Military sciences.....	3	11	1	—	1	9	1	—	—	2	—	—
Multi/interdisciplinary studies.....	200	640	193	55	170	275	121	38	30	385	72	17
Parks and recreation.....	85	271	70	11	74	183	63	11	11	88	7	—
Philosophy and religion.....	34	806	170	68	18	264	75	42	16	642	95	48
Theology.....	85	338	232	98	2	2	—	—	63	338	232	98
Physical sciences.....	238	1,054	339	193	213	448	240	129	25	608	99	64
Psychology.....	141	1,198	452	216	119	447	274	122	22	751	178	94
Protective services.....	719	384	98	7	670	222	72	5	49	182	26	2
Public affairs.....	297	850	327	67	249	295	214	38	48	355	113	31
Social sciences.....	213	1,259	412	161	167	477	288	106	48	792	124	55
Theater and performing arts.....	709	1,147	381	85	571	431	225	54	138	716	135	31

<sup>1</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1997.)

**Table 231.—First-professional degrees conferred in dentistry, medicine, and law, by sex: 1949-50 to 1987-88**

Year	Dentistry (D.D.S. or D.M.D.)				Medicine (M.D.)				Law (LL.B. or J.D.)			
	Number of institutions conferring degrees	Degrees conferred			Number of institutions conferring degrees	Degrees conferred			Number of institutions conferring degrees	Degrees conferred		
		Total	Men	Women		Total	Men	Women		Total	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13
1949-50.....	40	2,579	2,561	18	72	5,612	5,028	584	(1)	(1)	(1)	(1)
1951-52.....	41	2,918	2,895	23	72	6,201	5,671	330	(1)	(1)	(1)	(1)
1953-54.....	42	3,102	3,083	39	73	6,712	6,377	335	(1)	(1)	(1)	(1)
1955-56.....	42	3,009	2,975	34	73	6,610	6,464	346	131	8,262	7,974	288
1957-58.....	43	3,065	3,031	34	75	6,816	6,459	347	131	9,394	9,122	272
1959-60.....	45	3,247	3,221	26	79	7,032	6,645	387	134	9,240	9,010	230
1961-62.....	46	3,183	3,166	17	81	7,138	6,749	389	134	9,364	9,091	273
1963-64.....	46	3,180	3,168	12	82	7,303	6,878	425	133	10,679	10,372	307
1965-66.....	47	3,178	3,146	32	84	7,673	7,170	503	136	13,248	12,776	470
1967-68.....	48	3,422	3,375	47	85	7,944	7,318	626	138	16,454	15,805	649
1969-70.....	48	3,716	3,684	34	86	8,314	7,615	699	145	14,916	14,115	801
1970-71.....	48	3,745	3,703	42	89	8,919	8,110	809	147	17,421	16,161	1,240
1971-72.....	48	3,862	3,819	43	92	9,253	8,423	830	147	21,784	20,286	1,498
1972-73.....	51	4,047	3,992	55	97	10,307	9,388	919	152	27,205	25,037	2,168
1973-74.....	52	4,440	4,355	85	99	11,358	10,093	1,265	151	29,326	25,986	3,340
1974-75.....	52	4,773	4,627	146	104	12,447	10,616	1,629	154	29,298	24,861	4,416
1975-76.....	56	5,425	5,167	238	107	13,428	11,252	2,174	168	32,293	26,085	6,208
1976-77.....	57	5,138	4,784	374	109	13,481	10,891	2,570	169	34,104	28,447	7,657
1977-78.....	57	5,189	4,823	566	109	14,279	11,210	3,069	169	34,402	25,457	8,945
1978-79.....	58	5,434	4,744	640	109	14,788	11,381	3,406	175	35,206	25,180	10,026
1979-80.....	58	5,258	4,558	700	112	14,902	11,418	3,486	179	35,647	24,893	10,754
1980-81.....	58	5,480	4,872	788	116	15,505	11,672	3,833	176	36,331	24,593	11,738
1981-82.....	59	5,282	4,487	815	119	15,614	11,867	3,947	180	36,991	23,985	12,006
1982-83.....	59	5,585	4,631	954	118	15,484	11,350	4,134	177	36,853	23,550	13,303
1983-84.....	60	5,353	4,302	1,051	119	15,613	11,359	4,454	179	37,012	23,382	13,630
1984-85.....	59	5,339	4,233	1,106	120	16,041	11,167	4,674	181	37,491	23,070	14,421
1985-86.....	59	5,046	3,907	1,139	120	15,938	11,022	4,916	181	35,844	21,874	13,970
1986-87.....	58	4,741	3,603	1,138	122	15,620	10,566	5,054	180	36,172	21,643	14,529
1987-88 <sup>1</sup> .....	58	4,351	3,216	1,135	120	15,091	10,107	4,984	180	35,469	21,124	14,345

<sup>1</sup> Data prior to 1955-56 are not shown because they lack comparability with the figures for subsequent years.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degree and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

Education Data System (IPEDS), "Completions" surveys. (This table was prepared March 1990.)

**Table 232.—First-professional degrees<sup>1</sup> conferred by institutions of higher education, by sex of student, control of institution, and field of study: 1981-82 to 1987-88**

Control of institution and field of study	1981-82	1982-83	1983-84	1984-85			1985-86			1986-87			1987-88 <sup>2</sup>		
	Total	Total	Total	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Total, all institutions</b> .....	<b>72,032</b>	<b>73,136</b>	<b>74,407</b>	<b>75,063</b>	<b>50,455</b>	<b>24,608</b>	<b>73,910</b>	<b>49,261</b>	<b>24,649</b>	<b>72,750</b>	<b>47,460</b>	<b>26,290</b>	<b>70,415</b>	<b>45,288</b>	<b>25,127</b>
Dentistry (D.D.S. or D.M.D.).....	5,282	5,585	5,353	5,339	4,233	1,106	5,046	3,907	1,139	4,741	3,603	1,138	4,351	3,216	1,135
Medicine (M.D.).....	15,814	15,484	15,813	16,041	11,167	4,874	15,938	11,022	4,916	15,620	10,566	5,054	15,091	10,107	4,984
Optometry (O.D.).....	1,110	1,116	1,088	1,115	812	303	1,029	744	285	1,082	607	385	1,023	672	351
Osteopathic medicine (D.O.).....	1,047	1,319	1,515	1,489	1,136	353	1,547	1,159	388	1,618	1,208	412	1,544	1,123	421
Pharmacy (D.Pharm.).....	625	705	709	861	430	431	903	432	471	861	351	510	951	383	568
Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.).....	598	631	607	582	464	118	612	488	124	590	468	122	645	495	150
Veterinary medicine (D.V.M.).....	2,038	2,060	2,269	2,178	1,135	1,043	2,270	1,191	1,079	2,230	1,150	1,080	2,235	1,117	1,118
Chiropractic (D.C. or D.C.M.).....	2,626	2,889	3,105	2,961	2,072	589	3,395	2,554	841	2,855	1,982	673	2,632	1,963	669
Law, general (LL.B. or J.D.).....	35,991	36,853	37,012	37,491	23,070	14,421	35,844	21,874	13,970	36,172	21,643	14,529	35,469	21,124	14,345
Theological professions, general (B.D., M.Div., M.H.L.).....	6,901	6,494	6,878	7,221	5,886	1,335	7,283	5,865	1,418	7,181	5,794	1,387	6,474	5,088	1,386
Other.....	—	—	60	85	50	35	43	25	18	—	—	—	—	—	—
<b>Total, public institutions</b> .....	<b>29,811</b>	<b>29,757</b>	<b>29,586</b>	<b>30,152</b>	<b>19,895</b>	<b>10,257</b>	<b>29,568</b>	<b>19,119</b>	<b>10,449</b>	<b>29,346</b>	<b>18,610</b>	<b>10,736</b>	<b>28,799</b>	<b>18,040</b>	<b>10,759</b>
Dentistry (D.D.S. or D.M.D.).....	3,154	3,438	3,174	3,051	2,414	637	2,827	2,170	657	2,655	2,004	651	2,422	1,774	648
Medicine (M.D.).....	9,708	9,589	9,674	10,071	7,126	2,945	9,991	6,908	3,083	9,711	6,639	3,072	9,306	6,268	3,040
Optometry (O.D.).....	430	427	384	456	306	150	441	302	139	454	272	182	429	285	144
Osteopathic medicine (D.O.).....	364	386	537	455	322	133	486	355	131	480	344	136	434	304	130
Pharmacy (D.Pharm.).....	328	366	356	416	198	218	473	219	254	475	196	279	604	234	370
Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.).....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Veterinary medicine (D.V.M.).....	1,889	1,828	2,060	1,963	1,037	926	1,931	1,008	923	2,003	1,056	947	2,014	1,018	996
Chiropractic (D.C. or D.C.M.).....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Law, general (LL.B. or J.D.).....	13,740	13,743	13,380	13,695	8,463	5,232	13,419	8,157	5,262	13,568	8,099	5,469	13,590	8,159	5,431
Theological professions, general (B.D., M.Div., M.H.L.).....	—	—	—	2	1	1	—	—	—	—	—	—	—	—	—
Other.....	—	—	21	43	28	15	—	—	—	—	—	—	—	—	—
<b>Total, private institutions</b> .....	<b>42,421</b>	<b>43,379</b>	<b>44,821</b>	<b>44,911</b>	<b>30,560</b>	<b>14,351</b>	<b>44,342</b>	<b>30,142</b>	<b>14,210</b>	<b>43,404</b>	<b>28,850</b>	<b>14,554</b>	<b>41,616</b>	<b>27,248</b>	<b>14,368</b>
Dentistry (D.D.S. or D.M.D.).....	2,128	2,147	2,179	2,288	1,819	469	2,219	1,737	482	2,086	1,599	487	1,929	1,442	407
Medicine (M.D.).....	6,108	5,915	6,139	5,970	4,041	1,929	5,947	4,114	1,833	5,909	3,927	1,982	5,785	3,641	1,944
Optometry (O.D.).....	680	689	702	659	506	153	588	442	146	628	425	203	594	387	207
Osteopathic medicine (D.O.).....	663	933	978	1,034	814	220	1,061	804	257	1,138	862	276	1,110	819	291
Pharmacy (D.Pharm.).....	297	339	353	433	232	213	430	213	217	386	155	231	347	149	198
Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.).....	598	631	607	582	464	118	612	488	124	590	468	122	645	495	150
Veterinary medicine (D.V.M.).....	149	232	209	215	98	117	339	183	156	227	94	133	221	99	122
Chiropractic (D.C. or D.C.M.).....	2,626	2,889	3,105	2,661	2,072	589	3,395	2,554	841	2,855	1,982	673	2,632	1,963	669
Law, general (LL.B. or J.D.).....	22,251	23,110	23,832	23,796	14,607	9,189	22,425	13,717	8,708	22,604	13,544	9,060	21,879	12,965	8,914
Theological professions, general (B.D., M.Div., M.H.L.).....	6,901	6,494	6,878	7,219	5,885	1,334	7,283	5,865	1,418	7,181	5,794	1,387	6,474	5,088	1,386
Other.....	—	—	39	42	22	20	43	25	18	—	—	—	—	—	—

<sup>1</sup> Includes degrees which require at least 6 years of college work for completion (including at least 2 years of pre-professional training).

<sup>2</sup> Preliminary data.

—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degree and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 233.—Associate degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
<b>All fields, total</b> <sup>1</sup> .....	<b>436,308</b>	<b>361,819</b>	<b>35,466</b>	<b>19,345</b>	<b>11,794</b>	<b>3,196</b>	<b>4,898</b>
Men .....	190,841	158,128	13,056	8,764	6,172	1,263	2,560
Women.....	245,467	203,693	21,510	10,581	5,022	1,933	2,128
<b>Agriculture and natural resources, total</b> .....	<b>5,458</b>	<b>5,149</b>	<b>62</b>	<b>125</b>	<b>27</b>	<b>51</b>	<b>44</b>
Men .....	3,691	3,492	46	61	20	36	36
Women.....	1,767	1,657	16	64	7	15	6
<b>Architecture and environmental design, total</b> .....	<b>1,665</b>	<b>1,448</b>	<b>58</b>	<b>73</b>	<b>54</b>	<b>4</b>	<b>30</b>
Men .....	229	169	10	23	19	1	7
Women.....	1,436	1,279	46	50	35	3	23
<b>Area and ethnic studies, total</b> .....	<b>14</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>0</b>
Men .....	6	2	0	1	0	3	0
Women.....	8	1	3	1	0	3	0
<b>Business and management, total</b> .....	<b>115,231</b>	<b>93,990</b>	<b>11,699</b>	<b>4,694</b>	<b>2,853</b>	<b>811</b>	<b>1,184</b>
Men .....	36,924	30,367	3,479	1,376	997	203	502
Women.....	78,307	63,623	8,220	3,318	1,856	608	682
<b>Communications, total</b> .....	<b>3,541</b>	<b>2,972</b>	<b>329</b>	<b>124</b>	<b>41</b>	<b>22</b>	<b>53</b>
Men .....	2,065	1,750	190	64	24	9	26
Women.....	1,476	1,222	139	60	17	13	25
<b>Computer and information sciences, total</b> .....	<b>9,101</b>	<b>7,110</b>	<b>954</b>	<b>415</b>	<b>404</b>	<b>47</b>	<b>171</b>
Men .....	4,791	3,855	415	207	199	20	95
Women.....	4,310	3,255	539	208	205	27	76
<b>Education, total</b> .....	<b>7,333</b>	<b>5,942</b>	<b>639</b>	<b>414</b>	<b>130</b>	<b>134</b>	<b>74</b>
Men .....	2,113	1,654	222	124	57	33	23
Women.....	5,220	4,288	417	290	73	101	51
<b>Engineering, total</b> .....	<b>4,539</b>	<b>3,400</b>	<b>261</b>	<b>337</b>	<b>387</b>	<b>28</b>	<b>126</b>
Men .....	4,061	3,060	225	307	332	22	115
Women.....	478	340	36	30	55	6	11
<b>Engineering technologies, total</b> .....	<b>57,973</b>	<b>47,936</b>	<b>4,019</b>	<b>2,445</b>	<b>2,592</b>	<b>332</b>	<b>649</b>
Men .....	52,860	43,950	3,526	2,247	2,255	298	584
Women.....	5,113	3,986	493	198	337	34	65
<b>Foreign languages, total</b> .....	<b>421</b>	<b>353</b>	<b>14</b>	<b>22</b>	<b>13</b>	<b>11</b>	<b>8</b>
Men .....	231	203	9	5	5	6	3
Women.....	190	150	5	17	8	5	5
<b>Health professions, total</b> .....	<b>62,547</b>	<b>53,876</b>	<b>4,876</b>	<b>2,046</b>	<b>1,028</b>	<b>403</b>	<b>316</b>
Men .....	7,214	5,945	599	374	173	51	72
Women.....	55,333	47,931	4,279	1,672	855	352	244
<b>Home economics, total</b> .....	<b>9,328</b>	<b>7,618</b>	<b>969</b>	<b>396</b>	<b>207</b>	<b>54</b>	<b>84</b>
Men .....	2,738	2,461	131	44	66	17	19
Women.....	6,590	5,157	838	352	141	37	65
<b>Law, total</b> .....	<b>2,498</b>	<b>2,179</b>	<b>170</b>	<b>94</b>	<b>40</b>	<b>11</b>	<b>4</b>
Men .....	267	216	44	19	3	5	0
Women.....	2,211	1,963	126	75	37	6	4
<b>Letters, total</b> .....	<b>508</b>	<b>390</b>	<b>35</b>	<b>29</b>	<b>33</b>	<b>6</b>	<b>15</b>
Men .....	158	115	14	8	13	3	5
Women.....	350	275	21	21	20	3	10
<b>Liberal/general studies, total</b> .....	<b>108,097</b>	<b>89,365</b>	<b>7,885</b>	<b>5,838</b>	<b>2,718</b>	<b>813</b>	<b>1,478</b>
Men .....	48,337	38,103	3,250	2,546	1,283	351	824
Women.....	61,760	51,262	4,635	3,292	1,455	462	654
<b>Library and archival science, total</b> .....	<b>117</b>	<b>104</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>1</b>
Men .....	19	14	1	2	1	0	1
Women.....	98	90	4	2	2	0	0
<b>Life sciences, total</b> .....	<b>892</b>	<b>617</b>	<b>105</b>	<b>54</b>	<b>62</b>	<b>18</b>	<b>36</b>
Men .....	397	268	21	30	25	5	28
Women.....	495	329	84	24	37	13	8
<b>Mathematics, total</b> .....	<b>666</b>	<b>499</b>	<b>39</b>	<b>40</b>	<b>72</b>	<b>4</b>	<b>12</b>
Men .....	418	313	27	22	46	2	8
Women.....	248	186	12	18	26	2	4

**Table 233.—Associate degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87—Continued**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
Military sciences, total .....	50	39	9	1	0	1	0
Men .....	48	37	9	1	0	1	0
Women .....	2	2	0	0	0	0	0
Multi/Interdisciplinary studies, total .....	9,794	8,800	399	239	273	33	50
Men .....	4,583	4,057	181	124	154	13	34
Women .....	5,231	4,743	218	115	119	20	16
Parks and recreation, total .....	551	478	38	21	8	0	6
Men .....	278	227	29	12	5	0	5
Women .....	273	251	9	9	3	0	1
Philosophy and religion, total .....	100	90	4	3	1	2	0
Men .....	64	57	2	3	1	1	0
Women .....	33	33	2	0	0	1	0
Physical sciences, total .....	2,061	1,767	104	78	67	8	39
Men .....	1,153	1,080	53	51	36	3	30
Women .....	808	687	51	27	31	3	9
Protective services, total .....	11,910	9,739	1,132	788	134	81	36
Men .....	6,711	7,290	661	579	109	46	26
Women .....	3,199	2,449	471	209	25	35	10
Psychology, total .....	1,014	825	77	67	20	17	8
Men .....	292	233	29	16	6	6	2
Women .....	722	592	48	51	14	11	6
Public affairs, total .....	3,560	2,774	459	141	69	63	54
Men .....	1,548	1,277	129	69	19	14	40
Women .....	2,012	1,497	330	72	50	49	14
Social sciences, total .....	2,584	1,853	304	256	95	52	24
Men .....	1,095	792	155	80	37	18	13
Women .....	1,489	1,061	149	176	58	34	11
Theology, total .....	594	527	34	18	3	1	11
Men .....	355	308	30	11	1	0	5
Women .....	239	219	4	7	2	1	6
Visual and performing arts, total .....	14,161	11,976	784	581	460	185	175
Men .....	8,095	6,811	469	358	306	96	55
Women .....	6,066	5,165	315	223	154	89	120

<sup>1</sup> This tabulation excludes 683 men and 146 women whose racial/ethnic group could not be imputed. Because of imputation methods, field of study totals by race/ethnicity may differ slightly from field of study by sex.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 234.—Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1986-87**

Year and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8
Number of degrees conferred							
<b>1976-77</b>							
Total <sup>1</sup> .....	917,900	807,688	58,638	18,743	13,793	3,328	15,714
Men.....	494,424	438,181	25,147	10,318	7,638	1,804	11,358
Women.....	423,476	369,527	33,489	8,425	6,155	1,522	4,358
<b>1978-79</b>							
Total <sup>2</sup> .....	919,540	802,542	60,246	20,098	15,407	3,410	17,839
Men.....	476,065	418,215	24,659	10,418	8,281	1,736	12,776
Women.....	443,475	384,327	35,587	9,678	7,146	1,674	5,063
<b>1980-81</b>							
Total <sup>3</sup> .....	934,800	807,319	60,873	21,832	18,784	3,593	22,589
Men.....	489,825	406,179	24,511	10,810	10,107	1,700	18,324
Women.....	465,175	401,148	36,182	11,022	8,687	1,893	6,265
<b>1984-85</b>							
Total <sup>4</sup> .....	968,311	826,106	57,473	25,874	25,395	4,246	29,217
Men.....	476,148	405,085	23,018	12,402	13,554	1,998	20,091
Women.....	492,163	421,021	34,455	13,472	11,841	2,248	9,126
<b>1986-87</b>							
Total <sup>5</sup> .....	991,260	841,820	56,555	26,990	32,818	3,971	29,306
Men.....	480,780	406,751	22,499	12,884	17,249	1,819	19,598
Women.....	510,480	435,069	34,056	14,126	15,369	2,152	9,708
Percentage distribution of degrees conferred							
<b>1976-77</b>							
Total <sup>1</sup> .....	100.0	88.0	6.4	2.0	1.5	0.4	1.7
Men.....	100.0	88.6	5.1	2.1	1.5	0.4	2.3
Women.....	100.0	87.9	7.9	2.0	1.5	0.4	1.0
<b>1978-79</b>							
Total <sup>2</sup> .....	100.0	87.3	6.6	2.2	1.7	0.4	1.9
Men.....	100.0	87.8	5.2	2.2	1.7	0.4	2.7
Women.....	100.0	86.7	8.0	2.2	1.8	0.4	1.1
<b>1980-81</b>							
Total <sup>3</sup> .....	100.0	86.4	6.5	2.3	2.0	0.4	2.4
Men.....	100.0	86.5	5.2	2.3	2.2	0.4	3.5
Women.....	100.0	86.2	7.8	2.4	1.9	0.4	1.3
<b>1984-85</b>							
Total <sup>4</sup> .....	100.0	85.9	5.9	2.7	2.6	0.4	3.0
Men.....	100.0	85.1	4.8	2.8	2.8	0.4	4.2
Women.....	100.0	85.5	7.0	2.7	2.4	0.5	1.9
<b>1986-87</b>							
Total <sup>5</sup> .....	100.0	84.9	5.7	2.7	3.3	0.4	3.0
Men.....	100.0	84.6	4.7	2.7	3.6	0.4	4.1
Women.....	100.0	85.2	6.7	2.8	3.0	0.4	1.9

<sup>1</sup> Excludes 1,121 men and 526 women whose racial/ethnic group was not available.

<sup>2</sup> Excludes 1,279 men and 571 women whose racial/ethnic group was not available.

<sup>3</sup> Excludes 258 men and 82 women whose racial/ethnic group was not available.

<sup>4</sup> Excludes 6,380 men and 4,786 women whose racial/ethnic group was not available.

<sup>5</sup> Excludes 74 men and 5 women whose racial/ethnic group was not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 235.—Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
<b>All fields, total</b> <sup>1</sup> .....	<b>991,260</b>	<b>841,820</b>	<b>56,555</b>	<b>26,990</b>	<b>32,616</b>	<b>3,971</b>	<b>29,306</b>
Men .....	480,780	406,751	22,499	12,864	17,249	1,819	19,598
Women.....	510,480	435,069	34,056	14,128	15,369	2,152	9,708
<b>Agriculture and natural resources, total</b> .....	<b>14,991</b>	<b>13,657</b>	<b>299</b>	<b>231</b>	<b>293</b>	<b>58</b>	<b>463</b>
Men .....	10,314	9,406	182	152	161	38	375
Women.....	4,677	4,251	117	79	122	20	88
<b>Architecture and environmental design, total</b> .....	<b>8,950</b>	<b>7,271</b>	<b>277</b>	<b>336</b>	<b>385</b>	<b>26</b>	<b>673</b>
Men .....	5,817	4,501	198	233	208	15	462
Women.....	3,333	2,770	79	105	157	11	211
<b>Area and ethnic studies, total</b> .....	<b>3,307</b>	<b>2,649</b>	<b>201</b>	<b>148</b>	<b>214</b>	<b>29</b>	<b>68</b>
Men .....	1,249	997	85	58	77	9	23
Women.....	2,058	1,652	118	88	137	20	45
<b>Business and management, total</b> .....	<b>241,100</b>	<b>205,118</b>	<b>14,686</b>	<b>8,397</b>	<b>6,002</b>	<b>783</b>	<b>8,114</b>
Men .....	128,920	111,091	8,051	3,251	2,873	400	5,254
Women.....	112,180	94,027	6,635	3,148	3,129	383	2,860
<b>Communications, total</b> .....	<b>45,393</b>	<b>39,493</b>	<b>3,228</b>	<b>1,011</b>	<b>919</b>	<b>132</b>	<b>810</b>
Men .....	18,153	15,941	1,125	402	356	58	271
Women.....	27,240	23,552	2,103	609	563	74	339
<b>Computer and information sciences, total</b> .....	<b>39,590</b>	<b>30,251</b>	<b>2,928</b>	<b>1,077</b>	<b>2,546</b>	<b>116</b>	<b>2,872</b>
Men .....	25,866	20,480	1,329	815	1,542	63	1,837
Women.....	13,724	9,771	1,599	482	1,004	53	835
<b>Education, total</b> .....	<b>87,083</b>	<b>78,216</b>	<b>4,253</b>	<b>2,223</b>	<b>1,092</b>	<b>452</b>	<b>847</b>
Men .....	20,759	18,050	1,348	518	312	124	407
Women.....	66,324	60,166	2,905	1,705	780	328	440
<b>Engineering, total</b> .....	<b>73,839</b>	<b>57,563</b>	<b>2,356</b>	<b>2,007</b>	<b>5,895</b>	<b>214</b>	<b>8,004</b>
Men .....	62,568	48,977	1,638	1,680	4,813	184	5,478
Women.....	11,271	8,586	718	327	1,082	30	526
<b>Engineering technologies, total</b> .....	<b>19,258</b>	<b>15,725</b>	<b>1,145</b>	<b>548</b>	<b>802</b>	<b>75</b>	<b>965</b>
Men .....	17,781	14,631	942	498	734	63	913
Women.....	1,477	1,094	203	48	68	12	52
<b>Foreign languages, total</b> .....	<b>10,197</b>	<b>8,421</b>	<b>321</b>	<b>808</b>	<b>341</b>	<b>24</b>	<b>282</b>
Men .....	2,792	2,287	87	209	140	10	59
Women.....	7,405	6,134	234	599	201	14	223
<b>Health professions, total</b> .....	<b>63,213</b>	<b>55,410</b>	<b>3,822</b>	<b>1,332</b>	<b>1,577</b>	<b>274</b>	<b>798</b>
Men .....	9,177	7,790	481	255	337	48	268
Women.....	54,036	47,620	3,341	1,077	1,240	228	530
<b>Home economics, total</b> .....	<b>14,940</b>	<b>13,072</b>	<b>879</b>	<b>232</b>	<b>423</b>	<b>119</b>	<b>215</b>
Men .....	1,115	909	98	18	48	18	26
Women.....	13,825	12,163	781	214	377	101	189
<b>Law, total</b> .....	<b>1,177</b>	<b>1,074</b>	<b>52</b>	<b>25</b>	<b>22</b>	<b>2</b>	<b>2</b>
Men .....	389	334	14	11	9	1	0
Women.....	808	740	38	14	13	1	2
<b>Letters, total</b> .....	<b>37,132</b>	<b>33,499</b>	<b>1,589</b>	<b>736</b>	<b>780</b>	<b>99</b>	<b>429</b>
Men .....	12,680	11,543	485	242	248	40	144
Women.....	24,452	21,956	1,124	494	534	59	285
<b>Liberal/general studies, total</b> .....	<b>21,366</b>	<b>18,066</b>	<b>1,820</b>	<b>893</b>	<b>356</b>	<b>133</b>	<b>298</b>
Men .....	9,315	7,993	618	305	160	50	189
Women.....	12,051	10,073	1,002	588	196	83	109
<b>Library and archival science, total</b> .....	<b>140</b>	<b>122</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>8</b>
Men .....	20	16	0	0	0	0	4
Women.....	120	106	9	3	0	0	2
<b>Life sciences, total</b> .....	<b>38,120</b>	<b>31,279</b>	<b>1,932</b>	<b>1,259</b>	<b>2,820</b>	<b>147</b>	<b>883</b>
Men .....	19,856	18,393	740	857	1,343	79	444
Women.....	18,464	14,886	1,192	602	1,277	68	439
<b>Mathematics, total</b> .....	<b>16,444</b>	<b>13,556</b>	<b>846</b>	<b>269</b>	<b>1,050</b>	<b>53</b>	<b>670</b>
Men .....	8,792	7,218	402	170	540	33	431
Women.....	7,652	6,340	444	99	510	20	239

**Table 235.—Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87—Continued**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
Military sciences, total .....	384	360	1	13	1	1	8
Men .....	358	338	1	12	1	1	7
Women.....	26	24	0	1	0	0	1
Multi/interdisciplinary studies, total.....	18,399	13,754	1,074	527	825	101	318
Men .....	7,598	8,451	450	212	284	46	155
Women.....	8,801	7,303	824	315	341	55	163
Parks and recreation, total.....	4,106	3,735	188	60	71	19	35
Men .....	1,638	1,449	105	24	32	9	17
Women.....	2,470	2,286	81	38	39	10	18
Philosophy and religion, total.....	5,984	5,324	233	142	163	11	111
Men .....	3,845	3,393	160	101	106	8	77
Women.....	2,139	1,931	73	41	57	3	34
Physical sciences, total .....	20,071	17,159	844	423	918	74	653
Men .....	14,372	12,505	445	287	815	48	474
Women.....	5,899	4,654	399	136	303	28	179
Protective services, total .....	12,930	10,177	1,330	534	140	53	98
Men .....	7,974	8,521	919	333	98	28	75
Women.....	4,956	3,858	1,011	201	42	25	21
Psychology, total .....	42,835	37,014	2,535	1,401	1,188	188	511
Men .....	13,328	11,540	883	459	417	85	184
Women.....	29,507	25,474	1,852	942	771	121	347
Public affairs, total.....	14,178	11,289	1,822	542	197	127	201
Men .....	4,541	3,883	455	188	86	41	130
Women.....	9,637	7,608	1,367	378	131	86	71
Social sciences, total.....	98,172	81,659	5,942	2,883	2,942	484	2,282
Men .....	53,870	48,493	2,878	1,564	1,448	249	1,440
Women.....	42,302	35,166	3,268	1,319	1,494	215	842
Theology, total.....	5,728	5,238	177	81	92	15	127
Men .....	4,330	3,950	142	63	87	13	95
Women.....	1,398	1,288	35	18	25	2	32
Visual and performing arts, total .....	36,233	31,871	1,388	851	1,194	184	965
Men .....	13,785	11,875	660	369	418	82	381
Women.....	22,448	19,796	708	482	778	102	584

<sup>1</sup> This tabulation excludes 74 men and 5 women whose racial/ethnic group could not be imputed. Because of imputation methods, field of study totals by race/ethnicity may differ slightly from field of study totals by sex of student.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 236.—Master's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1986-87**

Year and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8
<b>Number of degrees conferred</b>							
<b>1976-77</b>							
Total <sup>1</sup> .....	316,802	286,081	21,037	6,071	5,122	967	17,344
Men.....	167,396	139,210	7,781	3,268	3,123	521	13,493
Women.....	149,206	126,851	13,256	2,803	1,999	446	3,851
<b>1978-79</b>							
Total <sup>2</sup> .....	300,255	249,360	19,418	5,555	5,496	999	19,427
Men.....	152,637	124,058	7,070	2,786	3,325	495	14,903
Women.....	147,618	125,302	12,348	2,769	2,171	504	4,524
<b>1980-81</b>							
Total <sup>3</sup> .....	294,183	241,216	17,133	6,461	6,282	1,034	22,057
Men.....	145,666	115,562	6,158	3,085	3,773	501	16,587
Women.....	148,517	125,654	10,975	3,376	2,509	533	5,470
<b>1984-85</b>							
Total <sup>4</sup> .....	280,421	223,628	13,939	6,864	7,782	1,256	26,952
Men.....	139,417	106,059	5,200	3,059	4,842	583	19,674
Women.....	141,004	117,569	8,739	3,805	2,940	673	7,278
<b>1986-87</b>							
Total <sup>5</sup> .....	289,341	228,870	13,867	7,044	8,558	1,104	29,898
Men.....	141,264	105,573	5,151	3,330	5,238	517	21,455
Women.....	148,077	123,297	8,716	3,714	3,320	587	8,443
<b>Percentage distribution of degrees conferred</b>							
<b>1976-77</b>							
Total <sup>1</sup> .....	100.0	84.0	6.6	1.9	1.6	0.3	5.5
Men.....	100.0	83.2	4.6	2.0	1.9	0.3	8.1
Women.....	100.0	85.0	8.9	1.9	1.3	0.3	2.6
<b>1978-79</b>							
Total <sup>2</sup> .....	100.0	83.0	6.5	1.9	1.8	0.3	6.5
Men.....	100.0	81.3	4.6	1.8	2.2	0.3	9.8
Women.....	100.0	84.9	8.4	1.9	1.5	0.3	3.1
<b>1980-81</b>							
Total <sup>3</sup> .....	100.0	82.0	5.8	2.2	2.1	0.4	7.5
Men.....	100.0	79.3	4.2	2.1	2.6	0.3	11.4
Women.....	100.0	84.6	7.4	2.3	1.7	0.4	3.7
<b>1984-85</b>							
Total <sup>4</sup> .....	100.0	79.7	5.0	2.4	2.8	0.4	9.6
Men.....	100.0	76.1	3.7	2.2	3.5	0.4	14.1
Women.....	100.0	83.4	6.2	2.7	2.1	0.5	5.2
<b>1986-87</b>							
Total <sup>5</sup> .....	100.0	79.1	4.8	2.4	3.0	0.4	10.3
Men.....	100.0	74.7	3.6	2.4	3.7	0.4	15.2
Women.....	100.0	83.3	5.9	2.5	2.2	0.4	5.7

<sup>1</sup> Excludes 387 men and 175 women whose racial/ethnic group was not available.  
<sup>2</sup> Excludes 733 men and 91 women whose racial/ethnic group was not available.  
<sup>3</sup> Excludes 1,377 men and 179 women whose racial/ethnic group was not available.  
<sup>4</sup> Excludes 3,973 men and 1,867 women whose racial/ethnic group was not available.  
<sup>5</sup> Excludes 99 men and 117 women whose racial/ethnic group was not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 237.—Master's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
<b>All fields, total</b> .....	<b>289,341</b>	<b>228,870</b>	<b>13,867</b>	<b>7,044</b>	<b>8,558</b>	<b>1,104</b>	<b>29,898</b>
Men .....	141,264	105,573	5,151	3,330	5,238	517	21,455
Women .....	148,077	123,297	8,718	3,714	3,320	587	8,443
<b>Agriculture and natural resources, total</b> .....	<b>3,521</b>	<b>2,538</b>	<b>79</b>	<b>44</b>	<b>58</b>	<b>8</b>	<b>798</b>
Men .....	2,460	1,680	63	30	36	4	647
Women .....	1,061	856	16	14	22	2	151
<b>Architecture and environmental design, total</b> .....	<b>3,154</b>	<b>2,250</b>	<b>77</b>	<b>93</b>	<b>92</b>	<b>8</b>	<b>644</b>
Men .....	2,086	1,419	48	68	57	7	487
Women .....	1,078	831	29	25	35	1	157
<b>Area and ethnic studies, total</b> .....	<b>853</b>	<b>585</b>	<b>39</b>	<b>53</b>	<b>38</b>	<b>5</b>	<b>133</b>
Men .....	457	310	10	30	25	4	78
Women .....	396	275	29	23	13	1	55
<b>Business and management, total</b> .....	<b>67,504</b>	<b>53,582</b>	<b>2,810</b>	<b>1,437</b>	<b>2,304</b>	<b>170</b>	<b>7,201</b>
Men .....	45,219	35,505	1,637	954	1,531	112	5,480
Women .....	22,285	18,077	1,173	483	773	58	1,721
<b>Communications, total</b> .....	<b>3,892</b>	<b>3,072</b>	<b>225</b>	<b>70</b>	<b>79</b>	<b>12</b>	<b>434</b>
Men .....	1,589	1,233	83	31	29	5	208
Women .....	2,303	1,839	142	39	50	7	226
<b>Computer and information sciences, total</b> .....	<b>8,481</b>	<b>5,053</b>	<b>222</b>	<b>132</b>	<b>834</b>	<b>23</b>	<b>2,217</b>
Men .....	5,985	3,475	138	98	561	20	1,895
Women .....	2,496	1,578	86	34	273	3	522
<b>Education, total</b> .....	<b>75,473</b>	<b>64,492</b>	<b>5,250</b>	<b>2,232</b>	<b>724</b>	<b>378</b>	<b>2,399</b>
Men .....	19,635	16,431	1,127	601	232	120	1,124
Women .....	55,838	48,061	4,123	1,631	492	256	1,275
<b>Engineering, total</b> .....	<b>22,046</b>	<b>13,343</b>	<b>419</b>	<b>521</b>	<b>1,715</b>	<b>39</b>	<b>8,008</b>
Men .....	19,279	11,399	328	450	1,513	33	5,556
Women .....	2,787	1,944	91	71	202	8	453
<b>Engineering technologies, total</b> .....	<b>612</b>	<b>405</b>	<b>30</b>	<b>8</b>	<b>42</b>	<b>25</b>	<b>102</b>
Men .....	529	343	23	6	39	25	93
Women .....	89	62	7	2	3	0	9
<b>Foreign languages, total</b> .....	<b>1,745</b>	<b>1,179</b>	<b>29</b>	<b>162</b>	<b>36</b>	<b>4</b>	<b>335</b>
Men .....	518	351	9	42	8	3	103
Women .....	1,229	828	20	120	28	1	232
<b>Health professions, total</b> .....	<b>18,421</b>	<b>15,724</b>	<b>856</b>	<b>378</b>	<b>489</b>	<b>62</b>	<b>912</b>
Men .....	3,885	3,048	139	72	152	12	482
Women .....	14,538	12,878	717	306	337	50	450
<b>Home economics, total</b> .....	<b>2,089</b>	<b>1,731</b>	<b>90</b>	<b>25</b>	<b>49</b>	<b>17</b>	<b>157</b>
Men .....	258	206	12	3	5	3	27
Women .....	1,813	1,525	78	22	44	14	130
<b>Law, total</b> .....	<b>1,944</b>	<b>1,100</b>	<b>44</b>	<b>50</b>	<b>78</b>	<b>4</b>	<b>668</b>
Men .....	1,423	809	26	30	53	3	502
Women .....	521	291	18	20	25	1	166
<b>Letters, total</b> .....	<b>8,125</b>	<b>5,149</b>	<b>141</b>	<b>89</b>	<b>130</b>	<b>20</b>	<b>596</b>
Men .....	2,142	1,774	38	37	43	9	241
Women .....	3,983	3,375	103	52	87	11	355
<b>Liberal/general studies, total</b> .....	<b>1,129</b>	<b>1,038</b>	<b>19</b>	<b>10</b>	<b>12</b>	<b>8</b>	<b>42</b>
Men .....	459	428	3	1	5	1	21
Women .....	670	610	18	9	7	7	21
<b>Library and archival science, total</b> .....	<b>3,814</b>	<b>3,318</b>	<b>146</b>	<b>48</b>	<b>93</b>	<b>9</b>	<b>200</b>
Men .....	796	879	25	14	21	1	58
Women .....	3,018	2,639	121	34	72	8	144
<b>Life sciences, total</b> .....	<b>4,950</b>	<b>3,944</b>	<b>175</b>	<b>88</b>	<b>198</b>	<b>11</b>	<b>538</b>
Men .....	2,538	2,038	84	40	89	4	283
Women .....	2,412	1,906	91	48	109	7	253
<b>Mathematics, total</b> .....	<b>3,319</b>	<b>2,113</b>	<b>78</b>	<b>55</b>	<b>193</b>	<b>3</b>	<b>879</b>
Men .....	2,022	1,247	47	39	118	1	572
Women .....	1,297	866	29	18	77	2	307

**Table 237.—Master's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87—Continued**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
Military sciences, total .....	119	101	8	5	0	0	5
Men .....	118	101	7	5	0	0	5
Women .....	1	0	1	0	0	0	0
Multi/interdisciplinary studies, total .....	3,035	2,585	114	55	66	31	184
Men .....	1,782	1,491	60	26	34	21	130
Women .....	1,273	1,094	54	29	32	10	54
Parks and recreation, total .....	475	414	25	3	14	1	18
Men .....	212	183	7	2	7	1	12
Women .....	263	231	18	1	7	0	6
Philosophy and religion, total .....	1,109	894	41	29	29	3	113
Men .....	898	541	30	20	25	2	80
Women .....	411	353	11	9	4	1	33
Physical sciences, total .....	5,630	4,082	64	116	241	9	1,116
Men .....	4,220	3,023	48	85	174	7	883
Women .....	1,410	1,059	36	31	67	2	235
Protective services, total .....	1,019	808	140	15	10	8	38
Men .....	719	586	80	10	5	7	31
Women .....	300	222	60	5	5	1	7
Psychology, total .....	8,124	7,093	398	243	120	37	233
Men .....	2,828	2,471	123	91	35	13	95
Women .....	5,296	4,622	275	152	85	24	138
Public affairs, total .....	17,029	13,645	1,553	610	313	135	773
Men .....	6,189	4,896	517	263	146	52	515
Women .....	10,640	8,949	1,036	347	167	83	258
Social sciences, total .....	10,395	7,441	416	245	250	23	2,020
Men .....	6,293	4,316	226	154	152	17	1,428
Women .....	4,102	3,125	190	91	98	6	592
Theology, total .....	4,841	4,108	121	88	112	8	404
Men .....	3,193	2,658	86	63	70	6	310
Women .....	1,648	1,450	35	25	42	2	94
Visual and performing arts, total .....	8,503	7,105	240	142	239	47	730
Men .....	3,758	3,132	129	65	75	24	331
Women .....	4,747	3,973	111	77	164	23	399

<sup>1</sup> This tabulation excludes 99 men and 117 women whose racial/ethnic group could not be imputed. Because of imputation methods, field of study totals by race/ethnicity may differ slightly from field of study totals by sex of student.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 238.—Doctor's degrees<sup>1</sup> conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1986-87**

Year and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8
Number of degrees conferred							
<b>1976-77</b>							
Total <sup>2</sup> .....	33,126	26,651	1,253	522	658	95	3,747
Men.....	25,036	20,032	766	363	540	67	3,248
Women.....	8,090	6,619	487	139	118	28	499
<b>1978-79</b>							
Total <sup>3</sup> .....	32,675	26,138	1,268	439	611	104	3,915
Men.....	23,468	16,433	734	294	646	69	3,312
Women.....	9,187	7,705	534	145	165	35	603
<b>1980-81</b>							
Total <sup>4</sup> .....	32,839	25,908	1,265	456	677	130	4,203
Men.....	22,595	17,310	694	277	655	95	3,564
Women.....	10,244	8,598	571	179	222	35	639
<b>1984-85</b>							
Total <sup>5</sup> .....	32,307	23,834	1,154	677	1,106	119	5,317
Men.....	21,296	15,017	561	431	802	64	4,421
Women.....	11,011	8,917	593	246	304	55	896
<b>1986-87</b>							
Total <sup>6</sup> .....	34,033	24,435	1,060	750	1,097	104	6,587
Men.....	22,059	14,613	488	439	795	58	5,466
Women.....	11,974	8,622	572	311	302	46	1,121
Percentage distribution of degrees conferred							
<b>1976-77</b>							
Total <sup>2</sup> .....	100.0	81.1	3.8	1.6	2.0	0.3	11.3
Men.....	100.0	80.0	3.1	1.5	2.2	0.3	13.0
Women.....	100.0	84.3	6.0	1.7	1.5	0.3	6.2
<b>1978-79</b>							
Total <sup>3</sup> .....	100.0	80.0	3.8	1.3	2.5	0.3	12.0
Men.....	100.0	78.5	3.1	1.3	2.6	0.3	14.1
Women.....	100.0	83.9	5.8	1.6	1.8	0.4	6.6
<b>1980-81</b>							
Total <sup>4</sup> .....	100.0	78.9	3.9	1.4	2.7	0.4	12.8
Men.....	100.0	76.6	3.1	1.2	2.9	0.4	15.8
Women.....	100.0	83.9	5.6	1.7	2.2	0.3	6.2
<b>1984-85</b>							
Total <sup>5</sup> .....	100.0	74.1	3.6	2.1	3.4	0.4	16.5
Men.....	100.0	70.5	2.6	2.0	3.6	0.3	20.6
Women.....	100.0	61.0	5.4	2.2	2.8	0.5	8.1
<b>1986-87</b>							
Total <sup>6</sup> .....	100.0	71.8	3.1	2.2	3.2	0.3	19.4
Men.....	100.0	67.2	2.2	2.0	3.6	0.3	24.6
Women.....	100.0	80.4	4.8	2.6	2.5	0.4	9.4

<sup>1</sup> Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Excludes first-professional degrees.

<sup>2</sup> Excludes 106 men whose racial/ethnic group was not available.

<sup>3</sup> Excludes 53 men and 2 women whose racial/ethnic group was not available.

<sup>4</sup> Excludes 116 men and 3 women whose racial/ethnic group was not available.

<sup>5</sup> Excludes 404 men and 232 women whose racial/ethnic group was not available.

<sup>6</sup> Excludes 40 men and 47 women whose racial/ethnic group was not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 239.—Doctor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
<b>All fields, total</b> .....	<b>34,033</b>	<b>24,435</b>	<b>1,060</b>	<b>750</b>	<b>1,097</b>	<b>104</b>	<b>6,587</b>
Men .....	22,059	14,813	488	439	795	58	5,466
Women .....	11,974	9,622	572	311	302	46	1,121
<b>Agriculture and natural resources, total</b> .....	<b>1,048</b>	<b>650</b>	<b>18</b>	<b>15</b>	<b>32</b>	<b>2</b>	<b>331</b>
Men .....	871	526	13	12	28	2	290
Women .....	177	124	5	3	4	0	41
<b>Architecture and environmental design, total</b> .....	<b>92</b>	<b>45</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>39</b>
Men .....	66	28	4	0	1	0	33
Women .....	26	17	3	0	0	0	6
<b>Area and ethnic studies, total</b> .....	<b>132</b>	<b>99</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>22</b>
Men .....	73	54	2	2	1	1	13
Women .....	59	45	5	0	0	0	9
<b>Business and management, total</b> .....	<b>1,094</b>	<b>688</b>	<b>29</b>	<b>10</b>	<b>50</b>	<b>2</b>	<b>315</b>
Men .....	836	473	21	6	46	1	289
Women .....	258	215	8	4	4	1	26
<b>Communications, total</b> .....	<b>260</b>	<b>209</b>	<b>17</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>42</b>
Men .....	183	116	7	7	0	0	33
Women .....	117	93	10	4	1	0	9
<b>Computer and information sciences, total</b> .....	<b>374</b>	<b>219</b>	<b>2</b>	<b>6</b>	<b>20</b>	<b>1</b>	<b>126</b>
Men .....	322	178	1	5	16	1	121
Women .....	52	41	1	1	4	0	5
<b>Education, total</b> .....	<b>6,909</b>	<b>5,495</b>	<b>468</b>	<b>207</b>	<b>104</b>	<b>49</b>	<b>586</b>
Men .....	3,117	2,412	177	87	59	25	357
Women .....	3,792	3,083	291	120	45	24	229
<b>Engineering, total</b> .....	<b>3,807</b>	<b>1,872</b>	<b>29</b>	<b>68</b>	<b>258</b>	<b>3</b>	<b>1,777</b>
Men .....	3,546	1,502	26	65	240	3	1,710
Women .....	261	170	3	3	18	0	67
<b>Engineering technologies, total</b> .....	<b>11</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>
Men .....	9	3	1	0	0	0	5
Women .....	2	2	0	0	0	0	0
<b>Foreign languages, total</b> .....	<b>441</b>	<b>300</b>	<b>16</b>	<b>42</b>	<b>4</b>	<b>0</b>	<b>79</b>
Men .....	184	117	7	11	2	0	47
Women .....	257	183	9	31	2	0	32
<b>Health professions, total</b> .....	<b>1,213</b>	<b>932</b>	<b>33</b>	<b>17</b>	<b>40</b>	<b>3</b>	<b>188</b>
Men .....	564	406	8	10	23	1	116
Women .....	649	526	25	7	17	2	72
<b>Home economics, total</b> .....	<b>297</b>	<b>225</b>	<b>23</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>37</b>
Men .....	85	49	2	1	1	0	12
Women .....	232	176	21	5	5	0	25
<b>Law, total</b> .....	<b>120</b>	<b>71</b>	<b>3</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>27</b>
Men .....	79	42	1	12	0	0	24
Women .....	41	29	2	7	0	0	3
<b>Letters, total</b> .....	<b>1,181</b>	<b>950</b>	<b>28</b>	<b>26</b>	<b>21</b>	<b>6</b>	<b>150</b>
Men .....	515	405	6	17	5	3	79
Women .....	666	545	22	9	16	3	71
<b>Liberal/general studies, total</b> .....	<b>29</b>	<b>22</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>
Men .....	14	11	0	0	0	0	3
Women .....	15	11	2	1	0	0	1
<b>Library and archival science, total</b> .....	<b>57</b>	<b>43</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>10</b>
Men .....	19	13	0	0	2	1	3
Women .....	38	30	1	0	0	0	7
<b>Life sciences, total</b> .....	<b>3,417</b>	<b>2,624</b>	<b>53</b>	<b>59</b>	<b>146</b>	<b>5</b>	<b>527</b>
Men .....	2,223	1,703	30	36	83	4	367
Women .....	1,194	921	23	23	66	1	160
<b>Mathematics, total</b> .....	<b>723</b>	<b>349</b>	<b>9</b>	<b>9</b>	<b>37</b>	<b>1</b>	<b>318</b>
Men .....	598	285	8	7	24	1	273
Women .....	125	64	1	2	13	0	45

**Table 239.—Doctor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87—Continued**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
Military sciences, total.....	0	0	0	0	0	0	0
Men.....	0	0	0	0	0	0	0
Women.....	0	0	0	0	0	0	0
Multi/interdisciplinary studies, total.....	276	215	2	8	4	1	46
Men.....	174	127	1	5	2	0	39
Women.....	102	88	1	3	2	1	7
Parks and recreation, total.....	33	28	2	0	0	0	3
Men.....	20	17	0	0	0	0	3
Women.....	13	11	2	0	0	0	0
Philosophy and religion, total.....	420	346	7	5	9	0	53
Men.....	329	266	6	5	6	0	46
Women.....	91	80	1	0	3	0	7
Physical sciences, total.....	3,671	2,441	26	60	166	3	975
Men.....	3,038	1,985	22	43	129	3	856
Women.....	633	456	4	17	37	0	119
Protective services, total.....	19	15	0	0	3	0	1
Men.....	16	14	0	0	2	0	0
Women.....	3	1	0	0	1	0	1
Psychology, total.....	3,056	2,725	97	71	51	16	96
Men.....	1,427	1,269	35	23	22	6	52
Women.....	1,629	1,456	62	48	29	10	44
Public affairs, total.....	397	292	34	18	6	2	45
Men.....	215	146	16	16	2	2	33
Women.....	182	146	18	2	4	0	12
Social sciences, total.....	2,915	2,051	95	68	77	4	620
Men.....	2,026	1,326	57	50	59	2	530
Women.....	689	723	38	18	18	2	90
Theology, total.....	1,230	1,040	39	11	37	2	101
Men.....	1,103	931	34	11	36	2	89
Women.....	127	109	5	0	1	0	12
Visual and performing arts, total.....	791	684	12	11	18	2	64
Men.....	447	387	3	8	6	0	43
Women.....	344	297	9	3	12	2	21

<sup>1</sup>This tabulation excludes 40 men and 47 women whose racial/ethnic group could not be imputed. Because of imputation methods, field of study totals by race/ethnicity may differ slightly from field of study totals by sex of student.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 240.—First-professional degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1986-87**

Major field of study and sex of student	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/Alaskan Native	Nonresident alien
1	2	3	4	5	6	7	8
<b>All fields, total</b> .....	<b>71,617</b>	<b>62,698</b>	<b>3,420</b>	<b>2,051</b>	<b>2,270</b>	<b>304</b>	<b>984</b>
Men .....	46,522	41,149	1,835	1,303	1,420	183	632
Women.....	25,095	21,539	1,585	748	850	121	252
<b>Dentistry (D.D.S. or D.M.D.), total</b> .....	<b>4,739</b>	<b>3,858</b>	<b>262</b>	<b>169</b>	<b>319</b>	<b>13</b>	<b>120</b>
Men .....	3,602	3,006	169	120	218	11	78
Women.....	1,137	850	93	49	101	2	42
<b>Medicine (M.D.), total</b> .....	<b>15,429</b>	<b>13,137</b>	<b>786</b>	<b>484</b>	<b>805</b>	<b>66</b>	<b>151</b>
Men .....	10,431	9,003	437	319	534	36	102
Women.....	4,998	4,134	349	165	271	30	49
<b>Optometry (O.D.), total</b> .....	<b>1,082</b>	<b>943</b>	<b>18</b>	<b>29</b>	<b>74</b>	<b>4</b>	<b>14</b>
Men .....	697	625	8	20	33	3	8
Women.....	385	316	10	9	41	1	6
<b>Osteopathic medicine (D.O.), total</b> .....	<b>1,618</b>	<b>1,498</b>	<b>26</b>	<b>25</b>	<b>45</b>	<b>13</b>	<b>11</b>
Men .....	1,206	1,132	7	17	31	10	9
Women.....	412	366	19	6	14	3	2
<b>Pharmacy (D.Pharm.), total</b> .....	<b>661</b>	<b>531</b>	<b>112</b>	<b>42</b>	<b>110</b>	<b>6</b>	<b>60</b>
Men .....	351	236	37	16	27	6	29
Women.....	510	295	75	26	83	0	31
<b>Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.), total</b> .....	<b>591</b>	<b>521</b>	<b>33</b>	<b>11</b>	<b>12</b>	<b>2</b>	<b>12</b>
Men .....	468	423	18	8	6	2	9
Women.....	123	98	15	3	4	0	3
<b>Veterinary medicine (D.V.M.), total</b> .....	<b>2,230</b>	<b>2,052</b>	<b>29</b>	<b>90</b>	<b>24</b>	<b>31</b>	<b>4</b>
Men .....	1,150	1,035	12	73	11	16	3
Women.....	1,080	1,017	17	17	13	15	1
<b>Chiropractic medicine (D.C. or D.C.M.), total</b> .....	<b>2,493</b>	<b>2,298</b>	<b>26</b>	<b>39</b>	<b>30</b>	<b>4</b>	<b>96</b>
Men .....	1,864	1,723	16	26	25	3	69
Women.....	629	575	10	11	5	1	27
<b>Law, general (LL.B. or J.D.), total</b> .....	<b>36,056</b>	<b>32,242</b>	<b>1,735</b>	<b>1,054</b>	<b>694</b>	<b>162</b>	<b>179</b>
Men .....	21,561	19,528	822	610	393	84	124
Women.....	14,495	12,714	913	444	301	68	55
<b>Theological professions, general (B.D., M.Div., Rabbi), total</b> .....	<b>6,518</b>	<b>5,610</b>	<b>393</b>	<b>108</b>	<b>157</b>	<b>13</b>	<b>237</b>
Men .....	5,192	4,438	309	92	140	12	201
Women.....	1,326	1,172	84	16	17	1	36

<sup>1</sup> This tabulation excludes 938 men and 195 women whose racial/ethnic group could not be imputed. Because of imputation methods, field of study totals by race/ethnicity may differ slightly from field of study by sex.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1989.)

**Table 241.—Earned degrees in agriculture and natural resources<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71.....	12,872	12,136	536	2,457	2,313	144	1,086	1,055	31
1971-72.....	13,518	12,779	737	2,680	2,490	190	971	945	26
1972-73.....	14,756	13,661	1,095	2,807	2,588	219	1,059	1,031	28
1973-74.....	16,253	14,684	1,569	2,928	2,640	288	930	867	33
1974-75.....	17,528	15,061	2,467	3,067	2,703	364	991	958	33
1975-76.....	19,402	15,845	3,557	3,340	2,862	478	928	867	61
1976-77.....	21,487	18,690	4,777	3,724	3,177	547	993	831	62
1977-78.....	22,650	17,069	5,581	4,023	3,266	755	971	909	62
1978-79.....	23,134	18,854	6,280	3,994	3,187	807	950	877	73
1979-80.....	22,802	18,045	6,757	3,976	3,082	894	991	879	112
1980-81.....	21,886	15,154	6,732	4,003	3,061	942	1,067	940	127
1981-82.....	21,029	14,443	6,586	4,163	3,114	1,049	1,079	925	154
1982-83.....	20,909	14,085	6,824	4,254	3,129	1,125	1,149	1,004	145
1983-84.....	19,317	13,206	6,111	4,178	2,989	1,189	1,172	1,001	171
1984-85.....	18,107	12,477	5,630	3,928	2,646	1,082	1,213	1,036	177
1985-86.....	16,923	11,544	5,279	3,801	2,701	1,100	1,158	966	192
1986-87.....	14,991	10,314	4,677	3,523	2,461	1,062	1,049	871	178
1987-88 <sup>2</sup> .....	14,222	9,744	4,478	3,479	2,427	1,052	1,142	926	216

<sup>1</sup> Includes degrees in agribusiness and agricultural production, agricultural sciences, and renewable natural resources.  
<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 242.—Earned degrees in architecture and environmental design<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50.....	2,563	2,441	122	168	159	7	1	1	—
1959-60.....	1,801	1,744	57	319	305	14	17	17	—
1967-68.....	3,057	2,931	126	1,021	953	68	15	15	—
1969-70.....	4,105	3,668	217	1,427	1,260	167	35	33	2
1970-71.....	5,570	4,906	664	1,705	1,489	236	38	33	3
1971-72.....	6,440	5,667	773	1,899	1,626	273	50	43	7
1972-73.....	6,962	6,042	920	2,307	1,943	364	58	54	4
1973-74.....	7,822	6,665	1,157	2,702	2,206	494	69	65	4
1974-75.....	8,226	6,901	1,435	2,938	2,343	595	89	58	11
1975-76.....	9,146	7,396	1,750	3,215	2,545	670	82	69	13
1976-77.....	9,222	7,249	1,973	3,213	2,489	724	73	62	11
1977-78.....	9,250	7,054	2,196	3,115	2,304	811	73	57	16
1978-79.....	9,273	6,878	2,397	3,113	2,226	887	96	74	22
1979-80.....	9,132	6,596	2,536	3,139	2,245	894	79	66	13
1980-81.....	9,455	6,800	2,655	3,153	2,234	919	93	73	20
1981-82.....	9,728	6,825	2,903	3,327	2,242	1,085	80	58	22
1982-83.....	9,823	6,403	3,420	3,357	2,224	1,133	97	74	23
1983-84.....	9,166	5,895	3,291	3,223	2,197	1,026	84	62	22
1984-85.....	9,325	6,019	3,306	3,275	2,148	1,127	89	66	23
1985-86.....	9,119	5,824	3,295	3,260	2,129	1,131	73	56	17
1986-87.....	8,922	5,590	3,332	3,142	2,073	1,069	92	66	26
1987-88 <sup>2</sup> .....	8,606	5,277	3,329	3,159	2,042	1,117	98	66	32

<sup>1</sup> Prior to 1965-66, includes degrees in architecture. From 1965-66, includes degrees in environmental design, general; architecture; interior design; landscape architecture; urban architecture; city, community, and regional planning; and other architecture and environmental design.  
<sup>2</sup> Preliminary data.

—Data not reported.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 243.—Earned degrees in business and management conferred by institutions of higher education, by level of degree and sex of student: 1955-56 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1955-56.....	42,813	38,708	4,107	3,280	3,118	182	129	127	2
1957-58.....	51,991	48,063	3,928	4,229	4,072	151	110	105	5
1959-60.....	52,110	48,265	3,845	4,814	4,645	189	138	136	2
1961-62.....	52,139	48,238	3,903	5,401	5,221	180	232	227	5
1963-64.....	59,188	54,892	4,506	8,513	8,310	203	281	274	7
1965-66.....	63,639	58,378	5,263	13,142	12,806	336	402	385	17
1967-68.....	80,138	73,147	8,991	18,048	17,431	617	456	442	14
1969-70.....	105,560	96,346	9,234	21,561	20,792	789	820	810	10
1970-71.....	114,865	104,404	10,461	26,461	25,443	1,038	807	784	23
1971-72.....	121,360	109,778	11,584	30,367	29,166	1,201	896	876	20
1972-73.....	126,263	112,897	13,366	31,007	29,461	1,526	923	871	52
1973-74.....	131,768	114,850	16,918	32,644	30,491	2,153	981	931	50
1974-75.....	133,010	111,411	21,599	38,247	33,185	3,062	1,009	968	41
1975-76.....	142,379	114,267	28,112	42,512	37,559	4,953	953	901	52
1976-77.....	150,964	115,526	35,438	46,420	39,766	6,654	863	809	54
1977-78.....	160,187	118,579	43,608	48,326	40,150	8,176	866	794	72
1978-79.....	171,764	119,227	52,537	50,372	40,701	9,671	860	760	100
1979-80.....	185,361	122,867	62,494	55,006	42,722	12,284	792	677	115
1980-81.....	199,338	125,795	73,543	57,898	43,394	14,504	842	717	125
1981-82.....	214,001	129,668	84,333	61,299	44,243	17,056	855	704	151
1982-83.....	226,893	131,718	95,175	65,319	46,457	18,862	809	673	136
1983-84.....	230,031	129,909	100,122	66,653	48,565	20,068	977	775	202
1984-85.....	233,351	129,032	105,319	67,527	46,624	20,903	866	718	148
1985-86.....	238,160	129,271	108,889	67,137	46,288	20,849	869	759	210
1986-87.....	241,156	128,958	112,198	67,496	45,211	22,285	1,098	839	259
1987-88 <sup>1</sup> .....	243,344	129,764	113,580	69,630	46,282	23,348	1,109	853	256

<sup>1</sup> Preliminary data.

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

**Table 244.—Earned degrees in communications<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71.....	10,802	8,989	3,813	1,656	1,214	642	145	126	19
1971-72.....	12,340	7,964	4,376	2,200	1,443	757	111	96	15
1972-73.....	14,317	9,074	5,243	2,406	1,548	860	139	114	25
1973-74.....	17,096	10,538	6,560	2,640	1,668	972	175	148	29
1974-75.....	19,248	11,455	7,793	2,794	1,818	1,176	186	119	46
1975-76.....	21,282	12,458	8,824	3,126	1,818	1,300	204	154	50
1976-77.....	23,214	12,932	10,282	3,091	1,719	1,372	171	130	41
1977-78.....	25,400	13,480	11,920	3,296	1,673	1,823	191	138	53
1978-79.....	28,457	13,266	13,191	2,882	1,483	1,399	192	138	54
1979-80.....	28,616	13,656	14,960	3,082	1,527	1,555	193	121	72
1980-81.....	31,282	14,179	17,103	3,105	1,448	1,657	182	107	75
1981-82.....	34,222	14,917	19,305	3,327	1,578	1,749	200	136	64
1982-83.....	38,602	18,185	22,417	3,604	1,661	1,943	214	126	88
1983-84.....	40,185	18,647	23,518	3,656	1,600	2,056	219	131	88
1984-85.....	42,083	17,238	24,845	3,669	1,576	2,093	234	143	91
1985-86.....	43,091	17,647	25,444	3,823	1,810	2,213	223	116	107
1986-87.....	45,408	18,155	27,253	3,337	1,606	2,331	275	158	117
1987-88 <sup>2</sup> .....	46,705	18,588	28,117	3,932	1,574	2,358	233	128	108

<sup>1</sup> Includes degrees in communications, general; journalism; radio-television; advertising; communications media; and other communications.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 245.—Earned degrees in computer and information sciences<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71	2,388	2,064	324	1,588	1,424	164	128	125	3
1971-72	3,402	2,941	481	1,977	1,752	225	187	155	12
1972-73	4,304	3,664	640	2,113	1,888	225	196	181	15
1973-74	4,756	3,978	780	2,278	1,983	293	188	189	9
1974-75	5,033	4,080	953	2,299	1,961	338	213	199	14
1975-76	5,852	4,534	1,118	2,603	2,226	377	244	221	23
1976-77	6,407	4,878	1,531	2,798	2,332	466	218	197	19
1977-78	7,201	5,349	1,852	3,036	2,471	567	196	181	15
1978-79	8,719	6,272	2,447	3,055	2,480	575	238	206	30
1979-80	11,154	7,782	3,372	3,647	2,883	764	240	213	27
1980-81	15,121	10,202	4,919	4,218	3,247	971	252	227	25
1981-82	20,267	13,218	7,049	4,935	3,825	1,310	251	230	21
1982-83	24,510	15,606	8,904	5,321	3,813	1,508	262	228	34
1983-84	32,172	20,248	11,926	6,190	4,379	1,811	251	225	26
1984-85	38,878	24,579	14,299	7,101	5,064	2,037	248	223	25
1985-86	41,889	26,923	14,968	8,070	5,858	2,412	344	299	45
1986-87	39,664	25,929	13,735	8,491	5,995	2,496	374	322	52
1987-88 <sup>2</sup>	34,548	23,347	11,201	9,166	6,702	2,464	428	380	48

<sup>1</sup> Includes degrees in computer and information sciences, general; information sciences and systems; data processing; computer programming; systems analysis; and other information sciences.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 246.—Earned degrees in education conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50	81,472	31,398	30,074	20,069	12,025	8,044	953	797	156
1950-51	89,421	25,838	63,583	33,512	18,126	15,386	1,590	1,281	309
1951-52	134,905	32,492	102,413	63,503	30,798	32,705	4,079	3,249	830
1952-53	165,453	41,347	124,106	79,349	35,451	43,898	5,894	4,898	1,196
1953-54	178,814	45,094	131,520	88,952	38,977	49,975	6,403	5,045	1,358
1954-55	191,220	49,537	141,683	98,143	41,818	56,327	7,044	5,384	1,660
1955-56	194,229	51,441	142,788	105,565	44,126	61,437	7,318	5,504	1,814
1956-57	185,225	49,160	136,065	112,810	45,124	67,686	7,293	5,318	1,977
1957-58	187,015	44,557	122,458	120,189	45,421	74,768	7,448	5,147	2,299
1958-59	154,807	42,070	112,737	128,417	45,796	82,621	7,778	5,179	2,599
1959-60	143,722	39,941	103,781	126,825	43,288	83,537	7,863	5,189	2,774
1960-61	138,141	37,484	98,657	119,038	38,413	80,625	7,595	4,834	2,761
1961-62	126,109	33,819	92,290	111,995	35,143	76,852	7,736	4,472	3,264
1962-63	118,189	30,922	87,247	103,951	31,020	72,931	7,941	4,419	3,522
1963-64	108,309	27,076	81,233	98,938	28,256	70,682	7,900	4,184	3,736
1964-65	101,113	24,402	76,711	93,757	25,953	67,804	7,680	3,950	3,730
1965-66	97,991	23,870	74,321	84,853	23,232	61,621	7,551	3,764	3,787
1966-67	92,382	22,215	70,167	77,187	21,581	55,606	7,473	3,703	3,770
1967-68	88,181	21,264	66,917	76,137	20,945	55,192	7,151	3,419	3,732
1968-69	87,221	20,986	66,235	78,363	20,719	55,634	7,110	3,315	3,795
1969-70	87,115	20,770	66,345	75,501	19,642	55,859	8,909	3,117	3,792
1970-71	91,013	21,005	70,008	77,704	19,383	58,321	8,544	2,944	3,600

<sup>1</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degree and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 247.—Earned degrees in engineering<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total <sup>1</sup>	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50.....	52,246	52,071	175	4,496	4,481	15	417	416	1
1950-51.....	37,879	37,537	142	7,159	7,133	26	766	763	3
1963-64.....	35,013	34,862	151	10,827	10,793	34	1,833	1,886	7
1965-66.....	35,815	35,472	143	13,875	13,599	78	2,304	2,295	9
1967-68.....	37,368	37,159	209	15,182	15,083	99	2,932	2,920	12
1969-70 <sup>2</sup> .....	49,876	49,296	382	15,723	15,547	176	3,691	3,667	24
1970-71.....	50,048	49,646	400	18,443	18,258	185	3,838	3,815	23
1971-72.....	51,164	50,638	526	18,960	18,688	272	3,671	3,649	22
1972-73.....	51,265	50,652	613	18,819	18,341	278	3,492	3,438	54
1973-74.....	50,266	49,490	796	15,379	15,023	356	3,312	3,257	55
1974-75.....	46,652	45,838	1,014	15,348	14,973	375	3,108	3,042	66
1975-76.....	46,331	44,871	1,460	16,342	15,760	582	2,821	2,755	66
1976-77.....	49,283	47,065	2,218	16,245	15,525	720	2,586	2,513	73
1977-78.....	55,654	51,945	3,709	16,398	15,533	885	2,440	2,383	57
1978-79.....	62,375	57,201	5,174	15,495	14,544	951	2,506	2,423	83
1979-80.....	66,893	62,488	8,405	16,243	15,101	1,142	2,507	2,412	95
1980-81.....	75,000	67,301	7,899	16,709	15,347	1,362	2,561	2,457	104
1981-82.....	80,005	70,899	9,106	17,939	16,311	1,628	2,636	2,496	140
1982-83.....	89,270	78,316	10,954	19,350	17,553	1,797	2,831	2,706	125
1983-84.....	94,444	82,309	12,135	20,661	18,504	2,157	2,981	2,816	165
1984-85.....	96,105	83,453	12,652	21,557	19,249	2,308	3,230	3,022	208
1985-86.....	95,953	83,372	12,581	21,661	19,168	2,493	3,410	3,181	229
1986-87.....	93,074	80,347	12,727	22,693	19,841	2,652	3,820	3,557	263
1987-88 <sup>3</sup> .....	88,791	76,607	12,184	23,426	20,503	2,923	4,191	3,898	293

<sup>1</sup> Includes degrees in engineering and engineering technologies from 1969-70 through 1987-88.

<sup>2</sup> Revised from previously published data.

<sup>3</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 248.—Earned degrees in chemical, civil, and electrical engineering conferred by institutions of higher education, by level of degree: 1970-71 to 1987-88**

Year	Chemical engineering			Civil engineering <sup>1</sup>			Electrical engineering		
	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's
1	2	3	4	5	6	7	8	9	10
1970-71.....	3,579	1,100	406	6,526	2,425	446	12,198	4,282	679
1971-72.....	3,825	1,154	394	6,803	2,487	415	12,101	4,206	824
1972-73.....	3,578	1,051	397	7,390	2,627	397	12,313	3,895	791
1973-74.....	3,399	1,044	400	8,017	2,852	368	11,316	3,499	705
1974-75.....	3,070	990	348	7,651	2,769	356	10,181	3,469	701
1975-76.....	3,140	1,031	308	7,923	2,999	370	9,791	3,774	649
1976-77.....	3,524	1,086	291	8,228	2,964	309	9,936	3,768	566
1977-78.....	4,569	1,235	259	9,135	2,685	277	11,133	3,740	503
1978-79.....	5,568	1,149	304	9,809	2,646	253	12,338	3,591	596
1979-80.....	6,320	1,270	284	10,326	2,683	270	13,821	3,836	525
1980-81.....	6,527	1,267	300	10,678	2,891	325	14,936	3,901	535
1981-82.....	6,740	1,285	311	10,524	2,995	329	16,455	4,462	526
1982-83.....	7,185	1,368	319	9,989	3,074	340	18,049	4,531	550
1983-84.....	7,475	1,514	330	9,693	3,146	369	19,943	5,078	585
1984-85.....	7,146	1,544	418	9,162	3,172	377	21,691	5,153	660
1985-86.....	5,877	1,361	446	8,679	2,926	395	23,742	5,534	722
1986-87.....	4,983	1,184	497	8,147	2,901	451	24,563	6,234	726
1987-88 <sup>2</sup> .....	3,926	1,103	579	7,497	2,839	481	23,596	6,692	660

<sup>1</sup> From 1970-71 to 1981-82 includes "construction and transportation engineering."

<sup>2</sup> Preliminary data.

NOTE.—Degrees in engineering technologies are not included in this tabulation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 249.—Earned degrees in English and literature<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50.....	17,240	8,221	9,019	2,259	1,320	939	230	181	49
1959-60.....	20,128	7,580	12,548	2,931	1,458	1,473	397	314	83
1967-68.....	47,977	15,700	32,277	7,918	3,434	4,482	977	717	260
1969-70.....	56,400	18,644	37,756	8,480	3,309	5,171	1,205	832	373
1970-71.....	57,026	19,000	38,026	8,935	3,485	5,450	1,441	1,021	420
1971-72.....	55,991	19,169	36,822	8,714	3,358	5,358	1,591	1,058	535
1972-73.....	52,478	18,544	33,934	8,151	3,203	4,948	1,831	1,040	591
1973-74.....	47,343	17,091	30,252	7,906	3,192	4,714	1,818	1,006	610
1974-75.....	40,297	14,727	25,570	7,820	2,932	4,688	1,507	884	623
1975-76.....	35,432	13,252	22,180	7,217	2,775	4,442	1,511	856	655
1976-77.....	31,996	11,818	20,180	6,513	2,436	4,077	1,318	718	600
1977-78.....	29,732	10,837	18,895	6,351	2,292	4,059	1,265	670	595
1978-79.....	27,720	9,776	17,944	5,522	2,015	3,507	1,137	600	537
1979-80.....	26,638	9,032	17,606	5,122	1,857	3,265	1,131	594	537
1980-81.....	26,006	8,788	17,218	4,948	1,793	3,155	1,047	494	553
1981-82.....	26,152	8,692	17,460	4,809	1,698	3,111	974	455	519
1982-83.....	25,632	8,550	17,082	4,350	1,538	2,812	890	418	474
1983-84.....	26,419	8,723	17,696	4,403	1,566	2,837	941	421	520
1984-85.....	26,536	8,662	17,874	4,571	1,590	2,981	943	426	517
1985-86.....	27,360	9,150	18,210	4,923	1,740	3,183	937	405	532
1986-87.....	26,822	9,578	19,248	4,878	1,743	3,133	896	387	509
1987-88 <sup>2</sup> .....	30,799	9,955	20,844	4,871	1,870	3,201	950	411	539

<sup>1</sup> Includes degrees conferred in general English, English literature, comparative literature, classics, creative writing, composition, American literature, and technical and business writing.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 250.—Earned degrees in modern foreign languages<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50.....	4,477	1,746	2,731	919	458	463	168	135	33
1959-60.....	4,527	1,548	2,979	832	392	440	150	100	50
1967-68.....	17,489	4,450	13,049	3,911	1,555	2,356	491	336	155
1969-70.....	19,457	4,921	14,536	4,154	1,476	2,678	590	369	221
1970-71.....	19,057	4,734	14,323	4,410	1,494	2,916	704	425	279
1971-72.....	18,140	4,448	13,694	4,278	1,450	2,828	754	467	287
1972-73.....	18,234	4,348	13,886	3,994	1,407	2,587	891	521	370
1973-74.....	18,256	4,279	13,977	3,795	1,254	2,541	876	488	388
1974-75.....	17,118	3,914	13,204	3,874	1,180	2,494	829	442	387
1975-76.....	15,081	3,496	11,585	3,365	1,100	2,265	831	429	402
1976-77.....	13,630	3,228	10,404	2,982	890	2,102	733	352	381
1977-78.....	12,449	2,938	9,511	2,858	771	1,887	636	290	346
1978-79.....	11,533	2,706	8,827	2,342	687	1,655	627	288	339
1979-80.....	10,816	2,583	8,233	2,160	631	1,529	524	218	306
1980-81.....	10,052	2,402	7,650	2,023	659	1,364	581	262	299
1981-82.....	9,577	2,279	7,298	1,917	573	1,344	502	224	278
1982-83.....	9,335	2,343	6,992	1,805	533	1,072	454	185	269
1983-84.....	9,158	2,400	6,758	1,841	513	1,128	429	191	238
1984-85.....	9,675	2,529	7,146	1,813	505	1,108	389	158	231
1985-86.....	9,810	2,686	7,124	1,856	482	1,174	427	174	253
1986-87.....	9,947	2,656	7,191	1,894	492	1,202	406	165	241
1987-88 <sup>2</sup> .....	9,773	2,623	7,150	1,798	562	1,236	383	162	221

<sup>1</sup> Includes degrees conferred in a single language or a combination of modern foreign languages. Excludes degrees in linguistics, Latin, classical Greek, and "other" foreign languages.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 251.—Earned degrees in French, German, and Spanish conferred by institutions of higher education, by level of degree: 1949-50 to 1987-88**

Year	French			German			Spanish		
	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's
1	2	3	4	5	6	7	8	9	10
1949-50.....	1,471	299	53	540	121	40	2,122	373	34
1959-60.....	1,927	316	58	659	128	21	1,610	261	31
1967-68.....	7,068	1,301	152	2,368	771	117	6,361	1,188	123
1969-70.....	7,824	1,409	181	2,652	669	118	7,226	1,372	139
1970-71.....	7,306	1,437	192	2,601	690	144	7,068	1,456	168
1971-72.....	6,822	1,421	193	2,477	608	167	6,847	1,421	152
1972-73.....	6,705	1,277	203	2,520	598	176	7,209	1,298	206
1973-74.....	6,263	1,195	213	2,425	550	149	7,250	1,217	203
1974-75.....	5,745	1,077	200	2,269	480	147	6,719	1,228	202
1975-76.....	4,783	914	190	1,983	471	164	5,984	1,080	176
1976-77.....	4,228	875	177	1,820	394	128	5,359	930	153
1977-78.....	3,708	892	155	1,647	357	101	4,832	822	113
1978-79.....	3,558	576	143	1,524	344	106	4,563	720	118
1979-80.....	3,285	513	128	1,466	309	94	4,331	685	103
1980-81.....	3,178	460	115	1,286	294	79	3,870	592	131
1981-82.....	3,054	485	92	1,327	324	76	3,633	568	140
1982-83.....	2,871	360	106	1,367	281	68	3,349	506	129
1983-84.....	2,876	418	06	1,292	241	63	3,254	537	102
1984-85.....	2,991	385	74	1,411	240	58	3,415	505	115
1985-86.....	3,015	409	86	1,398	249	73	3,385	521	95
1986-87.....	3,057	421	85	1,363	234	70	3,445	504	104
1987-88 <sup>1</sup> .....	3,079	437	89	1,346	241	71	3,408	559	93

<sup>1</sup> Preliminary data.

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

**Table 252.—Earned degrees in the health professions<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71.....	25,190	5,764	19,426	5,445	2,401	3,044	459	384	75
1971-72.....	28,570	6,990	21,580	6,875	2,987	3,888	425	351	74
1972-73.....	33,523	7,744	25,779	7,879	3,304	4,575	643	483	160
1973-74.....	41,394	9,365	32,029	9,090	3,539	5,557	568	439	129
1974-75.....	48,858	10,855	38,003	9,901	3,710	6,191	609	437	172
1975-76.....	53,813	11,412	42,401	11,885	3,955	7,930	577	411	166
1976-77.....	57,122	11,897	45,225	12,323	3,910	8,413	538	366	172
1977-78.....	59,168	11,548	47,620	13,819	3,990	9,829	638	393	245
1978-79.....	61,819	11,161	50,658	14,781	4,223	10,558	705	447	258
1979-80.....	63,607	11,336	52,271	15,068	4,131	10,937	771	424	347
1980-81.....	63,348	10,464	52,884	16,004	4,151	11,853	827	469	358
1981-82.....	63,385	10,064	53,321	15,942	3,843	12,099	910	499	411
1982-83.....	64,814	10,204	54,610	17,068	4,232	12,836	1,155	649	506
1983-84.....	64,338	10,079	54,259	17,443	4,269	13,174	1,163	573	590
1984-85.....	64,513	9,786	54,727	17,363	4,135	13,228	1,199	565	634
1985-86.....	64,535	9,683	54,852	18,624	4,460	14,164	1,241	604	637
1986-87.....	63,206	9,177	54,029	18,426	3,887	14,539	1,213	564	649
1987-88 <sup>2</sup> .....	60,095	8,787	51,308	18,523	4,028	14,495	1,247	540	707

<sup>1</sup> Includes degrees in health professions, general; hospital and health care administration; nursing; dental specialties; medical specialties; occupational therapy; optometry; pharmacy; physical therapy; dental hygiene; public health; medical record librarianship; podiatry or podiatric medicine; biomedical communication; veterinary medicine specialties; speech pathology and audiology; chiropractic; medical laboratory technologies; dental technologies; radiologic technologies; and other health professions. Excludes first-professional degrees that require at least 6 years for completion (including at least 2

years of preprofessional training) in dentistry, medicine, optometry, osteopathic medicine, pharmacy, podiatry or podiatric medicine, veterinary medicine, and chiropractic.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 253.—Earned degrees in the life sciences<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1951-52 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1951-52.....	11,094	6,212	2,882	2,307	1,908	399	764	680	64
1953-54.....	9,279	6,710	2,569	1,610	1,287	323	1,077	977	100
1955-56.....	12,423	9,515	2,908	1,759	1,379	380	1,025	908	117
1957-58.....	14,306	11,159	3,149	1,852	1,448	404	1,125	987	138
1959-60.....	15,576	11,654	3,922	2,154	1,688	466	1,205	1,086	119
1961-62.....	16,915	12,136	4,779	2,642	1,982	660	1,338	1,179	159
1963-64.....	22,723	16,321	6,402	3,296	2,348	948	1,625	1,432	193
1965-66.....	26,916	19,368	7,548	4,232	3,085	1,147	2,097	1,792	305
1967-68.....	31,826	22,986	8,840	5,506	3,959	1,547	2,784	2,345	439
1969-70.....	37,389	27,004	10,385	5,800	3,975	1,825	3,289	2,820	469
1970-71.....	35,743	25,333	10,410	5,728	3,805	1,923	3,645	3,050	595
1971-72.....	37,293	26,323	10,970	6,101	4,087	2,014	3,653	3,031	622
1972-73.....	42,233	29,636	12,597	6,263	4,354	1,909	3,636	2,928	710
1973-74.....	48,340	33,245	15,095	6,552	4,555	1,997	3,439	2,740	699
1974-75.....	51,741	34,612	17,129	6,550	4,587	1,963	3,384	2,641	743
1975-76.....	54,275	35,520	18,755	6,582	4,497	2,085	3,392	2,663	729
1976-77.....	53,605	34,216	19,387	7,114	4,718	2,396	3,397	2,671	726
1977-78.....	51,502	31,705	19,797	6,806	4,400	2,406	3,309	2,511	798
1978-79.....	48,846	29,191	19,655	6,831	4,265	2,566	3,542	2,636	906
1979-80.....	46,370	26,828	19,542	6,510	4,098	2,412	3,636	2,690	946
1980-81.....	43,216	24,149	19,067	5,978	3,654	2,324	3,718	2,666	1,052
1981-82.....	41,639	22,754	18,885	5,874	3,426	2,448	3,743	2,654	1,089
1982-83.....	39,982	21,564	18,418	5,696	3,214	2,482	3,341	2,266	1,075
1983-84.....	38,640	20,556	18,082	5,408	2,996	2,410	3,437	2,381	1,056
1984-85.....	38,445	20,064	18,381	5,059	2,647	2,412	3,432	2,307	1,125
1985-86.....	38,524	19,993	18,531	5,013	2,616	2,397	3,358	2,229	1,129
1986-87.....	38,114	19,641	18,473	4,954	2,539	2,415	3,423	2,228	1,197
1987-88 <sup>2</sup> .....	36,761	18,261	18,500	4,769	2,417	2,352	3,598	2,330	1,268

<sup>1</sup> Includes degrees in anatomy, bacteriology, biochemistry, biology, botany, entomology, physiology, zoology, and other biological sciences.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 254.—Earned degrees in biology, zoology, and microbiology conferred by institutions of higher education, by level of degree: 1970-71 to 1987-88**

Year	Biology, general			Zoology <sup>1</sup>			Microbiology		
	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's
1	2	3	4	5	6	7	8	9	10
1970-71.....	26,294	2,665	536	5,768	1,255	1,235	1,122	382	323
1971-72.....	27,473	2,943	580	5,570	1,260	1,228	1,263	416	326
1972-73.....	31,185	2,959	627	5,808	1,263	1,113	1,567	454	318
1973-74.....	38,188	3,186	657	6,238	1,347	1,012	1,907	448	348
1974-75.....	38,746	3,109	637	6,224	1,339	1,047	2,394	490	324
1975-76.....	40,163	3,177	624	6,214	1,268	1,030	2,485	529	336
1976-77.....	39,530	3,322	608	5,718	1,311	1,056	2,492	581	309
1977-78.....	37,598	3,094	664	5,236	1,296	978	2,355	530	338
1978-79.....	35,962	3,093	663	5,108	1,277	1,050	2,342	512	367
1979-80.....	33,523	2,911	718	4,447	1,202	1,079	2,347	545	348
1980-81.....	31,323	2,598	734	4,020	1,198	1,078	2,227	438	351
1981-82.....	29,651	2,579	678	3,770	1,135	1,059	2,215	430	338
1982-83.....	28,022	2,354	521	3,578	1,005	911	2,141	406	319
1983-84.....	27,379	2,313	617	3,440	960	928	2,214	413	351
1984-85.....	27,593	2,130	658	3,287	895	909	2,091	378	295
1985-86.....	27,618	2,173	574	3,140	836	830	2,164	342	328
1986-87.....	27,458	2,022	537	3,032	833	900	2,057	360	325
1987-88 <sup>2</sup> .....	26,802	1,977	582	2,780	814	888	1,982	335	367

<sup>1</sup> Zoology includes general zoology, entomology, genetics, pathology, pharmacology, physiology, and zoology, other.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 255.—Earned degrees in mathematics<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50	8,382	4,942	1,440	974	784	190	160	151	9
1959-60	11,399	8,293	3,106	1,757	1,422	335	303	285	18
1967-68	23,513	14,782	8,731	5,527	4,199	1,328	947	895	52
1969-70	27,442	17,177	10,265	5,636	3,968	1,670	1,238	1,140	98
1970-71	24,801	15,389	9,432	5,191	3,873	1,518	1,199	1,108	93
1971-72	23,713	14,454	9,259	5,198	3,855	1,543	1,128	1,039	89
1972-73	23,067	13,786	9,271	5,028	3,525	1,503	1,068	968	102
1973-74	21,635	12,791	8,844	4,834	3,337	1,497	1,031	931	100
1974-75	18,181	10,586	7,595	4,327	2,905	1,422	975	865	110
1975-76	15,984	9,475	6,509	3,857	2,547	1,310	856	782	84
1976-77	14,196	8,303	5,893	3,895	2,396	1,299	823	714	109
1977-78	12,569	7,398	5,171	3,373	2,223	1,145	805	681	124
1978-79	11,806	6,899	4,907	3,036	1,985	1,051	730	606	122
1979-80	11,378	6,562	4,818	2,860	1,828	1,032	724	624	100
1980-81	11,078	6,342	4,736	2,567	1,892	875	728	614	114
1981-82	11,599	6,593	5,006	2,727	1,821	906	681	587	84
1982-83	12,453	6,995	5,458	2,837	1,858	979	698	582	118
1983-84	13,211	7,368	5,845	2,741	1,791	950	695	569	128
1984-85	15,148	8,164	6,982	2,882	1,874	1,008	699	590	109
1985-86	18,306	8,725	7,581	3,159	2,047	1,112	742	618	124
1986-87	18,489	8,834	7,655	3,321	2,024	1,297	725	599	125
1987-88 <sup>2</sup>	15,888	8,513	7,375	3,423	2,052	1,371	752	626	126

<sup>1</sup> Includes degrees conferred in statistics.  
<sup>2</sup> Preliminary data.

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degree and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

**Table 256.—Earned degrees in the physical sciences<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1959-60 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1959-60	18,007	14,013	1,994	3,378	3,049	327	1,838	1,776	82
1967-68	19,380	16,739	2,641	5,499	4,869	630	3,593	3,405	188
1969-70	21,439	18,522	2,917	5,935	5,093	842	4,312	4,077	235
1970-71	21,412	18,458	2,953	6,367	5,521	846	4,390	4,144	246
1971-72	20,745	17,663	3,082	6,287	5,404	883	4,103	3,830	273
1972-73	20,896	17,826	3,070	6,257	5,414	843	4,006	3,738	268
1973-74	21,178	17,874	3,504	6,082	5,188	878	3,826	3,373	253
1974-75	20,778	18,992	3,786	5,807	4,969	838	3,626	3,325	301
1975-76	21,465	17,3	4,112	5,466	4,648	818	3,431	3,132	299
1976-77	22,497	17,990	4,501	5,331	4,450	881	3,341	3,022	319
1977-78	22,986	18,090	4,896	5,581	4,820	941	3,133	2,821	312
1978-79	23,207	17,985	5,222	5,451	4,481	990	3,102	2,752	350
1979-80	23,410	17,864	5,546	5,219	4,248	971	3,089	2,705	384
1980-81	23,952	18,064	5,888	5,284	4,200	1,084	3,141	2,765	378
1981-82	24,052	17,866	6,186	5,514	4,318	1,196	3,268	2,835	451
1982-83	23,405	17,018	6,389	5,290	4,157	1,133	3,289	2,811	458
1983-84	23,871	17,134	6,537	5,578	4,268	1,308	3,306	2,815	491
1984-85	23,732	17,095	6,837	5,796	4,452	1,344	3,403	2,851	552
1985-86	21,731	15,789	5,962	5,902	4,470	1,432	3,551	2,963	588
1986-87	19,974	14,302	5,872	5,852	4,243	1,409	3,872	3,038	634
1987-88 <sup>2</sup>	17,778	12,375	5,401	5,727	4,315	1,412	3,904	3,119	685

<sup>1</sup> Includes degrees in astronomy, chemistry, geology, metallurgy, meteorology, physics, science technologies, and other physical sciences.  
<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degree and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 257.—Earned degrees in chemistry, physics, and geology conferred by institutions of higher education, by level of degree: 1970-71 to 1987-88**

Year	Chemistry			Physics			Geology <sup>1</sup>		
	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's
1	2	3	4	5	6	7	8	9	10
1970-71	11,063	2,275	2,159	5,071	2,188	1,482	2,414	851	324
1971-72	10,580	2,248	1,971	4,834	2,033	1,344	2,573	841	310
1972-73	10,128	2,225	1,872	4,259	1,747	1,338	2,923	827	305
1973-74	10,438	2,125	1,823	3,952	1,855	1,115	3,253	938	315
1974-75	10,549	1,986	1,822	3,706	1,574	1,080	3,319	932	292
1975-76	11,022	1,783	1,821	3,544	1,451	997	3,358	1,003	313
1976-77	11,215	1,787	1,588	3,420	1,319	945	3,879	1,047	325
1977-78	11,315	1,886	1,521	3,330	1,294	873	4,342	1,239	288
1978-79	11,508	1,757	1,518	3,337	1,319	918	4,502	1,300	288
1979-80	11,232	1,723	1,545	3,398	1,192	830	4,597	1,295	313
1980-81	11,347	1,854	1,822	3,441	1,294	888	5,202	1,398	294
1981-82	11,025	1,818	1,595	3,472	1,282	883	5,538	1,540	282
1982-83	10,786	1,822	1,748	3,793	1,389	873	6,102	1,552	295
1983-84	10,704	1,687	1,744	3,907	1,532	953	6,549	1,514	315
1984-85	10,482	1,719	1,788	4,097	1,523	951	6,308	1,892	289
1985-86	10,118	1,754	1,908	4,180	1,501	1,010	4,974	1,787	271
1986-87	9,661	1,738	1,976	4,330	1,563	1,086	3,865	1,803	280
1987-88 <sup>2</sup>	9,025	1,694	1,990	4,087	1,878	1,093	2,552	1,530	350

<sup>1</sup> Includes geology, geochemistry, and geophysics and seismology. Beginning in 1982-83, also includes other geological sciences.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 258.—Earned degrees in psychology conferred by institutions of higher education, by level of degree and by sex of student: 1949-50 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1949-50	8,589	6,055	3,514	1,318	948	368	283	241	42
1950-51	8,061	4,773	3,288	1,406	981	425	641	544	97
1967-68	23,819	13,792	10,027	3,479	2,321	1,158	1,268	982	288
1969-70	33,608	19,042	14,584	4,111	2,549	1,562	1,668	1,298	372
1970-71	37,880	21,029	16,851	4,431	2,783	1,648	1,782	1,355	427
1971-72	43,093	23,159	19,934	5,289	3,259	2,030	1,881	1,414	487
1972-73	47,895	24,978	22,719	5,831	3,495	2,336	2,089	1,484	605
1973-74	51,821	25,705	26,118	6,588	3,971	2,617	2,336	1,645	691
1974-75	50,988	24,190	26,798	7,068	4,044	3,022	2,442	1,688	754
1975-76	49,908	22,832	27,078	7,811	4,171	3,640	2,581	1,782	819
1976-77	47,373	20,553	26,820	8,301	4,313	3,988	2,761	1,770	991
1977-78	44,559	18,348	26,211	8,160	3,919	4,241	2,587	1,621	968
1978-79	42,481	18,484	25,997	8,003	3,872	4,331	2,862	1,597	1,065
1979-80	41,982	15,419	26,563	7,806	3,376	4,430	2,788	1,602	1,168
1980-81	40,833	14,295	26,538	7,998	3,358	4,640	2,955	1,881	1,274
1981-82	41,031	13,823	27,208	7,791	3,209	4,582	2,780	1,518	1,262
1982-83	40,364	13,105	27,259	8,378	3,238	5,140	3,108	1,621	1,487
1983-84	39,872	12,792	27,080	8,002	2,961	5,041	2,973	1,517	1,456
1984-85	38,811	12,694	27,117	8,408	3,044	5,364	2,908	1,492	1,416
1985-86	40,521	12,578	27,943	8,293	2,923	5,370	3,088	1,497	1,591
1986-87	42,868	13,332	29,536	8,204	2,856	5,348	3,123	1,458	1,695
1987-88 <sup>1</sup>	44,961	13,484	31,477	7,862	2,589	5,273	2,988	1,366	1,622

<sup>1</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degree and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 259.—Earned degrees in public affairs and services<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71.....	8,252	2,489	3,763	8,215	4,178	4,039	185	141	44
1971-72.....	8,221	3,260	4,961	8,183	4,780	4,403	219	170	49
1972-73.....	11,346	4,567	6,759	10,899	5,787	5,132	214	174	40
1973-74.....	12,871	4,890	7,781	12,077	6,455	5,622	214	185	49
1974-75.....	14,730	5,465	9,265	14,810	7,747	8,863	271	200	71
1975-76.....	18,751	8,778	9,975	18,117	8,421	7,896	298	198	100
1976-77.....	17,627	8,705	10,922	17,917	9,251	8,666	318	210	108
1977-78.....	18,082	8,148	11,936	18,341	9,033	9,308	385	258	129
1978-79.....	18,882	8,009	12,873	18,300	8,547	9,753	344	233	111
1979-80.....	18,422	8,650	12,772	18,413	8,281	10,152	372	241	131
1980-81.....	18,714	8,870	13,044	18,524	7,780	10,734	388	226	182
1981-82.....	18,739	8,733	13,006	18,218	7,314	10,902	389	210	179
1982-83.....	18,280	4,910	11,380	18,245	8,112	10,133	347	184	163
1983-84.....	14,386	4,592	9,804	15,373	5,869	9,504	421	231	190
1984-85.....	13,838	4,635	9,203	16,045	5,938	10,107	431	213	218
1985-86.....	13,878	4,870	9,208	18,300	8,108	10,192	385	174	211
1986-87.....	14,181	4,537	9,824	17,032	8,191	10,841	398	218	182
1987-88 <sup>2</sup> .....	14,232	4,533	8,899	17,150	8,324	10,826	470	238	232

<sup>1</sup> Includes degree in community services, general; public administration; management; social work and helping services; international public service; transportation and public utilities; clinical social work; and other public affairs and services.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 260.—Earned degrees in the social sciences<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71.....	155,236	98,090	57,146	18,478	11,779	4,897	3,659	3,152	507
1971-72.....	158,037	100,879	57,158	17,418	12,517	4,899	4,078	3,480	598
1972-73.....	155,922	99,704	56,218	17,288	12,529	4,759	4,230	3,569	661
1973-74.....	150,298	95,637	54,661	17,248	12,289	4,960	4,123	3,382	741
1974-75.....	135,185	84,813	50,352	18,892	11,828	5,066	4,209	3,332	877
1975-76.....	126,287	78,823	47,664	15,824	10,831	4,993	4,154	3,259	895
1976-77.....	118,879	71,006	45,873	15,395	10,340	5,055	3,784	2,949	835
1977-78.....	112,827	87,144	45,683	14,578	9,751	4,827	3,583	2,713	870
1978-79.....	107,922	82,785	45,157	12,807	8,300	4,507	3,358	2,492	868
1979-80.....	103,519	58,434	45,085	12,101	7,746	4,355	3,219	2,347	872
1980-81.....	100,345	58,039	44,306	11,855	7,403	4,452	3,114	2,269	845
1981-82.....	99,545	55,111	44,434	11,892	7,408	4,484	3,061	2,237	824
1982-83.....	95,088	52,708	42,380	11,112	8,918	4,196	2,931	2,042	889
1983-84.....	93,212	52,102	41,110	10,465	8,496	3,969	2,911	2,030	881
1984-85.....	91,481	51,172	40,289	10,380	8,400	3,980	2,851	1,933	918
1985-86.....	93,703	52,854	41,049	10,428	8,339	4,089	2,955	1,970	985
1986-87.....	96,185	53,879	42,308	10,397	8,294	4,103	2,918	2,026	890
1987-88 <sup>2</sup> .....	100,270	56,297	43,973	10,293	8,235	4,058	2,783	1,851	932

<sup>1</sup> Includes degrees in social sciences, general; anthropology; archeology; economics; history; geography; political science and government; sociology; criminology; international relations; urban studies; demography; and other social sciences.

<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

**Table 261.—Earned degrees in economics, history, political science and government, and sociology conferred by institutions of higher education, by level of degree: 1949-50 to 1987-88**

Year	Economics			History			Political science and government <sup>1</sup>			Sociology		
	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's	Bachelor's	Master's	Doctor's
1	2	3	4	5	6	7	8	9	10	11	12	13
1949-50.....	14,588	921	200	13,542	1,801	275	8,338	710	127	7,870	552	98
1951-52.....	8,593	895	239	10,187	1,445	317	4,911	525	147	8,648	517	141
1953-54.....	6,719	609	245	8,363	1,220	355	5,314	534	153	5,892	440	184
1955-56.....	8,555	581	232	10,510	1,114	259	5,633	509	203	5,878	402	170
1957-58.....	7,457	669	239	12,840	1,397	297	8,118	685	170	6,568	397	150
1959-60.....	7,453	708	237	14,737	1,794	342	6,596	722	201	7,147	440	181
1961-62.....	8,366	853	268	17,340	2,163	343	8,326	839	214	8,120	578	173
1963-64.....	10,583	1,104	385	23,668	2,705	507	12,126	1,163	263	10,943	648	198
1965-66.....	11,555	1,522	458	26,812	3,893	599	15,242	1,429	336	15,038	981	244
1967-68.....	15,193	1,916	600	35,291	4,845	688	20,367	1,937	457	21,710	1,193	367
1969-70.....	17,197	1,988	794	43,386	5,049	1,038	25,713	2,105	525	30,436	1,813	534
1970-71.....	15,758	1,995	721	44,663	5,157	891	27,482	2,318	700	33,263	1,808	574
1971-72.....	15,231	2,224	794	43,895	5,217	1,133	28,135	2,451	758	35,216	1,844	636
1972-73.....	14,770	2,225	845	40,843	5,030	1,140	30,100	2,398	747	35,436	1,923	583
1973-74.....	14,285	2,141	788	37,049	4,533	1,114	30,744	2,448	768	35,491	2,196	632
1974-75.....	14,048	2,127	815	31,470	4,228	1,117	29,126	2,333	680	31,488	2,112	693
1975-76.....	14,741	2,087	763	28,400	3,658	1,014	28,302	2,191	723	27,634	2,009	729
1976-77.....	15,296	2,158	758	25,433	3,393	821	26,411	2,222	641	24,713	1,830	714
1977-78.....	15,661	1,995	708	23,004	3,033	813	26,069	2,069	636	22,750	1,811	599
1978-79.....	16,409	1,955	712	21,019	2,536	756	25,628	2,037	563	20,285	1,415	612
1979-80.....	17,863	1,821	677	19,301	2,367	712	25,457	1,938	535	18,881	1,341	583
1980-81.....	18,753	1,911	727	18,301	2,237	843	24,977	1,875	484	17,272	1,240	610
1981-82.....	19,878	1,964	877	17,146	2,210	636	25,658	1,954	513	18,042	1,145	558
1982-83.....	20,517	1,972	734	18,465	2,040	575	25,791	1,829	435	14,105	1,112	522
1983-84.....	20,719	1,891	729	18,642	1,937	561	25,719	1,769	457	13,145	1,008	520
1984-85.....	20,711	1,992	749	18,048	1,921	468	25,834	1,500	441	11,968	1,022	480
1985-86.....	21,602	1,937	789	18,413	1,959	497	26,439	1,704	439	12,271	965	504
1986-87.....	22,387	1,855	750	18,988	2,023	534	26,834	1,818	435	12,231	850	451
1987-88 <sup>2</sup> .....	22,950	1,831	770	18,194	2,092	519	27,200	1,577	391	13,100	982	452

<sup>1</sup> Excludes degrees in public administration and international relations.<sup>2</sup> Preliminary data.

Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary

**Table 262.—Earned degrees in visual and performing arts<sup>1</sup> conferred by institutions of higher education, by level of degree and sex of student: 1970-71 to 1987-88**

Year	Bachelor's degrees			Master's degrees			Doctor's degrees		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
1970-71.....	30,394	12,256	18,138	8,675	3,510	3,165	821	483	138
1971-72.....	33,831	13,580	20,251	7,537	4,049	3,488	572	428	144
1972-73.....	36,017	14,267	21,750	7,254	4,005	3,249	818	449	187
1973-74.....	39,730	15,821	23,909	8,001	4,325	3,676	585	440	145
1974-75.....	40,782	15,532	25,250	8,382	4,448	3,914	649	448	203
1975-76.....	42,138	18,491	23,647	8,817	4,507	4,310	820	447	173
1976-77.....	41,793	18,166	23,627	8,636	4,211	4,425	662	447	215
1977-78.....	40,951	15,572	25,379	9,036	4,327	4,709	708	448	260
1978-79.....	40,969	15,380	25,589	8,524	3,933	4,591	700	454	246
1979-80.....	40,892	15,065	25,827	8,708	4,067	4,641	855	413	242
1980-81.....	40,479	14,798	25,681	8,829	4,056	4,573	854	396	258
1981-82.....	40,422	14,819	25,603	8,748	3,866	4,880	870	380	290
1982-83.....	39,489	14,899	24,770	8,742	4,011	4,731	892	404	288
1983-84.....	39,833	15,103	24,730	8,520	3,897	4,623	728	406	322
1984-85.....	37,938	14,506	23,430	8,714	3,897	4,817	693	407	286
1985-86.....	38,949	14,284	22,665	8,418	3,775	4,641	722	396	326
1986-87.....	38,223	13,783	22,440	8,506	3,757	4,749	792	447	345
1987-88 <sup>2</sup> .....	38,600	14,106	22,494	7,925	3,437	4,488	728	427	301

<sup>1</sup> Includes degrees in fine arts, general; art: art history and appreciation; music (performing composition, theory); music (liberal arts program); music history and appreciation; dramatic arts: dance; applied design; cinematography; photography; and other fine and applied arts.<sup>2</sup> Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared March 1990.)

Table 263.—Statistical profile of persons receiving doctor's degrees,<sup>1</sup> by field of study: 1987-88

Item	Field of Study									
	All fields	Education	Engineering	Humanities	Life sciences	Mathematics	Physical sciences <sup>4</sup>	Business and management	Social sciences and psychology	Other professional fields
1	2	3	4	5	6	7	8	9	10	11
Doctor's degrees conferred (number) .....	33,481	6,349	4,190	3,663	6,143	749	5,308	1,099	5,799	1,969
Sex (percent) .....										
Men.....	64.8	44.8	93.2	55.7	63.2	63.6	63.4	78.2	55.0	59.6
Women.....	35.2	55.2	6.8	44.3	36.8	36.4	36.6	21.8	45.0	40.4
Racial/ethnic group (percent) <sup>2</sup> .....										
American Indian.....	0.4	0.6	0.2	0.2	0.4	0.5	0.3	0.6	0.3	0.3
Asian.....	5.0	2.4	15.5	2.3	4.9	6.6	6.6	9.4	3.2	4.4
Black.....	3.8	7.5	1.5	3.0	2.2	0.7	1.2	2.8	4.3	8.9
Mexican-American.....	0.8	1.2	0.5	0.8	0.4	0.0	0.5	0.4	1.0	0.8
Puerto Rican.....	0.7	0.8	0.8	0.9	0.8	0.3	0.7	0.3	0.7	1.0
Of or Hispanic.....	1.3	0.9	1.8	2.1	1.3	0.8	1.0	0.6	1.5	0.5
White.....	86.1	85.3	77.0	69.1	85.5	86.2	86.6	84.2	87.3	83.1
Other and unknown.....	1.9	1.3	2.9	1.6	1.7	2.9	3.1	1.7	1.7	1.0
Citizenship (percent) .....										
United States.....	69.3	83.1	42.4	78.4	71.3	45.5	60.8	58.5	74.6	73.3
Foreign.....	29.3	10.2	49.8	14.4	22.2	48.3	32.5	32.4	18.1	15.5
Unknown.....	7.5	6.7	7.7	7.1	6.4	8.1	6.7	9.0	9.1	11.2
Median age at doctorate (years).....	33.8	40.5	31.0	35.4	31.9	30.9	30.3	34.8	34.1	37.9
Percent with bachelor's degree in same field as doctorate.....	54.7	36.9	78.4	56.7	55.4	70.4	67.3	36.9	54.5	23.6
Median time lapse from bachelor's to doctorate (years).....										
Total time.....	10.5	16.9	6.1	12.2	6.9	6.0	7.4	11.8	10.5	14.6
Registered time.....	6.9	8.1	5.9	8.5	6.5	6.3	6.1	6.9	7.4	7.9
Postdoctoral activities (percent) .....										
Postdoctoral study plans.....	23.5	4.8	19.5	7.2	53.2	20.7	43.3	2.1	14.5	3.8
Fellowship.....	11.4	2.0	5.2	4.0	30.8	7.7	17.6	0.5	8.4	1.3
Research associateship.....	9.7	1.3	12.6	1.5	17.4	10.7	24.3	0.7	3.7	1.0
Traineeship.....	1.0	0.8	1.3	0.3	1.6	1.2	0.7	0.5	1.5	0.7
Other.....	1.3	0.9	0.4	1.4	3.5	1.1	0.7	0.5	1.0	0.6
Planned postdoctoral employment.....	66.1	85.2	69.1	82.6	37.6	67.3	47.1	66.6	73.6	61.6
Educational institution.....	39.2	63.1	24.0	66.1	19.9	52.9	20.3	75.6	36.6	50.1
Industry, business.....	13.2	6.3	34.5	5.5	7.3	9.8	20.3	7.8	12.1	7.2
Government.....	6.2	7.4	7.2	2.3	6.3	2.1	4.4	1.9	6.9	7.0
Nonprofit organization.....	4.3	4.9	0.7	4.8	2.0	0.6	0.6	0.5	10.4	14.9
Other and unknown.....	3.1	3.5	2.8	4.0	2.4	1.9	1.4	0.9	5.4	2.5
Postdoctoral status unknown.....	10.5	10.0	11.4	10.2	9.0	12.0	9.6	11.3	11.9	14.4
Definite postdoctoral study.....	17.3	3.0	11.7	4.1	41.9	13.6	33.2	1.7	9.9	1.6
Seeking postdoctoral study.....	6.2	1.8	7.7	3.2	11.3	7.1	10.0	0.4	4.8	2.0
Definite employment.....	48.1	64.8	47.4	54.3	27.2	47.4	35.0	73.7	53.0	66.2
Seeking employment.....	17.9	20.4	21.7	26.3	10.6	19.9	12.1	12.9	20.6	15.6
Primary activity (percent) .....										
Research and development.....	26.3	5.5	64.0	6.6	44.6	36.0	61.9	32.0	22.7	11.9
Teaching.....	36.3	35.5	20.6	70.2	26.7	50.1	24.7	57.7	29.7	46.6
Administration.....	13.2	37.4	2.1	5.6	5.9	0.6	1.7	3.7	8.3	13.1
Professional services.....	13.0	11.6	5.1	5.9	9.8	2.5	3.9	1.7	33.5	16.6
Other.....	3.1	2.5	2.2	5.2	3.5	0.6	2.0	1.4	3.4	6.2
Region of employment after doctorate (percent) .....										
New England.....	6.2	5.3	5.5	6.4	4.4	6.5	6.4	6.1	7.6	5.5
Middle Atlantic.....	15.1	13.8	15.6	15.5	10.7	13.2	16.9	14.0	18.3	12.8
East North Central.....	12.9	12.9	11.3	14.4	11.3	14.1	13.3	15.9	12.7	13.9
West North Central.....	8.0	7.1	3.5	6.9	7.6	5.9	4.4	6.4	5.5	7.3
South Atlantic.....	15.7	16.3	13.0	15.1	14.4	11.8	13.6	14.6	16.7	14.6
East South Central.....	4.1	5.1	3.5	4.5	3.7	2.5	2.2	5.5	3.1	7.2
West South Central.....	7.4	6.1	6.7	7.8	7.3	7.3	5.6	6.9	6.4	12.3
Mountain.....	4.8	6.1	5.2	3.5	4.5	4.2	5.4	5.0	4.2	2.6
Pacific and insular.....	10.9	8.9	14.0	10.3	9.9	13.5	15.8	9.4	10.7	7.5
Foreign.....	9.7	5.6	14.7	6.7	20.4	14.9	10.0	9.6	7.3	9.5
Region unknown.....	7.1	6.6	6.7	6.6	5.9	5.9	6.1	4.3	7.4	6.9

<sup>1</sup> Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Excludes first-professional degrees, such as M.D., D.D.S., and D.V.M.

<sup>2</sup> Includes 2,497 individuals who did not report their citizenship at time of doctorate.

<sup>3</sup> Within the racial/ethnic category, mathematics and computer sciences are included under physical sciences. Distribution for U.S. citizens and foreign students with permanent visas.

<sup>4</sup> Includes mathematics and computer science.

NOTE.—The above classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The major dif-

ferences are that history is included under humanities rather than social sciences and that psychology is included under social sciences. The number of degrees also differs slightly from that reported in the NCES "Degrees and Other Formal Awards Conferred" survey. The above tabulation excludes some non-research doctorate degrees such as doctor's degree in theology. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Summary Report 1988: Doctorate Recipients From United States Universities*. (This table was prepared January 1990.)

**Table 264.—Statistical profile of persons receiving doctor's degrees in education: 1977-78 to 1987-88**

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Number of doctorates</b> .....	<b>7,190</b>	<b>7,370</b>	<b>7,576</b>	<b>7,489</b>	<b>7,226</b>	<b>7,147</b>	<b>6,780</b>	<b>6,717</b>	<b>6,602</b>	<b>6,447</b>	<b>6,349</b>
<b>Sex (percent)</b>											
Men.....	60.3	57.9	55.5	52.8	51.2	49.6	49.0	48.2	45.6	44.9	44.8
Women.....	39.7	42.1	44.5	47.2	48.8	50.4	51.0	51.8	54.4	55.1	55.2
<b>Racial/ethnic group (percent) <sup>1</sup></b>											
American Indian.....	0.8	0.9	0.8	0.6	0.5	0.7	0.5	0.7	0.5	0.7	0.6
Asian.....	1.3	1.3	1.3	1.8	1.7	1.9	1.5	1.7	1.8	1.7	2.4
Black.....	9.0	8.6	8.8	8.8	9.5	8.1	8.5	8.6	8.0	7.3	7.5
Mexican-American.....	( <sup>2</sup> )	( <sup>2</sup> )	0.8	1.1	1.2	1.3	1.2	1.2	1.4	1.3	1.2
Puerto Rican.....	( <sup>2</sup> )	( <sup>2</sup> )	0.4	0.6	0.7	0.7	0.6	1.0	0.9	0.9	0.8
Other Hispanic.....	( <sup>2</sup> )	( <sup>2</sup> )	1.1	0.7	1.0	0.9	0.8	1.0	1.3	1.3	0.9
White.....	81.4	81.7	83.1	83.1	83.6	84.8	85.1	84.5	84.8	85.1	85.3
Other and unknown.....	4.9	5.0	3.7	3.3	1.8	1.7	1.8	1.4	1.6	1.6	1.2
<b>Citizenship (percent)</b>											
United States.....	90.1	89.8	88.7	87.7	86.6	87.1	86.8	85.5	84.7	84.9	83.1
Foreign.....	7.5	8.1	8.2	8.8	9.9	9.8	9.8	10.4	9.6	9.2	10.2
Unknown.....	2.4	3.1	3.1	3.6	3.5	3.1	3.4	4.1	5.6	6.0	6.7
Median age at doctorate (years).....	36.5	36.5	37.0	37.3	37.4	37.8	38.4	38.7	39.4	39.8	40.5
Percent with bachelor's degree in same field as doctorate.....	39.7	38.6	39.0	38.9	39.9	39.5	39.6	38.7	39.0	37.8	36.9
<b>Median time lapse from bachelor's to doctorate (years)</b>											
Total time.....	12.7	12.7	13.1	13.5	13.6	14.1	14.6	15.1	15.7	16.2	16.9
Registered time.....	6.5	6.6	6.9	7.0	7.2	7.4	7.6	7.6	7.8	7.9	8.1

<sup>1</sup> Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey.

<sup>2</sup> Hispanic subcategories totaled 2.4 and 2.5 in 1977-78 and 1978-79, respectively.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The number of degrees also differs slightly from that reported in the NCES

"Degrees and Other Formal Awards Conferred" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared January 1990.)

**Table 265.—Statistical profile of persons receiving doctor's degrees in engineering: 1977-78 to 1987-88**

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Number of doctorates</b> .....	<b>2,423</b>	<b>2,494</b>	<b>2,479</b>	<b>2,528</b>	<b>2,644</b>	<b>2,760</b>	<b>2,915</b>	<b>3,165</b>	<b>3,376</b>	<b>3,716</b>	<b>4,190</b>
<b>Sex (percent)</b>											
Men.....	97.8	97.5	96.4	96.1	95.3	95.5	94.8	93.7	93.3	93.5	93.2
Women.....	2.2	2.5	3.6	3.9	4.7	4.5	5.2	6.3	6.7	6.6	6.8
<b>Racial/ethnic group (percent) <sup>1</sup></b>											
American Indian.....	0.6	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.3	0.4	0.2
Asian.....	17.2	18.9	17.9	19.2	16.8	16.7	16.5	17.6	15.2	17.1	15.5
Black.....	0.8	1.2	1.1	1.3	1.4	1.9	1.0	2.1	1.4	1.3	1.4
Mexican-American.....	( <sup>2</sup> )	( <sup>2</sup> )	0.1	0.1	0.3	0.3	0.4	0.4	0.3	0.4	0.5
Puerto Rican.....	( <sup>2</sup> )	( <sup>2</sup> )	0.2	0.3	0.7	0.4	0.5	0.3	0.6	0.2	0.6
Other Hispanic.....	( <sup>2</sup> )	( <sup>2</sup> )	1.5	0.6	1.4	1.3	1.4	0.7	1.1	1.1	1.3
White.....	73.2	71.4	73.5	74.4	75.2	76.1	76.4	74.5	78.3	76.2	77.0
Other and unknown.....	6.1	6.7	5.5	3.7	4.0	3.2	3.6	4.3	2.7	3.3	2.9
<b>Citizenship (percent)</b>											
United States.....	52.0	51.9	50.6	46.2	44.1	41.8	42.5	40.4	40.8	41.8	42.4
Foreign.....	45.1	45.6	46.3	49.1	50.1	53.5	52.9	54.6	50.8	50.7	49.8
Unknown.....	3.0	2.5	3.1	4.7	5.9	4.7	4.6	5.0	8.4	7.4	7.7
Median age at doctorate (years).....	30.2	30.3	30.3	30.5	30.7	30.8	30.7	30.9	31.0	31.0	31.0
Percent with bachelor's degree in same field as doctorate.....	78.2	77.9	75.2	74.1	72.4	74.0	74.3	74.2	73.0	75.2	76.4
<b>Median time lapse from bachelor's to doctorate (years)</b>											
Total time.....	7.5	7.6	7.6	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.1
Registered time.....	5.6	5.5	5.6	5.6	5.8	5.7	5.8	5.8	5.9	5.9	5.9

<sup>1</sup> Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey.

<sup>2</sup> Hispanic subcategories totaled 2.1 and 1.5 in 1977-78 and 1978-79, respectively.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The number of degrees also differs slightly from that reported in the NCES "De-

grees and Other Formal Awards Conferred" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared January 1990.)

**Table 266.—Statistical profile of persons receiving doctor's degrees in the humanities: 1977-78 to 1987-88**

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Number of doctorates</b> .....	<b>4,235</b>	<b>4,143</b>	<b>3,863</b>	<b>3,745</b>	<b>3,560</b>	<b>3,494</b>	<b>3,528</b>	<b>3,428</b>	<b>3,461</b>	<b>3,504</b>	<b>3,553</b>
<b>Sex (percent)</b>											
Men.....	62.3	61.5	60.4	58.7	57.6	56.2	55.0	56.8	54.8	55.1	55.7
Women.....	37.7	38.5	39.6	41.3	42.4	43.8	45.0	43.4	45.2	44.9	44.3
<b>Racial/ethnic group (percent) <sup>1</sup></b>											
American Indian.....	0.5	0.6	0.3	0.4	0.2	0.2	0.2	0.3	0.2	0.4	0.2
Asian.....	1.2	1.9	1.9	1.7	1.7	1.5	1.8	2.2	1.8	2.1	2.3
Black.....	2.3	3.4	2.9	2.8	3.3	2.5	3.3	2.5	2.8	2.8	3.0
Mexican-American.....	(2)	(2)	0.4	0.5	0.8	0.7	0.8	0.8	0.8	0.8	0.8
Puerto Rican.....	(2)	(2)	0.3	0.7	0.9	0.7	0.7	0.8	0.5	1.1	0.9
Other Hispanic.....	(2)	(2)	2.2	1.9	2.5	2.2	2.1	2.3	2.1	2.5	2.1
White.....	67.0	64.8	67.3	68.0	67.8	69.4	68.4	68.9	69.8	68.4	69.1
Other and unknown.....	5.9	5.9	4.8	4.1	2.8	2.7	2.7	2.4	2.2	2.2	1.8
<b>Citizenship (percent)</b>											
United States.....	89.3	88.2	87.3	85.7	84.7	85.3	83.7	83.1	78.8	78.0	78.4
Foreign.....	7.9	8.5	8.8	10.2	10.2	10.7	11.2	12.1	13.7	14.3	14.4
Unknown.....	2.8	3.3	3.9	4.1	5.1	4.0	5.2	4.8	7.4	7.7	7.1
Median age at doctorate (years).....	32.6	33.0	33.4	33.5	34.0	34.0	34.5	34.7	35.0	35.0	35.4
Percent with bachelor's degree in same field as doctorate.....	62.5	62.3	64.2	61.0	61.1	58.4	60.2	58.8	58.2	58.5	56.7
Median time lapse from bachelor's to doctorate (years)											
Total time.....	10.2	10.3	10.8	10.8	11.2	11.1	11.5	11.7	12.1	12.0	12.2
Registered time.....	7.3	7.5	7.7	7.7	8.0	8.0	8.2	8.3	8.2	8.4	8.5

<sup>1</sup> Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey.  
<sup>2</sup> Hispanic subcategories totaled 3.2 and 3.4 in 1977-78 and 1978-79, respectively.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The major differences are that history is included under humanities rather than

social sciences and that psychology is included under social sciences. The number of degrees also differs slightly from that reported in the NCES "Degrees and Other Formal Awards Conferred" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared January 1990.)

**Table 267.—Statistical profile of persons receiving doctor's degrees in the life sciences: 1977-78 to 1987-88**

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Number of doctorates</b> .....	<b>4,887</b>	<b>5,076</b>	<b>5,325</b>	<b>5,461</b>	<b>5,565</b>	<b>5,540</b>	<b>5,745</b>	<b>5,748</b>	<b>5,720</b>	<b>5,742</b>	<b>6,143</b>
<b>Sex (percent)</b>											
Men.....	77.9	76.8	74.8	73.8	72.3	69.0	68.9	67.7	66.0	64.8	63.2
Women.....	22.1	23.4	25.2	26.4	27.7	31.0	31.1	32.3	34.0	35.2	38.8
<b>Racial/ethnic group (percent) <sup>1</sup></b>											
American Indian.....	0.8	0.4	0.2	0.2	0.3	0.2	0.3	0.4	0.5	0.4	0.4
Asian.....	5.4	5.3	5.0	4.8	4.5	5.2	4.8	4.6	4.8	5.8	4.9
Black.....	1.9	1.4	1.5	1.8	1.5	1.8	2.0	2.1	1.9	2.4	2.2
Mexican-American.....	(2)	(2)	0.2	0.3	0.4	0.2	0.3	0.4	0.4	0.4	0.4
Puerto Rican.....	(2)	(2)	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.8	0.8
Other Hispanic.....	(2)	(2)	0.7	0.8	0.8	0.7	0.8	1.1	1.3	1.0	1.3
White.....	64.9	65.9	66.7	67.8	69.1	69.5	69.1	69.0	68.9	67.3	68.5
Other and unknown.....	5.9	5.9	5.8	4.5	3.1	2.3	2.8	2.0	1.8	2.3	1.7
<b>Citizenship (percent)</b>											
United States.....	79.8	79.8	80.4	80.3	80.4	79.9	79.4	77.1	75.9	73.5	71.3
Foreign.....	17.9	17.4	17.8	17.1	18.8	17.4	17.8	19.3	18.8	20.5	22.2
Unknown.....	2.5	2.7	2.0	2.6	3.0	2.8	3.0	3.8	5.3	8.1	8.4
Median age at doctorate (years).....	30.0	30.0	30.0	30.1	30.3	30.8	31.0	31.3	31.8	31.7	31.9
Percent with bachelor's degree in same field as doctorate.....	40.9	40.7	40.9	40.7	41.4	56.3	58.1	58.3	57.1	55.8	55.4
Median time lapse from bachelor's to doctorate (years)											
Total time.....	7.3	7.3	7.3	7.3	7.8	7.9	8.2	8.4	8.7	8.7	8.9
Registered time.....	5.7	5.7	5.8	5.9	6.0	6.1	6.3	6.3	6.4	6.5	6.5

<sup>1</sup> Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey.  
<sup>2</sup> Hispanic subcategories totaled 1.1 in 1977-78 and 1978-79.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The number of degrees also differs slightly from that reported in the NCES

"Degrees and Other Formal Awards Conferred" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared January 1990.)

**Table 268.—Statistical profile of persons receiving doctor's degrees in the physical sciences: 1977-78 to 1987-88**

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Number of doctorates</b> .....	<b>3,234</b>	<b>3,321</b>	<b>3,151</b>	<b>3,208</b>	<b>3,348</b>	<b>3,436</b>	<b>3,459</b>	<b>3,531</b>	<b>3,679</b>	<b>3,837</b>	<b>4,046</b>
<b>Sex (percent)</b>											
Men.....	90.4	89.4	87.7	86.7	86.3	86.4	85.4	83.7	83.6	83.3	82.6
Women.....	9.6	10.6	12.3	11.3	13.7	13.6	14.6	16.3	16.4	16.7	17.4
<b>Racial/ethnic group (percent) <sup>1</sup></b>											
American Indian.....	0.6	0.5	0.2	0.1	0.2	0.3	0.2	0.1	0.2	0.3	0.3
Asian.....	7.3	6.9	7.2	6.5	6.0	6.4	6.4	6.7	6.9	6.6	5.5
Black.....	1.5	1.5	0.9	1.2	1.1	1.0	1.3	1.2	1.0	1.0	1.3
Mexican-American.....	( <sup>2</sup> )	( <sup>2</sup> )	0.2	0.1	0.2	0.2	0.3	0.5	0.5	0.4	0.6
Puerto Rican.....	( <sup>2</sup> )	( <sup>2</sup> )	0.1	0.4	0.3	0.3	0.4	0.2	0.5	1.0	0.6
Other Hispanic.....	( <sup>2</sup> )	( <sup>2</sup> )	0.7	0.7	0.7	0.8	1.2	0.9	1.0	0.9	1.1
White.....	62.2	62.6	63.7	65.3	68.5	67.4	67.0	67.0	66.5	66.6	67.3
Other and unknown.....	7.5	7.1	7.0	5.7	3.0	3.6	3.2	3.2	3.4	3.0	3.1
<b>Citizenship (percent)</b>											
United States.....	77.1	77.4	75.9	75.4	75.0	74.0	73.6	70.3	66.1	65.1	64.3
Foreign.....	20.7	20.6	21.6	21.3	21.9	23.1	23.5	25.5	27.8	28.5	26.8
Unknown.....	2.2	2.0	2.4	3.3	3.1	2.9	2.9	4.1	6.1	6.4	6.9
Median age at doctorate (years).....	29.3	28.9	29.1	29.0	29.2	29.3	29.5	29.5	29.9	29.6	30.1
Percent with bachelor's degree in same field as doctorate.....	77.4	76.1	76.5	76.6	77.2	75.4	77.7	75.0	73.4	72.6	72.6
<b>Median time lapse from bachelor's to doctorate (years)</b>											
Total time.....	6.9	6.6	6.8	6.7	6.8	7.0	7.0	7.1	7.1	7.1	7.2
Registered time.....	5.7	5.6	5.7	5.7	5.6	5.9	6.0	6.0	6.0	5.9	6.1

<sup>1</sup> Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey.

<sup>2</sup> Hispanic subcategories totaled 0.9 and 1.4 in 1977-78 and 1978-79, respectively.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The number of degrees also differs slightly from that reported in the NCES

"Degrees and Other Formal Awards Conferred" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared January 1990.)

**Table 269.—Statistical profile of persons receiving doctor's degrees in the social sciences: 1977-78 to 1987-88**

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Number of doctorates</b> .....	<b>6,453</b>	<b>6,379</b>	<b>6,253</b>	<b>6,505</b>	<b>6,250</b>	<b>6,055</b>	<b>5,995</b>	<b>5,720</b>	<b>5,841</b>	<b>5,718</b>	<b>5,769</b>
<b>Sex (percent)</b>											
Men.....	69.6	67.0	65.4	64.4	63.3	60.7	59.2	58.9	57.6	57.2	55.0
Women.....	30.2	33.0	34.6	35.6	36.7	39.3	40.6	41.1	42.4	42.6	45.0
<b>Racial/ethnic group (percent) <sup>1</sup></b>											
American Indian.....	0.5	0.6	0.3	0.2	0.4	0.2	0.2	0.4	0.4	0.5	0.3
Asian.....	2.1	2.3	2.7	2.4	2.4	2.1	2.4	2.5	2.5	3.1	3.2
Black.....	3.6	3.9	4.0	3.9	4.6	3.8	4.5	4.3	4.0	3.7	4.3
Mexican-American.....	( <sup>2</sup> )	( <sup>2</sup> )	0.4	0.8	0.9	0.9	0.6	0.9	1.0	1.0	1.0
Puerto Rican.....	( <sup>2</sup> )	( <sup>2</sup> )	0.3	0.3	0.6	0.4	0.6	0.5	0.6	0.5	0.7
Other Hispanic.....	( <sup>2</sup> )	( <sup>2</sup> )	1.2	1.1	1.1	1.6	1.3	1.4	1.6	2.0	1.5
White.....	65.6	65.5	66.5	67.6	67.6	68.2	68.0	67.6	67.9	67.3	67.3
Other and unknown.....	6.0	5.7	4.5	3.7	2.2	2.8	2.1	2.4	2.0	2.0	1.7
<b>Citizenship (percent)</b>											
United States.....	83.6	84.4	84.7	84.0	81.8	82.9	80.8	79.3	77.9	76.1	74.8
Foreign.....	11.7	11.6	11.6	11.9	12.6	12.5	14.1	15.3	15.3	15.7	16.1
Unknown.....	4.7	4.0	3.7	4.2	5.6	4.5	5.4	5.4	6.9	8.3	9.1
Median age at doctorate (years).....	30.9	31.5	31.6	32.0	32.3	32.4	32.7	33.0	33.4	33.5	34.1
Percent with bachelor's degree in same field as doctorate.....	57.7	56.4	58.6	59.1	57.4	58.9	59.3	56.5	57.0	56.4	54.5
<b>Median time lapse from bachelor's to doctorate (years)</b>											
Total time.....	8.2	6.5	6.7	9.0	9.2	9.3	9.7	9.9	10.0	10.3	10.5
Registered time.....	6.0	6.2	6.4	6.5	6.7	6.6	7.1	7.1	7.2	7.4	7.4

<sup>1</sup> Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey.

<sup>2</sup> Hispanic categories totaled 2.0 and 1.9 in 1977-78 and 1978-79, respectively.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The major differences are that history is included under humanities rather than

social sciences and that psychology is included under social sciences. The number of degrees also differs slightly from that reported in the NCES "Degrees and Other Formal Awards Conferred" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared January 1990.)

Table 270.—Doctor's degrees<sup>1</sup> conferred by 60 large institutions of higher education: 1978-79 to 1987-88

Institution	Rank order <sup>2</sup>	Total, 1978-79 to 1987-88	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88 <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
United States, all institutions	—	332,849	32,730	32,615	32,968	32,707	32,775	33,209	32,943	33,683	34,120	34,839
Total, 60 large institutions	—	199,758	20,194	20,075	20,228	19,915	19,355	19,890	19,727	19,600	20,124	20,450
University of California, Berkeley	1	7,139	709	735	672	712	702	698	689	753	727	742
University of Wisconsin, Madison	2	6,521	668	665	623	690	594	631	674	608	667	664
University of Michigan, Ann Arbor	3	6,066	660	689	552	605	584	738	607	598	589	564
University of Illinois, Urbana Campus	4	5,963	652	597	622	567	543	538	622	560	618	648
Columbia University (N.Y.) <sup>4</sup>	5	5,939	585	630	610	587	529	603	625	610	593	567
Ohio State University, Main Campus	6	5,508	575	566	530	585	563	521	543	512	570	542
Stanford University (Calif.)	7	5,046	527	458	495	489	451	497	497	530	562	560
University of Minnesota, Minneapolis-St. Paul	8	4,995	466	485	518	459	466	495	515	556	508	527
University of Texas at Austin	9	4,621	455	432	452	418	418	427	474	545	612	588
University of California, Los Angeles	10	4,782	495	479	559	481	465	485	449	433	448	508
Harvard University (Mass.)	11	4,761	533	513	586	462	474	457	385	452	434	465
Michigan State University	12	4,521	464	474	485	488	481	395	405	436	464	427
Cornell University (N.Y.) <sup>5</sup>	13	4,343	433	419	424	405	442	432	433	456	445	454
Massachusetts Institute of Technology	14	4,310	381	387	406	416	429	415	447	455	458	518
New York University	15	4,106	458	436	432	435	344	418	391	377	392	421
Indiana University, Bloomington	16	4,098	488	451	436	448	413	417	397	353	374	319
University of Pittsburgh, Main Campus (Pa.)	17	3,894	360	383	357	426	407	369	396	390	394	390
University of Southern California	18	3,818	435	424	365	365	306	424	424	363	354	354
Purdue University, Main Campus (Ind.)	19	3,809	374	387	396	377	388	383	389	379	370	366
Pennsylvania State University, Main Campus	20	3,717	370	365	394	389	394	364	371	350	341	379
University of Washington	21	3,638	342	351	342	366	367	358	342	345	411	392
University of Maryland, College Park Campus	22	3,613	367	310	348	364	354	387	373	370	378	364
University of Pennsylvania	23	3,486	331	335	323	396	361	406	367	341	307	319
Rutgers University, New Brunswick (N.J.)	24	3,439	367	323	381	340	372	362	343	320	320	311
University of Chicago (Ill.)	25	3,214	326	296	340	349	315	329	291	329	319	316
Texas A&M University, Main Campus	26	3,060	257	290	274	253	286	296	315	336	369	382
Northwestern University (Ill.)	27	3,058	301	308	308	287	274	310	326	312	319	313
Boston University (Mass.)	28	3,026	274	336	316	314	324	333	276	307	299	245
Nova University (Fla.)	29	2,957	399	447	332	294	240	210	209	263	271	292
University of Florida	30	2,938	313	281	295	237	299	294	301	290	313	313
University of Massachusetts at Amherst	31	2,927	316	282	317	298	264	266	300	290	311	261
University of North Carolina at Chapel Hill	32	2,900	300	307	296	280	279	283	260	283	311	301
University of Georgia	33	2,893	252	268	268	282	296	270	355	309	275	316
Florida State University	34	2,888	343	370	336	316	293	273	257	224	228	250
Yale University (Conn.)	35	2,876	323	286	265	292	281	299	276	259	305	290
University of Iowa	36	2,827	306	274	270	315	248	273	284	259	287	312
University of Arizona	37	2,608	217	259	225	270	269	259	261	260	296	290
Temple University (Pa.)	38	2,542	237	260	230	237	227	242	264	277	290	277
Iowa State University of Science and Technology	39	2,519	227	239	256	249	214	228	245	256	296	309
Virginia Polytechnic Institute and State University	40	2,458	193	194	211	227	246	271	260	274	274	287
University of California, Davis	41	2,394	195	247	270	204	290	253	224	245	228	238
Vanderbilt University (Tenn.)	42	2,327	122	250	262	267	228	232	239	259	252	196
University of Kansas, Main Campus	43	2,306	252	238	222	236	212	241	260	211	221	213
University of Missouri, Columbia	44	2,296	287	254	220	229	221	245	230	202	181	227
University of Tennessee, Knoxville	45	2,292	251	218	228	234	232	250	223	233	206	217
University of Colorado at Boulder	46	2,267	241	212	267	216	215	258	196	196	229	231
Princeton University (N.J.)	47	2,255	242	195	217	230	231	226	211	218	218	269
City University of New York Graduate School and University Center	48	2,230	261	190	212	203	206	200	234	232	232	258
State University of New York at Buffalo, Main Campus	49	2,188	238	234	208	236	213	206	194	206	209	240
University of Virginia, Main Campus	50	2,185	228	229	227	202	224	190	221	217	218	229
Johns Hopkins University (Md.)	51	2,129	196	184	209	187	187	212	254	220	213	267
University of Nebraska, Lincoln	52	2,052	189	206	222	201	203	215	179	201	203	233
Oklahoma State University, Main Campus	53	1,978	189	193	198	187	197	197	220	224	189	184
North Carolina State University at Raleigh	54	1,928	165	164	159	191	177	210	204	219	200	239
University of Oregon	55	1,903	198	201	207	215	197	208	173	197	140	167
University of Cincinnati, Main Campus (Ohio)	56	1,849	173	183	193	181	189	202	171	187	182	188
University of Utah	57	1,831	166	206	193	181	188	162	175	188	179	209
University of Connecticut	58	1,810	161	194	205	168	159	195	181	174	193	180
University of Rochester (N.Y.)	59	1,775	199	191	180	164	179	154	166	195	198	187
United States International University (Calif.)	60	1,743	138	209	284	226	199	172	128	157	115	115

<sup>1</sup> Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Excludes first-professional degrees (e.g., M.D., D.D.S., and D.V.M.).

<sup>2</sup> Institutions are ranked by the total number of doctor's degrees conferred during the designated 10-year period.

<sup>3</sup> Preliminary data.

<sup>4</sup> Includes degrees conferred by the Main Division and Teachers College.

<sup>5</sup> Includes degrees conferred by the Endowed and Statutory Colleges.  
—Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared April 1990.)

**Table 271.—Percentage of the high school class of 1980 enrolled in postsecondary education, by attendance status, sex, race/ethnicity, socioeconomic status, and ability level: Fall 1980 to fall 1985**

Sex, race/ethnicity, socioeconomic status, and ability level	Fall 1980		Fall 1981		Fall 1982		Fall 1983		Fall 1984		Fall 1985	
	Full-time	Part-time										
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	46.1	5.8	43.1	6.6	34.1	9.9	33.3	6.6	17.1	7.5	10.4	7.6
<b>Sex</b>												
Male.....	43.2	5.4	42.4	6.0	33.9	9.0	34.0	6.4	18.3	6.7	11.8	7.5
Female.....	48.9	6.1	43.8	7.1	34.3	10.8	32.7	7.1	15.9	8.1	9.2	7.8
<b>Race/ethnicity</b>												
White, non-Hispanic.....	47.7	5.8	44.8	6.8	35.5	10.2	34.7	6.7	18.0	7.8	10.5	7.8
Black, non-Hispanic.....	42.0	4.1	39.8	4.8	29.8	6.1	28.3	6.0	12.7	5.4	6.9	6.2
Hispanic.....	34.9	7.8	30.5	9.4	23.8	10.8	22.9	6.0	11.8	6.0	10.0	6.3
American Indian.....	34.2	5.3	35.0	8.9	21.0	11.9	22.4	6.2	14.6	2.1	10.5	2.8
Asian.....	67.4	12.0	64.6	12.8	57.7	15.8	53.8	10.9	37.2	13.8	20.8	16.6
<b>Socioeconomic status<sup>1</sup></b>												
Low.....	30.3	5.0	28.7	5.4	16.7	6.7	17.1	5.4	9.7	5.3	6.3	5.8
Low-middle.....	40.3	5.9	35.8	7.1	27.3	9.4	25.0	6.8	13.5	7.1	8.0	7.8
High-middle.....	51.9	7.0	48.5	7.2	38.0	11.7	36.7	6.0	16.2	6.6	10.5	7.6
High.....	70.2	5.6	68.4	6.9	59.3	11.0	60.1	7.8	29.2	9.5	18.5	9.0
<b>Ability level<sup>2</sup></b>												
Low.....	22.2	4.9	19.8	5.6	13.0	7.8	12.8	4.8	7.2	3.3	5.2	2.9
Low-middle.....	38.4	6.4	34.8	7.7	25.5	10.7	23.7	6.0	13.8	6.0	6.0	7.4
High-middle.....	58.1	6.3	52.3	7.6	39.9	13.1	39.2	6.0	19.8	6.3	11.7	6.4
High.....	75.1	5.7	73.3	6.1	63.8	10.3	63.5	7.1	30.8	9.8	16.4	11.1

<sup>1</sup> Socioeconomic status quartiles as measured by a composite score on parental education, family income, father's occupation, and household characteristics in 1980.  
<sup>2</sup> Ability level quartiles as measured by performance on a test battery administered as part of the High School and Beyond survey in 1980.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond survey. (This table was prepared October 1988.)

**Table 272.—Percentage of the high school class of 1980 enrolled in 4-year colleges, by attendance status, sex, race/ethnicity, socioeconomic status, and ability level: Fall 1980 to fall 1985**

Sex, race/ethnicity, socioeconomic status, and ability level	Fall 1980		Fall 1981		Fall 1982		Fall 1983		Fall 1984		Fall 1985	
	Full-time	Part-time										
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	30.3	1.5	28.9	1.6	26.3	3.4	27.9	2.7	13.8	4.3	7.9	4.2
<b>Sex</b>												
Male.....	28.9	1.4	26.5	1.6	25.9	3.3	26.7	2.8	15.5	4.1	9.2	4.1
Female.....	31.6	1.5	29.3	1.6	26.6	3.5	27.2	2.7	12.3	4.8	6.7	4.3
<b>Race/ethnicity</b>												
White, non-Hispanic.....	31.8	1.5	30.8	1.8	28.0	3.5	29.8	2.7	14.7	4.4	6.3	4.2
Black, non-Hispanic.....	28.2	1.1	26.1	1.3	21.2	3.2	21.3	2.1	9.1	3.0	5.6	3.2
Hispanic.....	18.7	1.3	14.2	1.5	13.9	2.0	15.5	2.8	9.1	4.7	6.2	4.3
American Indian.....	14.5	1.3	14.4	1.8	13.2	2.7	15.7	2.3	9.8	1.0	6.6	1.0
Asian.....	44.8	4.0	43.1	4.0	42.8	6.8	46.4	4.7	34.0	6.5	16.3	6.3
<b>Socioeconomic status<sup>1</sup></b>												
Low.....	15.5	1.1	14.8	0.9	12.3	2.2	12.2	1.4	6.8	2.4	4.0	2.3
Low-middle.....	23.2	1.3	20.9	1.4	19.1	2.7	19.7	2.3	10.0	4.0	5.8	4.0
High-middle.....	33.5	1.4	31.4	1.8	26.7	3.6	29.8	3.2	14.6	4.7	6.0	4.5
High.....	55.0	2.3	54.8	2.5	49.8	5.3	54.3	3.7	25.9	6.8	16.1	6.2
<b>Ability level<sup>2</sup></b>												
Low.....	6.2	1.0	7.4	0.8	6.2	1.5	7.1	0.5	4.1	0.6	2.4	0.9
Low-middle.....	21.1	0.7	19.9	0.8	17.3	2.7	17.2	2.5	9.8	3.8	5.1	3.7
High-middle.....	35.6	1.7	32.9	2.3	29.8	4.5	32.5	3.6	15.5	5.8	9.2	4.5
High.....	62.9	2.3	61.5	2.8	56.8	5.2	56.8	3.8	28.6	7.3	17.0	6.0

<sup>1</sup> Socioeconomic status quartiles as measured by a composite score on parental education, family income, father's occupation, and household characteristics in 1980.  
<sup>2</sup> Ability level quartiles as measured by performance on a test battery administered as part of the High School and Beyond survey in 1980.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond survey. (This table was prepared October 1988.)

**Table 273.—Mean number of semester credits completed by bachelor's degree recipients, by major and course area: 1972 to 1976 and 1980 to 1984**

Selected college majors	Course areas									
	Total	Business	Computer science	Education	Engineering	Mathematics	Biological sciences	Physical sciences	Social sciences	Other
1	2	3	4	5	6	7	8	9	10	11
<b>1972-76<sup>1</sup></b>										
Mean, all majors.....	124.0	7.8	1.0	9.7	2.3	7.4	7.6	9.0	30.3	48.8
Business and management.....	124.4	41.2	2.3	0.5	0.4	10.2	2.5	4.6	30.4	32.0
Computer science.....	133.3	6.6	33.5	0.4	5.3	22.4	1.9	7.6	20.6	34.6
Education.....	126.4	0.9	0.3	40.2	—	5.0	5.5	4.3	23.9	46.4
Engineering.....	134.6	1.6	2.0	0.1	50.0	16.2	1.3	20.5	14.0	27.1
English.....	117.8	0.5	0.1	7.6	0.1	3.2	3.4	3.4	24.2	75.2
Fine arts.....	124.9	0.3	0.1	6.6	—	1.3	2.5	2.1	13.6	98.4
Life sciences.....	122.2	0.4	0.6	1.7	—	6.4	35.6	26.2	17.8	31.3
Physical sciences.....	122.7	0.6	1.4	0.9	1.9	16.2	9.6	49.5	13.1	29.2
Psychology.....	119.1	2.0	0.5	5.9	0.3	5.5	6.2	5.9	56.0	36.9
Social sciences.....	120.6	3.4	0.4	3.3	0.4	5.3	3.2	4.3	60.3	40.1
<b>1980-84<sup>2</sup></b>										
Mean, all majors.....	123.5	12.6	3.3	6.2	4.6	6.4	5.3	8.1	27.5	47.2
Business and management.....	122.6	41.2	4.5	0.6	1.1	8.9	2.2	3.9	27.5	32.7
Computer science.....	129.3	11.8	27.9	0.3	4.7	21.3	1.8	8.5	19.0	33.9
Education.....	127.4	0.7	0.3	45.5	0.1	4.4	4.4	3.6	20.6	47.3
Engineering.....	132.3	1.0	2.3	0.6	52.5	16.2	1.1	20.2	12.3	25.9
English.....	114.8	1.7	1.5	6.9	—	2.2	2.1	4.7	21.4	74.4
Fine arts.....	120.5	1.7	0.6	5.1	—	1.7	2.7	1.5	14.1	93.1
Life sciences.....	121.9	0.7	1.5	1.9	0.2	10.1	33.5	22.6	16.1	33.3
Physical sciences.....	124.3	0.2	4.9	0.1	2.0	14.1	12.9	46.7	11.6	30.0
Psychology.....	120.7	3.0	2.7	2.1	—	6.5	5.8	4.2	55.2	41.2
Social sciences.....	119.2	6.0	1.4	1.0	0.5	5.4	4.4	5.1	52.0	43.3

<sup>1</sup> Sample survey based on 1972 high school seniors who completed bachelor's degrees by 1976.

<sup>2</sup> Sample survey based on 1980 high school seniors who completed bachelor's degrees by 1984.

—Data not reported or not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond survey. (This table was prepared April 1986.)

**Table 274.—Colleges and universities offering remedial instruction or tutoring, by type and control of institution: 1980, 1984, and 1988**

Type and control of institution	Percent of colleges offering remedial instruction or tutoring			Change in percentage points	
	1980	1984	1988	1980 to 1984	1984 to 1988
1	2	3	4	5	6
All 4-year colleges.....	78.9	85.6	89.0	6.9	3.2
All 2-year colleges.....	63.6	93.4	93.8	9.6	0.4
Public institutions					
4-year colleges.....	69.6	92.9	94.7	3.1	1.6
2-year colleges.....	69.6	97.2	96.9	7.6	1.7
Private institutions					
4-year colleges.....	73.8	62.5	66.3	8.7	3.6
2-year colleges.....	61.9	78.9	77.8	17.0	-1.1

SOURCE: College Entrance Examination Board, *Annual Survey of Colleges, 1986-87, Summary Statistics*, copyrighted, and unpublished tabulations. (This table was prepared January 1989.)

**Table 275.—Highest level of education attained by 1980 high school seniors, by selected student and school characteristics: Spring 1986**

Student and school characteristics	Highest educational attainment of 1980 high school seniors in 1986						
	Total	No high school diploma <sup>1</sup>	High school diploma	License <sup>2</sup>	Associate degree	Bachelor's degree	Graduate/professional degree
1	2	3	4	5	6	7	8
<b>Total</b> .....	100.0	0.9	61.8	11.9	6.5	18.2	0.7
<b>Sex</b>							
Men.....	100.0	1.0	64.0	10.5	5.9	17.6	0.9
Women.....	100.0	0.6	59.6	13.3	7.0	16.6	0.6
<b>Race/ethnicity</b>							
White, non-Hispanic.....	100.0	0.6	60.0	11.5	6.6	20.2	0.9
Black, non-Hispanic.....	100.0	1.2	69.4	13.9	5.3	9.9	0.2
Hispanic.....	100.0	1.7	70.2	13.8	7.3	6.8	0.1
Asian.....	100.0	( <sup>3</sup> )	49.6	12.6	8.7	27.3	1.7
American Indian.....	100.0	( <sup>3</sup> )	61.3	16.6	9.3	10.6	( <sup>3</sup> )
<b>Socioeconomic status group<sup>4</sup></b>							
Low.....	100.0	1.2	74.1	12.3	5.5	6.6	0.2
Low-middle.....	100.0	0.5	66.7	13.6	6.0	11.1	0.2
High-middle.....	100.0	0.1	58.4	12.9	7.7	20.4	0.6
High.....	100.0	( <sup>3</sup> )	45.7	8.7	6.3	37.1	2.2
<b>High school program<sup>5</sup></b>							
General.....	100.0	0.6	69.7	12.6	6.5	10.2	0.2
Academic.....	100.0	0.1	45.6	6.6	7.2	36.6	1.6
Vocational.....	100.0	0.6	72.8	16.2	6.9	3.6	0.0
<b>Postsecondary education plans<sup>6</sup></b>							
No plans.....	100.0	1.4	63.5	12.7	2.1	0.2	( <sup>3</sup> )
Attend vocational/technical school.....	100.0	0.3	72.5	17.7	6.4	1.1	( <sup>3</sup> )
Attend college less than 4 years.....	100.0	0.2	65.5	14.4	13.1	6.8	( <sup>3</sup> )
Earn bachelor's degree.....	100.0	( <sup>3</sup> )	48.9	6.2	6.9	35.6	0.7
Earn advanced degree.....	100.0	0.1	43.5	7.9	4.9	40.6	3.0
<b>Type of high school</b>							
Public.....	100.0	1.0	63.2	12.1	6.6	16.4	0.7
Catholic.....	100.0	( <sup>3</sup> )	47.4	11.9	6.4	32.6	1.6
Other private.....	100.0	( <sup>3</sup> )	52.3	7.0	3.9	36.7	0.1

<sup>1</sup> Seniors who dropped out of high school after spring 1980 survey and had not completed high school by 1986.

<sup>2</sup> Persons who earned a certificate for completing a program of study.

<sup>3</sup> Less than .05 percent.

<sup>4</sup> Socioeconomic status was measured by a composite score on parental education, family income, father's occupation, and household characteristics in 1980.

<sup>5</sup> Students' self-reported high school program.

<sup>6</sup> During their senior year of high school, students were asked about the highest level of education they planned to attain. Students who planned to get less than a high

school education or a high school education only were classified as having no postsecondary education plans.

NOTE.—Because of rounding, percents may not add to 100.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond survey. (This table was prepared September 1987.)

**Table 276.—Highest level of education attained by 1980 high school seniors, by race/ethnicity and October 1980 postsecondary education attendance status: Spring 1986**

Race/ethnicity and October 1980 postsecondary education attendance status	Highest educational attainment 1980 high school seniors in 1986						
	Total	No high school diploma <sup>1</sup>	High school diploma	License <sup>2</sup>	Associate degree	Bachelor's degree	Graduate/professional degree
1	2	3	4	5	6	7	8
<b>All students</b>							
Part-time 2-year public college.....	100.0	0.7	66.4	17.7	8.8	6.5	( <sup>3</sup> )
Part-time 4-year public college.....	100.0	2.7	57.1	15.4	1.6	22.6	0.6
Full-time 2-year public college.....	100.0	( <sup>3</sup> )	49.5	11.7	20.7	17.6	0.5
Full-time 4-year public college.....	100.0	( <sup>3</sup> )	41.7	7.6	4.5	44.9	1.3
Full-time 4-year private college.....	100.0	( <sup>3</sup> )	31.1	8.8	5.1	51.9	3.0
Not a student.....	100.0	1.8	78.2	12.6	3.6	3.5	0.2
<b>White</b>							
Part-time 2-year public college.....	100.0	0.8	67.7	17.9	6.9	6.7	( <sup>3</sup> )
Part-time 4-year public college.....	100.0	3.4	54.6	14.5	0.3	27.0	( <sup>3</sup> )
Full-time 2-year public college.....	100.0	( <sup>3</sup> )	48.6	10.8	20.7	19.3	0.7
Full-time 4-year public college.....	100.0	( <sup>3</sup> )	39.0	8.8	4.6	46.0	1.5
Full-time 4-year private college.....	100.0	( <sup>3</sup> )	28.1	7.9	5.1	55.7	3.3
Not a student.....	100.0	1.6	78.5	12.7	3.5	3.5	0.2
<b>Black</b>							
Part-time 2-year public college.....	100.0	( <sup>3</sup> )	65.8	22.1	9.8	2.3	( <sup>3</sup> )
Part-time 4-year public college.....	100.0	( <sup>3</sup> )	58.5	25.1	6.0	8.5	1.8
Full-time 2-year public college.....	100.0	( <sup>3</sup> )	52.8	19.2	16.9	9.1	( <sup>3</sup> )
Full-time 4-year public college.....	100.0	( <sup>3</sup> )	59.4	11.2	3.4	25.6	0.5
Full-time 4-year private college.....	100.0	( <sup>3</sup> )	50.5	15.0	5.5	28.5	0.6
Not a student.....	100.0	2.2	78.1	13.9	3.6	2.8	( <sup>3</sup> )
<b>Hispanic</b>							
Part-time 2-year public college.....	100.0	( <sup>3</sup> )	57.4	14.9	23.4	4.4	( <sup>3</sup> )
Part-time 4-year public college.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Full-time 2-year public college.....	100.0	( <sup>3</sup> )	53.9	14.9	22.7	8.5	( <sup>3</sup> )
Full-time 4-year public college.....	100.0	( <sup>3</sup> )	51.1	18.4	4.1	25.8	0.9
Full-time 4-year private college.....	100.0	( <sup>3</sup> )	46.8	19.4	6.1	26.8	1.0
Not a student.....	100.0	3.1	63.2	10.3	2.4	0.9	( <sup>3</sup> )

<sup>1</sup> Seniors who dropped out of high school after spring 1980 survey and had not completed high school by 1986.  
<sup>2</sup> Includes persons who earned a certificate for completing a program of study.  
<sup>3</sup> Less than .05 percent.  
<sup>4</sup> Fewer than 30 cases available for analysis. Estimates are suppressed because they are unreliable.

NOTE.—Because of rounding, percents may not add to 100.0.  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond survey. (This table was prepared September 1987.)

**Table 277.—Highest level of education attained by 1980 high school seniors, by socioeconomic status and race/ethnicity: Spring 1986**

Socioeconomic status <sup>1</sup> in 1980 and race/ethnicity	Highest educational attainment of 1980 high school seniors in 1986						
	Total	No high school diploma <sup>2</sup>	High school diploma	License <sup>3</sup>	Associate degree	Bachelor's degree	Graduate/professional degree
1	2	3	4	5	6	7	8
<b>Lower 25 percent</b>							
White, non-Hispanic.....	100.0	0.9	75.1	12.2	5.0	6.6	0.3
Black, non-Hispanic.....	100.0	1.4	73.0	12.7	5.1	7.7	0.1
Hispanic.....	100.0	1.6	73.9	11.8	7.8	4.9	( <sup>4</sup> )
Asian.....	100.0	( <sup>4</sup> )	53.4	17.3	15.7	12.0	1.6
<b>Middle 50 percent</b>							
White, non-Hispanic.....	100.0	0.3	62.0	13.0	8.0	16.3	0.4
Black, non-Hispanic.....	100.0	1.3	67.5	14.7	6.5	10.7	0.3
Hispanic.....	100.0	1.0	67.0	14.7	6.5	10.7	0.2
Asian.....	100.0	( <sup>4</sup> )	51.1	11.7	11.1	26.1	( <sup>4</sup> )
<b>Upper 25 percent</b>							
White, non-Hispanic.....	100.0	( <sup>4</sup> )	44.9	8.6	6.2	38.2	2.2
Black, non-Hispanic.....	100.0	( <sup>4</sup> )	56.3	12.4	5.4	25.5	0.4
Hispanic.....	100.0	0.3	60.0	11.4	9.6	18.0	0.7
Asian.....	100.0	( <sup>4</sup> )	42.9	6.5	4.8	40.0	5.9

<sup>1</sup> Socioeconomic status was measured by a composite score on parental education, family income, father's occupation, and household characteristics in 1980.  
<sup>2</sup> Seniors who dropped out of high school after spring 1980 survey and had not completed high school by 1986.  
<sup>3</sup> Includes persons who earned a certificate for completing a program of study.

<sup>4</sup> Less than .05 percent.  
 NOTE.—Because of rounding, percents may not add to 100.0.  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond survey. (This table was prepared September 1987.)

**Table 278.—Cumulative percentage of 1972, 1980, and 1982 high school graduates completing college, by level of degree and selected student characteristics: 1976 to 1986**

Student characteristics	1972 high school seniors												1980 high school seniors			1982 high school seniors 1 to 2-year degree <sup>1</sup>
	1 to 2-year degree, <sup>1</sup> by year of attainment						Bachelor's degree, by year of attainment						1 to 2-year degree <sup>1</sup>		Bachelor's degree	Feb. 1986
	June 1976	June 1978	June 1980	June 1982	June 1984	June 1986	June 1976	June 1978	June 1980	June 1982	June 1984	June 1986	Feb. 1984	Feb. 1986	Feb. 1986	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>Total</b> .....	<b>6.39</b>	<b>7.87</b>	<b>9.35</b>	<b>11.76</b>	<b>14.22</b>	<b>16.59</b>	<b>14.33</b>	<b>23.71</b>	<b>25.14</b>	<b>26.42</b>	<b>27.06</b>	<b>27.68</b>	<b>8.84</b>	<b>12.51</b>	<b>16.77</b>	<b>7.85</b>
<b>Sex</b>																
Male .....	5.57	7.09	8.58	10.84	13.89	15.81	13.32	25.64	27.47	28.71	29.57	30.09	7.70	10.84	16.35	5.94
Female .....	7.16	8.62	10.08	12.64	14.73	17.33	15.29	21.87	22.92	24.24	24.72	25.39	9.92	14.08	19.17	9.59
<b>Race/ethnicity</b>																
White .....	8.94	8.52	9.91	12.11	14.72	18.99	15.81	25.46	26.98	28.05	28.76	29.39	9.03	12.54	20.79	7.93
Black .....	2.14	3.48	4.89	9.36	11.09	14.61	7.75	13.49	14.69	18.29	18.66	19.18	6.37	10.42	10.14	7.14
Hispanic .....	3.29	4.01	6.59	9.07	10.99	13.89	3.09	9.13	9.70	10.44	10.81	10.88	9.16	14.71	6.75	9.49
American Indian .....	4.11	5.51	11.36	20.06	23.46	26.23	29.19	48.48	53.23	54.93	54.93	56.06	16.88	20.35	9.22	5.79
Asian .....	8.02	8.02	12.77	21.00	25.49	27.66	5.76	5.76	5.76	10.72	15.29	18.52	11.83	15.68	28.65	5.29
<b>Ability level<sup>2</sup></b>																
Lower 25 percent .....	3.48	4.20	4.94	5.91	7.14	9.27	1.47	3.80	4.12	4.68	4.98	5.14	6.02	8.71	2.98	7.31
Middle 50 percent .....	6.23	9.84	11.83	14.73	17.15	19.15	6.70	17.75	19.15	20.77	21.54	22.05	10.83	15.06	15.53	9.36
Upper 25 percent .....	7.04	8.76	10.28	13.43	16.77	18.68	31.76	47.94	50.04	51.81	52.81	53.56	9.32	12.18	41.82	5.46
<b>High school grades</b>																
A .....	7.89	8.72	9.72	13.52	16.95	19.02	41.94	57.21	59.27	59.82	60.20	60.65	8.17	11.29	48.95	3.85
A to B .....	7.40	8.45	10.91	12.95	14.93	16.95	23.46	38.04	39.31	40.94	41.50	42.37	12.61	15.92	28.54	7.08
B .....	7.07	8.12	9.88	11.74	14.91	16.79	12.31	22.75	24.92	26.16	27.02	28.02	9.72	14.00	18.49	9.46
B to C .....	6.78	8.58	10.21	12.83	15.83	18.15	6.00	13.10	14.29	16.08	17.04	17.46	9.65	12.47	8.95	8.52
C .....	2.58	3.99	5.22	7.74	9.27	12.77	2.37	5.40	6.09	6.82	7.20	7.74	5.41	9.97	2.50	7.19
D .....	3.22	3.51	5.04	6.97	8.00	9.74	1.08	2.81	3.61	4.26	4.51	4.51	2.96	7.63	1.28	<sup>3</sup> 6.20
<b>High school program</b>																
General .....	5.43	6.90	8.04	10.07	11.91	14.68	5.57	10.77	11.96	13.12	13.73	14.21	8.50	12.04	9.96	8.49
Academic .....	7.96	9.79	11.64	15.00	18.50	20.88	27.50	43.56	45.58	47.42	48.21	49.08	10.24	13.96	37.40	6.77
Vocational/technical .....	4.71	5.53	6.78	7.88	9.22	10.93	1.29	3.69	4.29	4.68	5.15	5.39	9.08	12.60	3.44	9.22
<b>Socioeconomic status<sup>4</sup></b>																
Lower 25 percent .....	4.19	5.30	6.72	8.19	9.91	12.38	5.02	8.89	10.08	11.00	11.55	11.97	7.12	10.06	6.84	7.99
Middle 50 percent .....	7.22	8.64	10.08	12.41	15.08	17.40	10.92	19.17	20.28	21.77	22.39	23.04	10.01	13.89	15.56	8.52
Upper 25 percent .....	6.73	8.67	10.28	13.69	16.40	18.75	29.15	45.61	47.86	49.10	49.93	50.58	9.88	13.36	38.25	6.35

<sup>1</sup> Includes licenses, awards, and associate degree programs of 1 to 2 years duration.

<sup>2</sup> Ability level as measured by a test battery administered as part of the High School and Beyond survey.

<sup>3</sup> Low C or D grade average.

<sup>4</sup> Socioeconomic status as measured by a composite score on parental education, family income, father's occupation, and household characteristics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond and National Longitudinal Study surveys, unpublished tabulations. (This table was prepared November 1988)

**Table 279.—Changes in scores on Graduate Record Examination (GRE) and professional school admission tests: 1964 to 1988<sup>1</sup>**

Magnitude of change and test	Change in standard deviation units <sup>2</sup>		GRE Means for selected years							
	Long-term (1964-1987)	Short-term (1978-79) (1988-89)	1975-78	1977-78	1979-80	1981-82	1983-84	1985-88	1987-88	1988-89
1	2	3	4	5	6	7	8	9	10	11
<b>Moderate increase (+0.20 to +0.39)</b>										
Mathematics (GRE <sup>3</sup> area test).....	0.37	0.26	693	692	696	696	711	714	720	720
LSAT <sup>4</sup> (1975-1982).....	0.21	—	—	—	—	—	—	—	—	—
<b>Small increase (+0.10 to +0.19)</b>										
Biology (MCAT <sup>5</sup> subtest; 1977-1982).....	0.15	—	—	—	—	—	—	—	—	—
Physics (GRE area test).....	0.13	0.09	654	652	650	647	637	645	645	661
GRE quantitative.....	0.12	0.31	510	516	522	533	541	552	557	560
<b>No change (-0.09 to +0.09)</b>										
Chemistry (GRE area test).....	0.01	0.17	627	624	618	616	619	626	631	642
Engineering (GRE area test).....	0.01	0.29	594	594	590	593	604	616	622	626
Biology (GRE area test).....	-0.01	-0.08	627	622	619	616	622	612	615	612
Chemistry (MCAT subtest; 1977-1982).....	-0.08	—	—	—	—	—	—	—	—	—
Computer science.....	—	0.15	—	606	605	604	607	607	622	620
<b>Small decline (-0.10 to -0.19)</b>										
Economics (GRE area test).....	-0.10	0.27	597	609	603	614	617	609	625	630
Reading (MCAT sub-test; 1977-1982).....	-0.10	—	—	—	—	—	—	—	—	—
GMAT <sup>6</sup> .....	-0.16	—	—	—	—	—	—	—	—	—
Education (GRE area test).....	-0.18	0.16	454	452	449	456	461	464	467	465
<b>Moderate decline (-0.20 to -0.39)</b>										
Psychology (GRE area test).....	-0.21	0.08	531	529	534	532	543	542	537	536
MCAT quantitative (1977-1982).....	-0.22	—	—	—	—	—	—	—	—	—
Music (GRE area test).....	-0.22	0.03	496	502	500	494	498	490	492	498
Geology (GRE area test; 1967-1987).....	-0.31	0.07	580	577	576	570	574	576	582	580
<b>Large decline (-0.40 to -0.74)</b>										
GRE verbal.....	-0.42	0.06	492	484	474	469	475	475	483	484
English literature (GRE area test).....	-0.67	0.03	539	530	521	521	530	527	525	526
French (GRE area test; 1964-1979).....	-0.68	—	519	514	503	512	510	509	519	—
History (GRE area test).....	-0.74	-0.01	518	509	508	507	512	509	505	504
<b>Extreme decline (-0.75 and below)</b>										
Sociology (GRE area test).....	-1.04	-0.10	457	450	436	433	434	430	434	425
Political science (GRE area test).....	-1.14	-0.08	473	471	456	461	460	455	457	457

<sup>1</sup> Test score changes are for these years unless indicated otherwise.

<sup>2</sup> Computed as the change in scale points divided by the mean standard deviation for the entire period.

<sup>3</sup> GRE-Graduate Record Examination.

<sup>4</sup> LSAT-Law School Admissions Test.

<sup>5</sup> MCAT-Medical College Admission Test.

<sup>6</sup> GMAT-Graduate Management Admissions Test.

—Data not available.

SOURCE: U.S. Department of Education, National Institute of Education, *The Standardized Test Scores of College Graduates, 1964-1982*, 1985; unpublished data; and National Center for Education Statistics, *The Condition of Education, 1988*. (This table was prepared June 1990.)

**Table 280.—Average undergraduate tuition and fees and room and board rates<sup>1</sup> paid by students in institutions of higher education, by control of institution and by State: 1989-90**

State or other area	Public 4-year				Private 4-year				2-year, tuition only	
	Total	Tuition (in-State)	Room	Board	Total	Tuition	Room	Board	Public	Private
1	2	3	4	5	6	7	8	9	10	11
<b>United States.....</b>	<b>\$4,979</b>	<b>\$1,781</b>	<b>\$1,558</b>	<b>\$1,640</b>	<b>\$12,348</b>	<b>\$8,448</b>	<b>\$1,945</b>	<b>\$1,957</b>	<b>\$758</b>	<b>\$5,324</b>
Alabama.....	4,119	1,522	1,236	1,361	8,212	5,484	1,136	1,592	682	3,703
Alaska.....	4,352	1,260	1,493	1,579	9,030	5,078	1,742	2,210	—	—
Arizona.....	5,595	1,362	1,418	2,817	6,432	4,127	1,026	1,279	519	11,007
Arkansas.....	4,187	1,376	1,387	1,424	6,110	3,715	994	1,401	644	6,102
California.....	5,547	1,123	2,182	2,242	14,245	9,489	2,423	2,333	112	7,664
Colorado.....	4,956	1,830	1,489	1,637	12,920	9,188	1,833	1,899	792	8,036
Connecticut.....	5,445	2,017	1,758	1,870	16,184	11,268	2,835	2,281	915	7,906
Delaware.....	6,196	2,768	1,813	1,815	8,776	5,388	1,821	1,567	882	—
District of Columbia.....	—	664	—	—	14,822	9,489	2,701	2,432	—	—
Florida.....	—	—	—	—	10,738	7,153	1,870	1,715	729	5,519
Georgia.....	4,308	1,631	1,183	1,484	10,244	7,078	1,511	1,657	852	3,194
Hawaii.....	4,529	1,293	1,242	1,994	6,997	4,008	1,399	1,590	410	—
Idaho.....	3,792	1,119	943	1,730	9,827	6,669	908	2,250	779	1,400
Illinois.....	5,495	2,370	1,553	1,572	12,209	8,281	2,021	1,907	871	5,505
Indiana.....	4,969	1,975	1,349	1,845	11,481	8,267	1,821	1,573	1,374	7,412
Iowa.....	4,347	1,823	1,239	1,285	10,769	7,945	1,293	1,531	1,225	6,423
Kansas.....	3,509	1,467	1,017	1,025	8,272	5,460	1,184	1,828	711	3,982
Kentucky.....	4,047	1,318	1,129	1,802	7,366	4,689	1,168	1,509	693	4,669
Louisiana.....	4,311	1,788	1,212	1,331	13,484	9,257	2,157	2,050	837	5,848
Maine.....	5,429	1,980	1,729	1,720	14,598	10,425	2,085	2,088	1,134	3,787
Maryland.....	8,437	2,120	2,230	2,087	14,621	9,914	2,463	2,244	1,172	8,393
Massachusetts.....	5,478	2,052	1,827	1,599	16,904	11,450	2,834	2,820	1,332	7,186
Michigan.....	5,854	2,484	1,493	1,877	9,764	6,520	1,481	1,763	1,047	6,400
Minnesota.....	4,870	2,063	1,262	1,345	11,891	8,776	1,535	1,580	1,499	5,181
Mississippi.....	4,241	1,858	1,111	1,272	7,208	4,828	1,052	1,316	680	3,602
Missouri.....	4,098	1,532	1,449	1,117	10,691	7,170	1,817	1,704	615	5,554
Montana.....	5,047	1,535	1,478	2,034	8,013	5,034	1,071	1,909	877	1,144
Nebraska.....	3,944	1,519	1,043	1,382	9,101	6,442	1,325	1,334	919	3,410
Nevada.....	4,007	1,100	1,481	1,428	—	5,400	2,000	—	522	—
New Hampshire.....	5,484	2,196	2,050	1,238	14,748	10,299	2,347	2,102	1,608	4,050
New Jersey.....	6,396	2,511	2,267	1,818	14,439	9,396	2,270	2,771	1,130	6,748
New Mexico.....	4,018	1,326	1,250	1,442	10,563	7,335	1,309	1,919	496	—
New York.....	5,094	1,480	2,014	1,820	14,078	9,517	2,341	2,216	1,412	5,544
North Carolina.....	3,790	1,015	1,293	1,482	10,412	7,373	1,345	1,694	288	4,680
North Dakota.....	4,380	1,804	647	1,909	7,939	5,149	1,308	1,482	1,286	2,100
Ohio.....	5,805	2,432	1,658	1,715	11,330	8,019	1,594	1,717	1,636	5,690
Oklahoma.....	3,754	1,309	1,098	1,349	8,119	5,133	1,308	1,878	840	5,382
Oregon.....	4,778	1,738	1,233	1,805	12,074	8,656	1,802	1,816	753	5,250
Pennsylvania.....	6,366	3,210	1,641	1,515	13,416	9,430	2,030	1,956	1,419	5,497
Rhode Island.....	6,340	2,281	2,140	1,919	14,128	10,143	1,935	2,048	1,004	—
South Carolina.....	5,089	2,162	1,367	1,560	8,771	5,914	1,356	1,501	807	4,898
South Dakota.....	4,236	1,718	873	1,845	8,595	6,224	1,106	1,265	—	2,447
Tennessee.....	4,172	1,406	1,287	1,479	9,642	6,530	1,572	1,540	803	3,395
Texas.....	4,168	959	1,565	1,824	9,402	6,047	1,526	1,829	455	5,112
Utah.....	4,342	1,429	1,449	1,464	4,970	1,975	1,189	1,826	1,136	2,768
Vermont.....	7,715	3,641	2,386	1,688	14,691	10,928	1,846	1,917	2,210	5,979
Virginia.....	5,983	2,532	1,651	1,800	10,342	7,238	1,472	1,632	813	4,409
Washington.....	4,634	1,710	1,534	1,390	11,229	8,096	1,818	1,515	802	7,045
West Virginia.....	5,128	1,591	1,857	1,880	10,058	7,197	1,267	1,574	803	2,554
Wisconsin.....	4,411	1,861	1,351	1,199	11,021	7,815	1,434	1,972	1,160	4,001
Wyoming.....	3,880	1,003	1,226	1,851	—	—	—	—	613	6,900

<sup>1</sup> Preliminary data based on fall 1988 enrollment weights.  
—Data not reported or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" and "Institutional Characteristics" surveys. (This table was prepared July 1990.)

NOTE.—Data are for the entire academic year and are average charges. Tuition and fees were weighted by the number of full-time-equivalent undergraduates but are not adjusted to reflect student residency. Room and board are based on full-time students.

**Table 281.—Average undergraduate tuition and fees and room and board rates<sup>1</sup> paid by students in institutions of higher education, by type and control of institution: 1964-65 to 1989-90**

Year and control of institution	Total tuition, room and board					Tuition and required fees (in-State)					Dormitory rooms					Board (7-day basis) <sup>1</sup>				
	All institutions	4-year institutions			2-year	All institutions	4-year institutions			2-year	All institutions	4-year institutions			2-year	All institutions	4-year institutions			2-year
		All 4-year	Universities	Other 4-year			All 4-year	Universities	Other 4-year			All 4-year	Universities	Other 4-year			All 4-year	Universities	Other 4-year	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
<b>All institutions</b>																				
1976-77	2,275	2,577	2,647	2,527	1,598	924	1,218	1,210	1,223	346	603	611	649	584	503	748	748	788	719	750
1977-78	2,411	2,725	2,777	2,685	1,703	984	1,281	1,269	1,305	378	645	654	691	628	525	781	780	818	752	801
1978-79	2,587	2,917	2,967	2,879	1,828	1,073	1,397	1,370	1,413	411	688	696	737	667	575	826	825	860	800	842
1979-80	2,809	3,167	3,223	3,124	1,979	1,163	1,513	1,484	1,530	451	751	759	803	729	628	895	895	936	865	900
1980-81	3,101	3,499	3,535	3,469	2,230	1,289	1,679	1,634	1,705	526	836	846	881	821	705	976	975	1,020	943	1,000
1981-82	3,489	3,951	4,005	3,908	2,476	1,457	1,907	1,860	1,935	590	950	961	1,023	919	793	1,083	1,082	1,121	1,055	1,094
1982-83	3,877	4,406	4,466	4,356	2,713	1,626	2,139	2,081	2,173	675	1,064	1,078	1,150	1,028	873	1,187	1,189	1,235	1,155	1,165
1983-84	4,167	4,747	4,793	4,712	2,854	1,783	2,344	2,300	2,368	730	1,145	1,162	1,211	1,130	916	1,239	1,242	1,282	1,214	1,208
1984-85	4,563	5,160	5,236	5,107	3,179	1,985	2,567	2,539	2,583	821	1,267	1,282	1,343	1,242	1,058	1,310	1,311	1,353	1,282	1,301
1985-86 <sup>2</sup>	4,885	5,504	5,597	5,441	3,367	2,161	2,784	2,770	2,793	888	1,338	1,355	1,424	1,309	1,107	1,365	1,365	1,403	1,339	1,372
1986-87 <sup>3</sup>	5,203	5,964	6,124	5,857	3,295	2,312	3,042	3,042	3,042	897	1,405	1,427	1,501	1,276	1,034	1,489	1,495	1,581	1,439	1,364
1987-88	5,494	6,272	6,339	6,226	3,263	2,458	3,201	3,168	3,220	809	1,488	1,516	1,576	1,478	1,017	1,549	1,555	1,596	1,529	1,437
1988-89	5,869	6,725	6,801	6,673	3,573	2,658	3,472	3,422	3,499	979	1,575	1,609	1,665	1,573	1,085	1,636	1,644	1,715	1,601	1,509
1989-90 <sup>4</sup>	6,269	7,244	7,377	7,156	3,781	2,892	3,826	3,791	3,845	1,025	1,643	1,679	1,739	1,641	1,111	1,734	1,739	1,847	1,670	1,645
<b>Public institutions</b>																				
1964-65	950	—	1,051	867	638	243	—	298	224	99	271	—	291	241	178	436	—	462	402	361
1965-66	983	—	1,105	904	670	257	—	327	241	109	281	—	304	255	194	445	—	474	408	367
1966-67	1,026	—	1,171	947	710	275	—	360	259	121	294	—	321	271	213	457	—	490	417	376
1967-68	1,064	—	1,199	997	789	283	—	366	268	144	313	—	337	292	243	468	—	496	437	402
1968-69	1,117	—	1,245	1,063	883	295	—	377	281	170	337	—	359	316	278	485	—	509	464	435
1969-70	1,203	—	1,362	1,135	951	323	—	427	306	178	369	—	395	346	308	511	—	540	483	465
1970-71	1,287	—	1,477	1,206	998	351	—	478	332	187	401	—	431	375	338	535	—	568	499	473
1971-72	1,357	—	1,579	1,263	1,073	376	—	526	354	192	430	—	463	400	366	551	—	590	509	515
1972-73	1,458	—	1,668	1,460	1,197	407	—	566	455	233	476	—	500	455	398	575	—	602	550	566
1973-74	1,517	—	1,707	1,506	1,274	438	—	581	463	274	480	—	505	464	409	599	—	621	579	591
1974-75	1,563	—	1,760	1,558	1,339	432	—	599	448	277	506	—	527	497	424	625	—	634	613	638
1975-76	1,666	—	1,935	1,657	1,386	433	—	642	469	245	544	—	573	533	442	689	—	720	655	699
1976-77	1,789	1,935	2,067	1,827	1,491	479	617	689	584	283	582	592	614	572	465	728	727	763	692	742
1977-78	1,888	2,038	2,170	1,931	1,590	512	655	736	596	306	621	631	649	616	486	755	752	785	720	797
1978-79	1,994	2,145	2,289	2,027	1,691	543	688	777	622	327	655	664	689	641	527	796	793	823	764	837
1979-80	2,165	2,327	2,487	2,198	1,822	583	738	840	662	355	715	725	750	703	574	867	865	898	833	893
1980-81	2,373	2,550	2,712	2,421	2,027	635	804	915	722	391	799	811	827	796	642	940	936	969	904	994
1981-82	2,663	2,871	3,079	2,705	2,224	714	909	1,042	813	434	909	925	970	885	703	1,039	1,036	1,067	1,006	1,086
1982-83	2,945	3,196	3,403	3,032	2,390	788	1,031	1,164	936	473	1,010	1,030	1,072	993	755	1,136	1,134	1,167	1,103	1,162
1983-84	3,156	3,433	3,628	3,285	2,534	891	1,148	1,284	1,052	528	1,087	1,110	1,131	1,092	801	1,178	1,175	1,213	1,141	1,205
1984-85	3,408	3,682	3,899	3,516	2,807	971	1,228	1,366	1,117	584	1,196	1,217	1,237	1,200	921	1,241	1,237	1,276	1,201	1,302
1985-86 <sup>2</sup>	3,571	3,859	4,146	3,637	2,981	1,045	1,318	1,536	1,157	641	1,242	1,263	1,290	1,240	960	1,285	1,278	1,320	1,240	1,380
1986-87 <sup>3</sup>	3,805	4,138	4,469	3,891	2,989	1,106	1,414	1,651	1,248	660	1,301	1,323	1,355	1,295	979	1,398	1,401	1,464	1,348	1,349
1987-88	4,050	4,403	4,619	4,250	3,066	1,218	1,537	1,726	1,407	706	1,378	1,410	1,410	1,409	943	1,454	1,456	1,482	1,434	1,417
1988-89	4,274	4,678	4,905	4,526	3,183	1,285	1,646	1,846	1,515	730	1,457	1,486	1,483	1,506	965	1,533	1,536	1,576	1,504	1,488
1989-90 <sup>4</sup>	4,520	4,979	5,289	4,756	3,324	1,367	1,781	2,006	1,631	758	1,516	1,558	1,563	1,554	958	1,636	1,640	1,720	1,572	1,609

HIGHER EDUCATION: STUDENT CHARGES 285

**Table 281.—Average undergraduate tuition and fees and room and board rates<sup>1</sup> paid by students in institutions of higher education, by type and control of institution: 1964-65 to 1989-90—Continued**

Year and control of institution	Total tuition, room and board					Tuition and required fees (in-State)					Dormitory rooms					Board (7-day basis) <sup>1</sup>				
	All institutions	4-year institutions			2-year	All institutions	4-year institutions			2-year	All institutions	4-year institutions			2-year	All institutions	4-year institutions			2-year
		All 4-year	Universities	Other 4-year			All 4-year	Universities	Other 4-year			All 4-year	Universities	Other 4-year			All 4-year	Universities	Other 4-year	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
<b>Private institutions</b>																				
1964-65	1,907	—	2,202	1,810	1,455	1,088	—	1,297	1,023	702	331	—	390	308	289	498	—	515	479	464
1965-66	2,005	—	2,316	1,899	1,557	1,154	—	1,369	1,086	768	356	—	418	330	316	495	—	529	483	473
1966-67	2,124	—	2,456	2,007	1,679	1,233	—	1,456	1,162	845	385	—	452	355	347	506	—	548	490	487
1967-68	2,205	—	2,545	2,104	1,762	1,297	—	1,534	1,237	892	392	—	455	366	366	516	—	556	501	504
1968-69	2,321	—	2,673	2,237	1,876	1,383	—	1,636	1,335	956	404	—	463	382	391	534	—	572	520	529
1969-70	2,530	—	2,920	2,420	1,993	1,533	—	1,809	1,468	1,034	436	—	503	409	413	561	—	608	543	546
1970-71	2,738	—	3,163	2,599	2,103	1,684	—	1,980	1,603	1,109	468	—	542	434	434	586	—	641	562	560
1971-72	2,917	—	3,375	2,748	2,186	1,820	—	2,133	1,721	1,172	494	—	576	454	449	603	—	666	573	565
1972-73	3,038	—	3,512	2,934	2,273	1,898	—	2,226	1,846	1,221	524	—	622	490	457	616	—	664	598	595
1973-74	3,164	—	3,717	3,040	2,410	1,989	—	2,375	1,925	1,303	533	—	622	502	483	642	—	720	613	624
1974-75	3,403	—	4,076	3,156	2,591	2,117	—	2,614	1,954	1,367	586	—	691	536	564	700	—	771	666	660
1975-76	3,663	—	4,467	3,385	2,711	2,272	—	2,881	2,084	1,427	636	—	753	583	572	755	—	833	718	712
1976-77	3,906	3,977	4,715	3,714	2,971	2,467	2,534	3,051	2,351	1,592	649	651	783	604	607	790	791	882	759	772
1977-78	4,158	4,240	5,033	3,967	3,148	2,624	2,700	3,240	2,520	1,706	698	702	850	648	631	836	838	943	800	811
1978-79	4,514	4,609	5,403	4,327	3,389	2,867	2,958	3,467	2,771	1,831	758	761	916	704	700	889	890	1,000	851	858
1979-80	4,912	5,013	5,891	4,700	3,751	3,130	3,225	3,811	3,020	2,062	827	831	1,001	768	766	955	957	1,078	912	923
1980-81	5,470	5,594	6,589	5,249	4,203	3,498	3,617	4,275	3,390	2,413	918	921	1,086	859	871	1,054	1,056	1,209	1,000	1,019
1981-82	6,166	6,330	7,443	5,947	4,746	3,953	4,113	4,887	3,853	2,605	1,038	1,039	1,229	970	1,022	1,175	1,178	1,327	1,124	1,119
1982-83	6,920	7,126	8,536	6,646	5,364	4,439	4,639	5,583	4,329	3,008	1,181	1,181	1,453	1,083	1,177	1,300	1,306	1,501	1,234	1,179
1983-84	7,508	7,759	9,308	7,244	5,571	4,851	5,093	6,217	4,726	3,099	1,278	1,279	1,531	1,191	1,253	1,380	1,387	1,559	1,327	1,219
1984-85	8,202	8,451	10,243	7,849	6,203	5,315	5,556	6,843	5,135	3,485	1,426	1,426	1,753	1,309	1,424	1,462	1,469	1,647	1,405	1,294
1985-86 <sup>2</sup>	8,885	9,228	11,034	8,551	6,512	5,789	6,121	7,374	5,641	3,672	1,553	1,557	1,940	1,420	1,500	1,542	1,551	1,720	1,490	1,340
1986-87 <sup>3</sup>	9,676	10,039	12,278	9,276	6,384	6,316	6,658	8,118	6,171	3,684	1,658	1,673	2,097	1,518	1,266	1,702	1,708	2,063	1,587	1,434
1987-88	10,512	10,659	13,075	9,854	7,078	6,988	7,116	8,771	6,574	4,161	1,748	1,760	2,244	1,593	1,380	1,775	1,783	2,060	1,687	1,537
1988-89	11,189	11,474	14,073	10,620	7,967	7,461	7,722	9,451	7,172	4,817	1,849	1,863	2,353	1,686	1,540	1,880	1,889	2,269	1,762	1,609
1989-90 <sup>4</sup>	12,057	12,348	15,165	11,423	8,772	8,174	8,446	10,400	7,815	5,324	1,931	1,945	2,420	1,783	1,648	1,951	1,957	2,345	1,825	1,800

<sup>1</sup> Data for 1966-67 through 1989-90 reflect 20 meals per week rather than meals 7 days per week.

<sup>2</sup> Room and board data are estimated.

<sup>3</sup> Because of revisions in data collection procedures, figures are not entirely comparable with those for previous years. In particular, data on board rates are somewhat higher than earlier years because they reflect a basis of 20

—Data not available.

NOTE.—Data are for the entire academic year and are average charges paid by students. Tuition and fees were weighted by the number of full-time-equivalent undergraduates but are not adjusted to reflect student residency. Room and board were based on full-time students. The data have not been adjusted for changes in the purchasing power of the dollar. Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

meals per week rather than meals served 7 days per week. Since many institutions serve fewer than 3 meals each day, the 1986-87 through 1989-90 data reflect a more accurate accounting of total board costs. Because of their low response rate, data for private 2-year colleges must be interpreted with caution.

<sup>4</sup> Preliminary data based on 1988 enrollment data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Institutional Characteristics of Colleges and Universities" and "Fall Enrollment in Institutions of Higher Education" surveys; Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" and "Institutional Characteristics" surveys. (This table was prepared July 1990.)

**Table 282.—Percentage of undergraduates enrolled in fall 1986 and average amount awarded per student, by type and source of aid and selected student characteristics**

Selected student characteristics	Enrollment of undergraduates, <sup>1</sup> in thousands	Any aid			Grants			Loans			Work study		
		Total <sup>2</sup>	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Percent of all undergraduates receiving aid													
All undergraduates.....	11,213	45.5	34.9	28.8	37.6	24.6	27.2	24.4	23.3	1.6	6.1	4.7	1.6
<b>Sex</b>													
Men .....	5,035	44.5	34.1	27.8	38.5	23.6	26.4	23.9	22.9	1.4	5.8	4.2	1.7
Women .....	6,179	46.3	35.8	29.7	36.6	25.5	27.9	24.9	23.7	1.7	6.8	5.0	1.8
<b>Race/ethnicity</b>													
White, non-Hispanic .....	6,724	43.3	32.0	28.4	35.1	20.9	26.8	23.8	22.6	1.6	5.6	4.1	1.8
Black, non-Hispanic .....	1,043	63.8	55.7	33.2	58.8	47.0	31.2	35.0	32.7	2.8	9.8	8.6	1.7
Hispanic .....	763	47.8	40.9	27.2	41.1	33.2	25.9	24.0	23.4	1.0	5.8	4.5	1.3
Asian American .....	572	40.5	33.3	28.5	38.2	27.0	27.7	18.4	18.1	1.0	7.8	6.2	1.6
American Indian .....	112	48.9	40.3	28.7	41.2	35.0	28.1	19.7	18.5	1.1	6.8	5.3	2.1
<b>Age</b>													
23 years old or younger .....	6,768	50.0	39.0	33.5	41.2	26.5	31.8	28.7	27.8	1.8	8.4	6.3	2.5
24 to 29 years old .....	1,897	42.8	34.2	21.9	34.4	25.5	19.8	22.5	21.2	1.9	3.8	2.9	0.8
30 years old or over .....	2,548	35.4	24.8	21.7	30.8	19.2	20.7	14.4	13.6	0.9	2.0	1.6	0.5
<b>Marital status</b>													
Married .....	2,714	35.4	24.8	20.0	29.5	18.1	18.8	15.3	14.3	1.2	2.0	1.7	0.4
Not married <sup>3</sup> .....	8,500	48.7	38.3	31.7	40.2	26.8	29.9	27.3	28.2	1.7	7.5	5.6	2.2
<b>Attendance status</b>													
Full-time .....	6,997	58.3	47.4	37.3	48.2	33.2	35.4	34.2	33.0	2.0	9.2	6.9	2.7
Part-time .....	4,218	24.4	14.4	15.0	20.3	10.6	13.8	8.4	7.4	1.1	1.1	0.9	0.3
<b>Dependency status</b>													
Dependent .....	6,975	45.2	33.9	30.7	36.5	21.7	29.1	25.3	24.2	1.8	7.4	5.4	2.3
Independent .....	4,239	48.4	37.1	28.0	39.9	29.7	24.5	23.3	22.2	1.5	4.1	3.4	0.9
<b>Housing status</b>													
School-owned .....	2,220	63.8	49.1	48.0	53.3	30.9	45.8	41.3	39.9	2.5	18.3	12.0	5.2
Off-campus, not with parents .....	5,652	42.3	32.7	24.7	34.9	23.9	23.1	22.1	21.1	1.5	4.1	3.2	0.9
With parents .....	3,342	38.6	29.3	23.3	31.9	21.8	22.1	17.1	18.2	1.1	2.9	2.2	0.9
Average 1986-87 award for full-time, full-year undergraduates enrolled in fall 1986													
All full-time, full-year undergraduates .....	5,621	\$3,613	\$2,073	\$2,113	\$2,630	\$1,598	\$2,033	\$2,456	\$2,425	\$1,723	\$1,077	\$1,002	\$1,105
<b>Sex</b>													
Men .....	2,632	3,964	3,127	2,202	2,788	1,756	2,125	2,539	2,504	1,747	1,096	1,012	1,118
Women .....	2,989	3,890	2,849	2,043	2,504	1,474	1,960	2,388	2,360	1,707	1,065	995	1,095
<b>Race/ethnicity</b>													
White, non-Hispanic .....	4,454	3,716	2,970	2,043	2,525	1,554	1,953	2,484	2,441	1,879	1,044	983	1,029
Black, non-Hispanic .....	492	4,126	3,132	2,308	2,827	1,785	2,248	2,257	2,299	1,141	1,170	1,003	1,632
Hispanic .....	333	3,817	2,741	2,181	2,728	1,518	2,129	2,439	2,420	—	1,186	1,183	1,214
Asian American .....	299	4,374	2,903	2,548	3,280	1,840	2,474	2,478	2,464	—	1,206	1,082	1,443
American Indian .....	44	4,201	3,020	2,413	3,299	1,859	2,558	2,762	2,762	—	—	—	—
<b>Age</b>													
23 years old or younger .....	4,459	3,853	2,912	2,229	2,997	1,531	2,148	2,390	2,383	1,688	1,063	976	1,102
24 to 29 years old .....	624	3,810	3,265	1,724	2,440	1,757	1,648	2,708	2,664	1,857	1,166	1,138	1,200
30 years old or over .....	538	3,535	3,033	1,529	2,366	1,791	1,442	2,643	2,598	2,102	1,146	1,152	—
<b>Marital status</b>													
Married .....	634	3,478	3,034	1,890	2,268	1,678	1,818	2,666	2,623	1,905	1,042	1,085	782
Not married <sup>3</sup> .....	4,988	3,858	2,964	2,158	2,877	1,584	2,075	2,429	2,400	1,695	1,080	996	1,122
<b>Dependency status</b>													
Dependent .....	4,404	3,782	2,828	2,254	2,664	1,448	2,179	2,402	2,377	1,701	1,038	952	1,080
Independent .....	1,217	3,939	3,277	1,855	2,546	1,842	1,558	2,584	2,541	1,778	1,206	1,151	1,214
<b>Housing status</b>													
School-owned .....	1,844	4,650	3,280	2,788	3,311	1,728	2,677	2,448	2,393	1,951	1,026	906	1,115
Off-campus, not with parents .....	2,079	3,708	3,132	1,715	2,431	1,735	1,640	2,520	2,494	1,650	1,194	1,170	1,144
With parents .....	1,698	2,757	2,256	1,532	1,942	1,214	1,488	2,330	2,341	1,399	1,033	996	994

**Table 282.—Percentage of undergraduates enrolled in fall 1986 and average amount awarded per student, by type and source of aid and selected student characteristics—Continued**

Selected student characteristics	Enrollment of undergraduates, <sup>1</sup> in thousands	Any aid			Grants			Loans			Work study		
		Total <sup>2</sup>	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Average 1986-87 award for other undergraduates enrolled in fall 1986													
All other undergraduates <sup>4</sup> .....	5,592	\$2,199	\$2,203	\$1,145	\$1,458	\$1,223	\$1,079	\$2,121	\$2,121	\$1,197	\$913	\$856	\$949
<b>Sex</b>													
Men.....	2,403	2,259	2,172	1,340	1,593	1,315	1,245	2,109	2,062	1,424	990	899	957
Women.....	3,190	2,155	2,225	1,011	1,362	1,161	965	2,128	2,159	1,052	866	833	941
<b>Race/ethnicity</b>													
White, non-Hispanic.....	4,270	2,061	2,123	1,137	1,373	1,163	1,059	2,137	2,114	1,277	906	840	916
Black, non-Hispanic.....	551	2,410	2,295	1,028	1,574	1,333	983	2,007	2,084	—	1,001	916	—
Hispanic.....	429	2,499	2,454	1,142	1,546	1,233	1,132	2,257	2,271	—	—	—	—
Asian American.....	273	2,842	2,488	1,520	1,972	1,452	1,473	2,138	2,072	—	—	—	—
American Indian.....	68	2,126	1,893	—	1,834	1,236	—	—	—	—	—	—	—
<b>Age</b>													
23 years old or younger.....	2,310	2,525	2,282	1,377	1,691	1,207	1,329	2,044	2,057	1,084	890	802	995
24 to 29 years old.....	1,273	1,917	2,089	893	1,234	1,216	807	2,084	2,103	1,281	1,008	1,037	—
30 years old or over.....	2,010	1,939	2,158	992	1,308	1,257	917	2,344	2,297	1,385	925	—	—
<b>Marital status</b>													
Married.....	2,080	1,805	2,068	1,008	1,218	1,221	898	2,313	2,263	1,547	936	—	—
Not married <sup>3</sup> .....	3,512	2,388	2,254	1,215	1,581	1,225	1,173	2,061	2,080	1,076	910	849	946
<b>Dependency status</b>													
Dependent.....	2,571	2,383	2,207	1,400	1,637	1,170	1,358	2,059	2,067	1,154	922	839	1,020
Independent.....	3,021	2,070	2,206	953	1,344	1,282	874	2,176	2,169	1,259	900	882	—
<b>Housing status</b>													
School-owned.....	378	3,469	2,553	2,010	2,364	1,268	1,957	2,120	2,048	1,489	906	801	975
Off-campus, not with parents.....	3,573	2,000	2,187	952	1,298	1,223	870	2,147	2,159	1,142	861	821	921
With parents.....	1,643	2,159	2,129	1,168	1,485	1,207	1,144	2,084	2,088	1,188	1,094	1,123	—

<sup>1</sup> Numbers of undergraduates may not equal figures reported in other tables, since these data are based on a sample survey.  
<sup>2</sup> Includes students who reported they were awarded aid, but did not specify the source or type of aid.  
<sup>3</sup> Includes students who were single, separated, divorced, or widowed.  
<sup>4</sup> Enrollment data include persons whose attendance status was not reported.  
 —Data not available.

NOTE.—Because of rounding and/or the fact that some students receive aid from multiple sources, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study*. (This table was prepared February 1989.)

**Table 283.—Undergraduates enrolled in fall 1986, by aid status and source of aid during 1986-87, and control and level of institution**

Control and level of institution	Number of undergraduates, fall 1986 <sup>1</sup>	Aid status, 1986-87, in percents					
		Nonaided	Receiving aid, by source				
			Any aid <sup>2</sup>	Federal	State	Institutional	Other
1	2	3	4	5	6	7	8
<b>All institutions.....</b>	<b>11,213,432</b>	<b>54.5</b>	<b>45.5</b>	<b>34.9</b>	<b>14.8</b>	<b>14.0</b>	<b>6.8</b>
<b>Public.....</b>	<b>8,572,090</b>	<b>62.0</b>	<b>38.0</b>	<b>28.5</b>	<b>12.5</b>	<b>8.8</b>	<b>6.0</b>
4-year doctoral.....	2,561,556	53.2	46.8	35.5	13.9	14.4	6.8
Other 4-year.....	1,681,062	52.7	47.3	38.4	19.2	9.1	5.7
2-year.....	4,180,263	71.5	28.5	19.9	9.0	5.3	5.7
Less than 2-year.....	129,219	48.2	51.8	41.9	14.2	5.3	5.0
<b>Private, nonprofit.....</b>	<b>2,036,949</b>	<b>34.7</b>	<b>65.3</b>	<b>48.4</b>	<b>25.4</b>	<b>39.0</b>	<b>11.2</b>
4-year doctoral.....	769,069	36.2	61.8	45.7	21.0	37.8	10.8
Other 4-year.....	1,119,861	32.1	67.9	50.1	28.5	42.0	12.0
2-year.....	133,779	36.1	63.9	47.9	24.5	28.3	7.2
Less than 2-year.....	16,441	33.8	66.2	59.4	27.2	3.9	6.5
<b>Private, proprietary.....</b>	<b>602,394</b>	<b>18.0</b>	<b>84.0</b>	<b>90.6</b>	<b>10.3</b>	<b>4.1</b>	<b>3.7</b>
2-year and above.....	223,859	17.3	82.7	79.2	18.1	4.1	3.6
Less than 2-year.....	378,535	15.2	84.8	81.4	5.7	4.1	3.8

<sup>1</sup> Numbers of undergraduates may not equal figures reported in other tables, since these data are based on a sample survey.  
<sup>2</sup> Includes students who reported they were awarded aid but did not specify the source of aid.

NOTE.—Because some students receive aid from multiple sources, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study*. (This table was prepared February 1989.)

**Table 284.--Undergraduates enrolled in fall 1986, by type and source of aid received during 1986-87, and by control and level of institution**

Control and level of institution	Number of undergraduates, fall 1986 <sup>1</sup>	Type and source of aid, 1986-87, in percents											
		Any aid			Grants			Loans			Work-study		
		Total <sup>2</sup>	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal <sup>3</sup>	Non-Federal
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>All institutions.....</b>	<b>11,213,432</b>	<b>45.3</b>	<b>34.9</b>	<b>28.8</b>	<b>37.8</b>	<b>24.6</b>	<b>27.2</b>	<b>24.4</b>	<b>23.3</b>	<b>1.8</b>	<b>8.1</b>	<b>4.7</b>	<b>1.8</b>
<b>Public.....</b>	<b>8,572,090</b>	<b>38.0</b>	<b>28.5</b>	<b>23.7</b>	<b>31.5</b>	<b>21.3</b>	<b>22.2</b>	<b>17.3</b>	<b>18.2</b>	<b>1.2</b>	<b>4.8</b>	<b>3.8</b>	<b>1.1</b>
4-year doctoral.....	2,581,556	46.8	35.5	28.5	36.4	23.1	26.7	27.8	26.4	1.6	5.8	4.5	1.5
Other 4-year.....	1,681,052	47.3	38.4	30.0	38.1	28.1	28.2	24.9	24.0	1.3	6.1	6.2	2.2
2-year.....	4,160,263	28.5	19.9	18.1	25.4	17.1	17.0	7.8	6.7	1.0	2.4	2.1	0.4
Less than 2-year....	129,219	51.8	41.9	22.9	46.1	34.8	22.3	19.8	19.4	0.5	3.4	2.5	0.9
<b>Private, nonprofit.....</b>	<b>2,038,949</b>	<b>65.3</b>	<b>46.4</b>	<b>54.1</b>	<b>56.7</b>	<b>29.3</b>	<b>51.9</b>	<b>40.7</b>	<b>39.4</b>	<b>2.9</b>	<b>14.3</b>	<b>10.2</b>	<b>5.1</b>
4-year doctoral.....	769,069	81.8	45.7	50.8	52.2	24.3	47.9	39.5	38.0	3.8	13.0	9.6	3.8
Other 4-year.....	1,119,661	67.9	50.1	57.7	60.1	32.2	55.9	42.1	40.9	2.3	16.4	11.3	8.6
2-year.....	133,779	63.9	47.9	44.7	53.8	32.4	43.1	35.7	34.4	2.4	5.7	5.2	0.4
Less than 2-year....	16,441	66.2	59.4	35.5	55.5	45.2	33.7	40.4	38.9	1.8	5.0	4.0	1.7
<b>Private, proprietary.....</b>	<b>602,394</b>	<b>84.0</b>	<b>80.8</b>	<b>17.2</b>	<b>60.3</b>	<b>55.7</b>	<b>15.3</b>	<b>70.7</b>	<b>70.0</b>	<b>2.1</b>	<b>0.8</b>	<b>0.6</b>	<b>0.2</b>
2-year and above....	223,859	82.7	79.2	24.2	54.9	49.0	22.8	69.3	68.8	1.9	1.2	0.7	0.5
Less than 2-year....	378,535	84.8	81.4	13.0	63.5	59.7	10.9	71.5	70.9	2.2	0.5	0.5	0.1

<sup>1</sup> Numbers of undergraduates may not equal figures reported in other tables, since these data are based on a sample survey.  
<sup>2</sup> Includes students who reported they were awarded aid but did not specify the source of aid.  
<sup>3</sup> Prior to October 17, 1986, private, proprietary institutions were prohibited by law from spending CWS (College Work-Study) funds for on-campus work.

NOTE.—Because some students receive multiple types and sources of aid, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study*. (This table was prepared February 1989.)

**Table 285.—Postbaccalaureate students enrolled in fall 1986, by aid status and source of aid during 1986-87, and by control and level of institution**

Control and level of institution	Number of postbaccalaureate students, <sup>1</sup> fall 1986	Aid status, 1986-87, in percents							
		Nonaided	Receiving aid, by source					Employer	Other <sup>3</sup>
			Any aid <sup>2</sup>	Federal	State	Institutional	Other <sup>3</sup>		
1	2	3	4	5	6	7	8	9	
<b>All institutions.....</b>	<b>1,340,079</b>	<b>43.2</b>	<b>56.8</b>	<b>27.3</b>	<b>5.9</b>	<b>34.8</b>	<b>7.4</b>	<b>3.8</b>	
<b>Master's</b>									
Total.....	852,340	52.6	47.4	17.0	3.2	28.1	9.7	2.3	
Public.....	527,428	55.2	44.8	14.9	3.4	26.9	7.1	1.6	
4-year doctoral.....	346,540	50.0	50.0	16.6	3.4	33.0	7.4	2.0	
Other 4-year.....	180,888	65.2	34.8	11.5	3.5	21.2	6.3	0.8	
Private.....	324,912	46.3	51.7	20.3	2.9	26.8	14.0	3.5	
4-year doctoral.....	215,047	43.1	56.9	22.9	3.4	32.5	14.0	4.2	
Other 4-year.....	109,865	58.6	41.4	15.3	2.0	15.5	14.1	2.2	
<b>Doctoral</b>									
Total.....	184,483	27.3	72.7	17.7	3.9	61.6	8.5	2.7	
Public.....	117,528	29.2	70.8	17.3	4.7	60.9	5.8	2.5	
Private.....	66,955	23.9	76.1	18.2	2.5	62.6	7.7	3.0	
<b>First-professional</b>									
Total.....	303,256	26.4	73.8	82.3	14.5	37.4	1.4	8.7	
Public.....	101,528	27.7	72.3	59.9	12.9	32.6	1.6	9.1	
Private.....	201,728	25.8	74.2	63.5	15.4	39.9	1.3	8.5	

<sup>1</sup> Numbers of postbaccalaureate students may not equal figures reported in other tables, since these data are based on a sample survey of all postsecondary postbaccalaureate students.  
<sup>2</sup> Includes students who reported they were awarded aid but did not specify the source of aid.  
<sup>3</sup> Includes aid provided by corporations, unions, foundations, fraternal organizations, community organizations, etc.

NOTE.—Because some students receive aid from multiple sources, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Student Financing of Graduate and Professional Education: A Report of the 1987 National Postsecondary Student Aid Study*. (This table was prepared February 1989.)

**Table 286.—Undergraduates enrolled in fall 1986, by Federal aid program and by control and level of institution: 1986-87**

Control and level of institution	Number of undergraduates, fall 1986 <sup>1</sup>	Type of Federal aid, 1986-87, in percenta							
		Any Federal aid	Any Title IV aid <sup>2</sup>	Selected Title IV programs <sup>3</sup>					Any other Federal aid
				Pell	SEOG	CWS <sup>4</sup>	NDSL	GSL <sup>5</sup>	
1	2	3	4	5	6	7	8	9	10
<b>All Institutions.....</b>	<b>11,213,432</b>	<b>34.9</b>	<b>30.6</b>	<b>17.5</b>	<b>5.0</b>	<b>4.3</b>	<b>5.6</b>	<b>20.5</b>	<b>4.0</b>
<b>Public.....</b>	<b>6,572,090</b>	<b>28.5</b>	<b>24.3</b>	<b>15.5</b>	<b>3.7</b>	<b>3.3</b>	<b>4.0</b>	<b>13.7</b>	<b>4.1</b>
4-year doctoral.....	2,581,556	35.5	32.0	16.9	4.7	4.2	7.6	21.9	3.6
Other 4-year.....	1,881,052	36.4	34.6	21.1	5.5	5.7	6.8	19.8	3.7
2-year.....	4,180,263	19.9	15.1	12.0	2.5	1.9	0.6	6.0	4.3
Less than 2-year.....	129,219	41.9	33.1	25.6	2.3	2.5	2.4	18.0	9.4
<b>Private, nonprofit.....</b>	<b>2,038,949</b>	<b>48.4</b>	<b>44.7</b>	<b>17.3</b>	<b>8.9</b>	<b>9.6</b>	<b>11.8</b>	<b>35.2</b>	<b>3.8</b>
4-year doctoral.....	769,069	45.7	41.1	13.0	8.0	8.9	13.6	33.9	4.8
Other 4-year.....	1,119,661	50.1	48.8	19.0	9.9	10.7	11.6	36.4	3.2
2-year.....	133,779	47.9	45.6	25.6	4.9	5.2	4.2	32.1	2.7
Less than 2-year.....	16,441	59.4	56.1	33.6	7.6	4.0	0.9	37.6	5.8
<b>Private, proprietary.....</b>	<b>602,394</b>	<b>80.6</b>	<b>75.5</b>	<b>46.9</b>	<b>9.6</b>	<b>0.5</b>	<b>7.7</b>	<b>67.3</b>	<b>4.9</b>
2-year and above.....	223,859	79.2	74.8	39.5	9.5	0.7	7.9	65.8	4.4
Less than 2-year.....	378,535	81.4	75.9	51.3	9.8	0.5	7.5	68.1	5.2

<sup>1</sup> Numbers of undergraduates may not equal figures reported in other tables, since these data are based on a sample survey.

<sup>2</sup> Includes Pell, SEOG, CWS, NDSL, GSL, PLUS/ALAS (Parent Loans for Undergraduates and Auxiliary Loans to Assist Students) and the Federal portion of SSIG (State Student Incentive Grants) program.

<sup>3</sup> Selected types of Federal aid: SEOG=Supplemental Educational Opportunity Grants; CWS=College Work-Study; NDSL=National Direct Student Loans; GSL=Guaranteed Student Loans.

<sup>4</sup> Prior to October 17, 1986, private, proprietary institutions were prohibited by law from spending CWS funds for on-campus work.

<sup>5</sup> Does not include PLUS/ALAS.

<sup>6</sup> Includes aid from all Federal departments and agencies except Title IV aid.

NOTE.—Because some students receive aid from multiple sources, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study*. (This table was prepared February 1989.)

**Table 287.—Postbaccalaureate students enrolled in fall 1986, by type of aid received during 1986-87, by level of study and by control and level of institution**

Control and level of institution	Number of postbaccalaureate students, <sup>1</sup> fall 1986	Type of aid, 1986-87, in percenta							
		Any aid <sup>2</sup>	Fellowships/grants <sup>3</sup>	Tuition waivers	Assistantships <sup>4</sup>	Loans			
						Any loans	Guaranteed student loans	Other	
1	2	3	4	5	6	7	8	9	
<b>All Institutions.....</b>	<b>1,340,079</b>	<b>56.8</b>	<b>27.0</b>	<b>17.6</b>	<b>20.2</b>	<b>26.5</b>	<b>23.5</b>	<b>13.3</b>	
<b>Master's</b>									
<b>Total.....</b>	<b>852,340</b>	<b>47.4</b>	<b>22.0</b>	<b>17.2</b>	<b>17.3</b>	<b>15.8</b>	<b>13.6</b>	<b>5.0</b>	
Public.....	527,428	44.8	17.4	19.9	20.1	13.4	11.5	3.6	
4-year doctoral.....	346,540	50.0	19.6	23.0	24.2	15.4	13.3	4.2	
Other 4-year.....	180,888	34.8	13.3	14.0	12.4	9.6	7.9	2.6	
Private.....	324,912	51.7	29.3	12.8	12.7	19.6	17.0	7.2	
4-year doctoral.....	215,047	56.9	32.6	16.3	16.3	21.9	19.2	8.8	
Other 4-year.....	109,865	41.4	22.8	5.7	5.8	15.0	12.7	4.0	
<b>Doctoral</b>									
<b>Total.....</b>	<b>184,483</b>	<b>72.7</b>	<b>31.1</b>	<b>38.3</b>	<b>49.0</b>	<b>15.8</b>	<b>13.1</b>	<b>4.5</b>	
Public.....	117,528	70.8	25.1	38.3	52.4	15.3	13.2	2.9	
Private.....	66,955	76.1	41.6	38.4	43.0	16.7	12.9	7.4	
<b>First-professional</b>									
<b>Total.....</b>	<b>303,256</b>	<b>73.6</b>	<b>30.6</b>	<b>6.3</b>	<b>11.0</b>	<b>62.9</b>	<b>57.5</b>	<b>42.1</b>	
Public.....	101,528	72.3	30.0	7.4	11.1	59.9	55.7	36.8	
Private.....	201,728	74.2	31.0	5.7	10.9	64.4	58.4	44.7	

<sup>1</sup> Numbers of postbaccalaureate students may not equal figures reported in other tables, since these data are based on a sample survey of all postsecondary postbaccalaureate students.

<sup>2</sup> Includes students who reported they were awarded aid but did not specify the type of aid.

<sup>3</sup> Includes students who received employer benefits.

<sup>4</sup> Includes students who received teaching or research assistantships and/or participated in work-study programs.

NOTE.—Because some students receive various types of aid, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Student Financing of Graduate and Professional Education: A Report of the 1987 National Postsecondary Student Aid Study*. (This table was prepared February 1989.)

**Table 288.—Scholarship and fellowship awards<sup>1</sup> of institutions of higher education, by control of institution: 1959-60 to 1986-87**

[In thousands]

Year	Total scholarship and fellowship awards			Scholarship and fellowship awards from unrestricted funds			Scholarship and fellowship awards from restricted funds		
	All institutions	Public	Private	All institutions	Public	Private	All institutions	Public	Private
1	2	3	4	5	6	7	8	9	10
1959-60.....	\$172,051	\$59,673	\$112,377	—	—	—	—	—	—
1961-62.....	228,765	78,255	150,510	—	—	—	—	—	—
1963-64.....	300,370	107,767	192,603	—	—	—	—	—	—
1965-66.....	425,524	153,256	272,269	—	—	—	—	—	—
1966-67.....	593,390	248,077	335,311	—	—	—	—	—	—
1967-68.....	712,425	326,915	385,510	—	—	—	—	—	—
1968-69.....	614,755	367,433	447,322	—	—	—	—	—	—
1969-70.....	984,594	456,977	527,617	—	—	—	—	—	—
1970-71.....	1,098,198	528,243	569,955	—	—	—	—	—	—
1971-72.....	1,241,372	621,367	619,996	—	—	—	—	—	—
1972-73.....	1,322,411	656,054	666,357	—	—	—	—	—	—
1973-74.....	1,396,488	705,691	690,707	—	—	—	—	—	—
1974-75.....	1,449,542	718,760	730,762	\$631,801	\$267,191	\$364,610	\$617,741	\$451,569	\$366,152
1975-76.....	1,635,859	796,515	837,343	686,604	276,334	410,269	949,255	522,181	427,074
1976-77.....	1,770,215	859,011	911,204	748,763	291,073	457,690	1,021,451	567,638	453,514
1977-78.....	1,839,296	840,666	998,632	818,101	305,563	512,537	1,021,197	535,102	486,095
1978-79.....	1,944,569	861,576	1,083,021	883,213	326,201	557,012	1,061,366	535,377	526,009
1979-80.....	2,200,468	970,363	1,230,106	904,678	324,224	580,652	1,295,592	646,138	649,454
1980-81.....	2,504,525	1,064,864	1,439,661	1,060,614	367,476	713,138	1,423,9*1	697,368	726,523
1981-82.....	2,684,945	1,068,717	1,596,228	1,236,081	374,632	861,449	1,448,864	714,065	734,779
1982-83.....	2,922,897	1,188,383	1,734,514	1,478,782	480,291	1,018,470	1,444,136	726,092	716,044
1983-84.....	3,301,673	1,276,644	2,025,029	1,738,188	518,626	1,219,562	1,563,485	759,018	805,466
1984-85.....	3,670,355	1,374,803	2,295,551	1,961,597	569,058	1,392,539	1,708,758	805,745	903,012
1985-86.....	4,190,174	1,575,909	2,584,266	2,285,116	696,973	1,588,143	1,875,059	878,935	996,123
1986-87 <sup>2</sup> .....	4,776,100	1,751,671	3,024,430	2,644,615	750,931	1,893,684	2,131,486	1,000,740	1,130,746

<sup>1</sup> Includes Supplementary Educational Opportunity Grants and State Student Incentive Grants, but excludes Pell Grants.

<sup>2</sup> Preliminary data.  
—Data not collected.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

NOTE.—Because of rounding, details may not add to totals.

**Table 289.—Pell Grant revenue of institutions of higher education compared to current-fund revenue and tuition, by type and control of institution: 1982-83 to 1986-87**

(Amounts in thousands)

Year and type of control of institution	Current-fund revenue		Pell Grant revenue	Pell Grants as a percent of current-fund revenue	Pell Grants as a percent of tuition	Distribution of Pell Grants
	Total	Tuition				
1	2	3	4	5	6	7
<b>1982-83</b>						
All institutions.....	\$77,595,726	\$17,776,041	\$1,855,879	2.4	10.4	100.0
4-year institutions.....	67,716,926	15,670,373	1,299,503	1.9	8.3	70.0
2-year institutions.....	9,878,799	2,105,668	556,376	5.6	26.4	30.0
Public institutions.....	50,412,066	7,295,879	1,257,270	2.5	17.2	67.7
4-year institutions.....	41,328,037	5,721,599	812,395	2.0	14.2	43.8
2-year institutions.....	9,084,049	1,574,279	444,875	4.9	28.3	24.0
Private institutions.....	27,183,640	10,480,163	598,609	2.2	5.7	32.3
4-year institutions.....	26,388,890	9,948,774	487,108	1.8	4.9	26.2
2-year institutions.....	794,750	531,389	111,501	14.0	21.0	6.0
<b>1983-84</b>						
All institutions.....	84,417,287	19,714,884	2,119,716	2.5	10.8	100.0
4-year institutions.....	73,827,400	17,399,381	1,478,158	2.0	8.5	69.7
2-year institutions.....	10,589,887	2,315,503	641,558	6.1	27.7	30.3
Public institutions.....	54,545,275	8,123,318	1,478,362	2.7	18.2	69.7
4-year institutions.....	44,849,649	6,419,039	962,451	2.1	15.0	45.4
2-year institutions.....	9,695,626	1,704,279	515,910	5.3	30.3	24.3
Private institutions.....	29,872,012	11,591,566	641,354	2.1	5.5	30.3
4-year institutions.....	28,977,751	10,980,342	515,706	1.8	4.7	24.3
2-year institutions.....	894,261	611,224	125,648	14.1	20.6	5.9
<b>1984-85</b>						
All institutions.....	92,472,694	21,283,329	2,259,538	2.4	10.6	100.0
4-year institutions.....	81,023,952	18,814,449	1,572,771	1.9	8.4	69.6
2-year institutions.....	11,448,743	2,468,879	686,767	6.0	27.8	30.4
Public institutions.....	59,794,159	8,647,637	1,607,965	2.7	18.6	71.2
4-year institutions.....	49,325,939	6,849,480	1,052,350	2.1	15.4	46.6
2-year institutions.....	10,468,220	1,798,157	555,615	5.3	30.9	24.6
Private institutions.....	32,678,536	12,635,691	651,573	2.0	5.2	26.8
4-year institutions.....	31,696,013	11,964,969	520,421	1.6	4.3	23.0
2-year institutions.....	980,523	670,722	131,152	13.4	19.6	5.8
<b>1985-86</b>						
All institutions.....	100,437,818	23,118,605	2,585,048	2.6	11.1	100.0
4-year institutions.....	88,144,386	20,496,399	1,770,042	2.0	8.6	69.0
2-year institutions.....	12,293,231	2,618,206	795,006	6.5	30.4	31.0
Public institutions.....	65,004,632	9,439,177	1,873,456	2.9	19.8	73.0
4-year institutions.....	53,746,503	7,539,717	1,214,303	2.3	16.1	47.3
2-year institutions.....	11,258,128	1,899,460	659,153	5.9	34.7	25.7
Private institutions.....	35,432,986	13,677,429	691,592	2.0	5.1	27.0
4-year institutions.....	34,397,882	12,958,683	555,739	1.6	4.3	21.7
2-year institutions.....	1,035,102	718,746	135,853	13.1	16.9	5.3
<b>1986-87<sup>1</sup></b>						
All institutions.....	106,809,827	25,705,827	2,456,078	2.3	9.6	100.0
Public institutions.....	69,613,289	10,198,633	1,795,475	2.6	17.6	73.1
Private institutions.....	39,196,539	15,507,194	660,603	1.7	4.3	26.9

<sup>1</sup> Preliminary data.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

**Table 290.—State awards for need-based<sup>1</sup> undergraduate scholarship and grant programs, by State: 1981-82 to 1988-89**

(in thousands)

State	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88 <sup>2</sup>	1988-89 <sup>2</sup>	Percent change, 1981-82 to 1988-89 <sup>3</sup>
1	2	3	4	5	6	7	8	9	10
<b>United States .....</b>	<b>\$987,081</b>	<b>\$945,898</b>	<b>\$1,024,206</b>	<b>\$1,141,870</b>	<b>\$1,222,112</b>	<b>\$1,325,964</b>	<b>\$1,408,279</b>	<b>\$1,485,459</b>	<b>67.6</b>
Alabama.....	505	1,558	1,731	2,242	2,242	2,120	2,260	2,260	347.5
Alaska.....	329	228	189	241	241	229	240	230	80.1
Arizona.....	2,283	2,305	2,027	2,355	2,401	2,437	3,244	3,508	53.7
Arkansas.....	1,803	1,866	2,228	3,792	4,108	3,800	3,898	3,910	143.9
California.....	88,363	82,753	86,031	92,168	112,373	112,770	135,002	140,981	63.2
Colorado.....	7,278	7,485	7,341	8,779	9,382	9,491	9,325	9,395	29.1
Connecticut.....	8,792	8,594	9,371	9,812	11,095	9,094	16,337	21,149	140.6
Delaware.....	544	531	548	536	758	875	852	983	80.7
District of Columbia.....	1,118	1,117	759	1,109	1,108	1,059	1,108	1,075	8.8
Florida.....	12,302	13,405	12,515	13,867	14,819	14,151	17,188	19,626	59.5
Georgia.....	3,493	3,661	3,683	4,040	4,510	4,948	4,934	5,020	43.7
Hawaii.....	737	550	493	493	604	595	734	598	-18.9
Idaho.....	486	482	378	509	509	487	343	348	-29.8
Illinois.....	89,834	93,515	104,384	110,217	122,300	131,788	135,772	147,303	64.3
Indiana.....	20,576	19,880	20,380	25,007	26,448	30,512	45,408	51,654	151.0
Iowa.....	15,829	17,259	20,263	22,205	22,379	22,378	28,157	30,915	97.8
Kansas.....	5,004	4,865	4,864	4,841	5,609	5,250	5,430	5,680	13.5
Kentucky.....	8,322	8,316	7,886	8,242	8,758	12,139	12,229	13,190	108.6
Louisiana.....	2,220	1,986	1,893	1,931	2,003	1,818	1,880	1,984	-11.5
Maine.....	537	518	477	784	809	1,151	1,422	1,411	182.8
Maryland.....	5,921	5,718	5,459	7,361	8,859	7,822	9,051	12,729	115.0
Massachusetts.....	17,071	18,750	25,665	35,937	43,466	58,995	81,654	84,018	275.0
Michigan.....	28,626	30,499	30,753	32,866	57,845	66,864	68,380	69,662	143.4
Minnesota.....	28,019	29,217	46,800	44,900	45,486	65,473	60,000	82,000	121.3
Mississippi.....	1,321	1,297	1,015	1,297	1,288	1,287	1,408	1,251	-5.3
Missouri.....	8,941	8,694	8,768	9,128	9,645	9,692	9,835	10,331	15.5
Montana.....	390	400	353	382	440	401	420	420	7.7
Nebraska.....	1,119	1,062	860	1,089	1,093	1,042	1,089	1,793	60.2
Nevada.....	150	402	327	414	414	328	352	4352	134.7
New Hampshire.....	592	567	538	582	660	623	856	835	41.0
New Jersey.....	39,774	45,890	47,980	57,579	65,173	63,978	72,475	80,222	101.7
New Mexico.....	720	1,000	695	1,025	1,461	1,461	1,461	5,024	597.8
New York.....	280,280	299,880	327,320	380,390	363,949	391,989	381,000	384,062	37.0
North Carolina.....	3,299	4,421	3,974	4,449	4,440	4,388	4,500	4,489	36.1
North Dakota.....	672	899	635	702	808	503	541	1,007	49.9
Ohio.....	31,864	35,077	41,974	44,800	45,000	47,848	49,400	51,400	61.3
Oklahoma.....	2,265	6,805	6,561	6,487	8,242	8,830	10,493	10,122	348.9
Oregon.....	7,669	8,660	8,548	8,938	9,514	9,204	10,121	10,618	38.4
Pennsylvania.....	77,572	87,644	83,474	88,002	98,800	103,401	108,923	120,373	55.2
Rhode Island.....	5,936	6,898	6,745	7,560	7,858	8,930	9,226	9,130	53.8
South Carolina.....	12,631	12,275	12,588	13,726	15,146	16,348	16,460	17,828	41.1
South Dakota.....	431	531	440	531	824	583	581	506	17.4
Tennessee.....	8,439	7,221	6,700	8,207	9,434	10,618	16,500	12,404	92.6
Texas.....	18,897	21,811	21,438	22,291	19,033	20,990	21,931	22,729	21.6
Utah.....	1,171	1,174	1,538	1,665	1,131	1,080	1,080	1,081	-7.7
Vermont.....	5,531	6,381	7,039	7,218	7,724	8,068	8,242	9,426	70.4
Virginia.....	3,733	4,000	4,075	4,374	4,415	4,349	4,420	5,851	56.7
Washington.....	5,304	5,979	7,530	7,185	8,827	10,022	12,975	12,901	143.2
West Virginia.....	4,300	4,044	4,378	4,850	5,187	5,157	5,227	5,228	21.8
Wisconsin.....	20,829	23,040	23,011	24,655	27,816	30,822	34,754	36,219	73.9
Wyoming.....	49	204	204	204	204	204	204	250	410.2

<sup>1</sup> In 1987-88, 81 percent of all aid was need-based aid, compared with non-need-based aid or other types of aid. In 1988-89, need-based aid comprised 78 percent.  
<sup>2</sup> Estimated.  
<sup>3</sup> Changes may reflect introduction of new programs or discontinuation of existing programs.

<sup>4</sup> Data are for 1987-88.  
 SOURCE: National Association of State Scholarship and Grant Programs, *20th Annual Survey Report, 1988-89 Academic Year*. (This table was prepared January 1990.)



Table 291.—Current-fund revenue of institutions of higher education, by source: 1977-78 to 1986-87

Source	1977-78	1978-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
In thousands									
<b>Total current-fund revenue</b> .....	<b>847,034,032</b>	<b>888,518,982</b>	<b>888,884,789</b>	<b>872,190,968</b>	<b>877,885,728</b>	<b>884,417,287</b>	<b>882,472,984</b>	<b>9100,437,818</b>	<b>9108,888,827</b>
Tuition and fees .....	9,855,270	11,930,340	13,773,259	15,774,038	17,776,041	19,714,884	21,283,329	23,116,805	25,705,827
Federal Government .....	6,988,501	8,902,843	9,747,586	9,591,805	9,631,097	10,406,186	11,509,125	12,704,750	13,804,049
Appropriations .....	1,048,632	1,223,429	1,348,635	1,297,832	1,347,259	1,426,539	1,570,590	1,817,510	1,888,245
Unrestricted grants and contracts .....	780,310	865,300	1,136,558	1,173,656	1,225,523	1,332,187	1,474,588	1,658,838	1,878,202
Restricted grants and contracts <sup>2</sup> .....	4,308,864	5,582,997	6,005,317	5,848,329	5,808,619	6,024,108	6,570,045	7,180,345	7,880,232
Independent operations (FFRDC) <sup>3</sup> .....	855,696	1,131,117	1,286,877	1,271,988	1,449,695	1,623,363	1,893,904	2,238,259	2,879,599
State governments .....	14,748,166	18,378,299	20,106,222	21,848,791	23,085,636	24,708,990	27,583,011	29,911,500	31,309,303
Appropriations .....	14,165,047	17,611,594	19,289,188	20,963,983	22,084,273	23,835,781	26,373,160	28,402,288	29,337,120
Unrestricted grants and contracts .....	67,828	91,862	84,648	107,630	101,155	120,548	135,139	184,109	213,481
Restricted grants and contracts .....	513,193	674,813	755,186	777,296	890,206	950,693	1,074,712	1,358,102	1,788,722
Local governments .....	1,744,230	1,567,552	1,790,740	1,937,989	2,031,353	2,182,275	2,387,212	2,544,508	2,789,321
Appropriations .....	1,532,093	1,314,368	1,482,536	1,603,904	1,693,399	1,826,590	1,973,284	2,153,160	2,294,133
Unrestricted grants and contracts .....	32,257	36,691	29,629	41,055	37,008	43,421	63,442	58,975	82,724
Restricted grants and contracts .....	179,880	236,293	278,575	292,710	300,948	322,264	350,485	334,371	412,486
Private gifts, grants, and contracts .....	2,320,388	2,808,075	3,176,670	3,563,558	4,052,849	4,415,275	4,998,325	5,410,905	5,952,882
Unrestricted .....	821,705	1,084,041	1,210,903	1,357,419	1,552,294	1,674,842	1,944,876	2,111,972	2,234,942
Restricted .....	1,598,683	1,724,034	1,965,766	2,206,140	2,500,555	2,740,333	2,953,448	3,298,933	3,717,741
Endowment income .....	632,286	1,176,627	1,384,443	1,596,813	1,720,677	1,873,945	2,098,298	2,275,898	2,377,958
Unrestricted .....	481,051	670,841	770,358	806,845	858,392	1,021,134	1,227,787	1,285,194	1,229,849
Restricted .....	371,205	505,785	594,085	689,968	782,285	852,811	868,501	990,704	1,148,015
Sales and services .....	9,479,491	12,094,281	13,677,368	15,543,098	17,024,567	18,467,779	19,701,812	21,274,295	23,283,827
Educational activities .....	882,715	1,239,439	1,406,730	1,562,922	1,723,484	1,970,747	2,128,927	2,373,484	2,641,906
Auxiliary enterprises .....	5,327,821	6,461,458	7,287,290	8,121,911	8,769,521	9,456,369	10,100,410	10,674,138	11,364,188
Hospitals .....	3,288,956	4,373,384	4,980,346	5,836,565	6,531,562	7,040,662	7,474,575	8,228,635	9,277,634
Other sources .....	1,087,719	1,641,955	1,848,503	2,335,084	2,293,706	2,639,973	3,015,483	3,199,188	3,478,790

Percentage distribution

Total current-fund revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tuition and fees .....	21.0	20.4	21.0	21.9	22.9	23.4	23.0	23.0	23.6
Federal Government .....	14.6	15.2	14.9	13.3	12.4	12.3	12.4	12.6	12.8
Appropriations .....	2.2	2.1	2.1	1.6	1.7	1.7	1.7	1.6	1.5
Unrestricted grants and contracts .....	1.8	1.8	1.7	1.6	1.6	1.6	1.6	1.7	1.7
Restricted grants and contracts <sup>2</sup> .....	9.2	9.5	9.2	8.1	7.2	7.1	7.1	7.2	7.1
Independent operations (FFRDC) <sup>3</sup> .....	1.6	1.9	1.9	1.6	1.9	1.9	2.0	2.2	2.5
State governments .....	31.4	31.4	30.7	30.3	29.7	29.3	29.8	29.8	29.8
Appropriations .....	30.1	30.1	29.4	29.0	28.5	28.0	28.5	28.3	27.0
Unrestricted grants and contracts .....	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Restricted grants and contracts .....	1.1	1.2	1.2	1.1	1.1	1.1	1.2	1.3	1.6
Local governments .....	3.7	2.7	2.7	2.7	2.6	2.5	2.5	2.5	2.6
Appropriations .....	3.3	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.1
Unrestricted grants and contracts .....	0.1	0.1	( <sup>4</sup> )	0.1	( <sup>4</sup> )	0.1	0.1	0.1	0.1
Restricted grants and contracts .....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
Private gifts, grants, and contracts .....	4.9	4.6	4.6	4.9	5.2	5.2	5.3	5.4	5.5
Unrestricted .....	2.0	1.9	1.8	1.9	2.0	2.0	2.1	2.1	2.1
Restricted .....	3.0	2.9	3.0	3.1	3.2	3.2	3.2	3.3	3.4
Endowment income .....	1.8	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.2
Unrestricted .....	1.0	1.1	1.2	1.3	1.2	1.2	1.3	1.3	1.1
Restricted .....	0.6	0.9	0.9	1.0	1.0	1.0	0.9	1.0	1.1
Sales and services .....	20.2	20.7	20.9	21.5	21.9	21.9	21.3	21.2	21.4
Educational activities .....	1.9	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4
Auxiliary enterprises .....	11.3	11.1	11.1	11.3	11.3	11.2	10.9	10.6	10.4
Hospitals .....	7.0	7.5	7.6	8.1	8.4	8.3	8.1	8.2	8.6
Other sources .....	2.3	2.6	3.0	3.2	3.0	3.1	3.3	3.2	3.2

<sup>1</sup> Preliminary data.

<sup>2</sup> Excludes Pell Grants. Federally supported student aid that is received through students is included under tuition and auxiliary enterprises.

<sup>3</sup> Generally includes only those revenues associated with major federally funded research and development centers (FFRDC).

<sup>4</sup> Less than 0.05 percent.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared July 1990.)

Table 292.—Current-fund revenue of public institutions of higher education, by source: 1977-78 to 1986-87

Source	1977-78	1978-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
In thousands									
<b>Total current-fund revenue</b> .....	<b>831,544,536</b>	<b>836,824,307</b>	<b>843,186,817</b>	<b>847,276,822</b>	<b>856,412,088</b>	<b>864,548,375</b>	<b>866,794,169</b>	<b>866,004,632</b>	<b>896,613,299</b>
Tuition and fees .....	4,141,965	4,880,162	5,570,404	6,354,813	7,295,879	8,123,318	8,647,637	9,439,177	10,198,633
Federal Government .....	4,036,662	5,073,481	5,540,101	5,373,330	5,351,137	5,719,802	5,309,818	6,652,370	7,227,965
Appropriations .....	892,333	1,025,663	1,128,101	1,087,493	1,142,486	1,215,816	1,346,183	1,401,367	1,434,295
Unrestricted grants and contracts .....	367,704	470,429	529,424	573,016	598,135	642,117	723,500	816,364	907,299
Restricted grants and contracts <sup>2</sup> .....	2,716,693	3,516,235	3,812,197	3,635,947	3,555,109	3,774,069	4,120,266	4,481,723	4,662,798
Independent operations (FFRDC) <sup>3</sup> .....	42,962	61,154	70,379	78,875	76,406	87,777	116,890	152,916	223,602
State governments .....	14,430,636	17,973,542	18,675,898	21,397,084	22,562,895	24,157,316	25,965,417	26,220,586	30,438,878
Appropriations .....	13,973,273	17,390,352	18,008,716	20,695,114	21,908,452	23,340,390	24,065,494	24,071,070	28,974,665
Unrestricted grants and contracts .....	42,301	48,740	45,390	63,570	54,547	65,000	71,113	86,779	139,059
Restricted grants and contracts .....	415,362	534,751	623,893	636,379	702,666	750,956	828,810	1,060,737	1,325,154
Local governments .....	1,635,582	1,436,474	1,622,939	1,757,007	1,845,517	1,964,164	2,178,781	2,325,844	2,535,014
Appropriations .....	1,527,320	1,310,360	1,478,001	1,599,110	1,691,259	1,824,430	1,970,829	2,150,459	2,298,420
Unrestricted grants and contracts .....	16,633	17,608	9,915	16,834	12,447	18,956	35,398	27,852	56,781
Restricted grants and contracts .....	91,630	108,605	135,022	141,084	141,811	140,996	172,534	147,533	168,819
Private gifts, grants, and contracts .....	775,927	978,697	1,100,084	1,277,049	1,496,318	1,621,466	1,846,606	2,109,782	2,292,965
Unrestricted .....	91,320	105,495	110,462	136,118	180,457	204,441	236,395	279,361	297,163
Restricted .....	684,607	873,202	989,622	1,139,931	1,317,861	1,417,027	1,609,220	1,830,401	1,995,822
Endowment income .....	129,796	191,037	214,561	244,070	274,113	315,109	342,633	398,603	349,779
Unrestricted .....	65,877	99,630	102,888	114,571	129,423	137,645	147,237	181,624	125,165
Restricted .....	62,919	92,107	111,673	129,499	144,690	177,165	195,596	216,979	224,614
Sales and services .....	5,819,597	7,442,962	8,455,449	9,620,314	10,392,946	11,262,071	11,967,500	12,980,670	14,775,531
Educational activities .....	555,422	619,154	843,737	1,071,743	1,158,584	1,279,212	1,424,866	1,594,846	1,771,760
Auxiliary enterprises .....	3,393,765	4,098,524	4,614,561	5,122,565	5,501,969	5,947,717	6,299,312	6,664,794	7,092,965
Hospitals .....	1,890,410	2,535,313	2,997,151	3,428,005	3,732,684	4,035,142	4,248,293	4,708,630	5,910,795
Other sources .....	572,043	667,523	1,016,110	1,207,178	1,191,491	1,362,205	1,536,566	1,667,600	1,783,474
Percentage distribution									
<b>Total current-fund revenue</b> .....	<b>100.0</b>								
Tuition and fees .....	13.1	12.6	12.9	13.5	14.5	14.9	14.5	14.5	14.7
Federal Government .....	12.8	13.1	12.8	11.4	10.6	10.5	10.6	10.6	10.4
Appropriations .....	2.8	2.8	2.6	2.3	2.3	2.3	2.3	2.2	2.1
Unrestricted grants and contracts .....	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.3	1.3
Restricted grants and contracts <sup>2</sup> .....	6.6	9.1	6.8	7.7	7.0	6.9	6.9	6.9	6.7
Independent operations (FFRDC) <sup>3</sup> .....	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3
State governments .....	45.7	46.3	45.6	45.3	44.8	44.3	45.1	45.0	43.7
Appropriations .....	44.3	44.8	44.0	45.6	43.3	42.8	43.6	43.2	41.6
Unrestricted grants and contracts .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Restricted grants and contracts .....	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.9
Local governments .....	5.2	3.7	3.8	3.7	3.7	3.6	3.6	3.6	3.6
Appropriations .....	4.6	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3
Unrestricted grants and contracts .....	0.1	( <sup>4</sup> )	0.1						
Restricted grants and contracts .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Private gifts, grants, and contracts .....	2.5	2.5	2.5	2.7	3.0	3.0	3.1	3.2	3.3
Unrestricted .....	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Restricted .....	2.2	2.2	2.3	2.4	2.6	2.6	2.7	2.8	2.9
Endowment income .....	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5
Unrestricted .....	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2
Restricted .....	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Sales and services .....	18.4	19.2	19.6	20.4	20.6	20.6	20.0	20.0	21.2
Educational activities .....	1.8	2.1	2.2	2.3	2.3	2.3	2.4	2.5	2.5
Auxiliary enterprises .....	10.6	10.5	10.7	10.8	10.9	10.9	10.5	10.3	10.2
Hospitals .....	5.9	6.5	6.7	7.2	7.4	7.4	7.1	7.2	6.5
Other sources .....	1.8	2.2	2.4	2.6	2.4	2.5	2.6	2.6	2.6

<sup>1</sup> Preliminary data.

<sup>2</sup> Excludes Pell Grants. Federally supported student aid that is received through students is included under tuition and auxiliary enterprises.

<sup>3</sup> Generally includes only those revenues associated with major federally funded research and development centers (FFRDC).

<sup>4</sup> Less than 0.05 percent.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

**Table 293.—Current-fund revenue of private institutions of higher education, by source: 1977-78 to 1986-87**

Source	1977-78	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
In thousands									
<b>Total current-fund revenue</b> .....	<b>\$15,489,484</b>	<b>\$19,695,774</b>	<b>\$22,369,172</b>	<b>\$24,920,034</b>	<b>\$27,183,640</b>	<b>\$29,872,012</b>	<b>\$32,678,536</b>	<b>\$35,432,965</b>	<b>\$39,196,539</b>
Tuition and fees.....	5,713,306	7,070,178	8,202,855	9,379,225	10,480,163	11,591,566	12,635,691	13,677,429	15,507,194
Federal Government.....	2,928,609	3,629,362	4,207,485	4,218,475	4,279,960	4,666,564	5,199,307	5,852,380	6,676,054
Appropriations.....	154,299	197,766	218,733	210,339	204,774	210,923	221,407	216,143	221,950
Unrestricted grants and contracts.....	372,606	494,871	597,134	600,641	627,366	690,040	751,076	842,272	970,903
Restricted grants and contracts <sup>2</sup> .....	1,589,171	2,066,762	2,193,119	2,212,382	2,073,511	2,250,015	2,449,780	2,708,622	3,027,434
Independent operations (FFRDC) <sup>3</sup> .....	612,734	1,069,963	1,196,498	1,195,113	1,374,267	1,535,566	1,777,044	2,085,343	2,455,767
State governments.....	315,230	404,457	430,263	451,728	502,951	549,873	617,593	690,914	869,424
Appropriations.....	191,774	221,242	259,470	268,749	278,621	295,401	307,666	331,219	362,454
Unrestricted grants and contracts.....	25,625	43,153	39,458	44,060	46,609	54,546	64,026	65,330	74,402
Restricted grants and contracts.....	97,831	140,062	131,326	138,919	177,522	199,727	245,902	294,365	432,568
Local governments.....	108,648	151,078	187,801	180,661	185,636	206,091	206,451	218,662	264,307
Appropriations.....	4,773	4,008	4,535	4,794	2,140	2,160	2,455	2,701	4,713
Unrestricted grants and contracts.....	15,824	19,283	19,714	24,221	24,559	24,565	28,045	29,123	35,943
Restricted grants and contracts.....	68,251	127,788	143,552	151,646	159,137	181,366	177,951	186,636	223,651
Private gifts, grants, and contracts.....	1,544,441	1,829,378	2,076,585	2,266,510	2,554,331	2,793,607	3,050,719	3,301,124	3,659,697
Unrestricted.....	830,366	978,548	1,100,441	1,219,301	1,371,836	1,470,501	1,706,491	1,832,592	1,937,776
Restricted.....	714,056	850,832	976,144	1,067,209	1,182,494	1,322,306	1,342,228	1,468,532	1,721,919
Endowment income.....	705,490	965,590	1,149,883	1,352,742	1,446,564	1,558,636	1,753,465	1,877,295	2,026,179
Unrestricted.....	395,204	571,912	667,471	792,273	826,969	883,190	1,069,560	1,103,570	1,104,778
Restricted.....	308,286	413,678	482,412	560,469	617,595	675,646	672,905	773,725	923,400
Sales and services.....	3,659,694	4,651,289	5,221,917	5,922,784	6,631,620	7,205,708	7,734,412	8,283,595	8,506,396
Educational activities.....	317,292	420,285	465,993	511,179	564,877	691,535	702,032	776,548	870,145
Auxiliary enterprises.....	1,934,055	2,392,934	2,672,729	2,999,045	3,267,852	3,508,652	3,804,096	3,986,342	4,271,203
Hospitals.....	1,406,546	1,838,070	2,063,195	2,412,560	2,796,678	3,005,520	3,228,282	3,517,705	3,367,046
Other sources.....	515,876	1,144,200	932,392	1,127,906	1,102,215	1,277,768	1,476,697	1,531,566	1,663,267
Percentage distribution									
<b>Total current-fund revenue</b> .....	<b>100.0</b>								
Tuition and fees.....	36.9	35.9	36.6	37.6	38.6	38.8	38.7	38.8	39.6
Federal Government.....	18.9	19.4	18.8	18.9	15.7	15.7	15.9	16.5	17.0
Appropriations.....	1.0	1.0	1.0	0.8	0.8	0.7	0.7	0.6	0.6
Unrestricted grants and contracts.....	2.4	2.5	2.7	2.4	2.3	2.3	2.3	2.4	2.5
Restricted grants and contracts <sup>2</sup> .....	10.3	10.5	9.8	8.9	7.6	7.5	7.5	7.8	7.7
Independent operations (FFRDC) <sup>3</sup> .....	5.2	5.4	5.4	4.6	5.1	5.1	5.4	5.9	6.3
State governments.....	2.0	2.1	1.9	1.8	1.9	1.8	1.9	1.9	2.2
Appropriations.....	1.2	1.1	1.2	1.1	1.0	1.0	0.9	0.9	0.9
Unrestricted grants and contracts.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Restricted grants and contracts.....	0.3	0.7	0.6	0.6	0.7	0.7	0.8	0.8	1.1
Local governments.....	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7
Appropriations..... <sup>(4)</sup>	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Unrestricted grants and contracts.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Restricted grants and contracts.....	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6
Private gifts, grants, and contracts.....	10.0	9.3	9.3	9.2	9.4	9.4	9.3	9.3	9.3
Unrestricted.....	5.4	5.0	4.9	4.9	5.0	4.9	5.2	5.2	4.9
Restricted.....	4.6	4.3	4.4	4.3	4.4	4.4	4.1	4.1	4.4
Endowment income.....	4.5	5.0	5.1	5.4	5.3	5.2	5.4	5.3	5.2
Unrestricted.....	2.6	2.9	3.0	3.2	3.0	3.0	3.3	3.1	2.8
Restricted.....	2.0	2.1	2.2	2.2	2.3	2.3	2.1	2.2	2.4
Sales and services.....	23.6	23.6	23.3	23.6	24.4	24.1	23.7	23.4	21.7
Educational activities.....	2.0	2.1	2.1	2.1	2.1	2.3	2.1	2.2	2.2
Auxiliary enterprises.....	12.5	12.1	11.9	12.0	12.0	11.7	11.6	11.3	10.9
Hospitals.....	9.1	9.3	9.3	9.7	10.3	10.1	9.9	9.9	6.6
Other sources.....	3.3	3.9	4.2	4.5	4.1	4.3	4.5	4.3	4.3

<sup>1</sup> Preliminary data.

<sup>2</sup> Excludes Pell Grants. Federally supported student aid that is received through students is included under tuition and auxiliary enterprises.

<sup>3</sup> Generally includes only those revenues associated with major federally funded research and development centers (FFRDC).

<sup>4</sup> Less than 0.05 percent.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared July 1990.)

**Table 294.—Revenue of Institutions of higher education, by source of funds: 1919-20 to 1986-87**

(In thousands)

Item	1919-20	1929-30	1939-40	1949-50	1959-60	1969-70	1973-74	1975-76	1977-78	1979-80	1981-82	1983-84	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Current-fund revenue</b> .....	<b>\$199,922</b>	<b>\$554,511</b>	<b>\$715,211</b>	<b>\$2,374,845</b>	<b>\$5,785,537</b>	<b>\$21,515,242</b>	<b>\$31,712,452</b>	<b>\$36,703,166</b>	<b>\$47,034,032</b>	<b>\$58,519,962</b>	<b>\$72,180,936</b>	<b>\$84,417,297</b>	<b>\$100,437,616</b>	<b>\$108,609,827</b>
Educational and general.....	172,929	463,065	571,298	1,833,845	4,686,352	—	—	—	—	—	—	—	—	—
Student tuition and fees <sup>2</sup> .....	42,255	144,126	200,897	394,610	1,157,482	4,419,845	6,500,101	8,171,942	9,855,270	11,930,340	15,774,038	19,714,684	23,116,605	25,705,827
Federal Government: <sup>3</sup>														
Veterans' tuition and fees <sup>2</sup> .....	—	—	—	307,325	3,422	—	—	—	—	—	—	—	—	—
Research <sup>4</sup> .....	—	—	—	—	827,263	4,130,066	5,511,155	6,477,179	6,968,501	8,902,844	9,591,905	10,436,108	12,704,750	13,904,049
Other purposes.....	12,783	20,656	38,860	216,994	206,305	—	—	—	—	—	—	—	—	—
State governments <sup>5</sup> .....	61,690	150,847	151,222	491,636	1,374,476	5,873,626	9,337,167	12,260,886	14,746,166	18,376,299	21,846,791	24,706,990	29,911,500	31,309,303
Local governments.....	(*)	(*)	24,392	61,700	151,715	778,162	1,267,783	1,816,975	1,744,230	1,587,552	1,937,669	2,192,275	2,544,508	2,799,321
Endowment earnings.....	26,482	68,605	71,304	96,341	206,619	516,038	667,589	687,470	832,286	1,176,627	1,596,813	1,673,945	2,275,898	2,377,958
Private gifts and grants <sup>7</sup> .....	7,584	26,172	40,453	118,827	382,569	1,129,438	1,583,704	1,917,036	2,320,368	2,806,075	3,563,558	4,415,275	5,410,905	5,952,682
Sales and services of educational departments.....	—	—	32,777	111,987	102,525	612,777	834,060	645,420	682,715	1,239,439	1,582,922	1,970,747	2,373,494	2,641,906
Other educational and general.....	22,135	72,657	11,383	34,625	69,207	—	—	—	—	—	—	—	—	—
Auxiliary enterprises.....	26,993	60,419	143,923	511,265	1,004,283	2,900,390	3,734,229	4,547,622	5,27,821	6,481,456	6,121,611	9,456,309	10,674,136	11,364,168
Student-aid income <sup>6</sup> .....	—	—	—	16,288	92,902	—	—	—	—	—	—	—	—	—
Hospitals <sup>8</sup> .....	—	—	—	—	187,769	619,578	1,436,481	2,494,340	3,268,956	4,373,384	5,838,565	7,040,662	6,226,635	9,277,834
Other current income.....	—	11,027	—	13,247	—	535,323	840,186	884,298	1,087,719	1,641,965	2,335,064	2,639,973	3,199,166	3,476,760
<b>Plant-fund receipts</b> .....	<b>19,194</b>	<b>82,078</b>	<b>66,209</b>	<b>529,747</b>	<b>1,306,506</b>	—	—	7,266,363	6,761,466	6,853,540	10,247,333	11,727,629	16,213,426	—
Federal Government.....	—	—	22,967	12,358	57,599	—	—	—	—	—	—	—	—	—
State governments.....	11,294	30,621	16,404	263,920	319,513	—	—	—	—	—	—	—	—	—
Local governments.....	—	—	2,154	19,373	36,304	—	—	6,400,819	5,738,021	7,546,010	6,695,342	9,703,180	13,661,547	—
Private gifts and grants.....	7,900	51,457	22,663	72,620	196,406	—	—	—	—	—	—	—	—	—
Loans, noninstitutional sources.....	—	—	—	—	361,112	—	—	—	—	—	—	—	—	—
Loans, institutional sources.....	—	—	—	—	31,673	—	—	—	—	—	—	—	—	—
Transfers from other funds.....	—	—	—	60,582	229,576	—	—	685,544	1,023,445	1,307,530	1,551,991	2,024,449	2,551,979	—
Miscellaneous receipts.....	—	—	—	79,694	77,122	—	—	—	—	—	—	—	—	—
<b>Other fund receipts</b> .....	<b>—</b>	<b>—</b>	<b>44,516</b>	<sup>10</sup> 116,932	<b>496,950</b>	—	—	1,312,947	1,438,783	2,612,466	3,351,273	3,646,719	7,794,247	—
Private gifts and grants.....	50,907	63,512	36,376	66,650	209,146	—	—	—	—	—	—	—	—	—
Other sources.....	—	—	8,142	50,082	289,904	—	—	—	—	—	—	—	—	—
<b>Net increase in principal of funds</b> .....	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>419,310</b>	<b>367,978</b>	<b>—</b>	<b>956,667</b>	<b>1,032,164</b>	<b>2,153,706</b>	<b>2,224,169</b>	<b>2,409,715</b>	<b>7,236,660</b>	<b>—</b>
Endowment funds <sup>11</sup> .....	—	—	—	—	375,178	367,978	—	648,667	757,622	1,674,241	2,030,269	2,147,552	6,792,298	—
Annuity funds.....	—	—	—	—	11,654	—	—	52,963	45,420	64,466	48,604	69,429	234,611	—
Student loan funds.....	—	—	—	—	32,279	—	—	257,037	229,122	214,999	145,316	192,734	211,951	—

<sup>1</sup> Preliminary data.

<sup>2</sup> Tuition and fees received from veterans under Public Law 550 are reported under student fees and not under income from the Federal Government.

<sup>3</sup> Federally supported student aid that is received through students is included under tuition and auxiliary enterprises.

<sup>4</sup> Income from the Federal Government for research at agricultural experiment stations administered by land-grant institutions is included under Federal Government "other purposes," not under "research." Beginning in 1969-70, data include independent operations (Federally Funded Research and Development Centers.)

<sup>5</sup> Includes Federal aid received through State channels and regional compacts, through 1959-60.

<sup>6</sup> Income from State and local governments tabulated under "State governments."

<sup>7</sup> Beginning in 1969-70, the private grants represent nongovernmental revenue for sponsored research, student aid, and other sponsored programs.

<sup>8</sup> Specifically designated or earmarked funds.

<sup>9</sup> Prior to 1959-60, data for hospitals are included under sales and services of educational activities.

<sup>10</sup> Does not include interfund transfers.

<sup>11</sup> Includes funds functioning as endowment; increase calculated on book value.

—Data not available.

NOTE.—Data for years prior to 1969-70 are not entirely comparable with data for later years. Also, some details for 1969-70 through 1973-74 are not directly comparable with data for later years. Details for 1959-60 and 1969-70 have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared July 1990.)

Table 295.—Current-fund revenue for public institutions of higher education, by State: 1974-75 to 1986-87

[In thousands of dollars]

State	1974-75	1978-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>	Percent change, 1981-82 to 1986-87
1	2	3	4	5	6	7	8	9	10	11
United States.....	824,004,864	898,824,207	843,198,617	847,270,822	880,412,086	884,843,275	889,794,188	948,004,632	988,813,289	47.3
Alabama.....	442,015	776,033	889,121	840,289	998,882	1,072,838	1,242,999	1,401,893	1,438,945	53.0
Alaska.....	87,714	152,628	159,448	187,833	221,703	233,875	235,089	221,837	211,186	12.8
Arizona.....	353,049	613,135	719,835	807,314	818,506	904,621	941,769	1,049,493	1,119,518	38.7
Arkansas.....	182,032	325,144	350,597	379,832	400,265	437,714	498,689	539,185	586,317	49.2
California.....	3,413,325	5,191,945	5,908,729	6,230,404	6,502,822	6,859,043	7,913,218	8,739,398	9,508,244	52.8
Colorado.....	430,841	688,508	747,040	842,200	900,398	955,865	1,012,873	1,085,078	1,153,559	37.0
Connecticut.....	213,850	337,426	378,527	411,047	449,653	498,488	535,142	579,868	636,210	54.8
Delaware.....	92,865	149,921	168,522	185,158	197,453	206,974	229,561	251,877	275,473	48.8
District of Columbia.....	44,894	60,988	66,138	69,193	77,366	82,779	88,757	91,842	95,139	37.5
Florida.....	718,440	1,093,760	1,202,788	1,385,121	1,399,084	1,516,669	1,660,841	1,810,090	2,035,008	48.9
Georgia.....	413,777	677,184	765,828	853,939	933,495	1,085,777	1,157,711	1,287,472	1,421,979	66.5
Hawaii.....	136,457	196,229	219,633	244,775	264,780	277,039	295,228	316,248	323,030	32.0
Idaho.....	90,348	153,412	189,274	182,230	195,579	206,284	224,069	235,507	243,122	33.4
Illinois.....	1,084,843	1,813,720	1,809,981	1,911,951	1,973,690	2,113,033	2,312,048	2,580,241	2,722,813	42.4
Indiana.....	845,809	958,264	1,094,560	1,161,700	1,279,558	1,421,573	1,532,377	1,701,421	1,800,869	52.4
Iowa.....	409,377	724,259	784,950	862,227	916,667	980,380	1,052,891	1,139,881	1,210,284	40.4
Kansas.....	313,371	526,880	594,104	651,178	687,883	760,763	821,398	865,119	891,748	36.9
Kentucky.....	368,020	625,016	671,414	700,106	758,174	833,408	873,077	943,088	1,016,961	45.3
Louisiana.....	339,238	625,290	735,374	825,107	878,345	934,388	1,011,370	1,065,941	1,078,864	30.7
Maine.....	93,460	142,366	157,370	173,364	186,743	197,681	213,880	222,624	253,862	48.4
Maryland.....	444,928	706,882	818,850	920,930	898,886	948,923	1,081,354	1,144,230	1,233,023	33.9
Massachusetts.....	341,790	523,328	582,873	696,718	719,497	780,193	838,898	1,075,348	1,161,894	66.7
Michigan.....	1,240,822	1,954,179	2,094,394	2,175,858	2,354,487	2,577,386	2,785,058	3,071,172	3,348,947	53.9
Minnesota.....	528,074	815,873	894,236	1,006,224	1,084,583	1,189,822	1,290,356	1,373,436	1,530,823	52.1
Mississippi.....	279,372	500,576	543,209	593,951	593,801	645,674	667,078	734,613	729,024	22.7
Missouri.....	421,311	637,375	717,628	743,250	822,443	860,798	930,651	1,032,665	1,086,719	48.2
Montana.....	84,110	114,394	123,933	144,451	160,579	173,831	181,506	181,482	184,812	27.9
Nebraska.....	195,481	348,976	390,372	425,876	456,784	483,707	525,341	584,814	601,868	41.3
Nevada.....	51,428	104,307	113,298	127,290	131,343	143,191	156,918	184,823	201,841	58.6
New Hampshire.....	76,578	124,247	131,990	142,959	148,847	160,437	173,231	190,482	208,577	45.9
New Jersey.....	504,493	820,932	917,143	982,725	1,084,707	1,186,469	1,316,823	1,448,098	1,657,551	68.7
New Mexico.....	144,053	287,837	334,392	358,077	387,026	395,195	440,567	473,716	521,547	45.7
New York.....	1,752,173	2,361,836	2,519,437	2,849,147	3,103,322	3,314,699	3,847,741	3,830,119	4,321,209	51.7
North Carolina.....	650,621	1,005,891	1,148,931	1,255,824	1,312,435	1,492,216	1,679,156	1,857,124	2,006,207	59.7
North Dakota.....	92,824	166,947	196,267	218,813	239,551	251,284	270,401	288,550	304,304	40.5
Ohio.....	-1,009,441	1,667,974	1,828,079	2,014,310	2,178,134	2,438,112	2,627,717	2,824,411	3,025,444	50.2
Oklahoma.....	277,533	509,988	588,938	667,907	763,352	757,856	778,181	873,448	848,389	26.8
Oregon.....	337,989	611,898	847,391	721,359	733,297	806,757	838,598	899,709	963,153	33.5
Pennsylvania.....	970,529	1,429,481	1,575,104	1,733,328	1,908,464	2,055,415	2,241,489	2,473,794	2,703,292	58.0
Rhode Island.....	90,414	144,100	158,451	168,264	175,678	189,272	200,477	213,859	227,584	35.2
South Carolina.....	317,651	565,851	630,968	654,981	691,528	752,972	866,386	957,771	997,857	52.3
South Dakota.....	87,864	123,244	127,839	137,354	137,592	140,806	138,859	147,699	154,582	12.5
Tennessee.....	367,747	602,981	675,770	743,900	797,319	851,895	978,132	1,104,118	1,226,302	84.9
Texas.....	1,297,669	2,549,822	2,858,725	3,361,074	3,684,882	4,082,329	4,327,824	4,568,275	4,437,840	32.0
Utah.....	210,779	375,015	431,294	478,363	523,194	549,220	621,338	686,617	729,349	53.1
Vermont.....	69,194	113,401	127,337	137,832	149,551	164,671	179,705	191,559	207,585	50.8
Virginia.....	547,234	1,051,493	1,159,453	1,288,821	1,387,444	1,477,697	1,702,484	1,878,151	2,054,788	59.5
Washington.....	544,985	928,782	998,148	1,042,048	1,083,799	1,244,048	1,348,070	1,445,849	1,582,882	49.0
West Virginia.....	137,390	305,115	318,915	347,196	370,754	411,385	364,577	385,170	398,843	14.9
Wisconsin.....	715,803	1,116,997	1,228,414	1,328,734	1,413,898	1,512,943	1,621,860	1,751,927	1,864,947	40.8
Wyoming.....	62,537	112,074	140,520	127,803	178,308	199,802	189,920	206,595	204,300	59.9
U.S. Service Schools.....	323,258	511,217	588,085	658,091	719,077	785,110	854,918	913,092	920,863	39.9
Outlying areas.....	195,332	250,469	242,380	314,581	368,690	422,108	420,841	451,734	448,110	41.8
American Samoa.....	1,159	1,266	1,305	1,361	1,784	1,980	2,313	2,413	2,538	88.7
Guam.....	11,808	14,575	14,291	24,972	25,868	21,034	26,555	31,139	29,447	17.9
Northern Marianas.....	—	—	—	—	—	1,212	1,293	1,360	1,484	—
Puerto Rico.....	174,698	222,842	213,012	272,570	321,825	378,404	365,213	392,194	388,840	42.7
Trust Territory of the Pacific.....	707	1,253	1,669	1,997	4,121	4,352	7,208	5,681	4,523	188.5
Virgin Islands.....	6,980	10,533	12,103	13,981	15,093	15,117	18,059	18,957	18,143	36.9

<sup>1</sup> Preliminary data.

—Data not available or not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

**Table 296.—Current-fund revenue from State and local governments for institutions of higher education, by State: 1982-83 to 1986-87**

[In thousands]

State	Current-fund revenue from State and local governments				Current-fund revenue from State and local governments, 1986-87 <sup>1</sup>					
	1982-83	1983-84	1984-85	1985-86	Total	State appropriations for public institutions	Local appropriations for public institutions	State and local appropriations for private institutions	State and local grants and contracts for public institutions	State and local grants and contracts for private institutions
1	2	3	4	5	6	7	8	9	10	11
<b>United States<sup>2</sup>.....</b>	<b>\$25,096,989</b>	<b>\$26,899,265</b>	<b>\$29,870,223</b>	<b>\$32,456,008</b>	<b>\$34,106,923</b>	<b>\$28,874,684</b>	<b>\$2,289,420</b>	<b>\$367,167</b>	<b>\$1,710,807</b>	<b>\$766,664</b>
Alabama.....	419,892	436,574	568,958	656,823	611,859	578,414	5,408	2,172	23,374	2,490
Alaska.....	155,172	163,355	171,888	159,761	142,721	137,263	252	—	4,787	419
Arizona.....	379,338	427,559	476,993	539,054	566,769	439,613	105,445	591	18,767	2,154
Arkansas.....	189,631	203,288	254,883	266,898	276,266	284,673	—	—	10,607	967
California.....	3,729,632	3,700,828	4,412,324	4,943,659	5,391,779	4,557,544	494,339	1,278	319,909	16,709
Colorado.....	331,247	349,241	369,073	391,468	370,248	311,402	15,192	—	42,048	1,80*
Connecticut.....	217,493	238,376	254,872	280,012	302,120	281,045	—	1,004	5,717	14,3bJ
Delaware.....	71,252	74,361	82,250	88,661	97,351	94,098	—	54	3,011	191
District of Columbia.....	61,261	62,980	67,530	71,761	75,469	—	70,215	—	2,132	3,122
Florida.....	908,555	1,005,790	1,088,802	1,172,112	1,315,327	1,195,127	—	10,559	68,650	40,991
Georgia.....	495,967	585,964	640,938	689,379	741,486	675,940	17,456	4,329	32,885	10,855
Hawaii.....	171,244	169,435	173,951	195,375	200,274	194,170	—	—	5,400	703
Idaho.....	100,551	105,590	114,422	125,338	132,512	121,857	5,549	—	5,074	32
Illinois.....	1,084,568	1,137,153	1,236,560	1,405,822	1,481,338	1,117,168	174,929	24,419	120,660	44,162
Indiana.....	463,196	541,573	584,351	645,680	712,596	667,295	817	596	32,215	11,673
Iowa.....	389,922	403,976	444,893	431,840	424,572	388,566	19,773	725	11,905	3,902
Kansas.....	358,529	369,380	403,293	422,276	401,232	317,425	67,979	—	14,337	1,491
Kentucky.....	396,569	442,320	464,739	483,027	504,005	493,039	3,578	0	35,573	1,817
Louisiana.....	501,611	519,896	572,660	562,205	495,535	464,348	1,965	35	26,824	2,634
Maine.....	75,010	79,537	92,212	103,724	129,041	122,608	831	—	4,642	760
Maryland.....	479,223	511,611	564,827	631,471	672,128	517,631	66,683	15,827	45,393	6,591
Massachusetts.....	349,706	385,960	534,697	589,876	727,276	599,800	233	165	29,919	97,159
Michigan.....	862,903	986,520	1,077,734	1,215,291	1,313,018	1,127,570	109,069	11,453	47,020	17,905
Minnesota.....	411,248	464,842	484,834	533,573	600,262	587,067	246	1,183	20,152	11,934
Mississippi.....	292,449	326,887	336,717	362,517	315,621	278,619	21,724	61	14,908	269
Missouri.....	377,295	392,407	433,052	506,246	503,066	442,527	38,363	—	19,727	2,471
Montana.....	89,311	97,172	99,092	97,672	94,857	87,378	3,126	—	4,292	61
Nebraska.....	219,631	231,825	250,531	248,544	264,576	214,778	37,010	—	11,356	1,433
Nevada.....	66,204	71,175	79,789	99,841	107,228	99,496	—	—	7,708	24
New Hampshire.....	37,054	42,824	45,254	52,393	58,533	54,275	103	15	2,537	1,604
New Jersey.....	604,673	656,209	749,962	837,214	927,137	704,721	97,222	9,582	61,561	34,021
New Mexico.....	178,189	184,746	216,286	221,094	246,965	199,247	24,810	42	24,760	326
New York.....	2,223,913	2,369,001	2,517,676	2,726,150	3,012,048	2,168,448	293,949	132,177	158,244	259,231
North Carolina.....	758,820	845,648	972,913	1,074,860	1,182,836	1,060,049	42,997	10,811	25,783	26,195
North Dakota.....	114,271	108,993	122,389	118,991	129,155	126,692	666	—	1,488	77
Ohio.....	781,206	919,630	1,030,246	1,132,676	1,219,667	1,096,188	40,249	9,252	50,844	21,154
Oklahoma.....	380,276	355,840	361,638	437,693	391,147	347,589	2,672	7	40,413	466
Oregon.....	304,287	356,271	363,526	394,899	415,405	294,932	93,901	960	27,793	1,820
Pennsylvania.....	766,530	806,788	868,715	961,069	1,031,785	778,378	52,511	74,437	67,420	59,038
Rhode Island.....	87,908	93,039	100,031	107,265	113,442	107,512	—	1,421	3,613	666
South Carolina.....	351,636	373,496	446,624	491,802	465,869	448,042	12,348	34	4,480	2,984
South Dakota.....	55,482	57,051	56,374	65,151	67,944	65,942	—	—	1,678	124
Tennessee.....	357,171	376,541	457,745	528,933	593,556	557,452	37	338	29,804	5,925
Texas.....	2,205,158	2,464,751	2,609,730	2,521,860	2,379,761	2,042,728	159,650	41,808	100,099	35,479
Utah.....	202,693	207,585	242,265	256,997	262,130	245,227	—	—	6,094	6,809
Vermont.....	30,705	32,779	34,006	35,334	38,904	33,764	—	—	4,060	1,060
Virginia.....	560,821	549,725	708,775	775,474	789,583	729,010	684	5,612	27,655	6,222
Washington.....	482,151	565,298	601,657	620,383	656,032	617,490	229	—	37,965	336
West Virginia.....	173,938	169,501	211,013	222,693	225,170	212,687	702	—	10,815	767
Wisconsin.....	695,149	741,097	776,723	825,810	841,995	648,722	176,778	6,219	7,594	2,682
Wyoming.....	115,962	114,990	115,366	127,714	126,973	108,322	9,975	—	6,675	—

<sup>1</sup> Preliminary data.  
<sup>2</sup> Excludes U.S. Service Schools.  
 —Data not available or not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

**Table 297.—Current-fund revenue received from the Federal Government by the 100 institutions of higher education receiving the largest amounts: 1985-87**

[In thousands]

Institution	Rank order	Current-fund revenue from the Federal Government <sup>1</sup>	Institution	Rank order	Current-fund revenue from the Federal Government <sup>1</sup>
1	2	3	1	2	3
United States (all institutions).....	—	\$13,904,049			
California Institute of Technology.....	1	971,357	Oregon State University.....	51	58,963
Massachusetts Institute of Technology.....	2	561,500	Baylor College of Medicine (Tex.).....	52	56,999
Johns Hopkins University (Md.).....	3	505,237	University of Colorado at Boulder.....	53	56,898
University of Chicago (Ill.).....	4	347,542	Iowa State University of Science and Technology.....	54	56,741
Stanford University (Calif.).....	5	353,335	Vanderbilt University (Tenn.).....	55	55,554
U.S. Air Force Academy (Colo.).....	6	260,926	University of California, Davis.....	56	54,579
U.S. Military Academy (N.Y.).....	7	244,141	Medical College of Wisconsin.....	57	53,529
Harvard University (Mass.).....	8	201,533	University of Virginia, Main Campus.....	58	52,126
University of Washington.....	9	189,558	University of Oklahoma Health Science Center.....	59	52,099
University of Wisconsin, Madison.....	10	189,120	University of Georgia.....	60	51,755
Columbia University, Main Division (N.Y.).....	11	182,940	University of Hawaii at Manoa.....	61	49,546
U.S. Naval Academy (Md.).....	12	161,299	North Carolina State University, Raleigh.....	62	48,903
Howard University (D.C.).....	13	159,214	University of Texas, Health Science Center at Dallas.....	63	48,591
University of Michigan, Ann Arbor.....	14	155,636	Uniformed Services University of the Health Sciences (Md.).....	64	47,796
University of California, Los Angeles.....	15	151,532	Air Force Institute of Technology (Ohio).....	65	47,282
University of California, San Diego.....	16	142,781	University of Tennessee, Knoxville.....	66	46,541
Princeton University (N.J.).....	17	141,790	University of Texas Medical Branch at Galveston.....	67	46,310
University of Pennsylvania.....	18	136,748	Emory University (Ga.).....	68	45,607
University of California, San Francisco.....	19	135,323	Gallaudet College (D.C.).....	69	44,739
University of Minnesota, Minneapolis-St. Paul.....	20	134,617	Virginia Polytechnic Institute and State University.....	70	44,012
University of Illinois, Urbana Campus.....	21	133,025	Tufts University (Mass.).....	71	43,132
Cornell University, Medical Center (N.Y.).....	22	127,952	University of Illinois at Chicago.....	72	42,614
University of Miami (Fla.).....	23	125,529	University of California, Irvine.....	73	42,201
University of North Carolina, Chapel Hill.....	24	124,113	Colorado State University.....	74	41,320
University of California, Berkeley.....	25	117,000	Cornell University Sate College (N.Y.).....	75	39,069
University of Southern California.....	26	112,692	University of Cincinnati, Main Campus (Ohio).....	76	39,014
Northwestern University (Ill.).....	27	112,292	University of Massachusetts, Amherst Campus.....	77	38,276
Georgetown University (D.C.).....	28	108,159	University of Colorado, Health Sciences Center.....	78	38,178
Virginia Commonwealth University.....	29	103,892	Rockefeller University (N.Y.).....	79	37,983
University of Texas at Austin.....	30	94,693	Mayo Graduate School of Medicine (Minn.).....	80	37,796
Cornell University, Endowed Colleges (N.Y.).....	31	94,029	University of Kentucky.....	81	37,628
Washington University (Mo.).....	32	87,479	Tulane University of Louisiana.....	82	36,999
University of Arizona.....	33	86,434	Brown University (R.I.).....	83	36,466
University of Rochester (N.Y.).....	34	86,393	Utah State University.....	84	35,943
New York University.....	35	85,599	Rochester Institute of Technology (N.Y.).....	85	35,414
Rush University (Ill.).....	36	83,900	University of Vermont and State Agricultural College.....	86	34,279
University of Pittsburgh, Main Campus (Pa.).....	37	78,148	University of California, Santa Barbara (Ca.).....	87	33,993
Michigan State University.....	38	74,504	Mount Sinai School of Medicine of City Univ. of New York.....	88	32,876
University of Maryland, College Park Campus.....	39	73,895	U.S. Coast Guard Academy (Conn.).....	89	32,514
Carnegie-Mellon University (Pa.).....	40	71,050	Washington State University.....	90	32,513
University of Iowa.....	41	69,829	University of Maryland, Baltimore Professional Schools.....	91	30,675
Purdue University (Ind.).....	42	69,751	University of Missouri, Columbia.....	92	29,411
University of Florida.....	43	69,605	Florida State University.....	93	29,003
Yeshiva University (N.Y.).....	44	68,345	Mississippi State University.....	94	27,508
Georgia Institute of Technology, Main Campus.....	45	65,029	Indiana University, Bloomington.....	95	27,342
Naval Postgraduate School (Calif.).....	46	64,040	University of Texas Health Science Center.....	96	26,507
Boston University (Mass.).....	47	63,941	University of New Mexico, Main Campus.....	97	26,414
University of Alabama at Birmingham.....	48	63,302	University of Dayton (Ohio).....	98	26,318
University of Utah.....	49	62,667	Syracuse University, Main Campus (N.Y.).....	99	26,093
Case Western Reserve University (Ohio).....	50	61,453	University of Texas Health Science Center at San Antonio.....	100	25,835

<sup>1</sup> Excludes institutions which have not reported data for 1985-86 or 1986-87 or have submitted system-wide reports. Institutions which appeared in the 1985-86 listing, but have been excluded for 1986-87 for these reasons are: State University of New York at Stony Brook, Main Campus; U.S. Army Command and General Staff College (Kans.); Duke University (N.C.); New Mexico State University, Main Campus; Pennsylvania State University, Main Campus; Ohio State University, Main Campus; Yale University (Conn.). Federal current-fund revenue includes Federal appropriations, unrestricted and restricted Federal contracts and grants, and revenue for independent operations. Independent operations generally include only the revenue associated with major federally funded re-

search and development centers. Excludes Pell Grants. Federally supported student aid that is received through students is excluded.

<sup>2</sup> NCES estimate based on 1985-86 data.

—Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared July 1990.)

**Table 268.—Current-fund expenditures and expenditures per full-time-equivalent student in institutions of higher education, by type and control of institution: 1970-71 to 1986-87**

Control of institution and year	All institutions			4-year institutions			2-year institutions		
	Current-fund expenditures, in millions		Current-fund expenditures per student, in constant 1986-87 dollars	Current-fund expenditures, in millions		Current-fund expenditures per student, in constant 1986-87 dollars	Current-fund expenditures, in millions		Current-fund expenditures per student, in constant 1986-87 dollars
	Current dollars	Constant 1986-87 dollars <sup>1</sup>		Current dollars	Constant 1986-87 dollars <sup>1</sup>		Current dollars	Constant 1986-87 dollars <sup>1</sup>	
1	2	3	4	5	6	7	8	9	10
<b>All institutions</b>									
1970-71.....	\$23,375	\$67,934	\$10,083	\$21,049	\$61,172	\$11,719	\$2,327	\$6,782	\$4,455
1971-72.....	25,580	70,231	9,824	22,851	62,787	11,584	2,709	7,443	4,330
1972-73.....	27,956	72,999	10,064	24,653	64,375	11,908	3,303	8,824	4,669
1973-74.....	30,714	74,864	10,044	26,912	65,598	11,918	3,802	9,266	4,753
1974-75.....	35,058	78,782	10,093	30,596	68,757	12,264	4,481	10,025	4,559
1975-76.....	38,903	81,941	9,663	33,811	71,216	12,070	5,092	10,725	4,158
1976-77.....	42,600	84,293	10,141	37,052	73,315	12,537	5,548	10,978	4,455
1977-78.....	45,971	85,243	10,130	39,899	73,984	12,485	6,072	11,260	4,540
1978-79.....	50,721	87,353	10,463	44,163	76,059	12,820	6,558	11,294	4,675
1979-80.....	56,914	89,130	10,502	49,661	77,772	12,927	7,253	11,359	4,596
1980-81.....	64,053	90,573	10,270	55,840	78,960	12,815	8,212	11,813	4,370
1981-82.....	70,339	90,469	10,036	61,333	78,985	12,822	9,006	11,583	4,190
1982-83.....	75,936	91,806	10,098	66,238	80,082	12,815	9,897	11,724	4,124
1983-84 <sup>2</sup> .....	81,993	94,051	10,268	71,690	82,221	13,002	10,314	11,830	4,172
1984-85 <sup>2</sup> .....	89,951	97,447	10,894	78,744	85,306	13,559	11,207	12,141	4,370
1985-86 <sup>2</sup> .....	97,536	101,394	11,350	85,580	88,944	14,126	11,976	12,449	4,720
1986-87 <sup>3</sup> .....	105,764	105,764	11,668	—	—	—	—	—	—
<b>Public institutions</b>									
1970-71.....	14,996	43,582	8,799	12,899	37,487	10,588	2,097	8,095	4,315
1971-72.....	16,484	45,294	8,475	14,014	38,507	10,321	2,470	8,788	4,207
1972-73.....	18,204	47,534	8,717	15,146	39,550	10,871	3,058	7,984	4,571
1973-74.....	20,336	49,570	8,805	16,802	40,955	10,822	3,534	8,815	4,669
1974-75.....	23,490	52,767	8,880	19,309	43,992	11,278	4,181	9,395	4,480
1975-76.....	26,184	55,151	8,456	21,392	45,057	11,107	4,792	10,093	4,093
1976-77.....	28,635	56,660	8,923	23,411	46,323	11,585	5,224	10,337	4,396
1977-78.....	30,725	58,973	8,907	25,013	48,382	11,483	5,712	10,592	4,493
1978-79.....	33,733	58,096	9,252	27,600	47,534	11,895	6,132	10,562	4,626
1979-80.....	37,768	59,147	9,252	30,979	48,515	11,952	6,789	10,632	4,557
1980-81.....	42,280	59,785	9,001	34,877	49,035	11,792	7,602	10,750	4,328
1981-82.....	46,219	59,446	8,766	37,890	48,732	11,579	8,330	10,713	4,164
1982-83.....	49,573	59,934	9,749	40,816	49,104	11,634	8,957	10,829	4,118
1983-84.....	53,087	60,894	8,849	43,588	49,998	11,721	9,499	10,896	4,165
1984-85 <sup>2</sup> .....	58,314	63,174	9,447	46,017	52,018	12,275	10,297	11,155	4,551
1985-86 <sup>2</sup> .....	63,194	65,693	9,845	52,184	54,248	12,300	11,010	11,445	4,711
1986-87 <sup>3</sup> .....	67,854	67,854	9,981	—	—	—	—	—	—
<b>Private institutions</b>									
1970-71.....	8,379	24,352	13,845	8,150	23,685	14,104	230	667	6,331
1971-72.....	9,075	24,936	13,821	8,637	24,281	14,294	239	655	6,210
1972-73.....	9,752	25,464	14,140	9,507	24,825	14,598	245	640	6,377
1973-74.....	10,377	25,295	13,869	10,110	24,643	14,331	267	651	6,243
1974-75.....	11,568	25,995	13,971	11,287	25,365	14,422	280	630	6,180
1975-76.....	12,719	26,790	13,887	12,419	26,159	14,197	300	632	5,566
1976-77.....	13,965	27,633	14,080	13,641	26,991	14,593	324	641	5,674
1977-78.....	15,246	28,270	14,003	14,865	27,602	14,558	360	668	5,436
1978-79.....	16,988	29,257	14,139	16,563	28,525	14,730	425	733	5,518
1979-80.....	19,146	29,983	14,314	18,682	29,257	14,952	464	728	5,266
1980-81.....	21,773	30,788	14,144	21,163	29,925	14,939	610	663	4,969
1981-82.....	24,120	31,023	13,892	23,444	30,153	14,771	678	670	4,533
1982-83.....	26,363	31,873	14,222	25,823	30,978	15,273	740	695	4,206
1983-84 <sup>2</sup> .....	28,907	33,158	14,557	28,092	32,223	15,857	815	695	4,255
1984-85 <sup>2</sup> .....	31,637	34,273	15,174	30,727	33,268	16,210	910	686	4,803
1985-86 <sup>2</sup> .....	34,342	35,700	15,788	33,376	34,896	16,893	966	1,004	4,639
1986-87 <sup>3</sup> .....	38,110	38,110	16,670	—	—	—	—	—	—

<sup>1</sup> Dollars adjusted by the Higher Education Price Index.

<sup>2</sup> Expenditure-per-student calculation includes only those institutions for which both finance and enrollment data were available.

<sup>3</sup> Preliminary data.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" and "Fall Enrollment in Colleges and Universities" surveys; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" and "Finance" surveys. (This table was prepared July 1990.)

**Table 299.—Current-fund expenditures of institutions of higher education, by purpose: 1977-78 to 1986-87**

Purpose	1977-78	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
In thousands									
<b>Total current-fund expenditures.....</b>	<b>845,870,780</b>	<b>886,813,588</b>	<b>884,052,938</b>	<b>870,338,448</b>	<b>875,935,748</b>	<b>881,899,380</b>	<b>888,951,283</b>	<b>897,526,742</b>	<b>9105,763,557</b>
<b>Educational and general expenditures.....</b>	<b>38,256,804</b>	<b>44,542,843</b>	<b>50,073,805</b>	<b>54,848,752</b>	<b>58,929,218</b>	<b>63,741,276</b>	<b>70,081,324</b>	<b>76,127,865</b>	<b>82,955,555</b>
Instruction.....	15,336,229	16,496,717	20,733,166	22,962,527	24,673,293	26,436,308	28,777,183	31,032,099	33,711,148
Research.....	3,919,830	5,099,151	5,857,719	5,929,894	6,265,290	6,723,534	7,551,892	8,437,387	9,352,309
Public service.....	1,425,294	1,816,521	2,057,770	2,209,726	2,320,478	2,488,203	2,861,095	3,119,533	3,448,453
Academic support.....	3,129,907	3,878,368	4,273,268	4,868,454	5,086,892	5,531,152	6,074,253	6,687,392	7,575,451
Libraries.....	1,348,747	1,623,811	1,758,784	1,922,418	2,039,871	2,231,149	2,381,793	2,551,331	2,441,184
Student services.....	2,034,933	2,586,732	2,908,998	3,178,997	3,481,379	3,787,935	4,178,236	4,562,936	4,875,613
Institutional support.....	4,142,098	6,054,411	5,772,515	6,471,072	6,950,654	7,763,325	8,587,216	9,350,786	10,084,963
Operation and maintenance of plant.....	3,795,043	4,700,070	5,350,310	5,979,291	6,391,598	6,729,825	7,345,482	7,605,228	7,819,032
Scholarships and fellowships.....	1,839,298	2,200,488	2,504,525	2,884,845	2,922,897	3,301,673	3,670,355	4,180,174	4,776,100
From unrestricted funds.....	818,101	904,878	1,080,814	1,238,081	1,478,782	1,736,188	1,981,597	2,285,116	2,644,815
From restricted funds <sup>2</sup> .....	1,021,197	1,295,612	1,423,911	1,448,864	1,444,116	1,565,485	1,708,758	1,875,059	2,131,486
Mandatory transfers.....	633,973	732,385	815,516	783,854	856,548	958,321	1,015,613	1,192,449	1,212,488
Auxiliary enterprises.....	5,261,477	6,485,808	7,288,089	7,997,832	8,614,316	9,250,198	10,012,248	10,528,303	11,037,333
Mandatory transfers.....	431,071	488,044	508,377	524,188	543,105	578,088	597,344	617,171	633,461
Hospitals.....	3,597,655	4,757,409	5,433,111	6,234,287	6,898,089	7,379,654	8,010,141	8,692,113	9,173,014
Mandatory transfers.....	32,984	50,134	67,983	62,103	103,918	88,447	130,692	126,933	151,071
Independent operations (FFRDC) <sup>3</sup> .....	855,054	1,127,728	1,257,934	1,258,777	1,406,128	1,622,233	1,887,550	2,187,361	2,597,655
Mandatory transfers.....	16,093	1,178	643	1,376	1,470	2,110	1,899	3,432	2,282
Percentage distribution									
<b>Total current-fund expenditures.....</b>	<b>100.0</b>								
<b>Educational and general expenditures.....</b>	<b>78.9</b>	<b>78.3</b>	<b>78.2</b>	<b>76.0</b>	<b>77.6</b>	<b>77.7</b>	<b>77.9</b>	<b>78.1</b>	<b>78.4</b>
Instruction.....	33.4	32.5	32.4	32.6	32.5	32.2	32.0	31.8	31.9
Research.....	5.5	9.0	6.6	6.4	6.3	6.2	6.4	6.7	6.8
Public service.....	3.1	3.2	3.2	3.1	3.1	3.0	3.2	3.2	3.3
Academic support.....	6.8	6.8	6.7	6.6	6.7	6.7	6.6	6.6	7.2
Libraries.....	2.9	2.9	2.7	2.7	2.7	2.7	2.6	2.8	2.3
Student services.....	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7
Institutional support.....	9.0	6.9	9.0	9.2	9.2	9.5	9.5	9.6	9.6
Operation and maintenance of plant.....	6.3	6.3	6.4	6.5	6.4	6.2	6.2	7.5	7.4
Scholarships and fellowships.....	4.0	3.9	3.9	3.8	3.8	4.0	4.1	4.3	4.5
From unrestricted funds.....	1.8	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.5
From restricted funds <sup>2</sup> .....	2.2	2.3	2.2	2.1	1.9	1.9	1.9	1.9	2.0
Mandatory transfers.....	1.4	1.3	1.3	1.1	1.1	1.2	1.1	1.2	1.1
Auxiliary enterprises.....	11.4	11.4	11.4	11.4	11.3	11.3	11.1	10.8	10.4
Mandatory transfers.....	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6
Hospitals.....	7.6	6.4	6.5	6.9	6.2	6.0	6.9	6.9	6.7
Mandatory transfers.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Independent operations (FFRDC) <sup>3</sup> .....	1.9	2.0	2.0	1.8	1.9	2.0	2.1	2.2	2.5
Mandatory transfers.....	( <sup>4</sup> )								

<sup>1</sup> Preliminary data.  
<sup>2</sup> Excludes Pell Grants.  
<sup>3</sup> Generally includes only those expenditures associated with major federally funded research and development centers (FFRDC).  
<sup>4</sup> Less than 0.05 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared July 1990.)

NOTE.—Because of rounding, details may not add to totals.

Table 300.—Current-fund expenditures of public institutions of higher education, by purpose: 1977-78 to 1986-87

Purpose	1977-78	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
In thousands									
Total current-fund expenditures.....	\$30,725,118	\$37,767,970	\$42,279,808	\$46,219,154	\$46,572,919	\$53,084,644	\$59,314,589	\$63,193,953	\$7,653,898
Educational and general expenditures.....	25,148,911	30,627,436	34,173,013	37,170,651	39,707,421	42,693,662	46,673,546	50,872,962	54,359,434
Instruction.....	11,147,758	13,316,733	14,849,822	16,348,109	17,481,538	19,582,391	20,267,410	21,880,782	23,359,057
Research.....	2,583,478	3,408,633	3,813,350	4,004,955	4,264,947	4,669,531	5,119,191	5,705,144	6,259,925
Public service.....	1,191,088	1,512,843	1,719,924	1,612,148	1,901,541	2,049,052	2,316,270	2,515,734	2,727,599
Academic support.....	2,259,126	2,785,726	3,029,284	3,298,322	3,648,084	3,909,572	4,267,696	4,693,543	5,049,232
Libraries.....	901,251	1,114,447	1,187,116	1,287,812	1,339,026	1,463,500	1,557,489	1,695,052	1,619,363
Student services.....	1,358,486	1,784,757	1,950,588	2,065,798	2,252,965	2,480,204	2,684,343	2,921,758	3,159,991
Institutional support.....	2,625,036	3,136,496	3,563,194	3,957,915	4,185,099	4,679,724	5,191,693	5,667,144	6,042,599
Operation and maintenance of plant.....	2,664,493	3,267,409	3,681,921	4,104,249	4,390,420	4,577,702	5,040,899	5,177,254	5,306,931
Scholarships and fellowships.....	840,699	970,363	1,084,864	1,068,717	1,188,363	1,278,644	1,374,903	1,575,909	1,751,671
From unrestricted funds.....	305,563	324,224	367,476	374,632	480,291	518,626	559,058	698,973	750,931
From restricted funds <sup>2</sup> .....	535,136	646,139	697,388	714,085	728,092	758,018	805,745	876,935	1,000,740
Mandatory transfers.....	70,781	473,478	501,087	470,940	524,455	586,662	591,399	735,995	704,040
Auxiliary enterprises.....	3,344,067	4,131,944	4,658,140	5,099,948	5,473,341	5,901,999	6,431,177	6,830,235	7,135,399
Mandatory transfers.....	292,208	314,238	344,043	349,671	355,461	367,956	367,595	410,777	409,728
Hospitals.....	2,187,322	2,947,662	3,377,972	3,902,217	4,315,263	4,503,492	4,914,560	5,358,999	5,904,212
Mandatory transfers.....	16,926	26,458	26,613	27,736	60,157	37,003	69,072	75,599	102,923
Independent operations (FFRDC) <sup>3</sup> .....	44,819	60,726	70,681	76,418	76,862	67,720	84,867	131,956	264,799
Mandatory transfers.....	12,198	775	322	873	738	656	451	646	184
Percentage distribution									
Total current-fund expenditures.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Educational and general expenditures.....	81.9	81.1	80.8	80.4	80.1	80.2	80.4	80.5	80.3
Instruction.....	36.3	35.3	35.1	35.4	35.2	35.0	34.8	34.6	34.5
Research.....	8.4	9.0	9.0	8.7	8.6	8.8	8.6	9.0	8.3
Public service.....	3.9	4.0	4.1	3.9	3.8	3.9	4.0	4.0	4.0
Academic support.....	7.4	7.4	7.2	7.1	7.2	7.2	7.3	7.4	7.5
Libraries.....	2.9	3.0	2.8	2.8	2.7	2.8	2.7	2.7	2.4
Student services.....	4.6	4.6	4.6	4.5	4.5	4.6	4.6	4.6	4.7
Institutional support.....	6.5	6.3	6.4	6.6	6.4	6.6	6.9	6.9	6.9
Operation and maintenance of plant.....	6.7	6.7	6.7	6.9	6.9	6.8	6.8	6.2	7.8
Scholarships and fellowships.....	2.7	2.6	2.5	2.4	2.4	2.4	2.4	2.5	2.6
From unrestricted funds.....	1.0	0.9	0.9	0.8	0.9	1.0	1.0	1.1	1.1
From restricted funds <sup>2</sup> .....	1.7	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.5
Mandatory transfers.....	1.4	1.3	1.2	1.0	1.1	1.1	1.0	1.2	1.0
Auxiliary enterprises.....	10.9	10.9	11.0	11.0	11.0	11.1	11.0	10.8	10.5
Mandatory transfers.....	1.0	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
Hospitals.....	7.1	7.8	8.0	8.4	8.7	8.5	8.4	8.5	8.7
Mandatory transfers.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Independent operations (FFRDC) <sup>3</sup> .....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
Mandatory transfers.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)

<sup>1</sup> Preliminary data.  
<sup>2</sup> Excludes Pell Grants.  
<sup>3</sup> Generally includes only those expenditures associated with major federally funded research and development centers (FFRDC).  
<sup>4</sup> Less than 0.05 percent.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

Table 301.—Current-fund expenditures of private institutions of higher education, by purpose: 1977-78 to 1986-87

Purpose	1977-78	1978-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
In thousands									
Total current-fund expenditures.....	\$15,245,671	\$16,145,618	\$21,773,132	\$24,120,314	\$26,362,831	\$29,906,716	\$31,836,713	\$34,341,899	\$38,109,719
Educational and general expenditures.....	11,107,693	13,915,407	15,900,792	17,676,201	19,221,796	21,147,714	23,187,778	25,255,003	26,590,121
Instruction.....	4,188,472	5,177,984	5,883,343	6,614,419	7,211,767	7,843,917	8,489,773	9,151,318	10,352,069
Research.....	1,336,362	1,890,518	1,844,369	1,924,939	2,010,333	2,164,003	2,432,701	2,732,222	3,093,684
Public service.....	234,206	303,676	336,845	391,578	418,937	450,171	544,825	603,799	720,860
Academic support.....	670,761	1,090,662	1,244,002	1,356,133	1,539,828	1,721,580	1,898,565	1,973,849	2,627,219
Libraries.....	447,495	509,364	572,667	634,604	701,845	767,849	804,304	898,279	821,831
Student services.....	636,448	811,975	958,432	1,091,201	1,206,394	1,337,731	1,493,893	1,641,190	1,816,922
Institutional support.....	1,517,081	1,918,915	2,209,321	2,513,757	2,785,765	3,083,501	3,395,523	3,683,642	4,042,069
Operation and maintenance of plant.....	1,130,550	1,432,662	1,688,389	1,875,032	2,001,176	2,152,123	2,304,812	2,427,972	2,510,400
Scholarships and fellowships.....	998,632	1,230,106	1,439,661	1,596,226	1,734,514	2,025,028	2,295,551	2,584,296	3,024,430
From unrestricted funds.....	512,537	590,652	713,136	811,449	1,018,470	1,219,562	1,392,539	1,586,143	1,893,684
From restricted funds <sup>2</sup> .....	486,095	649,454	726,523	777,779	716,044	805,466	903,012	998,123	1,130,746
Mandatory transfers.....	195,192	258,909	314,429	312,914	332,093	369,659	424,344	456,754	606,448
Auxiliary enterprises.....	1,917,409	2,353,664	2,629,948	2,927,664	3,140,975	3,348,327	3,580,671	3,698,067	3,801,940
Mandatory transfers.....	136,663	163,608	164,335	174,295	167,644	206,110	209,780	206,394	223,736
Hospitals.....	1,410,333	1,809,547	2,055,139	2,332,070	2,670,826	2,676,161	3,095,581	3,333,414	3,268,602
Mandatory transfers.....	17,026	24,676	31,349	34,368	43,732	51,444	61,619	53,264	46,449
Independent operations (FFRDC) <sup>3</sup> .....	610,235	1,067,000	1,187,253	1,182,359	1,329,234	1,534,513	1,772,693	2,055,405	2,342,656
Mandatory transfers.....	3,997	404	321	403	731	1,454	1,449	2,596	2,096
Percentage distribution									
Total current-fund expenditures.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Educational and general expenditures.....	72.9	72.7	73.0	73.3	72.9	73.2	73.3	73.5	75.0
Instruction.....	27.5	27.0	27.0	27.4	27.4	27.1	26.8	26.6	27.2
Research.....	6.8	6.6	6.5	6.0	7.6	7.5	7.7	8.0	8.1
Public service.....	1.5	1.8	1.6	1.6	1.6	1.6	1.7	1.6	1.9
Academic support.....	5.7	5.7	5.7	5.6	5.6	6.0	5.7	5.7	6.8
Libraries.....	2.9	2.7	2.6	2.6	2.7	2.7	2.5	2.5	2.2
Student services.....	4.2	4.2	4.4	4.5	4.6	4.6	4.7	4.6	4.6
Institutional support.....	10.0	10.0	10.1	10.4	10.5	10.7	10.7	10.7	10.8
Operation and maintenance of plant.....	7.4	7.5	7.7	7.8	7.6	7.4	7.3	7.1	6.6
Scholarships and fellowships.....	6.6	6.4	6.6	6.6	6.6	7.0	7.3	7.5	7.9
From unrestricted funds.....	3.4	3.0	3.3	3.6	3.9	4.2	4.4	4.6	5.0
From restricted funds <sup>2</sup> .....	3.2	3.4	3.3	3.0	2.7	2.8	2.9	2.9	3.0
Mandatory transfers.....	1.3	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3
Auxiliary enterprises.....	12.6	12.3	12.1	12.1	11.9	11.6	11.3	10.6	10.2
Mandatory transfers.....	0.9	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6
Hospitals.....	9.3	9.5	9.4	9.7	10.1	9.9	9.6	9.7	8.6
Mandatory transfers.....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1
Independent operations (FFRDC) <sup>3</sup> .....	5.3	5.6	5.5	4.9	5.0	5.3	5.6	6.0	6.1
Mandatory transfers.....	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)

<sup>1</sup> Preliminary data.<sup>2</sup> Excludes Pell Grants.<sup>3</sup> Generally includes only those expenditures associated with major federally funded research and development centers (FFRDC).<sup>4</sup> Less than 0.05 percent.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared July 1990.)

**Table 302.—Voluntary support for institutions of higher education, by source and purpose of support: 1949-50 to 1987-88**

[In millions]

Source and purpose of support	1949-50	1959-60	1965-66	1970-71	1975-76	1980-81	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11
<b>Total voluntary support<sup>1</sup></b>	<b>\$240</b>	<b>\$317</b>	<b>\$1,440</b>	<b>\$1,890</b>	<b>\$2,410</b>	<b>\$4,230</b>	<b>\$6,320</b>	<b>\$7,400</b>	<b>\$8,500</b>	<b>\$9,900</b>
<b>Sources</b>										
Alumni.....	60	191	310	458	568	1,049	1,460	1,825	2,348	2,042
Nonalumni individuals.....	60	194	350	495	569	1,007	1,416	1,761	2,066	1,927
Corporations.....	28	130	230	259	379	778	1,574	1,702	1,819	1,853
Foundations.....	60	163	357	418	549	922	1,175	1,363	1,513	1,907
Religious organizations.....	16	60	108	104	130	140	208	211	204	197
Other.....	16	57	85	126	195	334	487	518	552	574
<b>Purpose</b>										
Current operations.....	101	385	675	1,050	1,480	2,590	3,600	4,022	4,420	4,688
Capital purposes.....	139	430	765	810	930	1,640	2,520	3,378	4,080	3,534
<b>Voluntary support as a percent of total expenditures<sup>2</sup></b>	<b>9.0</b>	<b>11.4</b>	<b>9.2</b>	<b>6.8</b>	<b>5.5</b>	<b>6.0</b>	<b>6.4</b>	<b>6.9</b>	<b>7.3</b>	<b>6.5</b>

<sup>1</sup> Data are based on a sample survey of institutions of higher education.  
<sup>2</sup> Total expenditures include current-fund expenditures and additions to plant value.

SOURCE: Council for Aid to Education, Research Report, "Contributions to Colleges Drop for First Time Since 1975." (This table was prepared April 1990.)

**Table 303.—Expenditures of institutions of higher education: 1929-30 to 1973-74<sup>1</sup>**

[In thousands]

Item	1929-30	1939-40	1949-50	1959-60	1969-70	1971-72	1973-74
1	2	3	4	5	6	7	8
<b>Current-fund expenditures.....</b>	<b>\$507,142</b>	<b>\$674,688</b>	<b>\$2,245,861</b>	<b>\$5,601,376</b>	<b>\$21,043,112</b>	<b>\$28,559,560</b>	<b>\$30,713,581</b>
<b>Educational and general.....</b>	<b>377,903</b>	<b>521,090</b>	<b>1,706,444</b>	<b>4,513,208</b>	<b>15,785,699</b>	<b>19,200,505</b>	<b>23,257,361</b>
General administration and general expense.....	42,833	62,827	213,070	583,224	2,627,693	3,344,215	4,200,955
Instruction and departmental research.....	221,598	280,248	780,994	1,793,320	<sup>2</sup> 7,653,097	<sup>2</sup> 9,503,250	<sup>2</sup> 11,574,145
Extension and public services.....	24,962	35,325	86,674	205,595	521,148	615,997	730,560
Libraries.....	9,654	19,487	56,147	135,384	652,598	764,461	939,023
Plant operation and maintenance.....	60,919	69,612	225,110	469,943	1,541,698	1,927,553	2,424,057
Separately organized research.....	18,117	27,266	225,341	1,022,353	2,144,076	2,265,282	2,480,451
Related activities.....	( <sup>3</sup> )	27,225	119,108	294,255	648,069	779,728	639,170
Other educational and general.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	<sup>4</sup> 9,134	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Auxiliary enterprises.....	( <sup>3</sup> )	124,184	476,401	918,117	2,769,276	3,178,272	3,613,256
Student-aid expenditures.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	172,050	984,594	1,241,372	1,398,488
Other current expenditures.....	129,239	28,514	62,816	—	<sup>5</sup> 1,500,544	<sup>5</sup> 1,939,411	<sup>5</sup> 2,448,476
<b>Gross additions to plant value<sup>7</sup>.....</b>	<b>125,108</b>	<b>83,765</b>	<b>416,831</b>	<b>1,314,717</b>	<b>4,232,526</b>	<b>4,162,626</b>	<b>4,312,142</b>

<sup>1</sup> Refer to the preceding table for revised format for educational and general items. Includes scholarships and fellowships under educational and general. Student aid item previously reported has been dropped.  
<sup>2</sup> Includes "other sponsored programs."  
<sup>3</sup> Data not collected separately.  
<sup>4</sup> Sales and services expenditures.  
<sup>5</sup> Data not tabulated separately.  
<sup>6</sup> "Major public service programs" previously reported in "separately organized research," "extension and public services," and "related activities."  
<sup>7</sup> Includes expenditures from plant and current funds, gifts and grants of plant assets, and increases in value due to reappraisal and other adjustments.

—Data not available.

NOTE.—Beginning in 1969-70, data are for 50 States and the District of Columbia; data for earlier years are for 48 States and the District of Columbia. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared January 1986.)

Table 304.—Educational and general expenditures of public universities, by purpose: 1976-77 to 1985-86

Year	Educational and general expenditures									
	Total	Instruction	Adminis- tration <sup>1</sup>	Student services	Research	Libraries	Public service	Operation and main- tenance of plant	Scholar- ships and fellowships	Mandatory transfers
1	2	3	4	5	6	7	8	9	10	11
Expenditures, in thousands of current dollars										
1976-77.....	\$9,413,626	\$3,670,554	\$1,222,410	\$346,906	\$1,727,807	\$331,614	\$763,809	\$657,677	\$377,749	\$115,069
1977-78.....	10,220,191	4,009,670	1,344,536	386,262	1,896,576	343,196	803,306	936,952	399,682	105,603
1978-79.....	11,284,191	4,406,025	1,478,568	419,231	2,136,135	363,675	920,726	1,046,740	396,356	114,533
1979-80.....	12,540,072	4,660,411	1,572,523	413,490	2,444,471	483,642	1,012,376	1,148,942	439,461	124,766
1980-81.....	13,951,029	5,374,271	1,795,504	525,661	2,743,145	451,978	1,156,512	1,270,339	462,225	139,164
1981-82.....	15,077,263	5,852,956	1,974,219	566,366	2,903,176	483,339	1,223,417	1,412,567	525,496	130,131
1982-83.....	16,089,166	6,247,356	2,107,933	604,657	3,066,646	526,470	1,300,353	1,512,947	562,903	137,702
1983-84.....	17,234,711	6,646,501	2,263,565	643,614	3,295,063	577,136	1,365,191	1,627,702	624,642	171,306
1984-85.....	18,960,810	7,257,616	2,596,764	701,451	3,662,755	609,365	1,519,324	1,745,625	677,533	166,155
1985-86.....	20,718,657	7,867,522	2,862,006	762,324	4,076,278	669,253	1,664,917	1,831,616	760,060	242,679
Percentage distribution										
1976-77.....	100.0	39.0	13.0	3.7	18.4	3.5	8.1	9.1	4.0	1.2
1977-78.....	100.0	39.2	13.2	3.6	18.6	3.4	7.9	9.2	3.8	1.0
1978-79.....	100.0	39.1	13.1	3.7	18.9	3.2	8.2	9.3	3.5	1.0
1979-80.....	100.0	38.8	12.5	3.8	19.5	3.7	8.1	9.2	3.5	1.0
1980-81.....	100.0	38.5	12.9	3.6	19.7	3.2	8.3	9.1	3.5	1.0
1981-82.....	100.0	38.8	13.1	3.6	19.3	3.2	8.1	9.4	3.5	0.9
1982-83.....	100.0	38.8	13.1	3.6	19.2	3.3	8.1	9.4	3.5	0.9
1983-84.....	100.0	38.6	13.1	3.7	19.1	3.3	8.0	9.4	3.6	1.0
1984-85.....	100.0	38.3	13.7	3.7	19.4	3.2	8.0	9.2	3.6	0.9
1985-86.....	100.0	37.7	13.9	3.7	19.7	3.2	8.0	8.6	3.6	1.2
Expenditure per full-time-equivalent student in constant 1985-86 dollars										
1976-77.....	\$10,303	\$4,017	\$1,336	\$360	\$1,691	\$363	\$836	\$939	\$413	\$126
1977-78.....	10,409	4,064	1,369	395	1,932	350	818	956	397	106
1978-79.....	10,743	4,197	1,408	399	2,034	346	877	997	377	109
1979-80.....	10,639	4,124	1,334	402	2,074	393	859	975	373	106
1980-81.....	10,467	4,032	1,347	395	2,056	339	869	953	369	104
1981-82.....	10,262	3,964	1,344	385	1,976	333	833	961	358	99
1982-83.....	10,255	3,962	1,344	385	1,967	337	829	964	359	93
1983-84.....	10,446	4,028	1,372	390	1,997	350	840	967	379	104
1984-85.....	10,635	4,147	1,485	401	2,104	348	864	966	367	96
1985-86.....	11,320	4,266	1,575	417	2,227	366	919	1,001	426	133

<sup>1</sup> Includes institutional and academic support libraries.

Education Price Index was used to convert the per student figures to constant dollars. Because of rounding, details may not add to totals.

NOTE.—Data in this table may differ slightly from data appearing in other tables. This table includes only institutions which provided enrollment and financial data. The Higher

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared October 1987.)

**Table 305.—Educational and general expenditures of public 4-year colleges,<sup>1</sup> by purpose: 1976-77 to 1985-86**

Year	Educational and general expenditures									
	Total	Instruction	Admini- stration <sup>2</sup>	Student services	Research	Libraries	Public service	Operation and mainte- nance of plant	Scholar- ships and fellowships	Mandatory transfers
1	2	3	4	5	6	7	8	9	10	11
Expenditures, in thousands of current dollars										
1976-77	\$8,232,538	\$4,027,051	\$1,445,651	\$500,832	\$507,235	\$340,002	\$250,152	\$1,001,848	\$336,432	\$171,335
1977-78	9,566,977	4,423,487	1,598,092	572,193	677,414	369,408	274,314	1,118,393	332,899	202,777
1978-79	10,455,134	4,770,599	1,789,534	651,541	786,072	395,299	301,367	1,214,996	337,588	208,119
1979-80	11,750,598	5,271,621	2,029,327	739,557	837,874	448,190	379,467	1,375,308	383,036	212,019
1980-81	13,139,618	5,890,759	2,258,967	807,249	1,043,614	511,817	437,816	1,563,514	412,972	242,890
1981-82	14,321,566	6,537,688	2,510,182	834,225	1,086,146	536,060	440,736	1,738,210	403,069	227,050
1982-83	15,286,145	6,990,269	2,690,360	904,745	1,150,011	559,353	469,841	1,857,151	450,067	254,349
1983-84	16,536,128	7,466,035	3,013,666	1,041,488	1,246,289	622,679	513,732	1,873,628	473,503	278,908
1984-85	18,333,578	8,211,171	3,370,676	1,140,312	1,420,844	669,518	603,018	2,137,225	499,168	291,626
1985-86	19,860,947	8,945,373	3,658,627	1,235,418	1,616,737	712,112	648,178	2,116,522	549,841	354,139
Percentage distribution										
1976-77	100.0	48.4	16.7	5.8	7.0	3.9	2.9	11.5	3.9	2.0
1977-78	100.0	46.2	16.7	6.0	7.1	3.9	2.9	11.7	3.5	2.1
1978-79	100.0	45.6	17.1	6.2	7.5	3.8	2.9	11.8	3.2	2.0
1979-80	100.0	44.9	17.3	6.2	8.0	3.8	3.1	11.7	3.3	1.9
1980-81	100.0	44.8	17.2	6.1	7.9	3.9	3.1	11.9	3.1	1.9
1981-82	100.0	45.7	17.6	5.8	7.8	3.7	3.1	12.1	2.8	1.6
1982-83	100.0	45.7	17.4	5.9	7.5	3.7	3.1	12.1	2.9	1.7
1983-84	100.0	45.1	18.2	6.3	7.5	3.8	3.1	11.3	2.9	1.7
1984-85	100.0	44.8	18.4	6.2	7.7	3.7	3.3	11.7	2.7	1.6
1985-86	100.0	45.0	18.4	6.2	8.2	3.6	3.3	10.7	2.9	1.8
Expenditure per full-time-equivalent student in constant 1985-86 dollars										
1976-77	\$7,513	\$3,484	\$1,251	\$433	\$525	\$294	\$216	\$667	\$293	\$148
1977-78	7,588	3,508	1,287	454	537	293	218	687	284	161
1978-79	7,788	3,558	1,335	486	586	295	225	908	252	155
1979-80	7,893	3,541	1,383	493	630	301	241	924	257	142
1980-81	7,809	3,501	1,342	480	620	304	242	929	245	144
1981-82	7,727	3,528	1,359	450	586	289	238	938	217	123
1982-83	7,552	3,448	1,314	447	568	278	232	917	222	126
1983-84	7,581	3,425	1,383	478	572	286	236	960	217	133
1984-85	7,936	3,554	1,459	494	615	290	261	925	212	128
1985-86	8,243	3,713	1,518	513	672	296	269	876	237	147

<sup>1</sup> Excludes universities. See preceding table.

<sup>2</sup> Includes institutional and academic support less libraries.

Education Price Index was used to convert the per student figures to constant dollars. Because of rounding, details may not add to totals.

NOTE.—Data in this table may differ slightly from data appearing in other tables. This table includes only institutions which provided enrollment and finance data. The Higher

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared October 1987.)

**Table 306.—Educational and general expenditures of public 2-year colleges, by purpose: 1976-77 to 1985-86**

Year	Educational and general expenditures									
	Total	Instruction	Administration <sup>1</sup>	Student services	Research	Libraries	Public service	Operation and maintenance of plant	Scholarships and fellowships	Mandatory transfers
1	2	3	4	5	6	7	8	9	10	11
Expenditures, in thousands of current dollars										
1976-77 .....	\$4,875,998	\$2,490,274	\$882,813	\$409,217	\$15,698	\$171,409	\$97,835	\$547,515	\$142,827	\$118,810
1977-78 .....	5,336,153	2,700,489	1,035,208	437,080	9,333	188,201	112,944	605,464	117,998	129,458
1978-79 .....	5,734,811	2,877,651	1,119,840	482,323	21,289	193,703	110,918	650,447	127,633	150,807
1979-80 .....	6,334,777	3,185,815	1,204,082	547,457	26,268	202,583	141,000	743,014	147,865	136,872
1980-81 .....	7,083,474	3,575,743	1,347,020	615,669	26,591	222,391	152,597	844,781	159,474	119,008
1981-82 .....	7,757,435	3,947,065	1,473,733	684,650	15,832	262,697	147,385	952,691	160,109	113,473
1982-83 .....	8,292,448	4,218,358	1,620,844	741,179	18,090	248,652	123,722	1,016,267	175,069	130,403
1983-84 .....	8,820,575	4,481,854	1,748,535	775,084	18,189	263,485	150,109	1,076,371	178,500	128,448
1984-85 .....	9,560,507	4,808,050	1,929,968	841,101	15,591	278,363	193,903	1,156,074	207,975	131,482
1985-86 .....	10,252,955	5,116,884	2,122,060	920,299	10,136	295,691	202,440	1,220,646	225,979	138,620
Percentage distribution										
1976-77 .....	100.0	51.1	18.1	8.4	0.3	3.5	2.0	11.2	2.9	2.4
1977-78 .....	100.0	50.6	19.4	8.2	0.2	3.5	2.1	11.3	2.2	2.4
1978-79 .....	100.0	50.2	19.5	8.4	0.4	3.4	1.9	11.3	2.2	2.6
1979-80 .....	100.0	50.3	19.0	8.8	0.4	3.2	2.2	11.7	2.3	2.2
1980-81 .....	100.0	50.8	19.1	8.7	0.4	3.1	2.2	12.0	2.3	1.7
1981-82 .....	100.0	50.9	19.0	8.8	0.2	3.4	1.9	12.3	2.1	1.5
1982-83 .....	100.0	50.9	19.5	8.9	0.2	3.0	1.5	12.3	2.1	1.8
1983-84 .....	100.0	50.6	19.6	8.8	0.2	3.0	1.7	12.2	2.0	1.5
1984-85 .....	100.0	50.3	20.2	8.8	0.2	2.9	2.0	12.1	2.2	1.4
1985-86 .....	100.0	49.9	20.7	9.0	0.1	2.9	2.0	11.9	2.2	1.4
Expenditure per full-time-equivalent student in constant 1985-86 dollars										
1976-77 .....	\$4,049	\$2,068	\$733	\$340	\$13	\$142	\$81	\$455	\$119	\$98
1977-78 .....	4,078	2,063	791	334	7	144	86	483	90	99
1978-79 .....	4,198	2,107	820	353	16	142	81	478	93	110
1979-80 .....	4,132	2,078	785	357	17	132	92	485	96	89
1980-81 .....	3,957	2,003	755	345	15	125	85	473	89	87
1981-82 .....	3,931	2,000	747	347	8	133	75	483	81	58
1982-83 .....	3,725	1,895	728	333	8	112	58	456	79	59
1983-84 .....	3,757	1,909	745	330	8	112	64	458	78	55
1984-85 .....	4,078	2,060	823	359	7	119	83	493	89	58
1985-86 .....	4,223	2,107	874	379	4	122	83	503	93	57

<sup>1</sup> Includes institutional and academic support less libraries.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared October 1987.)

NOTE.—Data in this table may differ slightly from data appearing in other tables. This table includes only institutions which provided enrollment and finance data. The Higher Education Price Index was used to convert the per student figures to constant dollars. Because of rounding, details may not add to totals.

**Table 307.—Educational and general expenditures of private (nonprofit) universities, by purpose: 1976-77 to 1985-86**

Year	Educational and general expenditures									
	Total	Instruction	Admini- stration <sup>1</sup>	Student services	Research	Libraries	Public service	Operation and mainte- nance of plant	Scholar- ships and fellowships	Mandatory transfer
1	2	3	4	5	6	7	8	9	10	11
Expenditures, in thousands of current dollars										
1976-77 .....	\$4,694,593	\$1,784,975	\$621,733	\$156,457	\$988,656	\$195,145	\$105,011	\$411,340	\$380,921	\$50,453
1977-78 .....	5,120,125	1,943,031	693,988	172,261	1,063,906	215,068	108,201	447,743	427,907	58,019
1978-79 .....	5,675,608	2,120,800	796,751	195,238	1,175,657	221,676	119,082	510,819	460,200	75,385
1979-80 .....	6,406,288	2,426,312	908,580	215,646	1,315,469	236,184	148,028	568,606	507,257	82,006
1980-81 .....	7,249,102	2,763,320	1,009,957	254,872	1,436,318	267,142	149,946	600,152	596,241	111,154
1981-82 .....	7,951,934	3,105,731	1,100,088	289,398	1,505,340	294,523	160,496	752,673	650,265	93,401
1982-83 .....	8,198,167	3,227,925	1,214,617	304,617	1,464,809	295,709	169,382	754,480	670,390	96,238
1983-84 .....	9,491,967	3,660,650	1,445,910	350,096	1,683,020	360,238	187,815	859,065	833,106	112,266
1984-85 .....	10,431,950	3,965,165	1,556,854	393,528	1,892,570	366,356	253,010	930,229	931,027	143,212
1985-86 .....	11,407,571	4,368,432	1,711,155	438,678	2,106,731	397,745	271,271	981,131	1,040,677	149,751
Percentage distribution										
1976-77 .....	100.0	38.0	13.2	3.3	21.1	4.2	2.2	8.8	8.1	1.1
1977-78 .....	100.0	37.9	13.4	3.4	20.8	4.2	2.1	8.7	8.4	1.1
1978-79 .....	100.0	37.4	14.0	3.4	20.7	3.9	2.1	9.0	8.1	1.3
1979-80 .....	100.0	37.9	14.2	3.4	20.5	3.7	2.3	8.9	7.9	1.3
1980-81 .....	100.0	38.1	13.9	3.5	19.8	3.7	2.1	9.1	8.2	1.5
1981-82 .....	100.0	39.1	13.8	3.6	18.9	3.7	2.0	9.5	8.2	1.2
1982-83 .....	100.0	39.4	14.8	3.7	17.9	3.8	2.1	9.2	8.2	1.2
1983-84 .....	100.0	38.6	15.2	3.7	17.7	3.8	2.0	9.1	8.8	1.2
1984-85 .....	100.0	38.0	14.9	3.8	18.1	3.5	2.4	8.9	8.9	1.4
1985-86 .....	100.0	37.8	15.0	3.8	18.5	3.5	2.4	8.6	9.1	1.3
Expenditure per full-time-equivalent student in constant 1985-86 dollars										
1976-77 .....	\$15,949	\$6,064	\$2,112	\$532	\$3,359	\$663	\$367	\$1,397	\$1,294	\$171
1977-78 .....	15,783	5,990	2,106	531	3,260	663	334	1,380	1,319	179
1978-79 .....	15,917	5,948	2,234	548	3,297	622	334	1,433	1,291	211
1979-80 .....	16,163	6,120	2,292	544	3,318	596	373	1,435	1,279	207
1980-81 .....	16,349	6,232	2,278	575	3,239	602	338	1,489	1,345	251
1981-82 .....	16,196	6,326	2,241	589	3,066	600	327	1,533	1,324	190
1982-83 .....	16,352	6,438	2,423	608	2,922	590	338	1,505	1,337	192
1983-84 .....	17,455	6,731	2,659	644	3,095	662	345	1,580	1,532	206
1984-85 .....	17,994	6,840	2,665	679	3,264	632	436	1,605	1,606	247
1985-86 .....	16,779	7,093	2,817	722	3,471	655	447	1,615	1,713	247

<sup>1</sup> Includes institutional and academic support less libraries.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared October 1987.)

NOTE.—Data in this table may differ slightly from data appearing in other tables. This table includes only institutions which provided enrollment and finance data. The Higher Education Price Index was used to convert the per student figures to constant dollars. Because of rounding, details may not add to totals.

**Table 308.—Educational and general expenditures of private (nonprofit) 4-year colleges,<sup>1</sup> by purpose: 1976-77 to 1985-86**

Year	Educational and general expenditures									
	Total	Instruction	Admini- tration <sup>2</sup>	Student services	Research	Libraries	Public service	Operation and mainte- nance of plant	Scholar- ships and fellowships	Mandatory transfers
1	2	3	4	5	6	7	8	9	10	11
Expenditures, in thousands of current dollars										
1976-77 .....	\$5,139,839	\$1,919,574	\$1,047,932	\$381,428	\$259,530	\$200,844	\$123,717	\$574,910	\$511,907	\$120,097
1977-78 .....	5,837,838	2,114,043	1,180,141	428,265	271,637	221,807	123,214	638,330	550,372	130,026
1978-79 .....	6,263,692	2,328,416	1,299,063	483,031	328,042	240,098	136,861	704,180	598,497	145,513
1979-80 .....	7,063,953	2,589,908	1,466,558	549,639	374,520	259,969	153,056	807,943	694,791	167,570
1980-81 .....	8,061,774	2,907,255	1,703,307	633,795	407,822	289,544	166,399	930,075	811,636	185,741
1981-82 .....	9,061,867	3,271,255	1,938,727	727,382	419,283	322,732	228,368	1,036,116	913,999	203,834
1982-83 .....	9,805,459	3,552,387	2,124,446	804,943	437,266	356,768	236,142	1,092,636	983,867	216,764
1983-84 .....	10,845,822	3,900,062	2,347,952	890,707	480,459	388,153	259,932	1,184,788	1,149,813	243,726
1984-85 .....	11,835,351	4,213,485	2,564,844	980,416	539,322	416,539	289,124	1,251,490	1,312,673	287,459
1985-86 .....	12,855,040	4,507,505	2,790,504	1,067,717	623,050	446,766	328,827	1,317,062	1,481,954	291,654
Percentage distribution										
1976-77 .....	100.0	37.3	20.4	7.4	5.0	3.9	2.4	11.2	10.0	2.3
1977-78 .....	100.0	37.5	20.8	7.6	4.8	3.9	2.2	11.3	9.8	2.3
1978-79 .....	100.0	37.2	20.7	7.7	5.2	3.8	2.2	11.2	9.8	2.3
1979-80 .....	100.0	36.7	20.8	7.8	5.3	3.7	2.2	11.4	9.8	2.4
1980-81 .....	100.0	36.1	21.1	7.9	5.1	3.6	2.3	11.5	10.1	2.3
1981-82 .....	100.0	36.1	21.4	8.0	4.6	3.6	2.5	11.4	10.1	2.2
1982-83 .....	100.0	36.2	21.7	8.2	4.5	3.6	2.4	11.1	10.0	2.2
1983-84 .....	100.0	36.0	21.8	8.2	4.4	3.6	2.4	10.9	10.6	2.2
1984-85 .....	100.0	35.8	21.7	8.3	4.6	3.5	2.4	10.6	11.1	2.3
1985-86 .....	100.0	35.1	21.7	8.3	4.8	3.5	2.6	10.2	11.5	2.3
Expenditure per full-time-equivalent student in constant 1985-86 dollars										
1976-77 .....	\$7,863	\$2,936	\$1,603	\$583	\$397	\$307	\$189	\$879	\$783	\$184
1977-78 .....	7,838	2,939	1,613	595	378	308	171	887	765	181
1978-79 .....	7,902	2,938	1,639	609	414	303	173	888	755	184
1979-80 .....	8,045	2,950	1,670	626	427	296	174	920	791	191
1980-81 .....	8,077	2,913	1,706	641	408	290	167	932	613	186
1981-82 .....	8,135	2,937	1,740	653	378	290	205	930	621	183
1982-83 .....	8,318	3,013	1,802	683	371	303	200	927	635	184
1983-84 .....	8,551	3,075	1,851	702	379	308	205	934	607	192
1984-85 .....	8,777	3,125	1,902	727	400	309	214	928	673	196
1985-86 .....	9,130	3,201	1,982	758	443	317	234	935	1,053	207

<sup>1</sup> Excludes universities. See preceding table.

<sup>2</sup> Includes institutional and academic support less libraries.

NOTE.—Data in this table may differ slightly from data appearing in other tables. This table includes only institutions which provided enrollment and finance data. The Higher Education Price Index was used to convert the per student figures to constant dollars. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared October 1987.)

**Table 309.—Educational and general expenditures of private (nonprofit) 2-year colleges, by purpose: 1976-77 to 1985-86**

Year	Educational and general expenditures									
	Total	Instruction	Admini- stration <sup>1</sup>	Student services	Research	Libraries	Public service	Operation and main- tenance of plant	Scholar- ships and fellowships	Mandatory transfers
1	2	3	4	5	6	7	8	9	10	11
Expenditures, in thousands of current dollars										
1976-77 .....	\$234,112	\$82,723	\$59,152	\$22,900	\$1,022	\$7,903	\$2,890	\$32,431	\$17,912	\$7,179
1977-78 .....	246,542	86,456	64,390	25,406	266	8,478	2,698	33,606	18,598	6,644
1978-79 .....	269,169	94,675	69,071	29,419	564	8,640	2,766	34,741	21,000	8,092
1979-80 .....	293,743	102,298	77,312	31,182	425	9,237	2,284	37,617	24,644	6,742
1980-81 .....	333,257	114,350	87,803	34,926	211	9,535	2,080	43,936	28,395	12,022
1981-82 .....	365,142	127,315	100,413	39,120	239	10,244	2,030	46,639	28,170	10,973
1982-83 .....	389,676	134,950	103,667	40,934	403	10,566	1,961	50,748	33,128	13,489
1983-84 .....	411,779	138,487	111,931	44,410	102	11,065	2,103	55,014	37,576	11,070
1984-85 .....	447,163	150,202	119,191	52,937	350	12,123	2,054	58,602	41,335	10,370
1985-86 .....	467,445	158,673	124,941	56,471	70	12,413	1,936	60,189	43,167	9,365
Percentage distribution										
1976-77 .....	100.0	35.3	25.3	9.8	0.4	3.4	1.2	13.9	7.7	3.1
1977-78 .....	100.0	35.1	26.1	10.3	0.1	3.4	1.1	13.6	7.5	2.7
1978-79 .....	100.0	35.2	25.7	10.9	0.2	3.2	1.0	12.9	7.8	3.0
1979-80 .....	100.0	34.8	26.3	10.6	0.1	3.1	0.8	12.8	8.4	3.0
1980-81 .....	100.0	34.3	26.3	10.5	0.1	2.9	0.8	13.2	8.5	3.6
1981-82 .....	100.0	34.9	27.5	10.7	0.1	2.8	0.8	12.8	7.7	3.0
1982-83 .....	100.0	34.6	26.6	10.5	0.1	2.7	0.5	13.0	8.5	3.5
1983-84 .....	100.0	33.6	27.2	10.8	0.0	2.7	0.5	13.4	9.1	2.7
1984-85 .....	100.0	33.6	26.7	11.8	0.1	2.7	0.5	13.1	9.2	2.3
1985-86 .....	100.0	34.0	26.7	12.1	0.0	2.7	0.4	12.9	9.2	2.0
Expenditure per full-time-equivalent student in constant 1985-86 dollars										
1976-77 .....	\$4,983	\$1,754	\$1,254	\$485	\$22	\$168	\$61	\$697	\$380	\$152
1977-78 .....	4,694	1,646	1,226	484	5	161	51	640	354	126
1978-79 .....	4,676	1,719	1,251	533	10	157	50	629	380	147
1979-80 .....	4,835	1,684	1,273	513	7	152	38	619	406	144
1980-81 .....	4,827	1,656	1,272	506	3	138	30	636	411	174
1981-82 .....	4,650	1,621	1,279	496	3	130	26	594	359	140
1982-83 .....	4,830	1,672	1,265	507	5	131	24	629	410	167
1983-84 .....	4,794	1,612	1,303	517	1	129	24	640	437	129
1984-85 .....	5,200	1,747	1,396	616	4	141	24	681	481	121
1985-86 .....	5,272	1,792	1,409	637	1	140	22	679	487	106

<sup>1</sup> Includes institutional and academic support less libraries.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared October 1987.)

NOTE.—Data in this table may differ slightly from data appearing in other tables. This table includes only institutions which provided enrollment and finance data. The Higher Education Price Index was used to convert the per student figures to constant dollars. Because of rounding, details may not add to totals.

Table 310.—Current-fund expenditures for public institutions of higher education, by State: 1974-75 to 1986-87

[In thousands of dollars]

State	1974-75	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 <sup>1</sup>	Percent change, 1981-82 to 1986-87
1	2	3	4	5	6	7	8	9	10	11
United States.....	823,488,981	837,787,970	842,279,808	846,219,134	849,872,919	853,088,844	858,914,560	863,183,853	867,653,898	46.4
Alabama.....	423,231	751,398	839,368	804,216	955,520	1,040,356	1,191,478	1,324,774	1,351,761	49.5
Alaska.....	85,966	148,397	158,700	185,400	213,063	224,589	235,188	224,042	213,286	15.0
Arizona.....	341,338	595,852	691,481	780,780	819,504	889,573	934,587	1,017,203	1,098,148	40.6
Arkansas.....	175,584	306,208	340,821	374,263	393,679	425,497	485,363	526,831	543,200	45.1
California.....	3,259,945	5,019,441	5,775,482	6,126,618	6,390,339	6,630,635	7,705,638	8,515,440	9,079,853	48.2
Colorado.....	419,550	581,668	738,363	821,983	881,516	935,447	993,440	1,087,558	1,123,508	36.7
Connecticut.....	205,649	333,418	387,850	394,270	426,462	489,917	522,006	562,666	621,183	57.8
Delaware.....	87,129	140,990	158,332	170,323	181,358	196,636	207,584	229,377	255,335	49.9
District of Columbia.....	44,125	80,328	71,791	67,800	77,902	84,234	60,520	68,462	92,438	36.3
Florida.....	679,780	1,054,042	1,170,305	1,329,291	1,366,801	1,497,580	1,650,338	1,782,180	1,973,533	46.5
Georgia.....	410,458	689,134	754,060	846,337	921,021	1,054,899	1,142,836	1,255,984	1,404,747	66.0
Hawaii.....	135,403	195,758	222,716	242,489	267,258	273,105	288,217	312,248	317,294	30.8
Idaho.....	87,781	149,634	166,844	180,352	192,701	204,783	226,142	236,438	248,647	36.9
Illinois.....	1,082,948	1,591,213	1,780,493	1,892,135	1,951,823	2,079,772	2,320,261	2,571,409	2,707,123	43.1
Indiana.....	628,121	933,703	1,064,395	1,138,511	1,252,380	1,367,711	1,472,007	1,602,203	1,758,524	54.5
Iowa.....	400,538	713,898	787,590	836,484	909,647	944,211	1,027,080	1,092,542	1,182,268	38.9
Kansas.....	309,174	513,087	579,857	639,475	684,708	733,372	794,588	848,602	886,190	38.8
Kentucky.....	348,968	605,151	673,775	677,795	741,848	808,091	845,505	896,718	992,842	48.5
Louisiana.....	333,508	612,723	716,702	806,068	882,911	914,211	1,000,470	1,039,177	1,065,692	31.9
Maine.....	90,392	138,278	153,658	166,905	164,042	197,915	210,749	216,737	244,432	46.4
Maryland.....	447,411	704,407	795,100	902,008	986,798	901,589	1,021,140	1,084,430	1,144,897	26.9
Massachusetts.....	327,719	492,512	553,019	631,766	687,245	740,329	878,644	960,585	1,100,445	74.2
Michigan.....	1,235,651	1,904,818	2,053,795	2,188,662	2,356,198	2,512,255	2,706,362	2,946,398	3,094,461	41.4
Minnesota.....	524,107	786,017	876,632	990,881	1,043,697	1,110,870	1,220,404	1,324,591	1,427,227	44.1
Mississippi.....	273,799	486,694	539,222	581,252	582,401	628,647	660,616	706,380	701,795	20.7
Missouri.....	409,430	606,690	587,643	713,841	782,708	831,684	899,740	999,899	1,071,224	50.1
Montana.....	83,835	112,353	121,894	142,334	156,492	170,366	185,588	182,102	182,795	26.4
Nebraska.....	195,041	341,734	378,928	418,332	444,133	469,817	508,752	537,858	582,939	39.3
Nevada.....	49,810	99,675	111,347	125,867	132,724	140,648	166,584	180,107	196,714	57.9
New Hampshire.....	76,052	121,882	134,391	143,648	151,983	153,461	168,453	183,959	200,211	39.4
New Jersey.....	492,944	805,448	903,159	984,376	1,070,511	1,166,525	1,285,926	1,406,490	1,579,016	63.7
New Mexico.....	137,909	282,439	325,990	349,373	379,595	382,998	422,740	456,600	500,874	43.3
New York.....	1,739,642	2,337,898	2,519,104	2,822,661	3,132,429	3,359,316	3,836,384	3,802,602	4,227,558	49.8
North Carolina.....	642,140	988,975	1,129,383	1,231,966	1,284,630	1,439,145	1,633,304	1,799,173	1,955,910	58.8
North Dakota.....	84,401	167,202	192,046	215,767	232,038	254,455	263,909	288,214	308,961	43.6
Ohio.....	996,691	1,612,495	1,784,754	1,936,700	2,149,696	2,326,494	2,536,913	2,716,408	2,932,615	51.5
Oklahoma.....	274,536	501,400	583,174	658,176	747,560	728,923	785,599	844,829	826,481	25.8
Oregon.....	335,116	586,355	642,411	699,525	734,767	788,163	832,298	880,696	959,238	37.1
Pennsylvania.....	963,368	1,398,891	1,544,580	1,701,884	1,872,341	2,004,320	2,159,745	2,392,145	2,606,557	53.3
Rhode Island.....	91,446	144,002	158,365	167,888	175,371	187,412	197,649	213,253	225,033	34.0
South Carolina.....	313,200	553,660	617,983	646,241	693,629	743,365	852,452	951,848	990,264	51.7
South Dakota.....	82,967	123,662	124,103	131,745	135,637	141,966	140,665	149,092	152,274	15.6
Tennessee.....	384,942	582,038	668,885	723,472	781,885	839,477	858,612	1,081,352	1,275,950	78.4
Texas.....	1,248,924	2,391,570	2,736,276	3,189,782	3,638,782	3,647,623	4,087,570	4,375,082	4,451,215	39.5
Utah.....	207,032	359,536	405,314	457,246	515,067	533,838	595,755	699,714	700,774	53.3
Vermont.....	69,621	109,954	122,708	134,910	146,712	159,763	174,081	186,112	201,435	49.3
Virginia.....	538,067	1,018,167	1,143,755	1,267,236	1,367,567	1,465,098	1,661,173	1,825,156	2,003,090	58.1
Washington.....	544,422	905,938	993,171	1,044,135	1,086,316	1,205,410	1,331,849	1,399,780	1,512,378	44.6
West Virginia.....	132,736	298,859	317,482	345,152	364,675	404,735	357,335	376,293	392,671	13.8
Wisconsin.....	707,518	1,104,035	1,208,399	1,308,457	1,410,280	1,493,528	1,675,092	1,754,395	1,872,979	43.4
Wyoming.....	59,624	106,604	126,082	145,666	166,782	181,300	182,752	203,307	198,934	36.5
U.S. Service Schools.....	322,135	514,316	592,454	656,787	715,661	786,375	812	904,895	942,868	43.6
Outlying areas.....	192,195	239,769	269,310	444,229	391,327	419,255	418,141	451,370	429,461	-3.3
American Samoa.....	1,159	1,424	1,909	1,235	1,399	1,369	1,092	1,092	1,162	-5.9
Guam.....	10,360	14,163	16,100	24,056	25,574	25,912	25,576	31,310	30,760	27.9
Northern Mariana.....	—	—	—	—	—	1,212	1,293	1,350	2,787	—
Puerto Rico.....	173,848	212,481	237,319	403,234	315,465	371,696	368,536	294,046	370,455	-8.1
Trust Territory of the Pacific.....	655	1,227	1,447	1,695	3,090	4,036	5,525	5,992	5,444	221.2
Virgin Islands.....	6,173	10,494	11,835	14,006	14,929	15,028	16,120	17,580	16,653	34.6

<sup>1</sup> Preliminary data.

—Data not available or not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys and Integrated Postsecondary Education Data System (IPEDS), "Finance" survey. (This table was prepared April 1990.)

**Table 311.—Current-fund expenditures per full-time-equivalent student in institutions of higher education, by control and type of institution and purpose of expenditure: 1975-86**

Item	Total				Public				Private			
	All institutions	Universities	Other 4-year	2-year	All institutions	Universities	Other 4-year	2-year	All institutions	Universities	Other 4-year	2-year
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total current-fund expenditures <sup>1</sup> .....</b>	<b>\$10,918</b>	<b>\$17,513</b>	<b>\$11,107</b>	<b>\$4,540</b>	<b>\$9,471</b>	<b>\$14,490</b>	<b>\$10,659</b>	<b>\$4,532</b>	<b>\$15,187</b>	<b>\$26,712</b>	<b>\$11,955</b>	<b>\$4,639</b>
Educational and general expenditures .....	8,520	13,179	8,518	4,215	7,823	11,320	8,243	4,223	11,167	18,779	8,977	4,122
Instruction .....	3,474	4,970	3,504	2,048	3,280	4,286	3,713	2,107	4,047	7,093	3,156	1,328
Research .....	945	2,537	581	4	856	2,227	672	4	1,209	3,471	431	2
Public service .....	349	794	253	78	377	910	269	83	267	447	227	12
Academic support .....	745	1,173	742	353	701	1,052	778	361	673	1,538	661	259
Libraries .....	285	438	301	119	252	366	296	122	383	655	311	90
Student services .....	510	493	601	394	438	417	513	379	725	722	749	567
Institutional support .....	1,048	1,149	1,241	667	849	888	1,036	634	1,628	1,934	1,582	1,054
Operation and maintenance of plant .....	851	1,154	894	507	775	1,001	879	503	1,073	1,615	920	556
Scholarships and fellowships .....	486	747	533	107	236	426	237	93	1,143	1,713	1,028	274
From unrestricted funds .....	256	425	305	27	105	203	114	21	703	1,094	624	102
From restricted funds <sup>2</sup> .....	210	322	228	80	132	223	122	73	441	620	404	172
Mandatory transfers .....	134	181	168	58	110	133	147	57	202	247	202	71

<sup>1</sup> Includes expenditures for auxiliary enterprises, hospitals, and independent operations which are not shown separately.

<sup>2</sup> Excludes Pell Grants.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education, Fiscal Year 1986," and "Fall Enrollment in Colleges and Universities, 1985" surveys. (This table was prepared August 1987.)

NOTE.—Tabulation includes only those institutions for which both finance and enrollment data are available. Because of rounding, details may not add to totals.

**Table 312.—Capital expenditures <sup>1</sup> for science and engineering programs in institutions of higher education, by field of study and source of funds: United States and outlying areas, 1976-77 to 1987-88**

(In thousands)

Field of study and source of funds	1976-77	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9	10	11	12
<b>Total from all sources.....</b>	<b>\$960,014</b>	<b>\$996,218</b>	<b>\$794,512</b>	<b>\$964,795</b>	<b>\$965,488</b>	<b>\$1,093,618</b>	<b>\$1,175,904</b>	<b>\$1,229,779</b>	<b>\$1,499,116</b>	<b>\$1,747,851</b>	<b>\$1,966,992</b>
Engineering.....	87,719	87,128	89,297	105,768	147,285	137,188	147,055	184,025	314,796	387,302	366,529
Sciences, total.....	872,296	809,090	705,215	849,027	818,203	956,430	1,028,849	1,045,754	1,184,320	1,367,549	1,600,373
Physical sciences.....	65,216	64,685	77,154	89,106	83,536	98,131	110,673	115,683	144,023	159,702	209,192
Environmental sciences.....	28,351	25,153	36,208	36,834	44,052	42,224	36,358	54,634	49,006	54,158	58,605
Mathematical and computer sciences.....	25,136	27,282	32,318	31,913	35,661	54,216	48,921	77,226	90,603	83,424	96,280
Life sciences.....	642,493	428,293	459,057	592,020	578,618	666,453	716,962	697,668	772,029	915,089	1,056,418
Psychological sciences.....	12,702	7,060	17,982	11,183	13,003	16,757	31,319	12,907	17,816	9,775	11,156
Social sciences.....	31,798	21,358	35,079	45,742	31,382	40,942	46,964	60,748	49,919	55,231	80,787
Other sciences.....	66,800	35,259	47,423	42,229	31,951	35,707	37,652	26,968	60,924	90,170	87,935
<b>Total from Federal sources.....</b>	<b>195,519</b>	<b>184,460</b>	<b>149,583</b>	<b>161,043</b>	<b>126,679</b>	<b>135,359</b>	<b>142,473</b>	<b>110,959</b>	<b>170,572</b>	<b>196,429</b>	<b>208,566</b>
Engineering.....	17,219	20,927	20,438	19,150	20,962	18,425	30,641	16,793	37,536	49,445	46,738
Sciences, total.....	176,300	143,533	129,125	141,893	105,717	116,934	111,832	94,166	133,036	146,984	161,828
Physical sciences.....	21,894	32,186	22,483	26,693	22,076	19,605	20,713	31,497	38,108	41,090	37,314
Environmental sciences.....	8,307	8,220	8,033	8,352	6,029	4,664	4,828	4,153	8,214	15,257	13,197
Mathematical and computer sciences.....	1,882	2,983	5,653	5,943	5,049	5,516	8,897	8,918	17,516	12,936	19,764
Life sciences.....	137,369	90,796	86,105	90,767	67,368	79,412	72,717	44,448	57,840	59,053	73,636
Psychological sciences.....	2,398	1,740	2,002	1,784	1,222	1,101	1,035	871	1,739	1,081	2,335
Social sciences.....	2,109	2,076	1,528	7,150	2,214	5,278	3,209	2,493	3,618	4,852	7,992
Other sciences.....	3,341	5,532	3,341	1,498	1,759	1,358	633	1,766	8,001	12,715	7,560
<b>Total from other sources.....</b>	<b>764,495</b>	<b>531,758</b>	<b>644,949</b>	<b>793,752</b>	<b>838,809</b>	<b>958,259</b>	<b>1,033,431</b>	<b>1,118,820</b>	<b>1,328,544</b>	<b>1,551,422</b>	<b>1,758,336</b>
Engineering.....	70,499	66,201	68,859	86,618	126,323	118,763	116,414	167,232	277,260	330,857	319,791
Sciences, total.....	693,996	465,557	576,090	707,134	712,486	839,496	917,017	951,588	1,051,284	1,220,565	1,438,545
Physical sciences.....	43,322	32,499	54,691	62,413	61,480	78,526	89,960	84,188	105,815	118,612	171,848
Environmental sciences.....	19,044	16,933	28,175	28,482	38,023	37,560	31,530	50,481	40,792	38,901	45,408
Mathematical and computer sciences.....	23,254	24,299	26,665	26,264	30,612	48,700	40,224	66,308	73,087	70,486	76,516
Life sciences.....	505,124	337,497	372,952	501,253	511,250	589,041	644,245	653,220	714,189	856,036	962,762
Psychological sciences.....	10,304	5,320	15,980	9,399	11,781	15,656	30,284	11,936	16,077	8,694	8,821
Social sciences.....	28,689	19,282	33,545	38,592	29,168	35,664	43,755	58,255	46,301	50,379	72,795
Other sciences.....	63,259	29,727	44,082	40,731	30,192	34,349	37,019	25,202	54,923	77,455	60,375

<sup>1</sup> Includes expenditures for facilities and equipment for research, development, and instruction.

NOTE.—Some data have been revised from previously published figures.

SOURCE: National Science Foundation, Division of Science Resources Studies, "Early Release of Summary Statistics on Academic Science/Engineering Resources," various years; and unpublished tabulations. (This table was prepared April 1990.)

Table 313.—Value of property and liabilities of institutions of higher education: 1899-1900 to 1985-86

(In thousands)

Academic year	Property value at end of year						Endowment (end of year market value) <sup>1</sup>	Liabilities of plant funds
	Total	Physical plant value			Endowment (book value) <sup>1</sup>			
		Total	Land	Buildings		Equipment		
1	2	3	4	5	6	7	8	9
1899-1900.....	\$448,597	\$253,599	—	—	—	<sup>2</sup> \$194,998	—	—
1909-10.....	781,255	457,594	\$92,359	\$297,153	\$68,082	<sup>2</sup> 323,661	—	—
1919-20.....	1,316,404	747,333	128,922	495,920	122,491	<sup>2</sup> 589,071	—	—
1929-30.....	3,437,117	2,065,049	304,114	1,490,014	270,921	<sup>2</sup> 1,372,068	—	—
1935-36.....	3,913,028	2,359,418	334,085	1,636,722	388,611	<sup>2</sup> 1,553,810	—	—
1937-38.....	4,206,695	2,556,075	313,665	1,811,309	431,101	1,652,620	—	—
1939-40.....	4,440,063	2,753,780	—	—	—	1,686,283	—	—
1941-42.....	4,525,925	2,759,261	—	—	—	<sup>2</sup> 1,766,664	—	—
1947-48.....	6,076,212	3,691,725	—	—	—	2,384,467	—	—
1948-50.....	7,401,187	4,799,994	—	—	—	<sup>2</sup> 2,601,223	—	—
1951-52.....	9,241,725	6,373,195	—	—	—	2,868,530	—	—
1953-54.....	10,717,082	7,523,193	—	—	—	3,193,889	—	—
1955-56.....	12,561,046	8,858,907	624,467	<sup>3</sup> 8,697,648	1,536,792	3,702,139	—	\$894,383
1957-58.....	15,770,197	11,124,489	733,182	<sup>3</sup> 8,540,429	1,850,878	4,645,708	—	1,444,802
1959-60.....	18,870,628	13,548,548	842,664	<sup>3</sup> 10,472,478	2,233,407	5,322,060	—	1,964,306
1961-62.....	22,761,193	16,681,844	1,009,294	<sup>3</sup> 12,900,083	2,772,457	6,079,349	—	2,806,868
1963-64.....	28,232,362	21,279,346	1,292,691	<sup>3</sup> 16,460,867	3,525,788	6,953,016	—	4,190,189
1965-66.....	35,274,597	26,851,273	1,758,901	<sup>3</sup> 20,653,028	4,439,344	8,423,324	\$11,126,831	6,071,750
1967-68.....	—	34,506,348	2,062,545	<sup>3</sup> 26,673,826	5,769,977	—	—	—
1969-70.....	52,930,923	42,093,580	3,076,751	31,865,179	7,151,649	10,837,343	11,206,632	9,384,731
1970-71.....	57,394,951	46,053,585	3,117,895	35,042,590	7,893,100	11,341,366	13,714,330	9,786,240
1971-72.....	62,136,459	50,153,251	3,267,326	38,131,339	8,734,586	11,969,208	15,180,934	10,291,066
1972-73.....	66,814,103	53,814,596	3,492,611	40,808,481	9,513,503	12,999,507	15,069,840	10,823,595
1973-74.....	71,305,817	58,002,777	3,888,372	43,701,491	10,412,914	13,303,040	13,168,076	11,400,916
1974-75.....	75,585,874	62,183,078	4,210,901	46,453,642	11,518,536	13,402,596	14,364,545	12,413,420
1975-76.....	80,300,595	66,348,304	4,345,232	49,349,224	12,653,847	13,952,291	15,488,265	12,667,015
1976-77.....	85,486,550	70,739,427	4,444,927	52,384,393	13,910,107	14,747,123	16,304,553	13,068,341
1977-78.....	90,337,044	74,770,804	4,621,071	55,188,803	14,961,131	15,566,240	16,840,129	13,437,881
1978-79.....	95,442,468	78,637,991	4,824,250	57,563,005	16,250,737	16,804,777	18,158,634	13,712,648
1979-80.....	102,294,859	83,733,387	5,037,172	60,647,097	17,649,119	18,561,472	20,743,045	14,181,991
1980-81.....	109,701,242	88,760,567	5,212,453	64,158,017	19,390,097	20,940,675	23,485,001	14,794,699
1981-82.....	117,601,954	94,516,512	5,402,339	67,794,877	21,319,297	23,065,442	24,415,245	15,487,618
1982-83.....	127,345,302	100,992,841	5,889,080	71,519,711	23,594,042	26,352,461	32,691,133	16,749,900
1983-84.....	137,141,741	107,640,113	6,109,746	75,220,765	26,309,602	29,501,629	32,975,610	18,277,315
1984-85.....	148,163,096	114,763,986	6,236,159	79,135,996	29,393,829	33,399,110	39,916,361	22,106,712
1985-86.....	160,959,517	122,261,355	6,573,923	82,686,012	32,801,419	38,698,162	50,280,775	25,699,408

<sup>1</sup> Includes funds functioning as endowment.<sup>2</sup> Includes annuity funds.<sup>3</sup> Includes improvements to land and equipment. These funds are included under appropriate categories after 1967-68.

— Data not available.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared August 1987.)

**Table 314.—Physical plant value and endowment funds per student in institutions of higher education, by type and control of institution: 1975-76 to 1985-86**

Control and level of institution	Institutions		Plant value (end of year)		Market value of endowment funds (end of year)	
	Number <sup>1</sup>	Full-time-equivalent enrollment, in thousands	Total, in thousands of dollars	Per full-time-equivalent student	Total, in thousands of dollars	Per full-time-equivalent student
1	2	3	4	5	6	7
<b>1975-76</b>						
All institutions.....	3,026	6,480	\$66,346,304	\$7,824	\$15,488,266	\$1,827
4-year institutions.....	1,898	5,900	57,333,509	9,717	15,337,285	2,599
2-year institutions.....	1,128	2,579	9,014,795	3,495	150,981	59
Publicly controlled institutions.....	1,442	6,522	44,795,168	6,868	2,932,737	450
4-year institutions.....	545	4,057	36,440,349	8,983	2,886,157	711
2-year institutions.....	897	2,466	8,354,819	3,388	46,580	19
Privately controlled institutions.....	1,584	1,957	21,553,136	11,011	12,555,529	6,414
4-year institutions.....	1,353	1,844	20,693,160	11,331	12,451,128	6,753
2-year institutions.....	231	113	659,976	5,816	104,401	920
<b>1979-80</b>						
All institutions.....	3,152	8,467	83,733,387	9,866	20,743,045	2,444
4-year institutions.....	1,957	6,016	71,524,828	11,889	20,541,897	3,415
2-year institutions.....	1,195	2,471	12,208,559	4,940	201,148	81
Publicly controlled institutions.....	1,475	6,393	56,970,126	8,912	3,706,329	580
4-year institutions.....	549	4,059	45,523,268	11,215	3,628,794	894
2-year institutions.....	926	2,333	11,446,838	4,906	79,535	34
Privately controlled institutions.....	1,677	2,095	26,763,261	12,777	17,034,716	8,132
4-year institutions.....	1,408	1,957	26,001,540	13,288	16,913,103	8,643
2-year institutions.....	269	138	761,721	5,522	121,613	882
<b>1983-84</b>						
All institutions.....	3,264	9,166	107,640,113	11,743	32,975,610	3,597
4-year institutions.....	2,013	6,324	92,237,794	14,585	32,644,125	5,182
2-year institutions.....	1,271	2,842	15,402,318	5,419	331,486	117
Publicly controlled institutions.....	1,481	6,881	72,805,169	10,551	6,038,051	877
4-year institutions.....	565	4,266	58,108,916	13,623	5,887,180	1,380
2-year institutions.....	916	2,616	14,496,252	5,542	150,871	58
Privately controlled institutions.....	1,803	2,285	35,034,944	15,333	26,937,560	11,769
4-year institutions.....	1,448	2,059	34,128,678	16,577	26,756,844	12,997
2-year institutions.....	355	226	906,266	4,006	180,615	799
<b>1984-85</b>						
All institutions.....	3,331	8,952	114,763,966	12,820	39,916,361	4,459
4-year institutions.....	2,025	6,293	96,417,404	15,640	39,524,453	6,261
2-year institutions.....	1,306	2,659	16,346,562	6,148	391,908	147
Publicly controlled institutions.....	1,501	6,685	77,314,401	11,566	7,344,312	1,099
4-year institutions.....	566	4,238	61,924,903	14,612	7,172,486	1,692
2-year institutions.....	935	2,447	15,389,498	6,290	171,826	70
Privately controlled institutions.....	1,830	2,267	37,449,565	16,519	32,572,049	14,368
4-year institutions.....	1,459	2,055	36,492,501	17,759	32,351,967	15,744
2-year institutions.....	371	212	957,064	4,510	220,082	1,037
<b>1985-86</b>						
All institutions.....	3,340	8,943	122,261,355	13,671	50,290,775	5,622
4-year institutions.....	2,029	6,294	105,074,835	16,694	49,808,974	7,913
2-year institutions.....	1,311	2,649	17,186,520	6,488	473,801	179
Publicly controlled institutions.....	1,498	6,668	82,553,486	12,381	9,067,997	1,363
4-year institutions.....	566	4,240	66,339,329	15,647	8,881,733	2,095
2-year institutions.....	932	2,428	16,214,157	6,676	206,265	85
Privately controlled institutions.....	1,842	2,276	39,707,869	17,449	41,192,778	18,102
4-year institutions.....	1,463	2,055	38,735,506	18,852	40,925,241	19,918
2-year institutions.....	379	221	972,363	4,401	267,536	1,211

<sup>1</sup> Includes main and branch campuses.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" and "Fall Enrollment in Colleges and Universities" surveys. (This table was prepared August 1987.)

**Table 315.—Endowment funds of the 100 institutions of higher education with the largest amounts:  
Fiscal year 1987**

Institution	Rank order <sup>1</sup>	Market value of endowment, in thousands of dollars (end of fiscal year)	Institution	Rank order <sup>1</sup>	Market value of endowment, in thousands of dollars (end of fiscal year)
1	2	3	1	2	3
United States (all institutions).....	—	858,199,243			
University of Texas at Austin.....	1	2,594,767	Oberlin College (Ohio).....	51	217,952
Princeton University (N.J.).....	2	1,892,091	George Washington University (D.C.).....	52	217,392
Columbia University, Main Division (N.Y.).....	3	1,387,056	Tulane University of Louisiana.....	53	213,198
Washington University (Missouri).....	4	1,218,884	University of Cincinnati, Main Campus (Ohio).....	54	209,368
Massachusetts Institute of Technology.....	5	1,169,740	Georgetown University (D.C.).....	55	204,600
Rice University (Tex.).....	6	893,027	Middlebury College (Vt.).....	56	202,563
University of Chicago (Ill.).....	7	689,269	Rensselaer Polytechnic Institute (N.Y.).....	57	190,835
Emory University (Ga.).....	8	649,247	Lehigh University (Penn.).....	58	181,259
Northwestern University (Ill.).....	9	623,303	Lafayette College (Penn.).....	59	176,331
University of Pennsylvania.....	10	648,528	Boston College (Mass.).....	60	176,214
Dartmouth College (N.H.).....	11	590,204	Thomas Jefferson University (Penn.).....	81	160,724
University of Rochester (N.Y.).....	12	568,066	Boston University (Mass.).....	82	159,192
Rockefeller University (N.Y.).....	13	549,153	Mount Holyoke College (Mass.).....	83	151,916
Cornell University, Endowed Colleges (N.Y.).....	14	540,298	Carleton College (Minn.).....	84	144,190
Johns Hopkins University (Md.).....	15	534,965	St. Louis University, Main Campus (Missouri).....	85	140,853
Vanderbilt University (Tenn.).....	16	514,377	Bowdoin College (Maine).....	86	138,579
New York University.....	17	511,220	CUNY Mount Sinai School of Medicine (N.Y.).....	87	138,319
Mayo Graduate School of Medicine (Minn.).....	18	466,479	Rochester Institute of Technology (N.Y.).....	88	135,626
University of Notre Dame (Ind.).....	19	456,099	University of Wisconsin at Madison.....	89	135,472
California Institute of Technology.....	20	418,235	University of North Carolina at Chapel Hill.....	70	128,619
University of Virginia, Main Campus.....	21	414,834	Syracuse University, Main Campus (N.Y.).....	71	128,400
University of Southern California.....	22	401,170	Brandeis University (Mass.).....	72	126,439
Brown University (R.I.).....	23	345,369	Cornell University Medical Center (N.Y.).....	73	126,412
Case Western Reserve University (Ohio).....	24	340,561	Occidental College (Calif.).....	74	126,317
Princeton Theological Seminary (N.J.).....	25	322,090	Northeastern University (Mass.).....	75	124,137
University of Michigan at Ann Arbor.....	26	321,427	Wabash College (Ind.).....	76	121,600
Southern Methodist University (Tex.).....	27	301,732	Purdue University (Ind.).....	77	117,171
Wellesley College (Mass.).....	28	297,958	Trinity College (Conn.).....	78	115,324
Smith College (Mass.).....	29	293,625	Colorado College.....	79	113,102
Swarthmore College (Penn.).....	30	277,516	University of Miami (Fla.).....	80	112,094
Williams College (Mass.).....	31	275,188	Earlham College (Ind.).....	81	111,304
Carnegie-Mellon University (Penn.).....	32	265,693	Tufts University (Mass.).....	82	110,795
Baylor College of Medicine (Tex.).....	33	264,634	Byrn Mawr College (Penn.).....	83	109,922
Texas Christian University.....	34	261,718	Rush University (Ill.).....	84	109,721
University of Delaware.....	35	258,926	State University of New York at Buffalo, Main Campus.....	85	108,820
Wesleyan University (Conn.).....	36	258,131	The Julliard School (N.Y.).....	86	108,260
Trinity University (Tex.).....	37	248,788	New Mexico Military Institute.....	87	104,627
Amherst College (Mass.).....	38	248,354	Colgate University (N.Y.).....	88	104,527
Loyola University of Chicago (Ill.).....	39	241,088	Hamilton College (N.Y.).....	89	103,190
Loyola University in New Orleans (La.).....	40	237,000	Southwestern University (Tex.).....	90	101,406
University of Minnesota, Minneapolis-St. Paul.....	41	236,517	Yeshiva University (N.Y.).....	91	100,111
Pomona College (Calif.).....	42	232,675	University of Oklahoma, Norman Campus.....	92	95,831
University of Washington.....	43	231,945	Whitman College (Wash.).....	93	90,295
University of Richmond (Va.).....	44	228,761	Agnes Scott College (Ga.).....	94	88,991
Grinnell College (Iowa).....	45	226,932	Cooper Union (N.Y.).....	95	87,863
Wake Forest University (N.C.).....	46	226,072	University of The South (Tenn.).....	96	87,396
Berea College (Ky.).....	47	225,938	Union College (N.Y.).....	97	87,063
Vassar College (N.Y.).....	48	225,134	Claremont McKenna College (Calif.).....	98	83,735
Baylor University (Tex.).....	49	220,819	Radcliffe College (Mass.).....	99	83,363
University of Pittsburgh, Main Campus (Penn.).....	50	219,845	Lucknell University (Penn.).....	100	82,368

<sup>1</sup> Institutions ranked by size of endowment. Excludes institutions which have not reported data for 1985-86 or 1986-87 or have submitted system-wide reports. Institutions which appeared in the 1985-86 listing, but have been excluded for 1986-87 for these reasons are: Pennsylvania State University, Main Campus; Harvard University (Mass.); Yale University (Conn.); Stanford University (Calif.); University of California at Berkeley; University of California at Los Angeles; University of California at Davis; University of

California at Santa Barbara; Duke University (N.C.); Oral Roberts University (Oklahoma); Ohio State University, Main Campus; —Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Finances, 1986-87" survey. (This table was prepared July 1990.)

**Table 316.—Additions to physical plant value of institutions of higher education, by type of addition and control of institution: 1969-70 to 1985-86**

(In millions)

Year	Total, all institutions	Public institutions				Private institutions			
		Total	Land	Buildings	Equipment	Total	Land	Buildings	Equipment
1	2	3	4	5	6	7	8	9	10
1969-70	\$4,233	\$2,985	\$152	\$2,105	\$648	\$1,248	\$59	\$967	\$221
1970-71	4,165	3,032	128	2,241	663	1,134	41	895	198
1971-72	4,183	3,054	112	2,277	665	1,109	53	890	195
1972-73	3,967	2,940	128	2,077	737	1,028	53	750	225
1973-74	4,312	3,208	205	2,188	813	1,106	55	816	235
1974-75	4,761	3,476	263	2,246	967	1,284	67	890	357
1975-76	4,702	3,552	188	2,365	1,019	1,150	58	788	325
1976-77	4,623	3,362	128	2,208	1,026	1,261	58	838	366
1977-78	4,527	3,306	102	2,117	1,087	1,221	45	777	400
1978-79	4,578	3,377	154	1,944	1,279	1,199	52	783	383
1979-80	5,551	3,866	184	2,149	1,354	1,888	98	1,220	568
1980-81	6,471	4,279	148	2,555	1,579	2,182	104	1,398	690
1981-82	6,975	4,594	170	2,679	1,744	2,362	83	1,488	611
1982-83	7,421	4,765	374	2,398	1,994	2,656	106	1,668	664
1983-84	7,804	5,038	196	2,427	2,415	2,566	110	1,507	950
1984-85	8,306	5,390	202	2,455	2,733	2,916	135	1,671	1,110
1985-86	10,149	6,675	237	3,316	3,320	3,274	128	1,922	1,225

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education" surveys. (This table was prepared July 1987.)

**Table 317.—Participants in postsecondary academic, vocational, and continuing education, by sex, race, age group, and labor force status: October 1982**

(Numbers in thousands)

Sex, race, age group, and labor force status	Type of postsecondary education					
	Academic <sup>1</sup>		Vocational <sup>2</sup>		Continuing <sup>3</sup>	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Total	8,243	100.0	3,787	100.0	5,177	100.0
Male	4,629	50.1	1,712	45.2	1,908	34.9
Female	4,614	49.9	2,074	54.8	3,368	65.1
White	7,833	85.8	3,199	84.5	4,731	91.4
Black	916	9.9	449	11.9	255	4.9
Other races	392	4.2	138	3.6	190	3.7
18 to 24 years old	6,208	67.2	1,833	48.4	848	16.4
25 to 34 years old	2,145	23.2	1,078	28.5	1,667	32.2
35 to 44 years old	624	6.8	522	13.8	1,121	21.7
45 to 54 years old	199	2.1	240	6.3	717	13.8
55 to 64 years old	56	0.6	95	2.5	514	9.9
65 years old and over	12	0.1	19	0.5	309	6.0
Not in labor force	3,893	42.1	955	25.2	1,271	24.6
Employed full-time	2,238	24.2	1,678	44.3	2,944	56.9
Employed part-time	2,097	29.2	834	22.0	728	14.1
Unemployed	416	4.5	321	8.5	234	4.5

<sup>1</sup> Academic students pursued coursework, either full- or part-time, for the purpose of obtaining an undergraduate, graduate, or professional degree.<sup>2</sup> Vocational students took coursework, either full- or part-time, in an occupational or technical field for the purpose of obtaining a vocational credential, such as a vocational certificate, occupational license, or other vocational diploma or degree.<sup>3</sup> Continuing education students were postsecondary education participants not otherwise classified as academic or vocational students who were taking college credit courses but not seeking a degree or who were taking noncredit courses for job improve-

ment, personal development, or social/recreational purposes (excluding adult basic education courses to improve basic skills in reading, writing, or arithmetic).

NOTE.—Data are based upon a sample survey of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Participants in Postsecondary Education: October 1982*. (This table was prepared May 1986.)

**Table 318.—Selected characteristics of participants in adult education: 1984**

[Numbers in thousands]

Characteristics of participants	Number of adults in population <sup>1</sup>	Participants in adult education <sup>2</sup>					
		Total		Full-time students in high school or college degree programs		Not full-time students in high school or college degree programs <sup>3</sup>	
		Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8
<b>Total</b> .....	<b>172,663</b>	<b>23,303</b>	<b>13.5</b>	<b>1,118</b>	<b>0.6</b>	<b>22,184</b>	<b>12.9</b>
<b>Age</b>							
17 to 34 years.....	71,891	11,704	16.3	948	1.3	10,756	15.0
35 to 54 years.....	52,303	8,864	16.9	152	0.3	8,712	16.7
55 years and over.....	48,368	2,735	5.7	18	(4)	2,717	5.6
<b>Sex</b>							
Men.....	81,700	10,446	12.8	485	0.6	9,931	12.2
Women.....	90,883	12,857	14.1	634	0.7	12,224	13.5
<b>Racial/ethnic group</b>							
White, non-Hispanic.....	139,777	20,429	14.6	939	0.7	19,491	13.9
Black, non-Hispanic.....	18,828	1,508	8.1	88	0.5	1,418	7.6
Hispanic.....	9,706	796	8.2	63	0.6	733	7.6
Other.....	4,472	571	12.8	28	0.6	543	12.1
<b>Highest level of education completed</b>							
Less than 4 years of high school.....	47,297	1,690	4.0	315	0.7	1,574	3.3
4 years of high school.....	66,224	6,991	10.6	193	0.3	6,799	10.3
1 to 3 years of college.....	30,267	6,022	19.9	394	1.3	5,623	18.8
4 or more years of college.....	28,775	8,400	29.2	217	0.8	8,164	28.4
<b>Labor force status</b>							
In labor force.....	112,441	19,788	17.6	740	0.7	19,047	18.9
Employed.....	104,464	18,929	18.1	854	0.8	18,275	17.5
Unemployed.....	7,977	859	10.8	86	1.1	772	9.7
Not in labor force.....	60,141	3,515	5.8	378	0.6	3,137	5.2
Keeping home.....	31,131	2,178	7.0	22	0.1	2,158	6.9
Going to school.....	6,868	524	7.6	330	4.8	195	2.8
Other.....	22,144	813	3.7	26	0.1	786	3.5
<b>Annual family income</b>							
Under \$5,000.....	13,018	797	6.1	85	0.7	712	5.5
\$5,000 to \$7,499.....	11,562	712	6.2	89	0.8	643	5.6
\$7,500 to \$9,999.....	10,308	742	7.2	44	0.4	698	6.8
\$10,000 to \$12,499.....	12,079	1,089	9.0	54	0.4	1,035	8.6
\$12,500 to \$14,999.....	10,509	1,028	9.8	39	0.4	988	9.4
\$15,000 to \$17,499.....	10,353	1,253	12.1	81	0.8	1,192	11.5
\$17,500 to \$19,999.....	9,422	1,255	13.3	53	0.6	1,202	12.8
\$20,000 to \$24,999.....	17,431	2,625	15.1	116	0.7	2,509	14.4
\$25,000 to \$29,999.....	15,090	2,503	16.6	106	0.7	2,397	15.9
\$30,000 to \$34,999.....	13,839	2,505	18.1	110	0.8	2,395	17.3
\$35,000 to \$39,999.....	10,287	1,913	18.7	78	0.7	1,843	17.9
\$40,000 to \$49,999.....	12,643	2,626	20.8	103	0.8	2,522	19.9
\$50,000 to \$74,999.....	11,991	2,543	21.2	123	1.0	2,420	20.2
\$75,000 or more.....	5,112	1,011	19.8	46	0.9	963	18.8
Not reported.....	6,951	695	7.8	32	0.4	664	7.4

<sup>1</sup> Persons 17 years of age and over on the date of the survey.

<sup>2</sup> Data are for the year ending in May 1984.

<sup>3</sup> On the date of the survey, includes part-time undergraduates and graduate students who indicated that they were also adult education participants.

<sup>4</sup> Less than .05 percent.

NOTE.—Data are based upon a sample survey of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Participation in Adult Education*, May 1984. (This table was prepared June 1986.)

Table 319.—Courses<sup>1</sup> taken by participants in adult education,<sup>2</sup> by sex, age, and field of study: Year ending May 1984

[In thousands]

Field of study	Total	Courses taken by men							Courses taken by women						
		Total	17 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over	Total	17 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Total courses.....</b>	<b>40,752</b>	<b>17,770</b>	<b>2,574</b>	<b>6,509</b>	<b>4,622</b>	<b>2,324</b>	<b>1,326</b>	<b>413</b>	<b>22,981</b>	<b>3,563</b>	<b>7,907</b>	<b>5,900</b>	<b>2,984</b>	<b>1,796</b>	<b>822</b>
Agriculture and renewable natural resources.....	430	321	28	118	91	40	35	7	109	20	28	36	15	8	2
Arts, visual and performing.....	2,149	509	122	177	78	45	48	43	1,640	232	534	354	194	194	132
Business.....	8,981	4,329	507	1,601	1,175	643	352	52	4,652	772	1,616	1,360	631	238	33
Education.....	2,675	863	148	282	246	126	38	25	2,011	298	742	540	293	106	31
Engineering and engineering technology.....	5,899	4,030	552	1,613	1,059	547	227	32	1,869	243	572	567	324	138	25
Health care and health sciences.....	5,101	1,648	103	543	543	227	194	38	3,453	461	1,277	859	453	349	55
Health education.....	1,204	346	32	161	99	32	16	6	858	101	319	238	125	45	30
Home economics.....	947	66	5	26	17	7	11	0	882	60	285	228	128	99	82
Personal services occupations.....	842	302	59	123	73	22	20	6	540	97	204	165	36	33	5
Language, linguistics, and literature.....	2,167	828	198	327	167	52	54	30	1,338	292	468	239	157	107	76
Life sciences, physical sciences, and mathematical sciences.....	1,331	609	183	246	89	42	33	16	722	169	275	198	42	27	12
Philosophy, religion, and psychology.....	2,703	1,028	125	292	254	188	105	64	1,674	234	481	407	230	162	160
Physical education and leisure.....	2,324	684	148	241	126	75	45	48	1,640	293	600	329	162	158	97
Social sciences and social studies.....	2,060	1,230	180	448	336	152	91	23	850	142	278	199	131	58	41
Interdisciplinary studies.....	357	143	37	33	43	22	6	2	214	49	53	68	30	11	4
Unable to classify.....	1,362	833	148	278	228	105	54	20	529	98	174	113	45	62	37

<sup>1</sup> The total number of adult education courses taken between May 1983 and May 1984 was 43,192,000. However, only 40,752,000 course descriptions were obtained through the survey, which asked for information on up to 4 courses (the most recent courses if more than 4 courses were taken during the year). Five percent of participants took more than 4 courses during the year.

<sup>2</sup> Includes part-time undergraduates and graduate students who indicated they were also adult education participants.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education statistics, "Current Population Survey, May 1984, Survey of Adult Education," conducted by the Bureau of the Census, unpublished tabulations. (This table was prepared June 1986.)

**Table 320.—Courses<sup>1</sup> taken by participants in adult education,<sup>2</sup> by sex, age, and reason for taking course: Year ending May 1984**

[In thousands]

Main reason for taking course	Total	Courses taken by men							Courses taken by women						
		Total	17 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over	Total	17 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total courses.....	40,752	17,770	2,574	6,509	4,622	2,324	1,328	413	22,981	3,563	7,907	5,900	2,984	1,786	622
Job-related reason.....	26,159	12,807	1,394	4,774	3,585	1,820	908	126	13,552	1,854	4,880	3,689	1,930	861	138
To get new job.....	4,802	1,824	502	790	307	154	56	15	2,978	886	1,033	748	264	59	9
In current occupation.....	984	395	40	218	77	37	19	4	569	126	196	165	54	24	1
In new occupation.....	3,818	1,428	462	571	230	117	37	11	2,390	738	836	583	210	34	6
To advance in job.....	19,703	10,004	835	3,665	3,035	1,567	797	105	9,699	880	3,495	2,934	1,537	727	125
Other job-related reason.....	1,654	779	58	319	244	99	55	5	875	108	352	207	128	76	5
Non-job-related reason.....	14,447	5,117	1,170	1,720	1,024	495	420	287	9,330	1,676	3,014	1,987	1,050	919	684
American citizenship.....	34	19	10	7	0	0	2	0	15	2	5	2	4	0	2
General education.....	3,358	1,447	595	503	206	74	43	27	1,911	673	633	317	150	85	52
Volunteer work.....	520	208	30	60	61	21	25	11	312	21	98	65	53	48	29
Personal or social.....	10,230	3,298	492	1,093	734	392	342	246	6,932	949	2,202	1,579	832	760	590
Other non-job-related.....	306	146	44	59	23	9	8	3	160	31	76	24	10	9	10
Not reported.....	145	48	9	15	13	10	0	0	99	32	13	24	15	15	0

<sup>1</sup> The total number of adult education courses taken between May 1983 and May 1984 was 43,192,000. However, only 40,752,000 course descriptions were obtained through the survey, which asked for information on up to 4 courses (the most recent courses if more than 4 courses were taken during the year). Five percent of participants took more than 4 courses during the year.

<sup>2</sup> Includes part-time undergraduate and graduate students who indicated they were adult education participants.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Trends in Adult Education, 1980-1984*. (This table was prepared June 1986.)

**Table 321.—Participants in adult basic and secondary education programs, by sex, level of enrollment, and State:  
Fiscal years 1980, 1984 and 1988**

State or other area	1980				1984			1988		
	Total	Level of enrollment			Total	Level of enrollment		Total	Level of enrollment	
		Adult basic education	Adult secondary education	Ungraded		Adult basic education	Adult secondary education		Adult basic education	Adult secondary education
1	2	3	4	5	6	7	8	9	10	11
<b>United States</b> .....	<b>2,018,906</b>	<b>915,936</b>	<b>531,603</b>	<b>571,307</b>	<b>2,559,550</b>	<b>1,910,003</b>	<b>649,547</b>	<b>3,007,169</b>	<b>1,951,089</b>	<b>1,056,080</b>
Alabama.....	51,599	36,726	12,372	2,501	44,126	28,034	16,092	37,154	24,430	12,724
Alaska.....	5,667	2,200	2,188	1,279	11,655	6,649	5,206	5,519	4,479	1,040
Arizona.....	9,996	9,968	22	6	15,836	11,480	4,356	27,122	20,102	7,020
Arkansas.....	8,583	7,308	1,275	—	9,000	7,603	1,397	24,182	10,001	14,181
California.....	267,625	60,395	—	207,240	632,938	632,938	—	845,023	603,243	241,780
Colorado.....	9,381	4,295	2,644	2,442	9,300	7,910	1,390	10,536	8,527	2,009
Connecticut.....	21,889	8,882	4,805	8,202	41,064	21,078	19,986	35,862	19,238	16,624
Delaware.....	1,797	1,110	503	184	1,659	1,263	1,595	2,259	1,910	349
District of Columbia.....	25,214	4,928	6,502	13,784	16,192	9,981	6,211	17,569	11,144	6,425
Florida.....	487,162	100,958	184,568	181,638	585,053	351,032	234,021	404,277	203,856	200,421
Georgia.....	50,820	26,734	17,008	7,078	54,257	36,998	17,261	47,344	32,408	14,938
Hawaii.....	16,457	16,457	—	—	22,219	22,219	—	48,900	28,892	20,208
Idaho.....	12,851	8,915	3,010	926	11,086	8,179	2,907	12,284	9,342	2,942
Illinois.....	78,456	59,314	17,142	—	59,728	50,080	8,648	77,828	61,477	16,151
Indiana.....	20,982	18,127	2,660	95	82,819	24,011	38,608	32,128	28,215	3,913
Iowa.....	25,951	16,928	5,153	3,770	23,319	18,118	5,201	32,623	26,840	5,783
Kansas.....	14,405	3,667	7,436	3,282	10,845	6,668	4,179	8,353	6,916	1,437
Kentucky.....	27,800	8,147	4,735	16,918	23,192	17,459	5,733	30,835	23,051	7,584
Louisiana.....	16,046	12,608	2,485	953	45,896	15,357	30,539	41,103	20,966	20,137
Maine.....	5,327	3,029	942	1,356	5,369	2,196	3,171	12,822	4,612	8,210
Maryland.....	34,572	23,421	8,043	5,106	29,732	26,555	3,177	31,659	28,629	2,830
Massachusetts.....	20,420	10,241	5,044	5,135	29,262	20,369	8,893	33,035	25,975	7,060
Michigan.....	40,973	29,945	—	11,028	90,561	60,561	—	160,797	47,334	113,463
Minnesota.....	10,828	8,627	877	1,322	23,912	12,810	11,302	31,148	22,008	9,140
Mississippi.....	14,317	10,340	2,918	1,059	13,533	9,279	4,254	16,520	11,558	4,934
Missouri.....	33,292	27,206	3,732	2,354	26,245	21,521	4,724	29,815	25,785	4,030
Montana.....	3,525	1,795	978	752	3,262	2,037	1,225	5,793	2,887	2,906
Nebraska.....	7,514	5,152	2,362	—	9,135	7,845	1,290	5,570	5,102	468
Nevada.....	3,063	845	82	2,136	2,381	2,381	—	2,872	2,872	0
New Hampshire.....	4,844	2,657	1,625	562	5,349	3,546	1,803	5,332	3,869	1,463
New Jersey.....	35,770	17,152	6,790	11,828	42,641	35,101	7,540	43,522	31,363	12,159
New Mexico.....	13,102	3,590	5,147	4,365	18,157	7,145	9,012	27,374	12,234	15,140
New York.....	94,574	57,217	20,002	17,355	78,195	59,238	18,957	122,942	96,732	26,210
North Carolina.....	84,252	33,854	46,679	3,719	49,800	49,800	—	101,401	56,616	44,585
North Dakota.....	2,810	1,983	538	309	1,741	1,221	520	3,300	2,708	592
Ohio.....	50,056	42,421	7,635	—	51,817	43,388	8,229	72,054	58,129	13,925
Oklahoma.....	14,701	6,983	5,697	2,021	14,801	12,951	1,850	18,629	15,418	3,211
Oregon.....	27,645	10,690	12,594	4,361	18,381	17,903	7,478	29,231	17,622	11,609
Pennsylvania.....	29,477	19,246	6,436	3,795	27,967	21,527	6,460	39,555	31,981	7,574
Rhode Island.....	5,844	2,266	1,357	2,221	6,315	4,508	1,807	7,110	4,876	2,234
South Carolina.....	69,659	27,959	35,165	6,535	71,436	32,846	38,590	74,614	36,714	37,900
South Dakota.....	4,067	2,060	1,109	878	5,279	4,070	1,209	4,359	3,485	874
Tennessee.....	26,268	17,079	3,244	5,945	28,199	24,452	1,747	28,320	23,396	4,922
Texas.....	157,349	94,245	51,126	11,973	155,932	84,271	71,661	216,931	133,461	83,470
Utah.....	16,541	3,756	14,785	—	21,895	6,325	15,370	20,025	3,768	16,259
Vermont.....	4,583	3,990	—	593	5,172	4,646	526	4,448	3,979	469
Virginia.....	21,525	10,480	3,804	7,241	23,388	21,787	1,621	17,903	17,218	685
Washington.....	16,266	7,245	3,694	5,147	18,460	15,299	3,151	24,634	21,335	3,499
West Virginia.....	14,628	9,743	3,672	1,213	15,818	10,708	4,912	20,738	13,758	6,980
Wisconsin.....	16,158	14,185	1,973	—	17,578	12,124	5,454	52,362	43,492	8,870
Wyoming.....	2,457	857	905	695	3,246	1,960	1,286	3,655	1,942	1,713
<b>Outlying areas</b> .....										
American Samoa.....	313	252	61	—	—	—	—	—	—	—
Northern Marianas.....	—	—	—	—	309	1,247	1,62	175	1,155	20
Guam.....	1,346	612	471	263	1,712	1,702	1,010	1,444	1,398	1,046
Puerto Rico.....	30,164	17,844	9,010	3,310	31,014	26,342	4,672	29,031	19,843	8,188
Trust Territory of the Pacific.....	3,753	2,138	899	916	—	—	—	—	—	—
Virgin Islands.....	3,500	1,002	859	1,639	3,959	1,883	2,076	2,611	857	1,754

<sup>1</sup> Estimated.  
—Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Women and Minority Groups Make Up Largest Segment of Adult Basic and Secondary Education Programs"; and Office of Vocational and Adult Education, unpublished data. (This table was prepared January 1990.)

**Table 322.—Enrollment, mean charges, and mean number of hours required to complete selected programs in noncollegiate noncorrespondence postsecondary schools offering occupational programs, by control of school: United States and outlying areas, 1980-81**

Selected program offerings	Enrollment <sup>1</sup>			Mean charges			Mean number of hours to complete program		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
1	2	3	4	5	6	7	8	9	10
All programs <sup>2</sup> .....	1,687,097	451,430	1,235,667	\$1,808	8593	\$2,200	1,107	1,324	981
<b>Agri-business</b>									
Agri-mechanics.....	513	513	—	778	778	—	1,719	1,719	—
Agri-production.....	1,168	1,168	—	722	722	—	1,548	1,548	—
Agri-products.....	874	874	—	924	924	—	2,103	2,103	—
Agri-supplies/services.....	2,297	373	1,924	1,778	379	3,832	880	974	742
Horticulture.....	2,039	1,802	237	704	617	4,758	1,361	1,352	1,780
<b>Business/office</b>									
Accounting.....	40,748	13,687	26,859	2,254	488	2,893	1,077	1,236	1,019
Business administration.....	22,889	4,690	18,199	3,307	395	3,913	1,189	1,148	1,198
Clerk.....	24,378	11,358	13,020	1,284	507	1,870	843	924	783
Computer programmer.....	34,789	2,450	32,319	3,113	551	3,473	775	1,276	704
Data processing, not elsewhere classified..	32,905	11,493	21,412	2,499	695	4,119	1,081	1,139	991
Office occupations, not elsewhere classified.....	23,025	14,508	8,519	1,284	413	2,222	1,022	1,281	742
Secretary.....	108,478	23,387	83,089	2,463	541	2,803	1,034	998	1,043
Typing.....	10,539	2,292	8,247	564	94	719	398	408	394
<b>Health</b>									
Dental assistant.....	9,047	2,110	6,937	1,914	747	2,590	787	1,112	568
Medical assistant (office).....	20,950	1,762	19,188	2,326	620	2,787	788	1,048	680
Nurse (practical).....	36,181	26,418	9,765	892	758	1,998	1,416	1,449	1,148
Radiology technician.....	6,018	986	5,032	758	916	705	3,244	2,779	3,397
<b>Home economics</b>									
Child care.....	2,244	2,194	50	258	247	325	1,108	1,003	1,900
Clothing management, product, and services.....	3,378	1,824	1,554	1,365	292	1,974	717	1,038	535
Dietician.....	1,240	806	334	522	454	665	1,342	1,253	1,529
Tailoring.....	2,048	567	1,479	2,099	321	2,512	868	1,289	773
<b>Marketing/distribution</b>									
Apparel.....	45,778	1,048	44,728	3,087	402	3,456	943	1,355	887
Banking.....	11,028	1,055	9,973	967	788	1,103	475	858	165
Entertainment services.....	35,122	308	34,814	714	808	709	232	1,834	134
Insurance sales.....	11,149	92	11,057	202	352	188	95	578	51
Merchandising.....	5,653	2,108	3,545	1,588	849	2,216	1,061	1,490	872
Real estate.....	100,745	891	99,854	202	238	201	58	419	53
Recreation/tourism.....	28,320	233	28,087	1,787	361	1,846	401	451	399
<b>Technical</b>									
Automotive technologies.....	9,571	1,430	8,141	2,756	993	4,541	1,438	1,503	1,369
Civil technologies.....	8,878	3,154	3,724	2,791	709	3,823	1,369	1,938	1,088
Communications technologies.....	15,924	1,951	13,973	2,460	1,199	2,848	937	1,848	657
Electronics technologies.....	45,152	8,996	36,156	2,600	697	4,870	1,810	1,708	1,497
Performing arts (music, dance, and drama).....	20,989	113	20,856	2,141	88	2,412	752	275	815
Pilot.....	48,732	202	48,530	7,898	7,900	7,898	—	—	—
<b>Trades/industry</b>									
Auto mechanic.....	28,666	18,914	9,752	1,070	607	2,841	1,466	1,561	1,101
Commercial art occupations.....	19,956	3,155	16,801	3,166	943	4,082	1,259	1,640	1,102
Cosmetology.....	153,381	8,622	144,559	1,457	483	1,525	1,342	1,297	1,346
Drafting.....	10,937	9,215	6,722	1,489	518	3,102	1,510	1,852	1,275
Maritime occupations.....	15,884	3,051	12,813	909	662	971	458	979	328
Truck driver.....	34,800	1,845	32,955	1,357	489	1,497	187	518	134
Welding.....	48,804	23,052	23,752	925	455	1,527	758	1,078	347

<sup>1</sup> Includes proprietary (operated for profit) schools, independent (nonprofit) schools, and schools operated by religious groups.

<sup>2</sup> Includes programs not shown separately below.

—Data not available.

June 30, 1981.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Postsecondary Schools with Occupational Programs" survey. (This table was prepared June 1988.)

NOTE.—Includes students enrolled at any time during the 12-month period ending

**Table 323.--Number of noncollegiate institutions offering postsecondary education, by control and State: 1988-89 and 1989-90**

State or other area	1988-89					1989-90				
	Total	Public	Private			Total	Public	Private		
			Total	Nonprofit	Proprietary			Total	Nonprofit	Proprietary
1	2	3	4	5	6	7	8	9	10	11
<b>United States</b> .....	<b>7,624</b>	<b>587</b>	<b>7,237</b>	<b>1,434</b>	<b>5,603</b>	<b>7,071</b>	<b>557</b>	<b>6,514</b>	<b>1,206</b>	<b>5,228</b>
Alabama.....	78	5	73	14	59	72	6	66	11	55
Alaska.....	54	7	47	10	37	40	5	35	8	27
Arizona.....	201	4	197	18	181	178	4	172	13	159
Arkansas.....	122	24	98	15	83	109	23	86	15	71
California.....	1,047	41	1,006	212	794	916	37	879	187	692
Colorado.....	129	7	122	18	104	119	7	112	15	97
Connecticut.....	133	4	129	29	100	122	4	118	25	93
Delaware.....	22	1	21	2	19	21	1	20	2	18
District of Columbia.....	33	1	32	11	21	31	1	30	12	18
Florida.....	355	45	310	82	248	320	38	282	60	222
Georgia.....	141	21	120	21	99	137	24	113	19	94
Hawaii.....	39	2	37	7	30	35	2	33	5	28
Idaho.....	39	1	38	4	34	39	1	38	4	34
Illinois.....	404	14	390	95	295	359	11	348	80	268
Indiana.....	145	11	134	18	118	135	9	126	14	112
Iowa.....	85	1	84	21	63	77	2	75	19	56
Kansas.....	82	16	66	16	50	76	16	60	13	47
Kentucky.....	133	15	118	13	105	131	15	116	12	104
Louisiana.....	206	53	153	13	140	196	52	144	7	137
Maine.....	27	1	26	10	16	22	1	21	8	13
Maryland.....	198	1	197	24	173	180	1	179	23	156
Massachusetts.....	201	18	183	63	120	177	18	159	55	104
Michigan.....	341	9	332	64	268	314	5	309	54	255
Minnesota.....	134	37	97	23	74	122	32	90	24	66
Mississippi.....	54	—	54	4	50	48	—	48	4	44
Missouri.....	226	28	198	35	163	203	24	179	34	145
Montana.....	46	5	41	9	32	45	5	40	9	31
Nebraska.....	54	1	53	9	44	48	—	48	8	40
Nevada.....	64	—	64	1	63	55	—	55	—	55
New Hampshire.....	33	—	33	5	28	28	—	28	4	24
New Jersey.....	222	5	217	52	165	192	7	185	48	137
New Mexico.....	38	3	35	5	30	39	3	36	5	31
New York.....	415	14	401	133	268	356	15	341	118	223
North Carolina.....	73	8	65	9	56	72	8	64	8	56
North Dakota.....	23	1	22	8	14	21	—	21	7	14
Ohio.....	327	36	291	67	224	310	38	272	61	211
Oklahoma.....	85	16	69	3	66	90	21	69	3	66
Oregon.....	137	1	136	6	130	113	1	112	4	108
Pennsylvania.....	410	11	399	123	276	366	13	353	119	234
Rhode Island.....	33	—	33	4	29	28	—	28	4	24
South Carolina.....	64	4	60	7	53	62	2	60	8	52
South Dakota.....	22	4	18	8	10	21	4	17	8	9
Tennessee.....	141	44	97	16	78	127	38	89	18	71
Texas.....	421	9	412	45	367	397	7	390	41	349
Utah.....	58	7	51	3	48	40	6	34	2	32
Vermont.....	13	3	10	4	6	11	3	8	3	5
Virginia.....	174	18	156	32	124	165	17	148	28	120
Washington.....	160	6	154	25	129	143	6	137	21	116
West Virginia.....	56	18	38	11	27	52	19	33	9	24
Wisconsin.....	111	4	107	27	80	99	4	95	26	69
Wyoming.....	15	2	13	1	12	14	1	13	1	12
<b>Outlying areas<sup>1</sup></b> .....	<b>134</b>	<b>6</b>	<b>128</b>	<b>23</b>	<b>105</b>	<b>107</b>	<b>6</b>	<b>101</b>	<b>20</b>	<b>81</b>
American Samoa.....	—	—	—	—	—	—	—	—	—	—
Guam.....	1	—	1	—	1	1	—	1	—	1
Northern Marianas.....	—	—	—	—	—	—	—	—	—	—
Palau.....	—	—	—	—	—	—	—	—	—	—
Puerto Rico.....	133	6	127	20	104	106	6	100	20	80
Virgin Islands.....	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> Excludes Federated States of Micronesia.  
—Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Institutional Characteristics" surveys. (This table was prepared May 1990.)

## CHAPTER 4

# Federal Programs for Education and Related Activities

This chapter provides a summary of Federal funds for education to help describe the magnitude of the Federal fiscal effort and give some indication of the scope and variety of the education programs. Data in this chapter reflect outlays and obligations of Federal agencies. These tabulations differ from Federal receipts reported in other chapters because of numerous variations in the data collection systems. Federal appropriations are not necessarily spent by recipient institutions in the same year they are appropriated. In some cases, institutions cannot identify the source of Federal revenues because they flow through State agencies. Some types of revenues, such as tuition and fees, are reported as revenues from students even though they may be supported by Federal student aid programs. Some institutions that receive Federal education funds are not included in regular surveys conducted by the National Center for Education Statistics. Thus, the revenue data tabulated in this chapter are not comparable to figures reported in other chapters. Readers should be careful about comparing data on obligations shown on some tables with data on outlays appearing on others.

A capsule view of the history of Federal education activities is provided in the following list of selected legislation:

**1787 *Northwest Ordinance*** authorized land grants for the establishment of educational institutions.

**1802** An act fixing the military peace establishment of the United States established the U.S. Military Academy. (The U.S. Naval Academy was established in 1845 by the Secretary of the Navy.)

**1862 *First Morrill Act*** authorized public land grants to the States for the establishment and maintenance of agricultural and mechanical colleges.

**1867 *Department of Education Act*** authorized the establishment of the Department of Education.\*

\* The Department of Education as established in 1867 was later known as the Office of Education. In 1980, under P.L. 96-88, it became a cabinet-level department. Therefore, for purposes of consistency, it is referred to as the "Department of Education"

**1876 *Appropriation Act, Department of the Treasury*** established the U.S. Coast Guard Academy.

**1890 *Second Morrill Act*** provided for money grants for support of instruction in the agricultural and mechanical colleges.

**1911 *State Marine School Act*** authorized Federal funds to be used for the benefit of any nautical school in any of 11 specified State seaport cities.

**1917 *Smith-Hughes Act*** provided for grants to States for support of vocational education.

**1918 *Vocational Rehabilitation Act*** provided for grants for rehabilitation through training of World War I veterans.

**1919** An act to provide for further educational facilities authorized the sale by the Federal Government of surplus machine tools to educational institutions at 15 percent of acquisition cost.

**1920 *Smith-Bankhead Act*** authorized grants to States for vocational rehabilitation programs.

**1935 *Bankhead-Jones Act*** (Public Law 74-182) authorized grants to States for agricultural experiment stations.

***Agricultural Adjustment Act*** (Public Law 74-320) authorized 30 percent of the annual customs receipts to be used to encourage the exportation and domestic consumption of agricultural commodities. Commodities purchased under this authorization began to be used in school lunch programs in 1936. The National School Lunch Act of 1946 continued and expanded this assistance.

**1936** An act to further the development and maintenance of an adequate and well-balanced American Merchant Marine (Public Law 84-415) established the U.S. Merchant Marine Academy.

even in those tables covering years when it was officially the Office of Education.

- 1937 National Cancer Institute Act** established the Public Health Service fellowship program.
- 1941 Amendment to Lanham Act of 1940** authorized Federal aid for construction, maintenance, and operation of schools in federally impacted areas. Such assistance was continued under Public Law 815 and Public Law 874, 81st Congress, in 1950.
- 1943 Vocational Rehabilitation Act** (Public Law 78-16) provided assistance to disabled veterans.
- School Lunch Indemnity Plan* (Public Law 78-129) provided funds for local lunch food purchases.
- 1944 Servicemen's Readjustment Act** (Public Law 78-346) provided assistance for the education of veterans.
- Surplus Property Act* (Public Law 78-457) authorized transfer of surplus property to educational institutions.
- 1946 National School Lunch Act** (Public Law 79-396) authorized assistance through grants-in-aid and other means to States to assist in providing adequate foods and facilities for the establishment, maintenance, operation, and expansion of nonprofit school lunch programs.
- George-Barden Act* (Public Law 80-402) expanded Federal support of vocational education.
- 1948 United States Information and Educational Exchange Act** (Public Law 80-402) provided for the interchange of persons, knowledge, and skills between the United States and other countries.
- 1949 Federal Property and Administrative Services Act** (Public Law 81-152) provided for donation of surplus property to educational institutions and for other public purposes.
- 1950 Financial assistance for local educational agencies affected by Federal activities** (Public Law 81-815 and P.L. 81-874) provided assistance for construction (Public Law 815) and operation (Public Law 874) of schools in federally affected areas. Housing Act (Public Law 81-475) authorized loans for construction of college housing facilities.
- 1954 An act for the establishment of the United States Air Force Academy and other purposes** (Public Law 83-325) established the U.S. Air Force Academy.
- Cooperative Research Act* (Public Law 83-531) authorized cooperative arrangements with universities, colleges, and State educational agencies for educational research.
- National Advisory Committee on Education Act* (Public Law 83-532) established a National Advisory Committee on Education to recommend needed studies of national concern in the field of education and to propose appropriate action indicated by such studies.
- School Milk Program Act* (Public Law 83-597) provided funds for purchase of milk for school lunch programs.
- 1956 Library Services Act** (Public Law 84-911) provided grants to States for extension and improvement of rural public library services.
- 1957 Practical Nurse Training Act** (Public Law 84-911) provided grants to States for practical nurse training.
- 1958 National Defense Education Act** (Public Law 85-865) provided assistance to State and local school systems for strengthening instruction in science, mathematics, modern foreign languages, and other critical subjects; improvement of State statistical services; guidance, counseling, and testing services and training institutes; higher education student loans and fellowships; foreign language study and training provided by colleges and universities; experimentation and dissemination of information on more effective utilization of television, motion pictures, and related media for educational purposes; and vocational education for technical occupations necessary to the national defense.
- Education of Mentally Retarded Children Act* (Public Law 85-926) authorized Federal assistance for training teachers of the handicapped.
- Captioned Films for the Deaf Act* (Public Law 85-905) authorized a loan service of captioned films for the deaf.
- 1961 Area Redevelopment Act** (Public Law 87-27) included provisions for training or retraining of persons in redevelopment areas.
- 1962 Manpower Development and Training Act** (Public Law 87-415) provided training in new and improved skills for the unemployed and underemployed.
- Communications Act of 1934, Amendment* (Public Law 87-447) provided grants for the

construction of educational television broadcasting facilities.

*Migration and Refugee Assistance Act of 1962* (Public Law 87-510) authorized loans, advances, and grants for education and training of refugees.

**1963** *Health Professions Educational Assistance Act* (Public Law 88-129) provided funds to expand teaching facilities and for loans to students in the health professions.

*Vocational Education Act of 1963* (Public Law 88-210) increased Federal support of vocational education schools; vocational work-study programs; and research, training, and demonstrations in vocational education.

*Higher Education Facilities Act of 1963* (Public Law 88-204) authorized grants and loans for classrooms, libraries, and laboratories in public community colleges and technical institutes, as well as undergraduate and graduate facilities in other institutions of higher education.

**1964** *Civil Rights Act of 1964* (Public Law 88-352) authorized the Commissioner of Education to arrange for support for institutions of higher education and school districts to provide in-service programs for assisting instructional staff in dealing with problems caused by desegregation.

*Economic Opportunity Act of 1964* (Public Law 88-452) authorized grants for college work-study programs for students from low-income families; established a Job Corps program and authorized support for work-training programs to provide education and vocational training and work experience opportunities in welfare programs; authorized support of education and training activities and of community action programs, including Head Start, Follow Through, and Upward Bound; and authorized the establishment of Volunteers in Service to America (VISTA).

**1965** *Elementary and Secondary Education Act* (Public Law 89-10) authorized grants for elementary and secondary school programs for children of low-income families; school library resources, textbooks, and other instructional materials for school children; supplementary educational centers and services; strengthening State education agencies; and educational research and research training.

*Health Professions Educational Assistance Amendments* (Public Law 89-290) authorized

scholarships to aid needy students in the health professions.

*Higher Education Act of 1965* (Public Law 89-329) provided grants for university community service programs, college library assistance, library training and research, strengthening developing institutions, teacher training programs, and undergraduate instructional equipment. Authorized insured student loans, established a National Teacher Corps, and provided for graduate teacher training fellowships.

*Medical Library Assistance Act* (Public Law 89-291) provided assistance for construction and improvement of health sciences libraries.

*National Foundation on the Arts and the Humanities Act* (Public Law 89-209) authorized grants and loans for projects in the creative and performing arts, and for research, training, and scholarly publications in the humanities.

*National Technical Institute for the Deaf Act* (Public Law 89-36) provided for the establishment, construction, equipping, and operation of a residential school for postsecondary education and technical training of the deaf.

*National Vocational Student Loan Insurance Act* (P.L. 89-287) encouraged State and non-profit private institutions and organizations to establish adequate loan insurance programs to assist students to attend postsecondary business, trade, technical, and other vocational schools.

*Disaster Relief Act* (Public Law 89-313) provided for assistance to local education agencies to help meet exceptional costs resulting from a major disaster.

**1966** *International Education Act* (Public Law 89-698) provided grants to institutions of higher education for the establishment, strengthening, and operation of centers for research and training in international studies and the international aspects of other fields of study.

*National Sea Grant College and Program Act* (Public Law 89-688) authorized the establishment and operation of sea grant colleges and programs by initiating and supporting programs of education and research in the various fields relating to the development of marine resources.

*Adult Education Act* (Public Law 89-750) authorized grants to States for the encouragement and expansion of educational programs for adults, including training of teachers of adults and demonstrations in adult education (previously part of Economic Opportunity Act of 1964).

*Model Secondary School for the Deaf Act* (Public Law 89-694) authorized the establishment and operation, by Gallaudet College, of a model secondary school for the deaf.

*Elementary and Secondary Education Amendments of 1966* (Public Law 89-750) in addition to modifying existing programs, authorized grants to assist States in the initiation, expansion, and improvement of programs and projects for the education of handicapped children.

**1967** *Education Professions Development Act* (Public Law 90-35) amended the Higher Education Act of 1965 for the purpose of improving the quality of teaching and to help meet critical shortages of adequately trained educational personnel.

*Public Broadcasting Act of 1967* (Public Law 90-129) established a Corporation for Public Broadcasting to assume major responsibility in channeling Federal funds to noncommercial radio and television stations, program production groups, and ETV networks; conduct research, demonstration, or training in matters related to noncommercial broadcasting; and award grants for construction of educational radio and television facilities.

**1968** *Elementary and Secondary Education Amendments of 1967* (Public Law 90-247) modified existing programs, authorized support of regional centers for education of handicapped children, model centers and services for deaf-blind children, recruitment of personnel and dissemination of information on education of the handicapped; technical assistance in education to rural areas; support of dropout prevention projects; and support of bilingual education programs.

*Handicapped Children's Early Education Assistance Act* (Public Law 90-538) authorized preschool and early education programs for handicapped children.

*Vocational Education Amendments of 1968* (Public Law 90-576) modified existing programs and provided for a National Advisory Council on Vocational Education, and collec-

tion and dissemination of information for programs administered by the Commissioner of Education.

*Higher Education Amendments of 1968* (Public Law 90-575) authorized new programs to assist disadvantaged college students through special counseling and summer tutorial programs, and programs to assist colleges to combine resources of cooperative programs and to expand programs which provide clinical experiences to law students.

**1970** *Elementary and Secondary Education Assistance Programs, Extension* (Public Law 91-230) authorized comprehensive planning and evaluation; grants to State and local education agencies; provided for the establishment of a National Commission on School Finance.

*National Commission on Libraries and Information Services Act* (Public Law 91-345) established a National Commission on Libraries and Information Science to effectively utilize the Nation's educational resources.

*Office of Education Appropriation Act* (Public Law 91-380) provided emergency school assistance to desegregating local education agencies.

*Environmental Education Act* (Public Law 91-516) established an Office of Environmental Education to develop curriculum and initiate and maintain environmental education programs at the elementary-secondary levels; disseminate information; provide training programs for teachers and other educational, public, community, labor, and industrial leaders and employees; provide community education programs; and distribute material dealing with environment and ecology.

*Drug Abuse Education Act of 1970* (Public Law 91-527) provided for development, demonstration, and evaluation of curriculums on the problems of drug abuse.

**1971** *Comprehensive Health Manpower Training Act of 1971* (Public Law 92-257) amended Title VII of the Public Health Service Act, increasing and expanding provisions for health manpower training and training facilities.

*Nurse Training Act of 1971* (Public Law 92-158) amended Title VIII, Nurse Training, of the Public Health Service Act, increasing and expanding provisions for nurse training facilities.

**1972 Drug Abuse Office and Treatment Act of 1972** (Public Law 92-255) established a Special Action Office for Drug Abuse Prevention to provide overall planning and policy for all Federal drug-abuse prevention functions; a National Advisory Council for Drug Abuse Prevention; community assistance grants for community mental health center for treatment and rehabilitation of persons with drug-abuse problems, and, in December 1974, a National Institute on Drug Abuse.

**Education Amendments of 1972** (Public Law 92-318) established the Education Division in the U.S. Department of Health, Education, and Welfare and the National Institute of Education; general aid for institutions of higher education; Federal matching grants for State student incentive grants; a National Commission on Financing Postsecondary Education; State Advisory Councils on Community Colleges; a Bureau of Occupational and Adult Education and State grants for the design, establishment, and conduct of post-secondary occupational education; and a bureau-level Office of Indian Education. Amended current Office of Education programs to increase their effectiveness and better meet special needs. Prohibited sex bias in admission to vocational, professional, and graduate schools, and public institutions of undergraduate higher education.

**1973 Older Americans Comprehensive Services Amendment of 1973** (Public Law 93-29) made available to older citizens comprehensive programs of health, education, and social services.

**Comprehensive Employment and Training Act of 1973** (Public Law 93-203) provided for opportunities for employment and training to unemployed and underemployed persons. Extended and expanded provisions in the Manpower Development and Training Act of 1962, Title I of the Economic Opportunity Act of 1962, Title I of the Economic Opportunity Act of 1964, and the Emergency Employment Act of 1971 as in effect prior to June 30, 1973.

**1974 Educational Amendments of 1974** (Public Law 93-380) provided for the consolidation of certain programs; and established a National Center for Education Statistics.

**Juvenile Justice and Delinquency Prevention Act of 1974** (Public Law 93-415) provided for technical assistance, staff training, central-

ized research, and resources to develop and implement programs to keep students in elementary and secondary schools; and established, in the Department of Justice, a National Institute for Juvenile Justice and Delinquency Prevention.

**1975 Indian Self-Determination and Education Assistance Act** (Public Law 93-638) provided for increased participation of Indians in the establishment and conduct of their education programs and services.

**Harry S. Truman Memorial Scholarship Act** (Public Law 93-642) established the Harry S. Truman Scholarship Foundation and created a perpetual education scholarship fund for young Americans to prepare and pursue careers in public service.

**Indochina Migration and Refugee Assistance Act of 1975** (Public Law 94-23) authorized funds to be used for education and training of aliens who have fled from Cambodia or Vietnam.

**Education of the Handicapped Act** (Public Law 94-142) provided that all handicapped children have available to them a free appropriate education designed to meet their unique needs.

**1976 Educational Broadcasting Facilities and Telecommunications Demonstration Act of 1976** (Public Law 94-309) established a telecommunications demonstration program to promote the development of nonbroadcast telecommunications facilities and services for the transmission, distribution, and delivery of health, education, and public or social service information.

**Education Amendments of 1976** (Public Law 94-482) extended and revised Federal programs for education assistance for higher education, vocational education, and a variety of other programs.

**1977 Youth Employment and Demonstration Projects Act of 1977** (Public Law 95-93) established a youth employment training program that includes, among other activities, promoting education-to-work transition, literacy training and bilingual training, and attainment of certificates of high school equivalency.

**1978 Career Education Incentive Act** (Public Law 95-207) authorized the establishment of a career education program for elementary and secondary schools.

*Tribally Controlled Community College Assistance Act* (Public Law 95-471) provided Federal funds for the operation and improvement of tribally controlled community colleges for Indian students.

*Education Amendments of 1978* (Public Law 95-561) established a comprehensive basic skills program aimed at improving pupil achievement (replaced the existing National Reading Improvement program); and established a community schools program to provide for the use of public buildings.

*Middle Income Student Assistance Act* (Public Law 95-566) modified the provisions for student financial assistance programs to allow middle income as well as low income students attending college or other postsecondary institutions to qualify for Federal education assistance.

**1979** *Department of Education Organization Act* (Public Law 96-88) established a Department of Education containing functions from the Education Division of the Department of Health, Education, and Welfare along with other selected education programs from H.E.W., the Department of Justice, Department of Labor, and the National Science Foundation.

**1980** *Asbestos School Hazard Protection and Control Act of 1980* (Public Law 96-270) established a program for inspection of schools for detection of hazardous asbestos materials and provided loans to assist educational agencies to contain or remove and replace such materials.

*Amendments to the Higher Education Act* (Public Law 96-374) provided for a new Commission on National Development in Postsecondary Education and a new Urban Grant University Program.

**1981** *Education Consolidation and Improvement Act of 1981* (Public Law 97-35) consolidated 42 programs into 7 programs to be funded under the elementary and secondary block grant authority.

**1983** *Student Loan Consolidation and Technical Amendments Act of 1983* (Public Law 98-79) established 8 percent interest rate for Guaranteed Student Loans and extended Family Contribution Schedule.

*Challenge Grant Amendments of 1983* (Public Law 98-95) amended Title III, Higher Education Act, and added authorization of Chal-

lenge Grant program. The Challenge Grant program provides funds to eligible institutions on a matching basis as incentive to seek alternative sources of funding.

*Education of Handicapped Act Amendments* (Public Law 98-199) added Architectural Barrier amendment and clarified participation of handicapped children in private schools.

*Education Consolidation and Improvement Act of 1981, Amendments* (Public Law 98-211) added technical amendments for Chapter 1, and provided for parental involvement and minor changes in other programs.

**1984** *Rehabilitation Amendments of 1984* (Public Law 98-221) revised and extended the Rehabilitation Act of 1973. Provides for the Helen Keller National Center for Deaf-Blind.

*Education for Economic Security Act* (Public Law 98-377) added new science and mathematics programs for elementary, secondary, and postsecondary education. The new programs include magnet schools, excellence in education, and equal access.

*Higher Education Act of 1965, Amendments* (Public Law 98-312) amended Title III of the Higher Education Act of 1965 by creating a new method of funding the Challenge Grant program. The act also increased the level of authorization for the Office of the Inspector General and extended the Allen J. Ellender Fellowship program through fiscal year 1989.

*Carl D. Perkins Vocational Education Act* (Public Law 98-524) continues Federal assistance for vocational education through fiscal year 1989. The act replaces the Vocational Education Act of 1963. It provides aid to the States to make vocational education programs accessible to all persons, including handicapped and disadvantaged, single parents and homemakers, and the incarcerated.

*Human Services Reauthorization Act* (Public Law 98-558) reauthorized the Head Start and Follow Through programs through fiscal year 1986. It also created a Carl D. Perkins scholarship program, a National Talented Teachers Fellowship program, a Federal Merit Scholarships program, and a Leadership in Educational Administration program.

**1985** *Montgomery GI Bill—Active Duty* (Public Law 98-525), brought about a new GI Bill for individuals who initially entered active military duty on or after July 1, 1985.

*Montgomery GI Bill—Selected Reserve* (Public Law 98-525), is an education program for members of the Selected Reserve (which includes the National Guard) who enlist, reenlist, or extend an enlistment after June 30, 1985, for a 6-year period.

**1986** *Education of the Deaf Act* (Public Law 99-371) places Gallaudet College and the National Technical Institute for the Deaf on a 5-year reauthorization cycle. Establishes an 18-month Commission to Study Deaf Education.

*Handicapped Children's Protection Act* (Public Law 99-372) allows parents of handicapped children to collect attorney's fees in cases brought under the Education of the Handicapped Act and provides that the Education of the Handicapped Act does not preempt other laws, such as Section 504 of the Rehabilitation Act.

*Reauthorization of the Education of the Handicapped Act, Amendments* (Public Law 99-457) reauthorizes for 3 years the discretionary programs under the Education of the Handicapped Act. Included are programs to provide demonstration projects for severely disabled individuals, research and technology activities, early childhood education, and a new State grant program to provide early intervention services for handicapped children from birth through age 2.

*Reauthorization of the Higher Education Act of 1965* (Public Law 99-498) reauthorizes for 5 years the Higher Education Act of 1965, as amended. Provides increases in maximum Pell Grant and student loan amounts, institutes a new agency to provide college construction funding, cuts incentives to lenders involved in the student aid programs and extends the authorization for the Office of Educational Research and Improvement.

*Reauthorization of the Rehabilitation Act* (Public Law 99-506) authorizes for 5 years programs to provide vocational rehabilitation for disabled persons. Includes increasing the State/Federal match requirements and establishes a new State grant program for supported employment.

*The Drug-Free Schools and Communities Act of 1986* (Public Law 99-570), part of the Anti-Drug Abuse Act of 1986, authorizes funding for fiscal years 1987-89. Establishes programs for drug abuse education and prevention, coordinated with related community ef-

forts and resources, through the use of Federal financial assistance.

**1987** *Higher Education Act Amendments of 1987* (Public Law 100-50) makes technical corrections, clarifications, or conforming amendments related to the enactment of the Higher Education Amendments of 1986.

**1988** *The Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988* (Public Law 100-297) reauthorizes through 1993 major elementary and secondary education programs including: Chapter 1, Chapter 2, Bilingual Education, Math-Science Education, Magnet Schools, Impact Aid, Indian Education, Adult Education, and other smaller education programs.

*White House Conference on Libraries* (Public Law 100-381) authorizes a White House Conference on Library and Information Services.

*Library Services and Construction Act* (Public Law 100-569) extends the authorization of Title V and Title VI of the Library Services and Construction Act for 1 year.

*The Handicapped Programs Technical Amendments Act of 1988* (Public Law 100-360) makes certain technical and conforming amendments to the Education of the Handicapped Act and the Rehabilitation Act of 1973.

*Technology-Related Assistance for Individuals with Disabilities Act of 1988* (Public Law 100-407) provides financial assistance to States to develop and implement consumer-responsive Statewide programs of technology-related assistance for persons of all ages with disabilities.

*The Omnibus Trade and Competitiveness Act of 1988* (Public Law 100-418) authorizes new and expanded education programs. Title VI of the Act, Education and Training for American Competitiveness, authorizes new programs in literacy, math-science, foreign language, vocational training, international education, technology training, and technology transfer.

*The Omnibus Drug Abuse Prevention Act of 1988* (Public Law 100-690) authorizes a new teacher training program under the Drug-Free Schools and Communities Act, an early childhood education program to be administered jointly by the Departments of Health and

Human Services and Education, and a pilot program for the children of alcoholics.

*Stewart B. McKinney Homeless Assistance Act* (Public Law 100-628) extends for 2 additional years programs providing assistance to the homeless, including literacy training for homeless adults and education for homeless youths.

*Tax Reform Technical Amendments* (Public Law 100-647) authorizes an Education Savings Bond for the purpose of postsecondary educational expenses. The bill grants tax exclusion for interest earned on regular series EE savings bonds.

**1989** *The Education and Training for a Competitive America Act of 1988* (Public Law 101-26) makes some technical corrections to the act.

*The Head Start Supplemental Authorization Act of 1989* (Public Law 101-120) amends the Head Start Act to increase the amount authorized to be appropriated for fiscal year 1990.

*The Domestic Volunteer Service Act Amendments of 1989* (Public Law 101-204) amends the Domestic Volunteer Service Act to extend through the fiscal year 1992 certain authorities relating to national volunteer anti-poverty programs.

*The Children with Disabilities Temporary Care Reauthorization Act of 1989* (Public Law 101-127) revises and extends the programs established in the Temporary Child Care for Handicapped Children and Crises Nurseries Act of 1986.

*The Drug-Free Schools and Communities Act Amendments of 1989* (Public Law 101-226) amends the Drug-Free Schools and Communities Act of 1986 to revise certain requirements relating to the provision of drug abuse education and prevention programs in elementary and secondary schools.

## Highlights

- Federal funding for education showed sizable growth between fiscal years 1965 and 1990, after adjustment for inflation. Particularly large increases occurred between 1965 and 1975. After a period of relative stability between 1975 and 1980, Federal funding for education declined approximately 14 percent between 1980 and 1985. From 1985 to 1990, Federal funding for education increased by 10 percent. (Table 324)

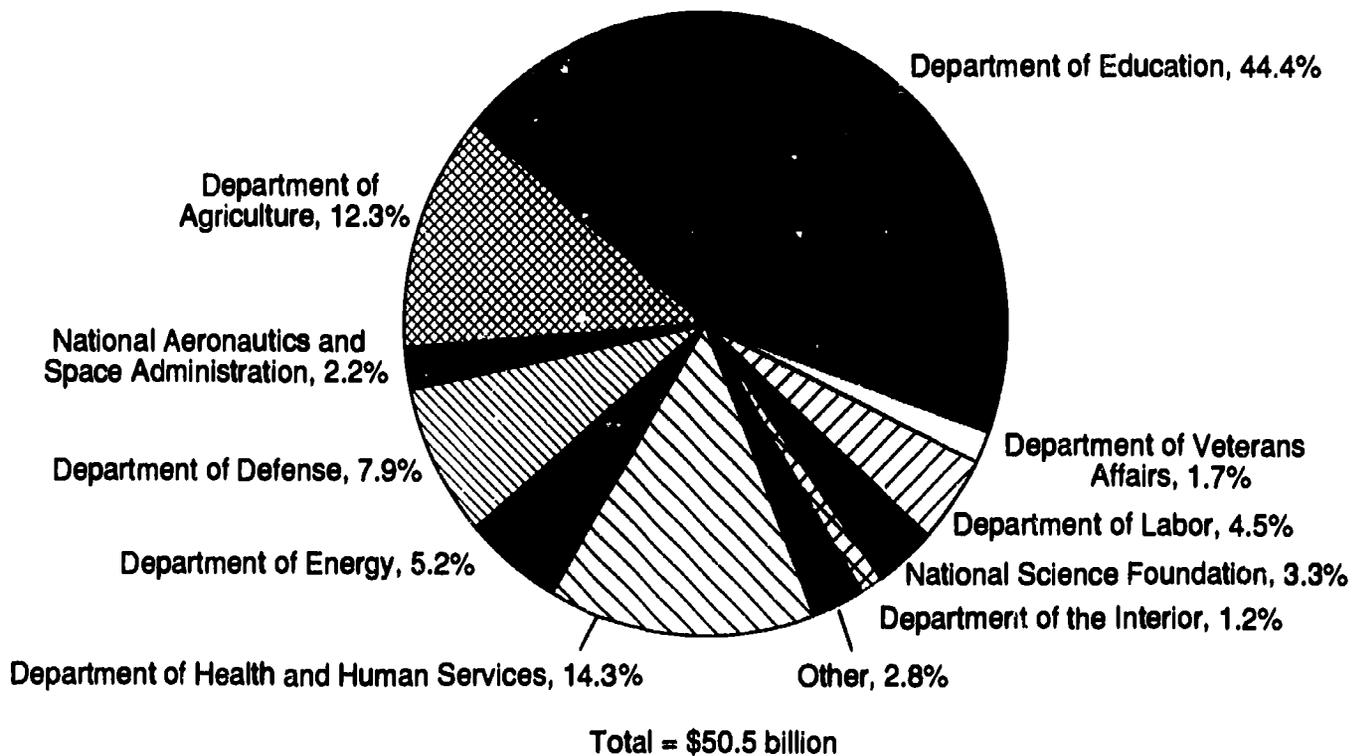
- During the 1965 to 1975 period, after adjustment for inflation, Federal funds for elementary and secondary education rose by 189 percent and Federal funds for higher education rose by 230 percent, but research funding fell by about 1 percent. Between 1975 and 1980, Federal funding remained relatively stable, with some increase in research funding. After dipping in the early 1980s, Federal funding for elementary and secondary education programs rose by 6 percent between 1985 and 1990, while funding for postsecondary education programs fluctuated after adjusting for inflation. In contrast, research funding grew by 16 percent in the first half of the decade and by 25 percent in the second half. (Table 324)
- According to fiscal year 1990 estimates, about 44 percent of the \$50.5 billion dollars spent by the Federal Government on education came from the Department of Education. Large amounts of money also came from the Department of Health and Human Services (\$7.2 billion), the Department of Agriculture (\$6.2 billion), the Department of Defense (\$4.0 billion), and the Department of Energy (\$2.6 billion). (Table 325)
- In fiscal year 1990, Federal program funds for elementary/secondary education amounted to \$21.1 billion; for higher education, \$12.9 billion; for research at universities and related institutions, \$13.0 billion; and for other programs, \$3.5 billion. (Table 326)
- Between fiscal years 1980 and 1990, Department of Education obligations rose by about 17 percent, after adjustment for inflation. Funds for student financial assistance increased to \$10.8 billion in 1990, a rise of 36 percent since 1980. Funds for elementary and secondary education stood at an estimated \$7.2 billion in 1990, an increase of 9 percent since 1980. Funds for the handicapped increased by about 74 percent, to \$4.2 billion, while funds for vocational education declined 33 percent, after adjustment for inflation. (Table 34 and 327)
- Of the \$22.4 billion spent by the Department of Education in 1990, about \$8.0 billion went to school districts, \$3.6 billion to institutions of higher education, \$3.4 billion to college students, and \$2.4 billion to State education agencies. A large portion of the remaining \$5.1 billion went to banks to subsidize student loans. (Table 328)
- Total Federal support for education was \$69.6 billion in fiscal year 1988, down 8 percent from fiscal year 1980, after adjustment for inflation. From fiscal year 1980 to fiscal year 1988, Federal program funds fell by 12 percent; non-Federal student

aid funds generated by Federal programs rose 53 percent; and estimated Federal tax expenditures for education declined by 19 percent. (Table 324)

- About one in four elementary and secondary school students in the United States receive publicly funded free or reduced price lunches in 1987-88. At public elementary schools, the participation rate was 34 percent compared with 18 percent for public secondary schools. Private school students were less likely to participate in school lunch programs; only 7 percent of elementary school students and 4 percent of the secondary school students participated in school lunch programs. (Table 337)

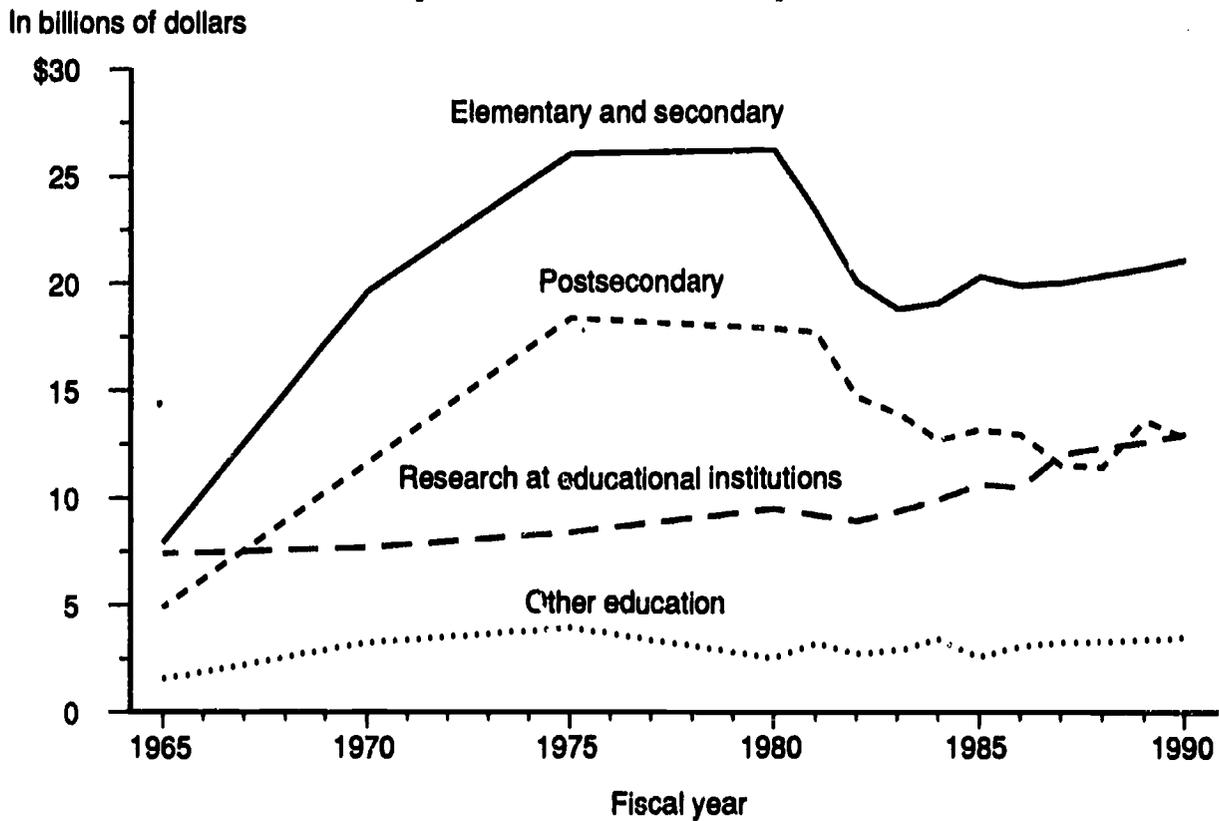
- About 10 percent of all elementary and secondary school children received Chapter 1 services in 1987-88. Federally sponsored Chapter 1 programs are designed to assist educationally disadvantaged children. As might be expected, children in rural areas (12 percent) and urban areas (12 percent) were more likely to receive services than those in suburban areas (6 percent). Children in public elementary schools (15 percent) were much more likely to participate in Chapter 1 programs than students in public secondary schools (5 percent). Only about 3 percent of private school students received Chapter 1 benefits. (Table 338)

Figure 20.—Federal funds for education, by agency: Fiscal year 1990



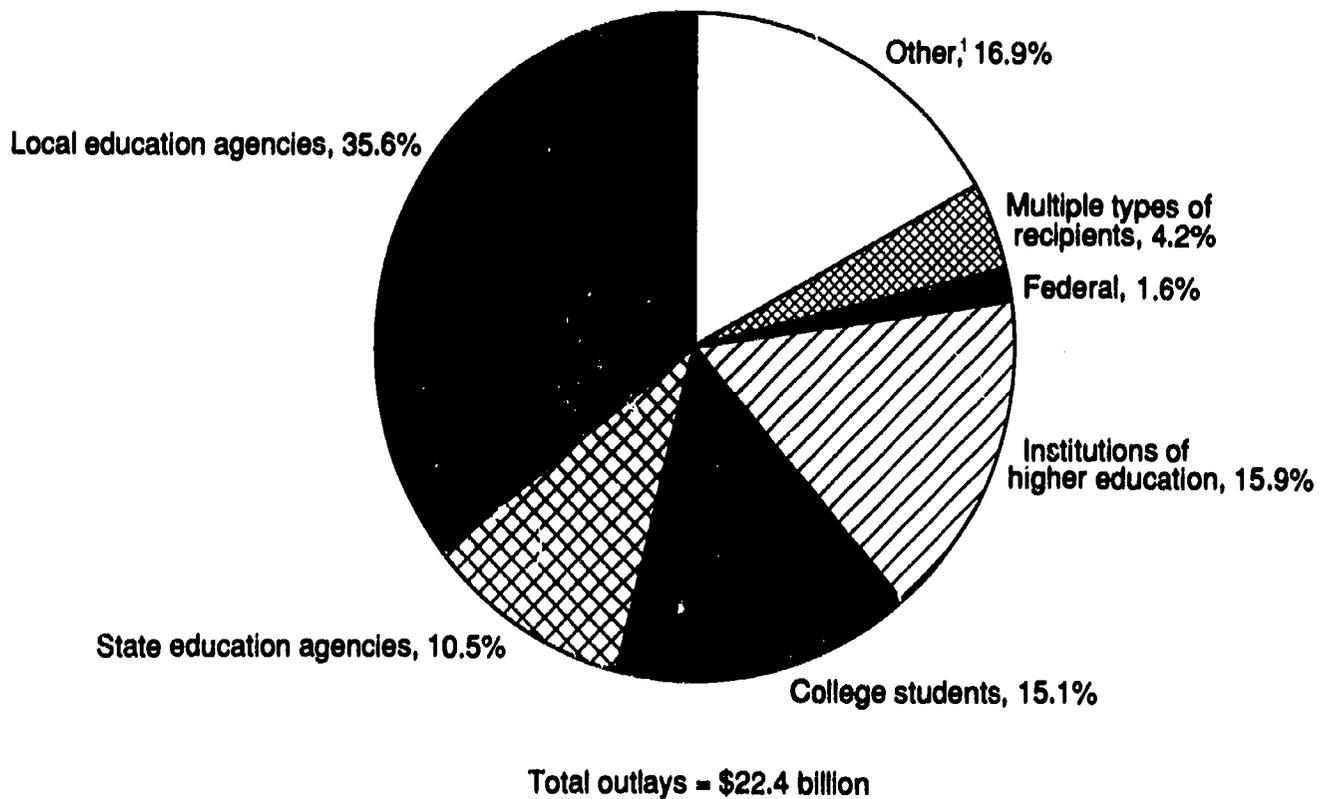
SOURCE: U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 1991*; and National Science Foundation, *Federal Funds for Research and Development, Fiscal years 1988, 1989, and 1990*; and unpublished data.

**Figure 21.—Federal funds for education, by level: Fiscal Years 1965 to 1991  
[in constant FY 90 dollars]**



SOURCE: U.S. Office of Management and Budget, *Budget of the U.S. Government, Appendix, Fiscal Years 1967 to 1991*; National Science Foundation, *Federal Funds for Research and Development*, fiscal years 1965 to 1990; and unpublished data.

**Figure 22.—U.S. Department of Education outlays, by type of recipient: Fiscal year 1990**



<sup>1</sup>Primarily private lending institutions and private nonprofit agencies

SOURCE: U.S. Department of Education, National Center for Education Statistics, unpublished data.

**Table 324.—Federal education support, by category: Fiscal years 1965 to 1990**

[In millions of dollars]

Fiscal year	Total education funds	On-budget support <sup>1</sup>					Non-Federal funds generated by Federal programs						Estimated Federal tax expenditures for education <sup>8</sup>		
		Total	Elementary and secondary	Post-secondary	Other education	Research at educational institutions	Total	Guaranteed student loans <sup>2</sup>	Pertinent loans <sup>3</sup>	Income contingent loans <sup>4</sup>	State student incentive grants <sup>5</sup>	Supplemental educational opportunity grants <sup>6</sup>		Work-study aid <sup>7</sup>	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Current dollars															
1965	—	\$5,331.0	\$1,942.8	\$1,197.5	\$374.7	\$1,818.3	\$23.7	—	\$18.1	—	—	—	—	\$7.8	—
1970	—	12,526.5	5,830.4	3,447.7	964.7	2,283.8	832.8	\$770.0	21.0	—	—	—	—	41.8	—
1975	—	23,133.2	10,817.2	7,489.2	1,608.5	3,418.4	1,403.4	1,233.0	35.7	—	\$20.0	—	—	114.7	—
1980	\$52,842.8	34,317.1	18,027.7	10,939.5	1,548.7	5,801.2	4,855.7	4,598.0	31.8	—	76.5	—	—	149.4	\$13,870.0
1981	60,501.8	36,446.2	15,903.7	12,064.8	2,182.2	8,275.5	7,875.4	7,433.0	20.7	—	78.5	—	—	145.2	18,380.0
1982	58,322.2	34,304.7	14,839.2	10,872.8	1,995.1	8,597.4	5,837.5	5,597.0	19.8	—	72.0	—	—	148.7	16,180.0
1983	58,269.7	34,719.2	14,527.8	10,753.4	2,204.1	7,233.8	8,825.5	8,582.0	19.8	—	60.0	—	—	163.7	18,725.0
1984	60,985.9	36,104.5	15,292.4	10,163.2	2,710.4	7,938.8	7,771.4	7,520.0	17.9	—	78.0	—	—	157.5	17,090.0
1985	65,565.4	38,809.9	18,901.3	10,956.5	2,107.8	8,844.8	8,725.5	8,487.0	21.4	—	78.0	—	—	181.1	18,030.0
1986	67,609.4	39,745.0	17,049.9	11,065.8	2,820.0	9,009.4	8,394.4	8,142.0	20.2	—	72.7	—	—	159.5	19,470.0
1987	69,692.0	40,972.2	17,535.7	10,077.5	2,820.4	10,538.8	9,529.8	9,272.0	20.9	0.8	78.0	—	—	160.4	19,180.0
1988	69,620.5	43,218.0	18,584.9	10,419.1	2,981.8	11,250.5	10,824.5	10,380.0	20.8	0.5	73.0	—	—	150.4	15,780.0
1989	—	47,912.1	19,751.2	12,970.4	3,180.7	12,009.8	11,267.8	10,938.0	20.4	0.5	71.9	—	22.0	215.0	—
1990 <sup>a</sup>	—	50,451.1	21,120.9	12,851.4	3,498.9	12,980.0	11,357.3	10,964.0	15.0	1.1	59.2	—	49.0	269.0	—
Constant fiscal year 1990 dollars <sup>10</sup>															
1965	—	23,352.6	8,509.5	5,245.7	1,841.2	7,956.2	103.9	—	70.6	—	—	—	—	33.3	—
1970	—	42,800.8	19,921.8	11,780.2	3,296.3	7,802.8	2,844.8	2,631.0	71.7	—	—	—	—	142.1	—
1975	—	53,535.8	24,570.8	17,331.8	3,722.4	7,910.9	3,247.7	2,853.4	82.5	—	48.3	—	—	265.4	—
1980	82,042.9	53,280.2	24,884.3	18,984.5	2,404.5	9,008.9	7,538.9	7,138.8	49.3	—	118.8	—	—	232.0	21,223.8
1981	85,058.7	51,239.4	22,358.9	18,989.9	3,067.9	8,822.7	10,790.7	10,450.0	29.1	—	107.8	—	—	204.1	23,028.5
1982	73,917.3	45,021.5	19,475.0	14,289.5	2,818.4	8,658.4	7,681.2	7,345.5	26.0	—	94.5	—	—	195.2	21,234.8
1983	73,320.4	43,686.9	18,280.2	13,530.9	2,773.4	9,102.2	8,588.5	8,282.1	25.0	—	75.5	—	—	206.0	21,045.0
1984	74,030.0	43,841.2	18,569.3	12,341.0	3,291.2	9,839.7	9,436.7	9,131.4	21.7	—	92.3	—	—	191.3	20,752.1
1985	77,256.3	45,730.1	19,915.0	12,910.1	2,483.4	10,421.8	10,281.3	9,978.7	25.2	—	89.8	—	—	189.8	21,244.9
1986	77,779.2	45,723.4	19,814.8	12,730.1	3,014.1	10,364.5	9,657.1	9,366.7	23.2	—	83.8	—	—	183.5	22,398.7
1987	78,189.7	45,982.8	19,871.8	11,304.9	3,163.9	11,822.3	10,890.8	10,401.4	23.4	0.8	85.3	—	—	179.9	21,518.2
1988	75,531.1	46,884.9	20,141.0	11,303.7	3,234.7	12,205.8	11,526.5	11,261.2	22.4	0.5	79.2	—	—	163.2	17,119.7
1989	—	49,818.8	20,577.5	13,513.0	3,313.8	12,512.3	11,739.2	11,395.8	21.2	0.8	74.9	—	22.9	224.0	—
1990 <sup>a</sup>	—	50,451.1	21,120.9	12,851.4	3,498.9	12,980.0	11,357.3	10,964.0	15.0	1.1	59.2	—	49.0	269.0	—

<sup>1</sup> On-budget support includes Federal funds for education programs tied to appropriations.  
<sup>2</sup> New student loans guaranteed by the Federal Government and disbursed to borrowers. Also known as off-budget support.  
<sup>3</sup> Student loans created from institutional matching funds (1/9 of the Federal contribution). Excludes repayments of outstanding loans.  
<sup>4</sup> Student loans created from institutional matching funds (1/9 of the Federal contribution). This is a demonstration project which involves only 10 institutions and also has unsubsidized interest rates.  
<sup>5</sup> Required State matching contributions.  
<sup>6</sup> Institutions award grants to undergraduate students, and the Federal share of such grants may not exceed 85 percent of the total grant.  
<sup>7</sup> Employer contributions to student earnings.  
<sup>8</sup> Tax expenditures are the difference between current Federal tax receipts and what these receipts would be without existing education deductions to income allowed by Federal tax provisions.

<sup>9</sup> Estimated.  
<sup>10</sup> Data adjusted by the Composite Deflator prepared by the Office of Management and Budget.  
 —Data not available or not applicable.

NOTE.—To the extent possible, Federal education funds data represent outlays rather than obligations. Because of rounding, details may not add to totals. Data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, compiled from data appearing in U.S. Office of Management and Budget, *Budget of the U.S. Government, Appendix, fiscal years 1967 to 1991 and Historical Tables, Budget of the United States Government*; National Science Foundation, *Federal Funds for Research and Development, fiscal years 1965 to 1990*; "Federal Tax Expenditures, FY 1980 to FY 1984" and "Federal Tax Expenditures, FY 1984 to FY 1988," by Stephen M. Barro, prepared for the National Center for Education Statistics; and unpublished data. (This table was prepared May 1990.)

Table 325.—Federal funds for education and related programs, by agency: Fiscal years 1965 to 1990

(In thousands of dollars)

Agency	1965	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Total</b> .....	<b>\$5,331,016</b>	<b>\$12,526,499</b>	<b>\$23,133,209</b>	<b>\$34,317,114</b>	<b>\$34,304,650</b>	<b>\$34,719,162</b>	<b>\$36,104,529</b>	<b>\$38,808,949</b>	<b>\$39,744,868</b>	<b>\$40,972,176</b>	<b>\$43,216,013</b>	<b>\$47,912,143</b>	<b>\$50,451,141</b>
Department of Education.....	1,000,567	4,625,224	7,350,355	13,137,785	14,109,272	14,585,825	15,534,737	16,701,065	17,740,051	18,879,827	18,328,916	21,071,232	22,401,407
Department of Agriculture.....	768,927	960,910	2,219,352	4,562,467	4,107,473	4,340,899	4,616,372	4,782,274	5,041,317	5,189,779	5,481,976	5,793,616	6,228,716
Department of Commerce.....	9,347	13,990	38,967	135,561	60,150	55,090	55,160	55,114	64,613	36,896	38,553	47,586	16,637
Department of Defense.....	587,412	821,368	1,009,229	1,580,301	2,097,256	2,487,597	2,825,148	3,119,213	3,354,588	3,695,617	3,461,345	3,698,446	4,010,672
Department of Energy.....	442,434	551,527	764,876	1,605,558	1,751,803	1,933,068	2,042,881	2,247,822	2,181,391	2,256,799	2,365,966	2,563,976	2,635,715
Department of Health and Human Services.....	1,027,537	1,798,654	3,520,350	5,437,542	5,453,996	4,804,004	4,735,554	5,104,429	5,096,910	5,882,270	6,273,185	6,611,926	7,235,510
Department of Housing and Urban Development.....	221,256	114,709	-52,768	5,314	969	2,158	2,000	438	342	463	51	186	203
Department of the Interior.....	170,068	190,975	300,191	440,547	476,030	484,314	576,779	549,479	454,273	485,922	528,409	542,466	617,313
Department of Justice.....	10,252	15,728	61,542	60,721	57,890	66,700	62,282	66,802	72,191	79,815	83,405	88,129	98,673
Department of Labor.....	230,041	424,494	1,103,935	1,862,738	1,799,315	1,833,392	1,755,839	1,948,665	1,976,960	2,258,631	2,272,226	2,277,556	2,295,007
Department of State.....	64,200	59,742	89,433	25,188	21,161	23,613	23,066	23,820	23,401	24,286	38,671	45,848	47,350
Department of Transportation.....	—	27,534	52,290	54,712	75,404	82,139	83,931	82,035	66,214	73,360	65,134	90,840	80,320
Department of Treasury.....	6,240	18	1,116,840	1,247,463	266,960	287,300	287,905	290,276	41,257	19,279	32,768	39,511	66,508
Department of Veterans Affairs.....	97,237	1,032,916	4,402,212	2,351,233	1,978,672	1,672,348	1,445,049	1,289,849	1,055,948	1,002,109	966,549	696,435	838,668
<b>Other agencies and programs:</b>													
ACTION programs.....	—	—	7,081	2,833	1,720	1,630	4,975	1,761	1,368	3,368	4,110	4,800	5,200
Agency for International Development.....	63,329	88,034	78,896	176,770	205,177	173,629	236,983	198,807	198,929	240,827	242,650	227,864	226,574
Appalachian Regional Commission.....	—	37,838	45,766	19,032	7,436	2,655	4,919	4,745	6,582	5,445	6,468	6,145	6,145
Berry Goldwater Scholarship and Excellence in Education Foundation.....	—	—	—	—	—	—	—	—	—	—	—	753	1,379
Environmental Protection Agency.....	—	19,446	33,675	41,033	67,798	43,557	97,395	60,521	101,844	67,465	58,053	64,517	79,413
Estimated education share of Federal aid to the District of Columbia.....	11,350	33,019	55,487	61,847	91,765	97,526	43,700	107,340	69,716	126,942	122,366	134,966	122,733
Federal Emergency Management Agency.....	—	290	290	1,946	2,695	1,145	321	1,628	290	290	290	77	247
General Services Administration.....	4,013	14,775	22,532	34,800	37,300	44,200	50,694	—	—	—	—	—	—
Harry S Truman scholarship fund.....	—	—	—	-1,695	1,627	1,795	1,929	1,332	2,441	2,717	2,615	2,651	3,024
Institute of American Indian and Alaska Native Culture and Arts Development.....	—	—	—	—	—	—	—	—	—	—	—	3,094	4,305
James Madison Memorial Fellowship Foundation.....	—	—	—	—	—	—	—	—	—	—	13,200	10,005	646
Japanese-United States Friendship Commission.....	—	—	—	2,294	1,807	2,364	1,611	2,236	235	3,225	2,274	3,004	2,995
Library of Congress.....	15,111	29,478	63,766	151,871	144,911	154,198	164,080	169,310	166,130	160,835	160,505	177,954	206,653
National Aeronautics and Space Administration.....	208,788	258,366	197,901	255,511	369,105	367,783	354,528	487,824	490,948	787,391	899,897	976,776	1,089,043
National Archives and Records Administration.....	—	—	—	—	—	—	—	52,116	55,252	59,521	65,153	66,266	76,716
National Commission on Libraries and Information Science.....	—	—	449	2,090	638	681	733	723	781	512	522	639	3,327
National Endowment for the Arts.....	—	340	4,754	5,220	4,823	4,701	5,197	5,536	5,188	5,394	5,550	5,655	5,600
National Endowment for the Humanities.....	—	6,459	63,955	142,566	115,618	123,315	127,571	125,671	121,125	124,407	125,230	137,076	140,571
National Science Foundation.....	161,216	295,626	535,284	806,392	854,665	907,917	1,035,746	1,147,115	1,147,273	1,270,415	1,329,520	1,472,835	1,664,076
Nuclear Regulatory Commission.....	—	—	7,093	32,590	38,150	37,967	36,400	30,261	27,472	26,176	25,676	25,690	25,610
Office of Economic Opportunity.....	169,671	1,092,410	16,619	—	—	—	—	—	—	—	—	—	—
Smithsonian Institution.....	2,233	2,461	5,509	5,153	5,215	6,073	5,758	7,866	6,191	6,545	5,393	5,880	6,846
United States Arms Control Agency.....	—	100	—	661	184	157	—	395	276	3,244	2,633	1,619	18
United States Information Agency.....	7,512	6,423	9,405	66,210	77,165	86,556	83,768	143,007	170,514	179,653	183,206	185,521	196,537
United States Institute of Peace.....	—	—	—	—	—	—	—	—	230	4,083	3,476	7,232	6,029
Other agencies.....	10,055	1,421	5,913	990	40	296	1,300	432	715	1,666	1,670	947	653

<sup>1</sup> Estimated.

—Data not available or not applicable.

NOTE.—To the extent possible, amounts reported represent outlays, rather than obligations. Data revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, compiled from data appearing in U.S. Office of Management and Budget, *Budget of the U.S. Government, Appendix, fiscal years 1967 to 1991*; National Science Foundation, *Federal Funds for Research and Development, fiscal years 1965 to 1990*; and unpublished data obtained from various Federal agencies. (This table was prepared February 1990.)

**Table 328.—Federal funds for education and related programs, by level of education or activity, agency, and program: Fiscal years 1965 to 1990**

(In thousands of dollars)

Level, agency, and program	1965	1970	1975	1980	1985	1987	1988	1989	1990 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
<b>Total, all programs</b> .....	<b>\$5,331,016</b>	<b>\$12,529,499</b>	<b>\$23,133,209</b>	<b>\$34,317,114</b>	<b>\$38,909,949</b>	<b>\$40,972,179</b>	<b>\$43,216,013</b>	<b>\$47,912,143</b>	<b>\$50,451,141</b>
<b>Elementary/secondary education programs</b> .....	<b>\$1,942,577</b>	<b>\$5,830,442</b>	<b>\$10,817,195</b>	<b>\$16,027,696</b>	<b>\$16,901,334</b>	<b>\$17,535,707</b>	<b>\$18,544,859</b>	<b>\$19,781,168</b>	<b>\$21,120,961</b>
Department of Education <sup>2</sup> .....	567,343	2,719,204	4,132,742	6,629,095	7,296,702	7,554,487	8,098,436	8,869,300	9,479,284
Grants for the disadvantaged.....	—	1,339,014	1,674,353	3,204,664	4,206,754	3,209,923	4,027,559	4,185,357	4,558,170
Impact aid program.....	349,871	658,372	618,711	690,170	647,402	704,197	707,539	755,477	764,008
School improvement programs.....	72,298	288,304	700,470	788,918	526,401	689,478	443,468	975,237	1,260,915
Indian education.....	—	—	40,036	93,365	82,328	39,638	16,339	65,683	67,810
Bilingual education.....	—	21,250	92,893	169,540	157,539	141,483	159,746	184,759	203,893
Education for the handicapped.....	13,849	79,090	151,244	821,777	1,017,964	1,339,241	1,465,965	1,880,751	1,716,415
Vocational and adult education.....	131,525	335,174	655,235	660,661	658,314	1,230,527	1,275,800	642,036	908,073
Department of Agriculture.....	823,014	760,477	1,884,345	4,064,497	4,134,906	4,582,093	4,806,766	5,104,502	5,552,879
Child nutrition programs.....	178,580	299,131	1,452,267	3,377,058	3,664,561	4,044,830	4,286,242	4,555,581	5,001,589
Agricultural Marketing Service—commodities <sup>3</sup> .....	340,073	341,597	248,839	388,000	336,502	350,118	349,870	342,071	350,900
Special milk program.....	86,609	83,800	122,858	159,293	15,993	15,448	18,342	18,544	18,931
Estimated education share of Forest Service permanent appropriations.....	17,752	35,949	60,381	140,148	117,850	151,699	152,512	188,306	181,459
Department of Commerce.....	—	—	—	54,816	—	—	—	—	—
Local public works program—school facilities <sup>4</sup> .....	—	—	—	54,816	—	—	—	—	—
Department of Defense.....	73,000	143,100	264,500	370,846	631,625	661,393	966,265	1,059,259	1,116,380
Junior ROTC.....	—	12,100	12,500	32,000	55,900	57,440	45,300	53,930	54,980
Overseas dependents schools.....	73,000	131,000	252,000	338,846	613,437	664,941	773,810	821,365	866,550
Section VI schools <sup>5</sup> .....	—	—	—	—	162,588	139,012	189,155	183,964	194,850
Department of Energy <sup>6</sup> .....	100	200	300	77,633	23,031	12,061	12,931	12,851	12,805
Energy conservation for school buildings <sup>7</sup> .....	—	—	—	77,240	22,731	11,781	12,611	12,442	12,442
Pre-engineering program.....	100	200	300	393	300	300	320	409	363
Department of Health and Human Services <sup>8</sup> .....	79,999	187,333	683,885	1,077,000	1,531,059	1,555,542	1,651,324	1,703,515	1,863,915
Head Start <sup>9</sup> .....	—	—	403,900	735,000	1,075,059	1,130,542	1,208,324	1,234,869	1,386,315
Social security student benefits <sup>10</sup> .....	79,999	187,333	279,985	342,000	456,000	425,000	445,000	468,646	497,600
Department of the Interior.....	130,098	140,705	220,392	318,170	389,810	344,183	379,845	379,381	459,867
Mineral Leasing Act and other funds:									
Payments to States—estimated education share.....	11,075	12,284	27,389	62,636	127,389	87,437	92,227	114,414	126,422
Payments to counties—estimated education share.....	10,731	16,359	29,494	48,953	59,016	36,455	34,922	54,804	108,120
Indian Education:									
Bureau of Indian Affairs schools.....	92,603	95,850	141,058	178,112	177,265	195,994	231,512	166,643	201,523
Johnson-O'Malley assistance <sup>11</sup> .....	15,534	18,080	22,251	28,081	25,675	22,824	20,400	23,000	23,252
Education expenses for children of employees, Yellowstone National Park.....	153	122	202	388	485	1,473	584	520	550
Department of Justice.....	8,402	8,237	9,822	23,990	36,117	44,531	50,879	58,523	67,803
Vocational training expenses for prisoners in Federal prison.....	1,466	2,720	3,039	4,966	6,292	6,744	6,879	6,933	2,857
Inmate programs <sup>12</sup> .....	4,936	5,517	6,783	18,924	27,825	35,787	42,000	51,590	64,746
Department of Labor.....	230,041	420,927	1,097,811	1,649,800	1,945,268	2,258,199	2,266,700	2,271,966	2,289,122
Job Corps <sup>13</sup> .....	—	—	175,000	459,800	604,748	676,599	712,218	771,966	789,122
Training programs—estimated funds for education programs <sup>14</sup> .....	230,041	420,927	922,811	1,380,000	1,340,520	1,579,600	1,554,482	1,500,000	1,500,000
Department of Transportation <sup>15</sup> .....	—	45	50	60	60	55	50	40	65
Tuition assistance for educational accreditation—Coast Guard personnel <sup>16</sup> .....	—	45	50	60	60	55	50	40	65
Department of the Treasury.....	32	—	847,139	935,903	273,728	—	—	—	—
Estimated education share of general revenue sharing— <sup>17</sup>									
State <sup>18</sup> .....	—	—	475,224	525,019	—	—	—	—	—
Local.....	—	—	371,915	410,884	273,728	—	—	—	—
Tuition assistance for educational accreditation—Coast Guard personnel <sup>16</sup> .....	32	—	—	—	—	—	—	—	—
Department of Veterans Affairs <sup>19</sup> .....	41,250	336,910	1,371,500	545,786	344,758	235,297	196,159	168,865	144,824
Noncollegiate and job training programs <sup>20</sup> .....	14,550	281,640	1,249,410	439,993	224,035	119,702	78,367	43,896	9,124
Vocational rehabilitation for disabled veterans <sup>21</sup> .....	17,400	41,700	73,100	87,980	107,480	105,947	112,058	119,749	129,251
Dependents' education <sup>22</sup> .....	9,300	15,570	48,990	17,813	13,243	9,648	7,734	6,420	8,449
Other agencies:									
Appalachian Regional Commission <sup>23</sup> .....	—	33,181	41,667	9,157	4,632	5,323	5,327	5,145	5,145
National Endowment for the Arts <sup>24</sup> .....	—	—	3,666	4,969	4,399	4,099	4,350	4,462	4,700
Arts in education.....	—	—	3,666	4,969	4,399	4,099	4,350	4,462	4,700
National Endowment for the Humanities <sup>25</sup> .....	—	20	149	330	321	352	626	698	716
Office of Economic Opportunity <sup>26</sup> .....	182,793	1,072,375	18,819	—	—	—	—	—	—
Head Start <sup>27</sup> .....	96,400	325,700	—	—	—	—	—	—	—
Other elementary and secondary programs <sup>28</sup> .....	20,000	42,809	16,612	—	—	—	—	—	—
Job Corps <sup>29</sup> .....	34,000	144,000	—	—	—	—	—	—	—
Youth Corps,—and other training programs <sup>30</sup> .....	31,000	553,368	7	—	—	—	—	—	—
Volunteers in Service to America (VISTA) <sup>31</sup> .....	1,393	6,496	—	—	—	—	—	—	—



**Table 326.—Federal funds for education and related programs, by level of education or activity, agency, and program: Fiscal years 1965 to 1990—Continued**

(In thousands of dollars)

Level, agency, and program	1965	1970	1975	1980	1985	1987	1988	1989	1990 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
Other programs:									
Estimated education share of Federal aid to the District of Columbia.....	6,507	25,748	42,588	65,714	84,918	98,092	103,400	112,661	103,556
<b>Higher education programs.....</b>	<b>1,187,511</b>	<b>3,447,697</b>	<b>7,489,182</b>	<b>10,939,494</b>	<b>10,956,452</b>	<b>10,077,456</b>	<b>10,419,120</b>	<b>12,970,409</b>	<b>12,851,424</b>
Department of Education <sup>2</sup> .....	237,955	1,187,982	2,089,184	5,682,242	8,202,499	7,438,674	8,247,103	10,640,044	10,507,322
Student financial assistance <sup>22</sup> .....	—	—	—	3,682,769	4,162,695	4,779,617	5,219,916	5,859,774	5,794,932
Guaranteed student loans <sup>22</sup> .....	—	2,323	111,087	1,407,977	3,534,795	2,548,179	2,779,304	3,699,387	3,848,130
Higher education.....	218,264	1,029,131	1,838,068	399,787	404,511	419,105	411,775	606,649	521,494
Facilities—loans and insurance <sup>23</sup> .....	3,588	114,199	16,292	-19,031	5,307	-84,866	-43,000	10,182	62,898
College housing loans <sup>24</sup> .....	—	—	—	14,082	-184,081	-558,178	-372,700	-31,299	-17,074
Educational activities overseas.....	129	774	1,881	3,581	1,838	-8	233	374	682
Gallaudet College and Howard University.....	15,974	38,559	111,971	176,829	229,938	299,085	224,781	256,519	290,407
National Technical Institute for the Deaf <sup>25</sup> .....	—	2,976	9,887	18,248	27,476	35,540	27,154	36,258	37,853
Department of Agriculture.....	—	—	8,450	10,453	17,741	18,877	27,799	27,799	31,273
Agriculture Extension Service, Second Morrill Act payments to agricultural and mechanical colleges and Tuskegee Institute <sup>26</sup> .....	—	—	8,450	10,453	17,741	18,877	27,799	27,799	31,273
Department of Commerce.....	5,081	6,277	14,973	29,971	2,163	2,031	2,420	2,765	2,765
Sea Grant Program <sup>27</sup> .....	—	—	1,886	3,123	2,163	2,081	2,420	2,765	2,765
Merchant Marine Academy <sup>28</sup> .....	3,570	6,160	10,152	14,809	—	—	—	—	—
State marine schools <sup>28</sup> .....	1,511	2,117	2,935	12,039	—	—	—	—	—
Department of Defense <sup>29</sup> .....	77,500	322,100	379,800	545,000	1,041,700	1,079,768	573,400	696,879	708,757
Tuition assistance for military personnel.....	—	57,500	66,600	(49)	77,100	111,368	134,500	236,089	249,755
Service academies <sup>41</sup> .....	77,500	78,700	86,200	106,100	196,400	223,700	109,100	115,150	123,788
Senior ROTC.....	—	108,100	116,500	(49)	354,000	382,440	179,200	198,325	206,856
Professional development education <sup>42</sup> .....	—	77,800	90,300	(49)	414,200	362,260	150,600	149,315	128,358
Department of Energy <sup>6</sup> .....	3,000	3,000	3,000	57,701	19,475	19,225	22,609	15,082	15,130
University laboratory cooperative program.....	3,000	3,000	3,000	2,800	6,500	9,859	13,571	5,929	5,657
Teacher development projects <sup>43</sup> .....	—	—	—	1,400	—	—	—	—	—
Graduate traineeship programs <sup>44</sup> .....	—	—	—	—	—	-4	-26	—	—
Energy conservation for buildings—higher education <sup>7</sup> .....	—	—	—	53,501	12,705	8,500	7,746	8,493	6,493
Minority honors vocational training <sup>45</sup> .....	—	—	—	—	150	390	598	720	660
Honors research program <sup>46</sup> .....	—	—	—	—	120	480	720	820	820
Pre-college science <sup>46</sup> .....	—	—	—	—	—	—	—	1,100	1,100
Department of Health and Human Services <sup>8</sup> .....	469,223	961,483	1,531,775	2,235,670	298,161	283,551	277,684	267,238	296,592
Health professions training programs.....	139,795	353,029	599,350	460,736	212,200	202,710	218,591	223,611	236,317
Indian health manpower <sup>47</sup> .....	—	—	—	7,187	5,577	7,018	5,998	5,972	7,021
National Health Service Corps scholarships.....	—	—	1,206	70,667	2,268	2,277	4,100	6,531	8,682
National Institute of Occupational Safety and Health training grants.....	4,327	8,088	7,182	12,899	8,760	9,900	9,718	10,095	10,461
Alcohol, drug abuse, and mental health training programs.....	65,101	118,366	83,727	122,103	43,617	61,075	40,726	40,301	33,406
Health teaching facilities <sup>48</sup> .....	—	—	353	3,078	739	571	551	526	505
Social security postsecondary students' benefits <sup>49</sup> .....	240,000	502,000	839,957	1,559,000	25,000	—	—	—	—
U.S. Department of Housing and Urban Development.....	220,744	114,199	-55,418	—	—	—	—	—	—
College housing loans <sup>24</sup> .....	220,744	114,199	-55,418	—	—	—	—	—	—
Department of the Interior.....	30,153	31,749	50,844	60,202	125,247	108,396	113,661	123,529	133,534
Shared revenues, Mineral Leasing Act and other receipts—estimated education share.....	6,280	6,949	15,480	35,403	71,091	49,421	52,117	64,669	71,109
Indian programs:									
Continuing education <sup>50</sup> .....	6,993	9,390	13,311	16,909	24,338	25,966	30,622	28,424	32,659
Higher education scholarships.....	14,900	15,420	22,053	27,890	26,918	32,979	30,722	30,436	29,766
Department of State.....	53,420	30,850	50,347	—	—	—	4,120	4,422	4,600
Educational Exchange <sup>51</sup> .....	53,420	30,850	50,347	—	—	—	—	—	—
Mutual educational and cultural exchange activities.....	47,025	30,454	50,300	—	—	—	—	—	—
International educational exchange activities.....	6,395	396	47	—	—	—	—	—	—
Soviet-East European Research and Training <sup>52</sup> .....	—	—	—	—	—	—	4,120	4,422	4,600
Department of Transportation <sup>18</sup> .....	—	11,197	11,885	12,530	55,569	47,206	44,998	63,559	48,792
Merchant Marine Academy <sup>28</sup> .....	—	—	—	—	19,896	20,476	20,579	20,611	21,445
State marine schools <sup>53</sup> .....	—	—	—	—	19,777	12,073	7,961	26,062	9,900
Coast Guard Academy <sup>18</sup> .....	—	9,342	9,780	10,000	11,857	10,066	10,610	11,740	11,555
Postgraduate training for Coast Guard officers <sup>54</sup> .....	—	1,855	1,851	2,230	3,499	3,978	5,084	4,821	5,317
Tuition assistance to Coast Guard military personnel <sup>19</sup> .....	—	200	250	300	538	613	564	525	575
Department of the Treasury.....	6,208	—	268,605	296,750	—	—	—	—	—
General revenue sharing—estimated State share to higher education <sup>17, 16</sup> .....	—	—	268,605	296,750	—	—	—	—	—
Coast Guard Academy <sup>18</sup> .....	6,615	—	—	—	—	—	—	—	—
Postgraduate training for Coast Guard officers <sup>54</sup> .....	1,293	—	—	—	—	—	—	—	—

**Table 326.—Federal funds for education and related programs, by level of education or activity, agency, and program: Fiscal years 1965 to 1990—Continued**

[In thousands of dollars]

Level, agency, and program:	1965	1970	1975	1980	1985	1987	1988	1989	1990 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
Tuition assistance to Coast Guard military personnel <sup>16</sup> .....	100	—	—	—	—	—	—	—	—
Department of Veterans Affairs <sup>18</sup> .....	55,650	603,490	3,029,600	1,803,847	944,091	784,561	768,090	725,270	891,744
Vietnam-era veterans <sup>19</sup> .....	33,950	638,260	2,840,600	1,579,974	694,217	411,987	345,242	264,702	55,632
College student support.....	—	—	—	1,530,081	676,953	403,527	337,568	258,992	54,262
Work-study.....	—	—	—	19,893	14,264	8,440	7,674	5,720	1,350
Service persons college support <sup>20</sup> .....	—	18,900	74,890	46,617	35,830	28,410	33,472	34,399	12,548
Post-Vietnam veterans <sup>21</sup> .....	—	—	—	922	82,554	171,752	203,262	195,142	184,864
All-volunteer-force educational assistance <sup>22</sup> .....	—	—	—	—	196	45,686	73,731	122,222	326,774
Veterans <sup>23</sup> .....	—	—	—	—	—	107	8,386	43,423	216,774
Reservists <sup>24</sup> .....	—	—	—	—	198	45,581	65,345	78,799	106,000
Veteran dependents' education <sup>25</sup> .....	21,700	38,330	114,310	176,334	131,494	106,744	100,883	96,805	99,926
Payments to State education agencies <sup>26</sup> .....	—	—	—	—	—	—	11,500	12,000	12,000
Other agencies:									
Appalachian Regional Commission <sup>27</sup> .....	—	4,105	2,545	1,751	—	30	1,141	825	825
National Endowment for the Humanities <sup>28</sup> .....	—	3,349	25,320	56,451	49,098	48,679	47,601	51,449	52,761
National Science Foundation.....	27,170	42,000	60,283	84,583	60,069	85,494	97,466	130,197	156,462
Science and engineering education program.....	27,170	37,000	60,283	84,583	60,069	85,494	97,466	130,197	156,462
Sea Grant Program <sup>29</sup> .....	—	5,000	—	—	—	—	—	—	—
United States Information Agency <sup>33</sup> .....	7,512	8,423	9,405	51,095	124,041	162,897	160,447	184,607	176,107
Educational and cultural affairs.....	—	—	—	49,548	21,079	24,313	23,466	21,596	21,458
Educational and cultural exchange programs <sup>34</sup> .....	—	—	—	—	101,529	138,039	136,646	143,194	154,163
Educational exchange activities, International.....	—	—	—	1,549	1,433	545	335	17	486
Information center and library activities <sup>35</sup> .....	7,512	8,423	9,405	—	—	—	—	—	—
Other programs:									
Barry Goldwater Scholarship and Excellence in Education Foundation <sup>36</sup> .....	—	—	—	—	—	—	—	753	1,379
Estimated education share of Federal aid to the District of Columbia.....	1,895	5,513	10,584	13,143	15,266	17,310	14,566	17,871	15,406
Harry S Truman scholarship fund <sup>37</sup> .....	—	—	—	-1,895	1,332	2,717	2,815	2,851	3,024
Institute of American Indian and Alaska Native Culture and Arts Development <sup>38</sup> .....	—	—	—	—	—	—	—	3,094	4,305
James Madison Memorial Fellowship Foundation <sup>39</sup> .....	—	—	—	—	—	—	13,200	10,005	646
<b>Other education programs.....</b>	<b>374,852</b>	<b>984,719</b>	<b>1,908,478</b>	<b>1,548,730</b>	<b>2,107,588</b>	<b>2,820,407</b>	<b>2,961,571</b>	<b>3,180,741</b>	<b>3,486,999</b>
Department of Education <sup>2</sup> .....	182,021	630,235	1,045,659	747,706	1,173,055	1,825,754	1,936,998	2,071,574	2,320,790
Administration.....	17,732	47,456	108,372	167,317	284,900	285,296	295,615	301,260	340,312
Libraries.....	26,111	108,284	225,810	129,127	85,650	129,062	101,202	140,398	145,274
Rehabilitative services and handicapped research.....	137,313	473,091	709,483	426,886	798,298	1,405,357	1,536,905	1,623,255	1,826,876
American Printing House for the Blind.....	665	1,404	1,994	4,349	4,230	5,989	5,234	6,645	5,844
Trust funds.....	—	—	—	27	-23	50	42	16	484
Department of Agriculture.....	87,551	135,637	220,395	271,112	336,375	330,666	342,523	347,021	352,423
Extension Service.....	85,924	131,734	215,523	263,584	325,966	322,095	330,184	333,571	337,907
National Agricultural Library.....	1,627	3,903	4,872	7,528	10,389	8,771	12,359	13,450	14,516
Department of Commerce.....	251	1,226	2,317	2,479	—	—	—	—	—
Maritime Administration:									
Training for private sector employees <sup>38</sup> .....	251	1,226	2,317	2,479	—	—	—	—	—
Department of Health and Human Services <sup>6</sup> .....	3,953	24,273	31,653	37,819	47,195	59,770	62,060	71,912	78,976
National Library of Medicine.....	3,953	24,273	31,653	37,819	47,195	59,770	62,060	71,912	78,976
Department of Housing and Urban Development.....	512	—	—	—	—	—	—	—	—
Urban mass transportation—managerial training grants <sup>70</sup> .....	512	—	—	—	—	—	—	—	—
Department of Justice.....	3,850	5,546	42,618	27,642	25,517	26,293	26,361	23,906	27,070
FBI National Academy.....	1,850	2,066	5,100	7,234	4,189	4,406	5,365	5,513	9,426
FBI—Field Police Academy.....	1,450	2,500	5,254	7,715	10,220	6,964	9,995	7,673	10,160
Narcotics and dangerous drug training.....	550	980	1,152	2,416	83	—	142	824	848
National Institute of Corrections <sup>71</sup> .....	—	—	31,312	10,277	11,025	12,901	10,839	9,896	8,614
Department of State.....	10,760	20,872	26,113	25,000	23,791	23,656	33,308	40,157	42,381
Foreign Service Institute.....	6,395	15,857	20,750	25,000	23,791	23,656	33,308	40,157	42,381
Center for Cultural and Technical Interchange <sup>61</sup> .....	4,365	4,815	7,363	—	—	—	—	—	—
Department of Transportation <sup>16</sup> .....	—	3,964	11,877	10,212	3,785	2,895	3,153	4,415	4,218
Highways training and education grants <sup>72</sup> .....	—	2,418	3,250	3,412	1,500	1,000	1,413	1,416	1,500
Maritime Administration:									
Training for private sector employees <sup>38</sup> .....	—	—	—	—	1,135	1,291	1,517	1,499	1,568
Urban mass transportation—managerial training grants <sup>70</sup> .....	—	1,546	2,627	500	1,150	604	220	1,500	1,150
Federal Aviation Administration <sup>73</sup> .....	—	—	6,000	6,300	—	—	—	—	—
Air traffic controllers second career program <sup>74</sup> .....	—	—	—	—	—	—	—	—	—
Department of the Treasury.....	—	18	3,096	14,584	16,160	19,110	32,768	39,100	66,266
Federal Law Enforcement Training Center <sup>76</sup> .....	—	18	3,096	14,584	16,160	19,110	32,768	39,100	66,266
Other agencies:									
ACTION <sup>75</sup> .....	—	—	7,045	2,833	1,761	3,368	4,110	4,600	5,200

**Table 326.—Federal funds for education and related programs, by level of education or activity, agency, and program: Fiscal years 1965 to 1990—Continued**

[In thousands of dollars]

Level, agency, and program	1965	1970	1975	1980	1985	1987	1988	1989	1990 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
Estimated education funds <sup>77</sup> .....	--	--	7,045	2,033	1,761	3,368	4,110	4,800	5,200
Agency for International Development.....	63,328	68,034	78,896	99,707	141,847	186,175	193,115	182,839	181,093
Education and human resources.....	53,968	61,570	58,349	80,518	115,104	152,332	180,051	148,915	139,513
American schools and hospitals abroad.....	9,361	26,464	20,547	19,189	26,743	33,843	33,064	35,924	41,580
Appalachian Regional Commission <sup>78</sup> .....	--	572	1,574	6,124	113	92	--	175	175
Federal Emergency Management Agency <sup>79</sup> .....	--	290	290	261	405	290	290	77	247
Estimate: architect/engineer student development program <sup>79</sup> .....	--	40	40	31	155	40	40	50	60
Estimated other training programs <sup>80</sup> .....	--	250	250	250	250	250	250	27	167
General Services Administration <sup>81</sup> .....									
Libraries and other archival activities.....	4,013	14,775	22,532	34,600	--	--	--	--	--
Japanese-United States Friendship Commission <sup>82</sup> .....	--	--	--	2,294	2,236	3,225	2,274	3,004	2,995
Library of Congress.....	15,111	29,478	63,796	151,871	169,310	160,835	160,505	177,854	206,653
Salaries and expenses.....	11,421	20,700	48,796	102,364	130,354	124,878	122,358	137,637	165,000
Books for the blind and the physically handicapped.....	2,317	6,195	11,908	31,438	32,954	33,813	36,245	36,233	34,362
Special foreign currency program.....	1,167	2,273	2,333	3,492	4,821	809	405	99	99
Furniture and furnishings.....	186	310	727	14,579	1,381	1,335	1,499	1,985	7,172
National Aeronautics and Space Administration									
Aerospace education services project.....	100	350	600	932	1,800	2,250	2,400	2,300	3,300
National Archives and Records Administration <sup>83</sup> Libraries and other archival activities.....	--	--	--	--	52,118	59,521	65,153	66,266	78,716
National Commission on Libraries and Information Science <sup>84</sup> .....	--	--	449	2,090	723	512	522	639	3,327
National Endowment for the Arts <sup>84</sup> .....	--	340	1,068	231	1,137	1,295	1,200	1,193	900
National Endowment for the Humanities <sup>85</sup> .....	--	5,090	36,486	85,805	76,252	75,376	78,603	64,929	67,094
Smithsonian Institution.....	2,233	2,461	5,509	5,153	7,866	6,545	5,393	5,890	6,846
Museum programs and related research.....	2,133	2,261	4,203	3,254	4,965	2,506	1,223	670	1,500
National Gallery of Art extension service.....	100	200	300	426	675	731	656	650	707
Woodrow Wilson International Center for Scholars.....	--	--	1,066	1,473	2,548	3,308	3,514	4,360	4,639
United States Information Agency—Center for Cultural and Technical Interchange <sup>81</sup> .....	--	--	--	15,115	19,966	16,756	22,759	20,714	20,430
United States Institute of Peace <sup>86</sup> .....	--	--	--	--	--	4,063	3,478	7,232	6,029
Other programs:									
Estimated education share of Federal aid for the District of Columbia.....	948	1,758	2,335	2,990	7,156	11,540	4,400	4,454	3,771
<b>Research programs at universities and related institutions<sup>87</sup>.....</b>	<b>1,816,276</b>	<b>2,263,641</b>	<b>3,418,374</b>	<b>5,801,204</b>	<b>8,644,575</b>	<b>10,539,908</b>	<b>11,280,464</b>	<b>12,069,825</b>	<b>12,979,957</b>
Department of Education <sup>87</sup> .....	13,248	67,823	82,770	76,742	26,609	60,912	42,379	90,314	94,011
Department of Agriculture.....	58,362	64,796	108,162	216,406	293,252	279,943	304,869	314,294	282,143
Department of Commerce.....	4,015	4,487	21,677	48,295	52,951	36,836	36,133	44,821	13,872
Department of Defense.....	436,912	356,188	364,929	644,455	1,245,688	1,754,456	1,809,690	1,940,308	2,165,535
Department of Energy.....	439,334	548,327	781,376	1,470,224	2,203,316	2,225,513	2,350,426	2,636,065	2,607,780
Department of Health and Human Services.....	474,362	623,765	1,273,037	2,087,053	3,228,014	3,983,407	4,262,117	4,549,261	4,978,027
Department of Housing and Urban Development.....	--	510	2,650	5,314	438	463	51	188	203
Department of the Interior.....	9,839	18,521	26,956	42,175	34,422	33,353	35,103	39,556	23,812
Department of Justice.....	--	1,945	6,902	9,199	5,168	8,991	6,366	5,700	4,000
Department of Labor.....	--	3,567	6,124	12,936	3,417	432	5,526	5,590	5,865
Department of State.....	--	6,220	10,973	186	29	432	1,243	1,269	389
Department of Transportation.....	--	12,326	26,478	31,910	27,621	25,184	16,933	22,826	27,245
Department of the Treasury.....	--	--	--	226	366	169	--	411	243
Department of Veterans Affairs.....	337	518	1,112	1,600	1,000	2,251	2,300	2,300	2,300
ACTION.....	--	--	36	--	--	--	--	--	--
Agency for International Development.....	--	--	--	77,063	56,960	54,652	49,535	45,025	45,481
Environmental Protection Agency.....	--	19,446	33,675	41,063	60,521	67,466	58,053	64,517	79,413
Federal Emergency Management Agency.....	--	--	--	1,695	1,423	--	--	--	--
National Aeronautics and Space Administration.....	208,668	258,016	197,301	254,629	486,824	785,141	697,497	976,478	1,066,743
National Science Foundation.....	154,046	253,626	475,011	743,809	1,067,046	1,184,821	1,232,054	1,342,648	1,507,614
Nuclear Regulatory Commission.....	--	--	7,093	32,590	30,261	29,176	25,676	25,690	29,610
Office of Economic Opportunity.....	7,076	20,035	--	--	--	--	--	--	--
U.S. Arms Control and Disarmament Agency.....	--	100	--	661	395	3,244	2,633	1,619	18
U.S. Information Agency.....	--	--	--	--	--	--	--	--	--
Other agencies.....	10,055	1,421	5,913	990	432	1,966	1,670	947	663

<sup>1</sup> Estimated.

<sup>2</sup> The U.S. Department of Education was created in May 1980. It formerly was the Office of Education in the U.S. Department of Health, Education, and Welfare.

<sup>3</sup> These commodities are purchased under Section 32 of the Act of August 24, 1935, for use in the child nutrition programs.

<sup>4</sup> This program assisted in the construction of public facilities, such as vocational schools, through grants or loans. No funds have been appropriated for this account since FY 77, and it was completely phased out in FY 84 after the monitoring of close-outs of projects was completed. Data are not available for previous years.

<sup>6</sup> This program was funded by the Department of Education in FYs 65 through 81 in the "Impact Aid" program. This program provides for education of dependents of Federal employees residing on Federal property in cases where free public education is unavailable in the nearby community.

<sup>7</sup> The U.S. Department of Energy was created in 1977. It formerly was the Energy Research and Development Administration and before that the Atomic Energy Commission.

<sup>8</sup> This program was established in 1979. Funds were appropriated for this program in FY 80.

<sup>9</sup> The U.S. Department of Health and Human Services was part of the U.S. Department of Health, Education, and Welfare until May 1980.

<sup>10</sup> The Head Start program was in the Office of Economic Opportunity, and funds were appropriated to the U.S. Department of Health, Education, and Welfare, Office of Child Development, in 1972.

<sup>11</sup> After age 18, benefits terminate at the end of the school term or in 3 months, whichever is less.

<sup>12</sup> This program provides funding for supplemental programs for eligible Indian students in public schools.

<sup>13</sup> This program finances the cost of academic, social, and occupational education courses for inmates in Federal prisons.

<sup>14</sup> The Job Corps program was formerly in the Office of Economic Opportunity, and funds were appropriated to the U.S. Department of Labor in 1971 and 1972.

<sup>15</sup> Some of the work and training programs included in this program were in the Office of Economic Opportunity and were transferred to the U.S. Department of Labor in 1971 and 1972.

<sup>16</sup> The U.S. Department of Transportation was created in 1967.

<sup>17</sup> This program was transferred from the U.S. Department of the Treasury to the U.S. Department of Transportation in 1967.

<sup>18</sup> This program was established in FY 72 and closed in FY 86.

<sup>19</sup> The States' share of revenue-sharing funds was not spent on education in FYs 81 through 86.

<sup>20</sup> The U.S. Department of Veterans Affairs, formerly the Veterans Administration, was created in March 1989.

<sup>21</sup> This program provides educational assistance allowances in order to restore lost educational opportunities to those individuals whose careers were interrupted or impeded by reason of active military service between January 31, 1955, and January 1, 1977. Includes "Readjustment Benefits," Chapter 34, for education other than college and also includes the "Veterans Job Training Program" for service persons and veterans.

<sup>22</sup> This program is in "Readjustment Benefits" program, Chapter 31, and covers the costs of subsistence, tuition, books, supplies, and equipment for disabled veterans requiring vocational rehabilitation.

<sup>23</sup> This program is in the "Readjustment Benefits" program, Chapter 35, and provides benefits to children and spouses of veterans.

<sup>24</sup> This agency was established March 9, 1965. First year of appropriations was 1966. The outlays were larger in the years 1970 and 1975 for elementary and secondary education because of the construction of facilities for vocational schools.

<sup>25</sup> This agency was established in 1965. In 1970, \$900,000 were appropriated through the Office of Education, U.S. Department of Health, Education, and Welfare, for the National Endowment for the Arts, Arts in Education program.

<sup>26</sup> This agency was established in 1965. First year of appropriations was 1966.

<sup>27</sup> The Economic Opportunity Act of 1964 authorized 10 major action programs, including Job Corps, Neighborhood Youth Corps, Adult Literacy, Work Experience, College Work-Study, and Community Action programs, including Head Start, Follow Through, and Upward Bound, and authorized the establishment of Volunteers in Service to America (VISTA). These programs were transferred to the U.S. Department of Health, Education, and Welfare, U.S. Department of Labor, and the Action Agency in the 1970's. An act on January 4, 1975 established the Community Services Administration as the successor agency to the Office of Economic Opportunity.

<sup>28</sup> Head Start program funds were transferred to the U.S. Department of Health, Education, and Welfare, Office of Child Development, in 1972.

<sup>29</sup> Most of these program funds were transferred to the U.S. Department of Health, Education, and Welfare, Office of Education, in 1972.

<sup>30</sup> The Job Corps program funds were appropriated to the U.S. Department of Labor in 1971 and 1972.

<sup>31</sup> These program funds were appropriated to the U.S. Department of Labor in 1971 and 1972.

<sup>32</sup> These funds were appropriated to the Action Agency in 1972.

<sup>33</sup> Similar programs were included in the "higher education" program in 1965 through 1975.

<sup>34</sup> Negative amounts occur when program receipts exceed outlays.

<sup>35</sup> This program was formerly in the U.S. Department of Housing and Urban Development and was transferred to the U.S. Department of Health, Education, and Welfare, Office of Education, in FY 79.

<sup>36</sup> First year of appropriations for this program was 1967.

<sup>37</sup> The first year program funds were appropriated for Tuskegee Institute was 1972.

<sup>38</sup> The Sea Grant College Program Act of 1965 established a matching fund grant program that provides for the establishment of a network of programs in fields related to development and preservation of the coastal and marine resources of the Nation. One of the objectives is to provide trained personnel to utilize and manage these resources. This program was in the National Science Foundation and transferred to the U.S. Department of Commerce, October 1970. Appropriations began in 1968.

<sup>39</sup> This program was transferred to the U.S. Department of Transportation in FY 81 by Public Law 97-31, from the U.S. Department of Commerce.

<sup>40</sup> The Department of Defense funds for FYs 88, 89, and 90 are lower than previous years because they exclude military pay and reserve accounts which were included in previous years. FY 85 data are not available except for service academies.

<sup>41</sup> Included in total above.

<sup>42</sup> Instructional costs only are included. These include academics, audiovisual, academic computing center, faculty training, military training, physical education, and libraries.

<sup>43</sup> Includes special education programs (military and civilian); legal education program; flight training; advanced degree program; college degree program (officers); and "Armed Forces Health Professions Scholarship" program.

<sup>44</sup> No funds have been appropriated for this program since FY 82.

<sup>45</sup> This program receives funds periodically.

<sup>46</sup> The first year of appropriations for this program was FY 84.

<sup>47</sup> The first year of appropriations for this program was FY 89.

<sup>48</sup> This program did not exist until FY 78. Money was first awarded in 1978.

<sup>49</sup> The amount reported in FY 83 was large because of a loan default.

<sup>50</sup> Postsecondary student benefits were ended by the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) and were completely phased out by August 1985.

<sup>51</sup> Includes adult education, tribally controlled community colleges, and other postsecondary schools.

<sup>52</sup> This program was transferred to the International Communication Agency (I.C.A.) in the Reorganization Plan No. 2 of 1977, which consolidated the functions of the United States Information Agency (U.S.I.A.) and the Department of State's, Bureau of Educational and Cultural Affairs. In FY 82 the I.C.A. became the U.S.I.A.

<sup>53</sup> This program provides funds for advanced study and research projects of the Soviet Union and Eastern European countries by American institutions of higher education and private research firms. Appropriations began in FY 88.

<sup>54</sup> This program was transferred to the U.S. Department of Transportation in FY 81 by Public Law 97-31, from the U.S. Department of Commerce. FY 89 outlays are much higher because of the replacement of one of the training ships.

<sup>55</sup> Includes flight training. This program was in the U.S. Department of the Treasury in 1965 and was transferred to the U.S. Department of Transportation in 1967.

<sup>56</sup> Includes Vietnam-era veterans under Chapter 34 (GI Bill) of the "Readjustment Benefits" education and training program. This program provides educational assistance allowances, primarily on a monthly basis, in order to restore lost educational opportunities to those individuals whose careers were interrupted or impeded by reason of active military service between January 31, 1955, and January 1, 1977.

<sup>57</sup> Includes service persons under Chapter 34 (GI Bill) of the "Readjustment Benefits" education and training program. Service persons with over 180 days of active duty, any part of which was before January 1, 1977, are eligible to participate in this program.

<sup>58</sup> Includes post-Vietnam-era veterans, under Chapter 32, of the post-Vietnam-era "Veterans Education Account." Provides education and training assistance payments to veterans and service persons with no active duty time before January 1, 1977. Funding is provided through participants' contributions while on active duty and through transfers from the U.S. Department of Defense (DOD). Participants' contributions, up to a maximum of \$2,700, are deposited to the fund prior to discharge. When the participant enters training, the monthly disbursement from his or her account is matched two for one from funds provided by DOD. Additional amounts in the form of incentive bonuses may also be provided by DOD funds. The U.S. Department of Veterans Affairs funds are not appropriated for this program so these data represent obligations.

<sup>59</sup> Public Law 98-525, enacted October 19, 1984 (New GI Bill), established two new peacetime educational programs: An assistance program for veterans who enter active duty during the period beginning July 1, 1965, and ending on June 30, 1988, and an assistance program for certain members of the Selected Reserve.

<sup>60</sup> Chapter 30, also called the Montgomery Bill, and the new GI Bill are for eligible veterans who have agreed to have their military pay reduced \$100 per month for their first 12 months of active duty in order to participate in this program. The "Readjustment Benefits" account under the U.S. Department of Veterans Affairs pays only the basic allowance, up to a maximum of \$300 per month, for full-time training. "Supplemental Benefits" are paid by the U.S. Department of Defense (DOD). Legislation is being proposed to fund the "basic benefit" allowance through the DOD rather than through the "Readjustment Benefits" program appropriation. The U.S. Department of Veterans Affairs would continue to administer the program.

<sup>61</sup> Chapter 108 is for members of the Selected Reserve. The reserve components include the Army, Navy, Air Force, Marine Corps Reserve, Army National Guard and Air National Guard under the U.S. Department of Defense (DOD), and the Coast Guard Reserve, which is under the U.S. Department of Transportation (DOT), when it is not operating as a service in the Navy. Eligible persons can receive up to \$140 per month for full-time training. The DOD and DOT pay for this program, and the U.S. Department of Veterans Affairs administers it.

<sup>62</sup> Includes dependents of veterans under Chapter 35, the "Readjustment Benefits" education and training program. Provides education and training benefits to dependents of veterans who died of a service-connected disability or whose service-connected disability is rated permanent and total.

<sup>63</sup> These payments have been made to State education agencies for years but they were not available as a separate budget item until FY 88.

<sup>64</sup> The U.S.I.A. was called the "International Communication Agency" in FYs 80 and 81.

<sup>65</sup> This program was in the "Educational and Cultural Affairs" program in FYs 80 through 83, and became an independent program in FY 84.

<sup>66</sup> This program was combined with the "educational and cultural affairs" program in FY 77.

<sup>67</sup> Public Law 99-661 established this program to operate the scholarship program in tribute to the former Senator from Arizona. The Foundation will award scholarships and fellowships to outstanding graduate and undergraduate students who intend to pursue careers or advanced degrees in science or mathematics. The Foundation may also award honoraria to outstanding individuals who have made significant contributions to improve the instruction of science and mathematics in secondary schools.

<sup>68</sup> Appropriations for this program began in FY 76.

<sup>69</sup> Public Law 99-496 established this Institute as an independent non-profit corporation administered by a Board of Trustees. The Institute provides Native Americans with an opportunity to obtain a postsecondary education in various fields of Indian art and culture.

<sup>70</sup> Public Laws 99-500 and 99-591 established the James Madison Memorial Fellowship Foundation to operate a fellowship program to encourage graduate study of the American Constitution. First year of appropriations for this program was FY 88.

<sup>71</sup> This program was transferred to the U.S. Department of Transportation in FY 88 from the U.S. Department of Housing and Urban Development, under Reorganization Plan No. 2 of 1968.

<sup>72</sup> This program was established by the Juvenile Justice and Delinquency Prevention Act of 1974 to provide education and training and to provide leadership in improving correctional programs and practices in prisons. FY 75 had large outlays because of the construction of buildings and facilities.

<sup>73</sup> Appropriations for this program began in FY 70. This program is part of the Federal-Aid Highway Act of 1970, Public Law 91-605.

<sup>74</sup> The Federal Aviation Administration was an independent agency, and was transferred to the U.S. Department of Transportation in FY 87.

<sup>75</sup> Appropriations for this program began in FY 72. No funds have been appropriated for this program since FY 82.

<sup>76</sup> First year of appropriations for this program was FY 70.

<sup>77</sup> This agency was established on July 1, 1971. This agency brings together a number of volunteer programs. Some of these funds were formerly in the Office of Economic Opportunity.

<sup>78</sup> These programs included the Service Learning Programs, University Year for Action, Youth Challenge Program, and the National Student Volunteer Program in FY 1975. In FYs 80 to 84, programs included were the University Year for Action, Young Volunteers for Action, and National Service Learning programs. In fiscal years 1985 and 1986, the program included was the Service Learning Programs, and in FYs 87 to 90, programs included were the Literacy Corps and the Student Community Services program.

## 342 FEDERAL PROGRAMS

<sup>76</sup> The Federal Emergency Management Agency was created on March 25, 1979, representing a combination of about five existing agencies. The two largest were the Defense Civil Preparedness Agency in the U.S. Department of Defense and the Federal Preparedness Agency in the General Services Administration.

<sup>77</sup> First year of appropriations for this program was FY 68.

<sup>80</sup> First appropriations for the "other training programs" were in the late 1960s. These programs include the Fall-Out Shelter Analysis, Blast Protection Design, and Multi-Protection Design Summer Institute.

<sup>81</sup> This program was transferred from the General Services Administration to the National Archives and Records Administration in April 1965.

<sup>82</sup> This program makes grants for the promotion of scholarly, cultural, and artistic exchanges between Japan and the United States. Appropriations for this program began in FY 76.

<sup>83</sup> The National Archives and Records Administration became an independent agency in April 1965.

<sup>84</sup> This program was established by the act of July 20, 1970, Public Law 91-344...

<sup>85</sup> This program was established by Congress to conduct and support research and scholarships in the fields of peace, arms control, and conflict resolution. This program began operation in February 1966.

<sup>86</sup> Includes Federal funds for research and development centers administered by colleges and universities. Obligation amounts are reported. FYs 89 and 90 are estimated.

<sup>87</sup> Total outlays for FYs 65 and 70 include the "Research and Training" program. FY 75 includes the "National Institute of Education" program. FYs 80 to 90 include outlays of the National Institute of Education and the National Center for Education Statistics. —Data not available or not applicable.

NOTE.—Some data have been revised from previously published figures. To the extent possible, amounts reported represent outlays rather than obligations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, compiled from data appearing in U.S. Office of Management and Budget, Budget of the U.S. Government, Appendix, fiscal years 1967 to 1991; National Science Foundation, Federal Funds for Research and Development, fiscal years 1965 to 1990; and unpublished data obtained from Federal agencies. (This table was prepared February 1990.)

**Table 327.—Federal funds obligated for programs administered by the Department of Education:  
Fiscal years 1980 to 1990**

(In thousands of dollars)

Program	1980	1982	1984	1985	1986	1987	1988	1989	1990 <sup>1</sup>
1	2	3	4	5	6	7	8	9	10
<b>Total</b> .....	<b>\$14,102,165</b>	<b>\$16,066,666</b>	<b>\$17,072,998</b>	<b>\$18,816,201</b>	<b>\$18,940,881</b>	<b>\$19,877,378</b>	<b>\$20,867,311</b>	<b>\$24,473,634</b>	<b>\$25,700,889</b>
Elementary and secondary education.....	4,239,022	3,802,234	4,294,269	4,732,804	4,447,153	5,174,344	5,682,997	5,997,160	7,171,545
Grants for the disadvantaged.....	3,204,664	3,063,651	3,501,383	3,745,655	3,557,026	3,994,266	4,357,970	4,600,444	5,372,571
School improvement programs.....	768,918	524,730	549,117	748,000	658,676	929,488	1,067,213	1,129,444	1,536,651
Bilingual education.....	169,540	136,292	173,051	171,605	167,534	166,312	191,470	196,309	188,674
Indian education.....	75,900	77,561	70,718	67,404	63,917	64,258	66,344	70,963	73,649
School assistance in federally affected areas.....	812,873	457,227	608,791	695,746	677,055	705,953	731,241	731,768	773,632
Maintenance and operations.....	660,000	436,498	555,300	665,000	636,405	685,000	685,498	708,398	717,354
Construction.....	110,873	15,951	26,491	23,037	21,267	7,293	35,640	18,400	37,748
Disaster assistance.....	12,000	2,776	25,000	7,709	19,383	13,690	10,103	4,972	16,530
Other.....	—	—	—	—	—	—	—	—	—
Education for the handicapped.....	1,555,253	2,023,536	2,416,799	2,666,056	2,573,399	3,207,674	3,075,456	3,814,846	4,204,099
State grant programs.....	615,605	933,657	1,082,180	1,245,219	1,087,249	1,305,643	1,115,333	1,642,647	1,809,207
Early childhood education <sup>2</sup> .....	38,745	40,673	53,164	27,625	15,991	227,532	210,752	319,012	430,164
Special centers, projects, and research.....	55,075	35,057	54,871	53,430	54,629	96,365	78,600	102,141	96,889
Captioned films and media services.....	17,778	11,438	14,000	35,670	36,105	18,393	13,026	13,346	15,192
Personnel training.....	55,375	48,911	55,540	68,025	68,339	73,724	66,153	87,023	71,000
Handicapped rehabilitation service and research.....	572,475	963,600	1,157,044	1,238,067	1,311,066	1,486,017	1,591,592	1,670,877	1,781,647
Vocational education and adult programs.....	1,153,743	751,118	954,320	856,271	1,016,302	997,966	1,000,055	1,052,470	1,202,736
Basic programs <sup>3</sup> .....	744,653	530,669	689,324	725,624	662,979	840,350	823,299	859,239	925,024
Consumer and homemaking.....	63,169	29,363	36,792	33,138	30,311	31,737	32,752	32,818	34,517
Program improvement and supportive services.....	182,512	91,650	117,249	5,202	—	—	—	—	—
State planning and advisory councils.....	13,423	6,800	11,200	7,584	6,761	7,645	7,681	7,945	8,266
Adult education, grants to States.....	153,724	90,636	99,755	84,723	109,791	111,254	129,183	139,771	217,392
Other.....	16,262	—	—	—	6,460	7,000	7,140	12,699	17,535
Postsecondary student financial assistance.....	5,106,534	6,584,012	7,476,401	8,534,205	8,932,803	6,473,766	8,807,929	11,482,606	10,801,185
Educational opportunity grants <sup>4</sup> .....	2,534,376	2,548,167	3,565,209	3,558,440	4,460,266	4,403,354	4,620,133	5,379,725	5,318,006
Work-study.....	596,065	523,910	561,322	599,487	576,145	603,160	604,445	620,644	606,362
Direct student loans.....	322,749	193,666	191,962	219,850	212,696	230,483	216,963	202,904	182,471
Guaranteed student loans.....	1,597,877	3,297,776	3,130,939	4,130,920	3,656,502	3,179,160	3,297,305	5,203,843	4,815,022
Other student assistance programs.....	57,465	22,473	28,969	25,528	25,194	57,629	69,063	75,492	79,324
Direct aid to postsecondary institutions.....	277,068	264,467	311,221	329,714	294,681	325,232	341,063	396,318	457,769
Aid to minority and developing institutions.....	114,680	119,829	132,081	140,374	125,895	149,026	135,222	179,062	215,947
Special programs for the disadvantaged.....	147,389	150,238	164,740	174,940	166,766	176,204	205,841	219,256	241,822
Cooperative education.....	14,999	14,400	14,400	14,400	—	—	—	—	—
Higher education facilities.....	266,493	449,191	216,693	194,556	206,017	212,936	162,526	77,362	94,223
Construction loans and insurance.....	35,362	36,690	54,105	33,166	26,800	11,553	69,820	37,109	45,083
Interest subsidy grants.....	24,626	23,759	23,925	24,968	23,961	58,408	24,466	22,524	31,059
College housing loans.....	206,505	386,742	138,663	136,400	155,236	142,975	48,242	17,729	18,081
Other higher education programs.....	34,927	36,226	82,410	74,340	64,032	92,561	79,305	73,574	89,717
International education and foreign languages.....	19,977	23,923	30,600	32,050	—	—	—	—	—
Fund for Improvement of Postsecondary Education.....	12,000	11,503	11,710	12,710	62,835	67,623	65,613	67,236	66,755
Other.....	2,950	2,800	39,900	29,580	1,197	24,938	13,492	6,336	2,962
Public library services.....	101,218	60,074	107,695	116,027	117,996	132,303	135,731	141,684	145,367
Public library services.....	66,451	60,000	65,000	75,000	71,774	80,000	78,922	80,944	82,505
Interlibrary cooperation.....	—	11,520	15,000	18,000	17,226	17,749	18,395	16,826	19,551
Public library construction.....	—	—	21,015	16,027	17,514	21,334	23,577	27,269	27,621
Research libraries.....	5,992	5,760	6,000	6,000	5,742	6,000	5,744	5,675	5,738
Other.....	28,775	2,784	660	1,000	5,742	7,220	9,093	9,150	9,952
Payments to special institutions.....	273,660	261,570	249,610	253,622	255,297	268,630	271,658	264,056	293,212
American Printing House for the Blind.....	4,349	5,000	5,000	5,500	5,263	5,500	5,266	5,335	5,663
National Technical Institute for the Deaf.....	19,799	26,300	26,000	31,400	30,624	32,000	31,594	33,326	36,070
Gallaudet College.....	49,409	64,815	56,268	59,092	59,334	62,000	62,195	65,998	67,643
Howard University.....	200,303	155,455	160,322	157,630	160,076	169,330	172,603	179,397	183,836
Departmental accounts.....	277,174	347,943	352,069	364,800	355,944	385,793	409,348	419,588	467,404
Educational research and improvement.....	51,415	61,550	57,165	60,556	57,514	63,694	66,147	76,263	95,241
Departmental management account.....	223,857	283,906	293,351	300,665	296,397	321,647	341,171	341,266	371,543
Other.....	1,875	2,290	1,401	3,349	—	—	—	—	—
Trust funds.....	27	187	172	10	33	52	30	39	620

<sup>1</sup> Estimated.

<sup>2</sup> Includes preschool incentive grants.

<sup>3</sup> Includes programs of national significance and special programs for the disadvantaged.

<sup>4</sup> Includes Pell Grants, Supplemental Education Opportunity Grants, State Student Incentive Grants, and Income Contingent Loans.

—Data are not available or not applicable.

NOTE.—Because of rounding, details may not add to totals. Data presented in this tabulation are obligations which differ from outlay figures reported in other tables in this chapter. Some data have been revised from previously published figures.

SOURCE: U.S. Office of Management and Budget, *Budget of the United States Government, Appendix, fiscal years 1982 to 1991*. (This table was prepared February 1990.)

**Table 328.—Department of Education outlays, by level of education and type of recipient:<sup>1</sup> Fiscal years 1980 to 1990**

(In millions of dollars)

Year and area of education	Total	Local education agencies	State education agencies	College students	Institutions of higher education	Federal	Multiple types of recipients	Other <sup>2</sup>
1	2	3	4	5	6	7	8	9
<b>1980 total</b> .....	<b>\$13,137.8</b>	<b>\$5,313.7</b>	<b>\$1,103.2</b>	<b>\$2,137.4</b>	<b>\$2,267.2</b>	<b>\$249.8</b>	<b>\$693.8</b>	<b>\$1,372.7</b>
Elementary/secondary .....	6,829.1	5,309.4	682.2	34.2	22.0	82.5	513.4	25.5
Postsecondary education.....	5,882.2	—	99.5	2,103.2	2,166.5	—	—	1,313.0
Other programs .....	747.7	4.3	341.5	—	—	167.3	180.4	34.2
Education research and statistics.....	78.7	—	—	—	78.7	—	—	—
<b>1981 total</b> .....	<b>15,081.8</b>	<b>5,545.8</b>	<b>1,654.0</b>	<b>2,274.2</b>	<b>2,427.7</b>	<b>305.8</b>	<b>661.8</b>	<b>2,213.1</b>
Elementary/secondary .....	6,835.0	5,540.9	676.5	43.4	28.6	58.4	457.5	27.5
Postsecondary education.....	6,824.9	—	152.3	2,230.6	2,338.4	—	—	2,103.4
Other programs .....	1,361.4	4.7	823.2	—	—	247.2	204.1	82.2
Education research and statistics.....	60.5	—	—	—	60.5	—	—	—
<b>1982 total</b> .....	<b>14,109.3</b>	<b>5,425.8</b>	<b>1,414.2</b>	<b>1,810.2</b>	<b>1,951.8</b>	<b>268.3</b>	<b>535.4</b>	<b>2,903.6</b>
Elementary/secondary .....	6,456.3	5,420.8	593.6	46.9	21.9	2.8	340.3	27.9
Postsecondary education.....	6,418.8	—	196.6	1,581.3	1,847.7	—	—	2,813.2
Other programs .....	1,152.0	5.0	623.8	—	—	265.7	195.1	82.5
Education research and statistics.....	82.2	—	—	—	82.2	—	—	—
<b>1983 total</b> .....	<b>14,585.6</b>	<b>5,091.9</b>	<b>1,392.0</b>	<b>2,357.8</b>	<b>2,442.0</b>	<b>250.8</b>	<b>569.0</b>	<b>2,482.6</b>
Elementary/secondary .....	5,986.6	5,086.7	485.2	49.3	23.3	2.8	330.8	28.8
Postsecondary education.....	7,213.3	—	167.9	2,308.5	2,359.1	—	—	2,377.6
Other programs .....	1,326.3	5.2	758.9	—	—	248.0	238.2	75.9
Education research and statistics.....	59.6	—	—	—	59.6	—	—	—
<b>1984 total</b> .....	<b>15,534.7</b>	<b>5,256.5</b>	<b>1,679.0</b>	<b>2,193.4</b>	<b>2,167.4</b>	<b>330.2</b>	<b>516.7</b>	<b>3,191.4</b>
Elementary/secondary .....	6,220.6	5,252.4	536.0	55.5	35.3	22.9	259.9	58.8
Postsecondary education.....	7,341.2	—	211.5	2,137.9	1,972.5	—	—	3,019.3
Other programs .....	1,813.1	4.1	1,131.5	—	—	307.3	258.6	113.3
Education research and statistics.....	159.6	—	—	—	159.6	—	—	—
<b>1985 total</b> .....	<b>16,701.1</b>	<b>6,225.0</b>	<b>1,502.9</b>	<b>2,434.7</b>	<b>2,362.3</b>	<b>287.3</b>	<b>503.9</b>	<b>3,385.0</b>
Elementary/secondary .....	7,296.7	6,220.6	636.0	58.0	25.2	2.4	322.4	31.9
Postsecondary education.....	8,202.5	—	226.3	2,376.7	2,308.3	—	—	3,269.2
Other programs .....	1,173.1	4.2	638.6	—	—	284.9	181.5	83.9
Education research and statistics.....	28.6	—	—	—	28.6	—	—	—
<b>1986 total</b> .....	<b>17,740.1</b>	<b>6,435.1</b>	<b>1,623.3</b>	<b>2,685.9</b>	<b>2,637.2</b>	<b>265.4</b>	<b>625.8</b>	<b>3,267.5</b>
Elementary/secondary .....	7,552.0	6,432.1	558.5	68.3	45.2	2.2	372.0	73.8
Postsecondary education.....	8,444.9	—	215.6	2,817.6	2,523.0	—	—	3,088.7
Other programs .....	1,674.2	3.0	1,049.2	—	—	263.2	253.6	105.0
Education research and statistics.....	69.0	—	—	—	69.0	—	—	—
<b>1987 total</b> .....	<b>18,879.8</b>	<b>6,341.0</b>	<b>1,849.0</b>	<b>2,794.5</b>	<b>2,271.9</b>	<b>309.4</b>	<b>788.3</b>	<b>2,545.6</b>
Elementary/secondary .....	7,554.5	6,335.0	555.0	65.8	40.8	24.1	470.8	63.3
Postsecondary education.....	7,438.7	—	169.7	2,726.7	2,170.4	—	—	2,369.6
Other programs .....	1,825.8	6.0	1,124.3	—	—	285.3	297.7	112.6
Education research and statistics.....	60.9	—	—	—	60.9	—	—	—
<b>1988 total</b> .....	<b>18,326.9</b>	<b>6,614.8</b>	<b>2,234.8</b>	<b>3,103.4</b>	<b>2,519.5</b>	<b>319.4</b>	<b>838.8</b>	<b>2,896.3</b>
Elementary/secondary .....	6,088.4	6,608.3	717.9	68.2	39.5	23.8	616.7	28.0
Postsecondary education.....	8,247.1	—	184.80	3,037.2	2,437.6	—	—	2,587.7
Other programs .....	1,939.0	8.5	1,332.1	—	—	295.6	222.1	80.6
Education research and statistics.....	42.4	—	—	—	42.4	—	—	—
<b>1989 total</b> .....	<b>21,671.2</b>	<b>7,533.5</b>	<b>2,209.1</b>	<b>3,482.2</b>	<b>3,538.3</b>	<b>318.8</b>	<b>748.7</b>	<b>3,842.9</b>
Elementary/secondary .....	6,889.3	7,528.9	618.1	67.0	64.5	17.3	511.2	64.4
Postsecondary education.....	10,640.0	—	195.0	3,415.2	3,383.5	—	—	3,646.3
Other programs .....	2,071.6	6.8	1,396.0	—	—	301.3	235.5	132.2
Education research and statistics.....	90.3	—	—	—	90.3	—	—	—
<b>1990 total</b> .....	<b>22,401.4</b>	<b>7,980.1</b>	<b>2,363.3</b>	<b>3,392.6</b>	<b>3,571.6</b>	<b>356.3</b>	<b>847.3</b>	<b>3,788.2</b>
Elementary/secondary .....	9,479.3	7,974.3	653.0	71.0	61.0	18.0	626.3	55.7
Postsecondary education.....	10,507.3	—	192.3	3,321.6	3,396.6	—	—	3,596.8
Other programs .....	2,320.8	5.8	1,518.0	—	—	340.3	321.0	135.7
Education research and statistics.....	94.0	—	—	—	94.0	—	—	—

<sup>1</sup> Outlays by type of recipient are estimated based on obligation data.<sup>2</sup> Other recipients include Indian tribes, private nonprofit agencies, and banks.

—Data are not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, unpublished data. (This table was prepared April 1990.)

NOTE.—Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

Table 329.—Department of Education obligations for major programs, by State or other area: Fiscal year 1989

(In thousands)

State or other area	Total	Grants for the disadvantaged <sup>1</sup>	Block grant to States for school improvement <sup>2</sup>	School assistance in federally affected areas <sup>3</sup>	Vocational and adult education <sup>4</sup>	Education for the handicapped <sup>5</sup>	Bilingual education <sup>6</sup>	Indian education	Higher and continuing education <sup>7</sup>	Student financial assistance <sup>8</sup>	Public library program	Rehabilitation services <sup>9</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	<b>819,190,781</b>	<b>84,528,724</b>	<b>8908,278</b>	<b>8722,216</b>	<b>31,018,483</b>	<b>81,981,609</b>	<b>8181,850</b>	<b>880,118</b>	<b>8842,539</b>	<b>87,729,890</b>	<b>8127,060</b>	<b>81,494,068</b>
Alabama.....	351,583	69,529	15,245	5,981	20,153	44,274	15	1,005	23,812	115,179	2,308	34,284
Alaska.....	125,671	16,355	4,402	73,787	4,771	5,382	1,043	6,859	825	6,492	421	5,365
Arizona.....	322,111	53,211	11,489	68,015	13,525	21,529	7,136	8,014	5,285	114,835	1,410	19,696
Arkansas.....	198,809	54,295	6,891	2,361	11,897	18,990	29	78	10,578	70,163	1,589	20,201
California.....	1,811,501	498,138	30,400	64,998	87,171	340,974	60,436	5,653	39,249	554,133	11,756	120,584
Colorado.....	226,097	42,155	10,953	6,110	12,113	22,026	2,081	786	7,054	101,898	2,183	16,758
Connecticut.....	173,123	49,056	9,986	7,169	1,896	23,107	869	22	4,201	82,099	1,870	13,047
Delaware.....	70,310	15,135	4,402	93	5,001	3,909	130	0	2,418	33,394	483	5,364
District of Columbia.....	77,417	22,190	4,402	1,870	5,059	5	1,266	233	7,896	24,151	1,176	9,199
Florida.....	745,663	198,303	35,183	14,488	42,391	81,818	6,420	272	15,196	281,939	5,358	64,485
Georgia.....	361,103	120,189	23,281	7,811	28,187	38,814	441	0	22,293	75,913	2,430	41,993
Hawaii.....	73,348	12,714	1,421	21,185	5,104	9,036	1,293	0	2,815	13,350	960	5,689
Idaho.....	90,238	15,788	4,402	4,688	5,102	12,516	533	427	2,096	36,385	910	7,422
Illinois.....	700,873	216,829	40,151	11,400	43,029	3,412	5,691	121	18,791	300,080	4,992	58,378
Indiana.....	339,243	68,937	6,544	1,932	24,530	35,484	795	14	7,943	152,811	2,822	37,452
Iowa.....	195,340	35,439	9,727	348	11,898	92	783	109	7,709	109,635	1,639	17,998
Kansas.....	282,391	32,284	6,312	10,652	9,357	17,140	328	556	8,571	149,324	1,321	14,518
Kentucky.....	295,767	78,752	13,689	1,599	18,653	35,995	205	0	10,909	108,690	1,878	30,396
Louisiana.....	413,431	103,256	17,401	7,848	21,686	48,644	1,847	511	15,492	181,833	2,350	32,583
Maine.....	103,272	23,547	3,767	3,080	6,544	23,227	299	60	4,865	28,565	1,011	9,517
Maryland.....	271,557	70,802	14,557	11,366	15,300	35,131	1,355	150	11,519	85,695	2,107	22,341
Massachusetts.....	408,274	110,828	17,778	5,709	21,281	50,114	4,532	628	15,480	145,504	2,758	31,587
Michigan.....	685,812	174,471	33,182	8,282	38,041	110,893	3,789	2,039	18,008	242,985	4,132	53,251
Minnesota.....	314,249	51,708	14,223	6,441	18,300	36,485	2,338	7,308	7,194	144,505	2,104	25,567
Mississippi.....	284,248	81,248	11,038	5,341	13,486	21,852	949	1,590	18,350	86,068	1,165	25,139
Missouri.....	377,340	69,991	17,012	5,531	20,993	66,140	709	3	5,522	152,382	3,163	33,885
Montana.....	93,552	13,754	4,402	21,456	5,036	366	2,022	4,559	5,987	29,024	674	6,270
Nebraska.....	183,473	20,990	5,484	8,525	6,633	12,184	409	510	3,293	114,887	891	9,668
Nevada.....	53,895	8,992	4,402	3,904	5,048	5,999	875	863	1,485	18,427	686	5,418
New Hampshire.....	53,173	10,842	4,402	2,307	5,121	6,168	89	0	3,642	13,380	776	6,485
New Jersey.....	476,327	142,058	24,533	12,058	25,023	71,456	2,528	72	9,435	151,649	3,506	34,010
New Mexico.....	170,152	33,801	5,600	36,758	7,225	11,706	7,321	6,509	3,477	44,884	1,017	11,675
New York.....	1,723,080	470,199	59,790	17,772	63,981	85,638	28,072	1,057	33,472	886,636	9,029	99,439
North Carolina.....	383,040	100,357	21,742	9,140	30,539	1,910	107	2,075	23,118	123,244	2,986	47,820
North Dakota.....	68,227	10,331	1,471	6,297	5,028	5,219	1,529	2,408	2,453	27,514	629	5,349
Ohio.....	671,247	147,022	37,368	5,158	44,843	70,341	1,105	40	14,050	276,304	4,818	70,179
Oklahoma.....	282,734	41,390	11,477	23,779	14,892	23,855	5,408	11,148	6,201	98,850	1,702	22,282
Oregon.....	194,604	45,398	9,131	3,465	10,916	29,171	1,728	846	6,079	69,593	1,484	16,713
Pennsylvania.....	905,245	218,298	38,693	4,383	47,584	79,704	1,378	390	16,900	418,605	5,333	78,112
Rhode Island.....	75,172	16,585	4,402	2,910	5,276	7,280	1,180	36	1,193	29,063	915	6,380
South Carolina.....	254,750	64,897	12,626	7,422	17,295	37,291	82	0	12,559	73,187	1,889	27,362
South Dakota.....	119,727	13,107	3,767	14,433	5,044	364	801	2,799	2,444	70,407	712	5,848
Tennessee.....	388,137	88,820	17,011	4,049	23,170	72,280	422	3	18,007	108,559	2,719	37,098
Texas.....	1,141,098	317,299	64,048	28,776	70,575	121,908	13,23	99	25,830	394,929	7,289	97,290
Utah.....	145,308	16,415	7,035	9,362	7,821	15,581	891	1,001	5,045	66,705	957	12,487
Vermont.....	55,688	11,321	4,402	19	5,360	6,781	79	83	5,340	16,174	529	5,397
Virginia.....	373,441	82,516	16,373	37,278	23,144	47,851	1,398	15	13,771	114,055	3,273	39,776
Washington.....	314,119	81,581	15,011	25,125	18,727	33,680	3,847	5,318	11,006	112,487	2,213	24,023
West Virginia.....	148,868	39,429	5,905	352	15,788	75	75	0	4,023	54,917	1,417	16,458
Wisconsin.....	396,298	63,997	16,499	6,214	19,379	59,964	732	2,921	12,305	181,141	2,584	30,185
Wyoming.....	47,367	6,725	4,402	7,212	4,038	530	536	738	943	15,518	542	5,384
Indian tribe setaside.....	63,153	25,217	3,499	0	13,453	16,495	0	0	0	0	2,449	0
Undistributed.....	686,278	0	7,000	61,910	0	0	0	91	0	617,275	0	0
<b>Outlying areas</b>												
American Samoa.....	3,177	402	1,085	0	373	106	210	0	202	220	85	485
Guam.....	13,535	180	2,490	0	1,265	4,698	281	0	1,814	1,394	232	1,424
Northern Mariana.....	1,000	180	672	0	382	209	206	0	585	117	78	318
Puerto Rico.....	503,759	154,144	17,007	1,550	18,869	1,307	1,456	0	10,381	267,279	1,415	30,547
Trust Territory of the Pacific.....	2,840	0	819	0	82	712	490	0	539	1	12	174
Virgin Islands.....	10,263	187	1,711	777	677	3,627	194	0	710	958	142	1,300

<sup>1</sup> Chapter 1, Education Consolidation and Improvement Act of 1981.  
<sup>2</sup> Includes Chapter 2, Education Consolidation and Improvement Act of 1981, Science and Mathematics Education, Drug-Free Schools and Communities, and Education of Homeless Children and Youth.  
<sup>3</sup> Includes Maintenance and Operations.  
<sup>4</sup> Includes Vocational Education—Basic State Grants, Community Based Organizations, Consumer and Homemaker Education, State Councils, and Adult Education—State Administered Program.  
<sup>5</sup> Includes State Grants, Preschool Incentive Grants to States, and Grants for Infants and Families.  
<sup>6</sup> Also includes Emergency Immigrant Education Program and Transition Program for Refugee Children.  
<sup>7</sup> Includes Institutional Aid to Strengthen Higher Education Institutions serving significant numbers of low-income students, Other Special Programs for the Disadvantaged,

Cooperative Education, Fund for the Improvement of Postsecondary Education, Fellowships and Scholarships, and annual interest subsidy grants for facilities construction.  
<sup>8</sup> Includes Basic Educational Opportunity Grants (Pell Grants), State Student Incentive Grants, and National Guaranteed Student Loan Interest Subsidies.  
<sup>9</sup> Includes Rehabilitation Services Basic State Grants, Client Assistance for Handicapped Individuals, Independent Living, and Supported Employment Services.  
 NOTE.—Data reflect revisions to figures in the Budget of the United States Government, Fiscal Year 1989. To the extent possible, data represent obligations rather than outlays. Because of the exclusion of certain programs, totals in this table are lower than those reported in other tables. Because of rounding, details may not add to totals.  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, based on unpublished tabulations from the Office of Management and Budget and U.S. Department of Commerce, Bureau of the Census, Federal Expenditures by State for Fiscal Year 1989. (This table was prepared February 1990.)

**Table 330.—Department of Education obligations for major programs, by State or other area: Fiscal year 1968**

(In thousands)

State or other area	Total	Grants for the disadvantaged <sup>1</sup>	Block grant to States for school improvement <sup>2</sup>	School assistance in federally affected areas <sup>3</sup>	Vocational and adult education <sup>4</sup>	Education for the handicapped <sup>5</sup>	Bilingual education	Indian education	Higher and continuing education <sup>6</sup>	Student financial assistance <sup>7</sup>	Public library program	Rehabilitation services <sup>8</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	<b>\$17,262,360</b>	<b>\$4,325,473</b>	<b>\$755,981</b>	<b>\$670,180</b>	<b>\$973,793</b>	<b>\$1,302,684</b>	<b>\$133,353</b>	<b>\$80,090</b>	<b>\$547,601</b>	<b>\$6,921,930</b>	<b>\$120,994</b>	<b>\$1,420,361</b>
Alabama.....	298,218	80,677	13,427	5,431	19,106	47,057	94	972	26,125	70,849	2,093	32,484
Alaska.....	126,665	14,510	3,903	79,385	4,101	3,547	1,331	6,814	4,107	3,293	554	5,121
Arizona.....	269,107	45,388	9,959	52,710	12,900	20,757	5,905	5,101	7,403	69,813	1,658	16,223
Arkansas.....	168,622	57,336	7,781	2,174	11,087	17,213	144	75	7,506	44,896	1,369	19,039
California.....	1,281,611	467,628	78,250	61,641	61,920	829	36,454	3,662	33,977	394,445	11,193	111,213
Colorado.....	169,918	38,971	9,779	7,851	11,362	16,803	2,495	522	6,797	77,779	1,531	18,026
Connecticut.....	183,283	47,713	9,123	6,912	10,413	23,159	406	19	4,225	67,143	1,845	12,523
Delaware.....	67,397	14,509	3,903	85	4,905	4,511	50	0	1,811	32,064	452	5,127
District of Columbia.....	93,748	20,466	3,903	1,293	5,011	1,785	880	110	8,236	42,691	454	6,917
Florida.....	657,131	183,405	29,677	11,111	39,368	64,686	3,453	94	12,108	236,964	5,714	60,501
Georgia.....	333,939	107,568	20,150	7,067	26,353	37,313	193	0	23,467	69,712	2,570	39,547
Hawaii.....	65,215	13,534	3,903	20,248	5,059	339	1,104	0	2,736	11,942	940	5,412
Idaho.....	71,318	14,710	3,903	4,613	5,030	7,219	564	179	1,792	25,576	566	7,134
Illinois.....	737,366	203,724	36,083	11,862	41,903	77,999	3,770	115	18,095	282,141	5,998	58,676
Indiana.....	351,044	65,025	17,961	1,897	23,640	68,977	876	12	7,062	126,971	2,406	36,016
Iowa.....	207,952	33,092	9,091	219	11,883	21,780	246	240	6,029	104,285	1,567	17,530
Kansas.....	225,408	31,997	7,437	10,711	9,061	30,123	50	621	7,653	112,658	1,348	13,727
Kentucky.....	259,791	72,631	12,353	1,317	17,894	25,339	195	0	10,755	67,924	2,236	29,147
Louisiana.....	341,172	101,364	15,491	6,302	21,406	7,349	1,765	410	14,048	136,249	2,170	32,530
Maine.....	82,235	22,157	3,903	3,196	5,564	9,902	841	55	3,667	23,356	639	9,135
Maryland.....	261,215	72,001	13,022	8,206	16,096	64,336	642	145	13,965	69,761	1,744	21,258
Massachusetts.....	366,643	107,567	16,107	11,432	21,010	19,586	2,901	335	15,139	139,650	2,756	30,439
Michigan.....	522,166	168,575	30,059	6,900	37,581	2,453	4,225	2,094	17,930	198,633	4,082	49,763
Minnesota.....	298,148	48,909	12,956	5,270	16,115	28,519	1,731	3,901	8,476	145,141	2,658	24,471
Mississippi.....	248,365	75,073	9,604	3,653	12,910	29,306	872	635	12,440	77,392	1,370	23,931
Missouri.....	260,598	84,905	15,458	6,314	20,728	3,036	479	2	5,610	129,911	2,136	32,018
Montana.....	92,457	12,909	3,903	22,940	4,977	5,579	1,500	3,325	3,602	27,022	662	5,957
Nebraska.....	141,235	19,717	5,042	8,990	6,444	11,320	364	374	2,470	75,683	1,072	9,759
Nevada.....	49,833	8,840	3,903	3,047	4,971	5,968	688	487	1,289	14,720	725	5,194
New Hampshire.....	46,571	10,020	3,903	2,575	5,045	6,014	113	0	2,153	11,844	751	6,153
New Jersey.....	437,633	131,269	22,062	12,326	24,351	57,329	2,026	70	11,702	140,472	3,453	32,569
New Mexico.....	149,778	30,206	5,028	37,634	6,945	11,368	6,326	4,338	3,087	32,967	931	10,825
New York.....	1,529,260	440,869	55,617	14,548	63,120	1,486	22,069	1,166	37,339	600,693	6,314	65,840
North Carolina.....	395,008	96,705	19,614	9,008	29,005	71,341	124	1,843	23,257	95,639	2,919	45,584
North Dakota.....	77,013	9,627	3,903	9,998	4,952	4,710	1,352	319	2,530	32,915	611	5,097
Ohio.....	658,544	145,620	34,436	4,852	43,809	69,529	1,066	43	20,251	266,563	4,763	65,382
Oklahoma.....	236,722	42,431	10,335	22,828	13,919	25,540	3,769	10,213	7,757	78,691	1,720	21,530
Oregon.....	157,392	44,594	8,174	3,021	10,520	62	1,284	647	5,156	65,965	1,448	16,303
Pennsylvania.....	635,569	213,156	34,674	3,940	46,963	74,880	1,336	155	23,242	359,095	5,229	72,907
Rhode Island.....	70,637	15,630	3,903	2,811	5,173	7,685	714	34	5,912	21,676	735	6,162
South Carolina.....	220,011	62,059	11,148	5,609	16,299	25,806	0	0	12,561	56,210	2,060	26,260
South Dakota.....	108,011	11,448	3,903	14,790	4,976	5,776	962	1,726	1,733	56,557	496	5,850
Tennessee.....	274,411	83,517	15,183	3,579	22,034	4,030	236	3	13,950	94,472	2,142	35,266
Texas.....	1,029,020	310,755	55,295	26,784	65,074	116,773	10,529	84	27,434	315,346	6,310	92,636
Utah.....	131,605	14,696	6,929	6,937	7,366	15,973	684	664	6,696	56,070	1,017	11,783
Vermont.....	44,228	11,365	3,903	11	4,414	806	50	142	3,548	14,228	567	5,175
Virginia.....	332,177	78,250	16,928	34,221	22,367	38,827	481	15	11,795	94,707	2,684	32,103
Washington.....	275,722	80,700	13,365	26,849	15,682	29,990	2,094	4,144	9,397	89,550	2,192	22,770
West Virginia.....	140,235	37,118	6,404	97	9,215	16,784	0	0	3,512	50,154	1,059	15,912
Wisconsin.....	286,091	61,524	15,078	5,557	19,842	1,306	435	1,758	6,261	139,926	2,129	30,472
Wyoming.....	49,705	6,422	3,903	7,231	4,760	6,856	410	644	998	12,819	550	5,112
Indian tribe setaside.....	46,769	27,247	598	0	0	16,519	0	0	0	0	2,405	0
Undistributed.....	916,307	0	0	35,918	0	0	50	14	0	680,325	0	0
<b>Outlying areas</b>												
American Samoa.....	7,062	3,491	784	0	390	1,439	182	0	149	94	84	489
Guam.....	15,440	3,901	2,031	0	345	4,202	568	0	1,719	1,233	91	1,360
Northern Marianas.....	5,031	1,737	360	0	360	714	569	0	764	129	77	301
Puerto Rico.....	487,051	130,201	14,545	1,029	17,406	30,564	1,068	0	10,937	232,544	1,697	27,059
Trust Territory of the Pacific.....	13,763	6,976	1,567	0	97	1,580	752	0	93	0	13	666
Virgin Islands.....	13,440	6,490	2,197	804	711	207	156	0	696	643	67	1,246

<sup>1</sup> Chapter 1, Education Consolidation and Improvement Act of 1961.  
<sup>2</sup> Includes Chapter 2, Education Consolidation and Improvement Act of 1961, Science and Mathematics Education, Drug-Free Schools and Communities, and Education of Homeless Children and Youth.  
<sup>3</sup> Includes Maintenance and Operations.  
<sup>4</sup> Includes Vocational Education - Basic State Grants, Community Based Organizations, Consumer and Homemaking Education, State Councils, Adult Education-State Administered Program, and Adult Education for the Homeless.  
<sup>5</sup> Includes State Grants, Preschool Incentive Grants to States, and Grants for Infants and Families.  
<sup>6</sup> Includes Institutional Aid to Strengthen Higher Education Institutions serving significant numbers of low-income students, Other Special Programs for the Disadvantaged,

Cooperative Education, Fund for the Improvement of Postsecondary Education, Fellowships and Scholarships, and annual interest subsidy grants for facilities construction.  
<sup>7</sup> Includes Basic Educational Opportunity Grants (Pell Grants), State Student Incentive Grants, and National Guaranteed Student Loan Interest Subsidies.  
<sup>8</sup> Includes Rehabilitation Services Basic State Grants, Client Assistance for Handicapped Individuals, Independent Living, and Supported Employment Services.  
 NOTE.—To the extent possible, data represent obligations rather than outlays. Because of the exclusion of certain programs, totals in this table are lower than those reported in other tables. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, based on unpublished tabulations from the Office of Management and Budget; and U.S. Department of Commerce, Bureau of the Census, *Federal Expenditure by State for Fiscal Year 1968*. (This table was prepared March 1969.)

**Table 331.—Appropriations for Chapter 1 and Chapter 2, Education Consolidation and Improvement Act of 1981, by State or other area: 1988-89 and 1989-90**

(In thousands)

State or other area	Chapter 1 totl., school year 1988-89 <sup>1</sup>	Chapter 1, school year 1989-90 <sup>1</sup>								Chapter 2	
		Total <sup>1</sup>	Concentration grants	Local education agencies, basic grant	State schools		Migrant children	State administration	Other <sup>2</sup>	Fiscal year 1988	Fiscal year 1989
					Hand-capped children	Neglected and delinquent children					
1	2	3	4	5	6	7	8	9	10	11	12
<b>Total</b> .....	<b>\$4,320,748</b>	<b>\$4,843,870</b>	<b>\$172,900</b>	<b>\$3,883,200</b>	<b>\$148,200</b>	<b>\$31,818</b>	<b>\$271,700</b>	<b>\$40,808</b>	<b>\$28,448</b>	<b>\$478,700</b>	<b>\$482,977</b>
Alabama.....	80,587	89,528	4,905	81,242	281	372	1,821	733	174	8,205	7,889
Alaska.....	14,483	16,354	340	6,548	1,834	197	7,009	325	102	2,388	2,296
Arizona.....	45,373	53,210	2,355	42,118	702	628	6,771	438	201	6,091	6,127
Arkansas.....	52,035	54,294	2,598	45,348	1,468	227	4,084	444	151	4,752	4,605
California.....	468,898	494,559	20,843	375,414	1,612	2,971	87,103	4,052	2,584	47,671	48,473
Colorado.....	41,518	42,154	1,128	35,237	2,861	286	2,337	345	181	5,980	5,865
Connecticut.....	47,879	49,431	1,359	41,540	2,961	484	2,277	405	426	5,577	5,284
Delaware.....	14,477	15,134	448	11,194	2,251	88	678	325	153	2,388	2,296
District of Columbia.....	20,461	22,189	1,058	17,220	2,702	667	89	325	151	2,388	2,296
Florida.....	193,005	198,299	8,544	159,574	4,015	904	23,173	1,825	484	18,141	18,342
Georgia.....	107,541	120,188	5,827	108,587	1,382	754	2,645	985	208	12,323	12,205
Hawaii.....	12,415	12,714	432	11,535	231	80	0	325	111	2,388	2,296
Idaho.....	14,707	15,788	432	11,529	85	86	3,243	325	107	2,388	2,296
Illinois.....	203,471	218,825	7,965	180,860	22,389	1,037	1,912	1,778	888	22,088	21,078
Indiana.....	64,974	68,938	978	60,888	4,454	687	908	584	482	11,003	10,470
Iowa.....	33,084	35,438	545	33,128	700	314	88	325	337	5,557	5,198
Kansas.....	31,974	32,352	525	25,524	1,394	595	3,781	325	230	4,540	4,440
Kentucky.....	72,607	76,775	3,707	68,151	1,494	500	1,879	829	415	7,551	7,155
Louisiana.....	101,331	103,254	4,947	90,798	1,783	580	3,588	848	734	9,483	9,018
Maine.....	22,147	23,587	570	18,391	611	188	3,339	325	161	2,388	2,296
Maryland.....	69,157	70,798	2,297	64,860	1,258	1,118	398	580	287	7,983	7,878
Massachusetts.....	107,483	110,928	3,844	89,574	10,853	668	4,860	909	820	9,848	9,181
Michigan.....	168,489	174,970	5,750	148,843	8,009	1,248	9,151	1,433	535	18,383	17,402
Minnesota.....	48,904	51,706	1,248	48,980	251	241	1,906	423	658	7,933	7,639
Mississippi.....	75,063	81,247	4,307	73,384	380	284	1,943	665	304	5,858	5,623
Missouri.....	64,893	69,334	2,814	63,328	1,178	345	782	588	521	9,423	9,113
Montana.....	13,178	13,477	390	11,729	428	140	345	325	119	2,388	2,296
Nebraska.....	20,018	20,687	519	18,877	150	169	391	325	256	3,050	2,928
Nevada.....	8,833	8,992	340	7,139	289	210	587	325	102	2,388	2,296
New Hampshire.....	10,098	10,759	340	9,205	548	83	112	325	149	2,388	2,296
New Jersey.....	135,201	141,789	5,477	128,636	3,948	1,409	1,773	1,182	1,383	13,561	12,777
New Mexico.....	30,199	33,800	1,825	29,820	125	235	1,248	325	221	3,080	3,026
New York.....	438,730	470,188	20,882	410,218	22,527	3,154	5,789	3,852	4,587	32,055	30,179
North Carolina.....	98,872	100,353	3,882	90,559	1,180	1,308	2,484	822	139	12,000	11,527
North Dakota.....	9,822	10,330	402	8,481	329	45	606	325	143	2,388	2,296
Ohio.....	145,756	147,017	4,090	133,318	4,700	1,637	1,327	1,204	741	21,081	20,000
Oklahoma.....	42,421	41,389	1,534	37,848	408	143	992	339	128	6,322	6,158
Oregon.....	43,906	45,937	432	31,978	4,811	682	7,524	375	158	4,993	4,909
Pennsylvania.....	212,873	218,523	5,822	188,756	14,270	1,058	2,378	1,774	2,488	21,111	20,048
Rhode Island.....	15,824	16,585	837	14,891	598	20	129	325	167	2,388	2,296
South Carolina.....	62,042	64,884	3,052	59,767	419	895	278	531	122	6,818	6,641
South Dakota.....	11,444	13,108	517	11,731	214	85	59	325	178	2,388	2,296
Tennessee.....	83,497	86,817	4,550	79,848	620	771	176	711	139	9,282	8,948
Texas.....	308,988	317,289	12,725	248,600	6,174	1,253	45,152	2,599	787	33,826	33,788
Utah.....	14,872	16,414	432	13,809	935	155	658	325	100	4,228	4,314
Vermont.....	11,348	11,521	340	8,246	1,838	139	708	325	125	2,388	2,296
Virginia.....	78,150	82,731	3,188	78,869	856	614	371	878	154	10,359	10,083
Washington.....	60,872	61,581	1,119	45,168	2,091	1,011	11,484	504	207	8,185	8,017
West Virginia.....	37,105	39,429	1,720	38,233	788	201	41	325	120	3,908	3,616
Wisconsin.....	61,495	63,995	1,375	58,335	1,934	821	785	524	421	9,232	8,851
Wyoming.....	8,410	8,735	340	4,788	777	183	288	325	95	2,388	2,296
<b>Other activities</b>											
Bureau of Indian Affairs.....	27,247	25,217	0	25,217	0	0	0	0	0	—	—
Migrant coordination activities.....	8,173	7,780	—	—	—	—	7,780	—	0	—	—
<b>Outlying areas</b>											
American Samoa.....	2,100	1,962	0	1,870	27	0	0	50	15	482	448
Guam.....	2,388	2,201	0	1,978	180	0	0	50	15	1,308	1,288
Northern Mariana.....	1,135	1,072	0	790	180	0	37	50	15	232	225
Puerto Rico.....	130,194	154,570	8,628	140,642	259	187	2,758	1,288	848	8,863	8,535
Trust Territory of the Pacific.....	6,314	4,502	0	4,437	0	0	0	50	15	1,752	581
Virgin Islands.....	4,292	4,008	0	3,859	84	0	0	50	15	1,329	1,288

<sup>1</sup> Data are based on fiscal year 1989 budget authorizations. Excludes \$7,904,000 for evaluation and studies; \$3,982,000 for rural technical assistance (Rural Tech); and \$14,820,000 for Even Start.

<sup>2</sup> Data are based on fiscal year 1988 budget appropriations. Excludes \$7,181,000 for evaluation and studies.

<sup>3</sup> Includes capital expenses and State program improvement grants.

—Data not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Office of Planning, Budget, and Evaluation, special tabulations. (This table was prepared January 1990.)

Table 332.—Federal obligations to colleges and universities, by agency and State: Fiscal year 1988<sup>1</sup>

[in thousands]

State or other area	Total	Department of Agriculture	Department of Defense	Department of Education	Department of Energy	Environmental Protection Agency	Department of Health and Human Services	National Aeronautics and Space Administration	National Science Foundation	Other <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11
United States.....	817,641,962	8729,910	81,783,034	84,669,299	82,992,082	986,078	84,755,474	81,208,860	81,181,582	8228,968
Alabama.....	249,118	19,413	11,454	101,368	12,214	6	82,737	13,670	5,516	2,741
Alaska.....	23,955	2,811	718	5,589	953	0	919	2,755	7,417	2,795
Arizona.....	186,707	10,830	9,909	48,647	13,567	1,085	41,697	13,802	40,993	6,207
Arkansas.....	84,001	14,361	515	57,996	783	365	8,292	164	1,300	205
California.....	3,420,059	25,651	151,039	319,997	1,107,699	5,327	690,663	925,720	180,557	13,188
Colorado.....	230,633	6,429	13,437	66,352	6,221	1,039	77,111	13,663	22,905	21,456
Connecticut.....	231,478	3,906	10,948	33,280	9,663	675	150,321	1,009	15,686	5,790
Delaware.....	27,618	3,686	3,634	9,756	660	48	3,422	720	4,331	1,361
District of Columbia.....	307,405	1,926	14,078	221,571	1,273	683	55,289	5,293	4,790	2,512
Florida.....	358,638	16,958	48,213	143,515	19,749	2,276	99,503	5,829	20,482	5,331
Georgia.....	299,505	21,237	66,004	87,026	12,348	2,213	66,190	4,536	13,589	4,362
Hawaii.....	58,779	5,097	2,140	12,547	1,601	37	12,316	6,492	10,026	6,323
Idaho.....	39,011	6,744	399	25,341	657	410	1,314	640	775	2,561
Illinois.....	958,145	20,901	30,961	202,744	438,356	2,773	178,584	9,054	72,085	4,787
Indiana.....	219,804	18,306	11,917	88,778	11,798	984	58,799	3,017	26,340	1,997
Iowa.....	217,027	24,122	3,742	80,538	21,882	1,424	69,431	7,749	7,143	996
Kansas.....	113,502	14,117	1,590	68,065	1,888	412	19,783	1,901	5,210	856
Kentucky.....	124,882	20,032	1,140	75,340	1,948	135	21,977	620	2,955	737
Louisiana.....	199,174	14,663	5,712	105,420	14,608	862	48,414	1,686	4,910	2,679
Maine.....	36,712	4,856	232	27,812	0	870	2,172	140	2,256	370
Maryland.....	761,458	9,955	416,344	71,903	6,797	1,271	206,925	14,454	25,820	5,967
Massachusetts.....	1,110,075	19,139	456,151	130,264	76,767	1,461	266,271	21,421	106,038	10,523
Michigan.....	433,177	20,831	16,942	167,423	11,831	1,616	156,006	9,904	43,200	5,194
Minnesota.....	248,301	16,678	5,416	105,999	4,260	864	83,415	1,665	18,002	772
Mississippi.....	148,500	23,614	12,342	90,770	4,267	181	9,969	1,041	1,292	3,004
Missouri.....	254,409	19,494	2,378	89,396	2,332	322	123,242	2,352	11,342	3,551
Montana.....	34,262	5,493	249	19,210	273	452	2,818	307	2,239	3,221
Nebraska.....	74,675	10,612	795	39,998	578	0	14,886	535	4,061	3,380
Nevada.....	20,963	2,455	90	4,830	615	3,165	3,596	96	2,272	3,743
New Hampshire.....	57,324	3,312	2,400	16,813	1,041	467	21,348	5,430	4,332	2,361
New Jersey.....	306,761	7,526	13,224	78,227	115,452	966	56,156	3,335	26,167	5,722
New Mexico.....	710,830	6,501	23,018	39,431	602,095	211	13,824	20,243	5,624	863
New York.....	1,587,867	21,432	88,705	449,485	281,268	7,265	575,836	14,164	152,761	16,931
North Carolina.....	412,690	28,272	15,117	119,062	6,196	5,385	210,896	3,978	19,564	4,528
North Dakota.....	54,401	18,093	352	26,974	1,198	71	4,107	90	659	2,659
Ohio.....	412,778	18,318	32,483	169,139	5,198	2,336	136,238	17,571	19,902	11,613
Oklahoma.....	127,973	14,536	1,665	76,889	10,948	991	13,827	3,203	4,349	1,545
Oregon.....	181,597	20,543	15,566	72,848	4,161	2,137	42,206	1,341	16,161	6,514
Pennsylvania.....	741,660	36,957	122,733	218,965	22,699	3,157	298,506	9,742	53,661	5,236
Rhode Island.....	77,987	2,622	10,174	26,155	3,204	1,216	16,036	1,903	13,684	2,773
South Carolina.....	126,927	14,652	4,061	66,554	9,699	288	23,090	690	5,351	533
South Dakota.....	36,883	5,971	520	23,097	265	110	1,441	389	890	3,230
Tennessee.....	254,186	19,550	8,264	89,984	30,880	565	92,435	4,055	7,427	1,046
Texas.....	720,490	36,564	66,942	249,480	21,498	3,050	270,509	22,064	41,355	6,996
Utah.....	163,120	4,849	24,469	66,090	4,886	682	44,920	1,744	11,334	2,144
Vermont.....	62,477	13,116	355	23,000	242	167	23,466	113	1,859	137
Virginia.....	278,643	16,515	10,634	81,906	50,391	1,631	76,603	13,172	13,922	10,167
Washington.....	333,978	25,845	24,127	94,360	7,930	1,172	140,199	5,103	28,947	6,275
West Virginia.....	96,085	7,964	1,028	36,410	7,136	1,114	10,751	211	29,693	1,758
Wisconsin.....	303,706	16,739	9,333	116,785	16,923	1,432	103,776	9,716	26,640	3,162
Wyoming.....	21,554	3,362	1,397	10,143	641	193	1,196	226	3,376	811
Outlying areas.....	251,323	16,892	315	215,235	400	108	15,112	96	2,117	1,050
American Samoa.....	768	665	0	103	0	0	0	0	0	0
Guam.....	4,203	1,664	0	2,117	0	0	307	0	10	105
Puerto Rico.....	240,524	11,506	315	210,671	400	106	14,561	96	2,027	840
Trust Territory of the Pacific.....	2,735	1,366	0	1,349	0	0	0	0	0	0
Virgin Islands.....	3,093	1,669	0	995	0	0	244	0	80	105

<sup>1</sup> Dollars reflect actual obligations during the fiscal year regardless of when the funds were actually spent by a recipient institution. Data include obligations to federally funded research and development centers administered by colleges and universities.

<sup>2</sup> Includes Department of Commerce, Department of Housing and Urban Development, Department of the Interior, Agency for International Development, Department of Labor, Department of Transportation, and Nuclear Regulatory Commission.

NOTE.—Totals exclude loans to individuals, such as the Federal Guaranteed Student Loan program sponsored by the Department of Education, and Federal training and development activities, as well as funds allocated to State agencies, even though the final recipient of such funds is known to be an academic institution. Tuition support programs such as Pell Grants are included in these figures.

SOURCE: National Science Foundation, *Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, Fiscal Year 1988*. (This table was prepared January 1990.)

**Table 333.—Summary of Federal funds for research, development, and R & D plant: Fiscal years 1982 to 1990**

(In millions of dollars)

Item	Actual							Estimated		Percent- age change, 1989 to 1990
	1982	1983	1984	1985	1986	1987	1988	1989	1990	
1	2	3	4	5	6	7	8	9	10	11
<b>Total outlays for research, development, and R &amp; D plant</b> .....	<b>\$35,766.8</b>	<b>\$37,859.4</b>	<b>\$41,330.1</b>	<b>\$45,850.3</b>	<b>\$52,090.3</b>	<b>\$53,214.2</b>	<b>\$56,556.6</b>	<b>\$61,299.3</b>	<b>\$65,514.7</b>	<b>6.6</b>
Research and development.....	34,390.7	36,559.4	39,891.0	44,171.4	50,609.1	51,611.7	54,739.4	59,140.3	63,147.2	6.6
R & D plant.....	1,376.1	1,299.9	1,439.2	1,688.9	1,481.2	1,602.4	1,617.2	2,159.0	2,367.4	9.7
<b>Total obligations for research, development, and R &amp; D plant</b> .....	<b>37,822.4</b>	<b>40,009.6</b>	<b>44,012.2</b>	<b>50,180.4</b>	<b>52,951.2</b>	<b>57,101.4</b>	<b>58,992.2</b>	<b>64,330.6</b>	<b>66,523.9</b>	<b>6.5</b>
Research and development obligations.....	36,432.6	38,711.5	42,224.9	48,359.6	51,412.4	55,255.4	56,935.1	61,902.0	66,064.0	6.6
<b>Performers:</b>										
Federal intramural <sup>1</sup> .....	9,141.0	10,581.9	11,572.3	12,945.4	13,534.9	13,413.1	14,280.9	15,795.1	16,725.7	5.9
Industrial firms.....	17,192.2	17,147.8	18,753.2	21,968.7	24,508.6	26,752.0	26,719.2	29,042.4	31,329.3	7.9
FFRDCS <sup>2</sup> administered by industrial firms.....	1,506.4	1,501.2	1,608.4	1,790.8	1,897.0	1,890.0	1,911.3	2,006.3	2,071.3	3.1
Universities and colleges.....	4,605.5	4,966.4	5,565.1	6,357.5	6,579.3	7,353.6	7,827.7	8,265.9	8,825.7	6.5
FFRDCS <sup>2</sup> administered by universities and colleges.....	1,976.7	2,265.8	2,324.9	2,534.9	2,439.8	3,209.5	3,473.9	3,740.3	4,151.1	11.0
Other nonprofit institutions.....	1,091.7	1,241.6	1,497.3	1,699.2	1,675.5	1,710.8	1,682.6	1,906.8	1,855.6	-2.6
FFRDCS <sup>2</sup> administered by nonprofit institutions.....	520.6	581.3	597.1	689.2	552.6	510.6	505.6	592.5	556.0	-6.2
State and local governments.....	184.3	186.0	130.9	129.4	128.4	148.3	142.1	166.7	159.9	-4.1
Foreign.....	214.3	239.5	175.6	244.5	296.3	297.6	391.8	362.1	409.3	13.0
<b>Research</b> .....	<b>13,022.2</b>	<b>14,253.5</b>	<b>14,978.6</b>	<b>16,133.4</b>	<b>16,502.2</b>	<b>17,942.7</b>	<b>18,650.0</b>	<b>20,415.5</b>	<b>21,091.4</b>	<b>3.3</b>
<b>Performers:</b>										
Federal intramural <sup>1</sup> .....	4,194.2	4,710.3	4,764.7	5,056.1	5,160.4	5,437.7	5,336.4	5,690.5	5,925.6	0.6
Industrial firms.....	2,156.6	2,152.6	2,185.9	2,159.1	2,379.3	2,448.6	2,642.5	3,115.7	3,060.3	-1.8
FFRDCS <sup>2</sup> administered by industrial firms.....	487.3	522.7	496.5	485.9	482.1	433.5	455.2	467.6	439.4	-6.1
Universities and colleges.....	4,046.4	4,466.0	5,029.7	5,726.3	5,883.5	6,640.3	7,022.9	7,485.1	8,048.0	7.5
FFRDCS <sup>2</sup> administered by universities and colleges.....	1,056.7	1,211.6	1,267.5	1,336.5	1,192.9	1,470.9	1,564.6	1,667.3	1,846.2	9.4
Other nonprofit institutions.....	743.5	836.9	922.6	1,045.1	1,061.6	1,207.3	1,299.8	1,442.7	1,426.4	-1.1
FFRDCS <sup>2</sup> administered by nonprofit institutions.....	104.2	85.2	87.3	97.0	89.2	89.6	82.9	94.1	101.6	7.9
State and local governments.....	125.9	136.7	88.2	69.5	91.0	90.2	103.1	115.7	109.1	-5.7
Foreign.....	108.3	129.6	116.5	137.9	182.4	124.3	140.4	116.6	134.7	15.5
<b>Fields of science:</b>										
Life sciences.....	4,745.5	5,177.9	5,638.0	6,362.5	6,484.3	7,343.6	7,724.5	8,276.4	8,739.4	5.6
Psychology.....	218.4	240.9	266.7	327.1	334.0	369.5	389.6	431.2	448.7	4.0
Physical sciences.....	2,500.4	2,891.4	2,669.0	3,046.0	3,069.1	3,252.7	3,317.3	3,725.9	3,965.7	6.4
Environmental sciences.....	1,148.3	1,251.2	1,275.9	1,403.7	1,491.7	1,511.6	1,607.0	1,774.1	1,755.6	-1.0
Mathematics and computer sciences.....	350.1	419.4	440.3	574.9	615.4	640.6	642.9	724.4	755.6	4.3
Engineering.....	3,386.6	3,517.0	3,624.1	3,617.6	3,739.0	3,906.2	3,656.3	4,363.7	4,257.8	-2.4
Social sciences.....	385.9	435.3	436.3	460.0	415.5	480.1	485.6	561.2	588.6	4.9
Other sciences.....	267.0	320.4	330.5	341.6	383.3	436.3	526.5	656.7	579.9	3.8
<b>Basic research</b> .....	<b>5,481.6</b>	<b>6,260.1</b>	<b>7,067.4</b>	<b>7,618.7</b>	<b>8,153.1</b>	<b>8,944.1</b>	<b>9,473.6</b>	<b>10,464.4</b>	<b>11,200.6</b>	<b>7.0</b>
<b>Performers:</b>										
Federal intramural <sup>1</sup> .....	1,465.5	1,689.6	1,681.1	1,923.4	2,018.9	2,046.2	2,050.3	2,332.3	2,373.6	1.6
Industrial firms.....	270.9	305.7	394.1	408.4	544.6	466.9	596.9	767.2	815.0	3.5
FFRDCS <sup>2</sup> administered by industrial firms.....	67.4	83.0	91.1	122.6	117.6	119.9	133.0	143.7	149.6	4.1
Universities and colleges.....	2,721.1	3,112.3	3,530.6	4,038.7	4,132.1	4,665.8	4,668.3	5,176.2	5,663.2	9.4
FFRDCS <sup>2</sup> administered by universities and colleges.....	516.7	591.2	652.7	695.9	691.1	906.6	966.6	1,084.4	1,235.7	14.0
Other nonprofit institutions.....	355.6	409.6	473.6	555.8	572.0	657.7	726.6	825.4	840.5	1.8
FFRDCS <sup>2</sup> administered by nonprofit institutions.....	9.0	8.0	6.2	12.4	13.1	13.3	17.7	19.4	26.2	34.6
State and local governments.....	24.5	32.1	26.1	30.5	31.0	37.6	42.7	47.5	50.0	5.1
Foreign.....	24.9	26.5	27.7	30.9	32.7	30.2	46.3	46.4	46.6	0.9
<b>Fields of science:</b>										
Life sciences.....	2,526.0	2,891.3	3,287.6	3,786.6	3,858.6	4,363.6	4,501.6	4,821.6	5,199.1	7.6
Psychology.....	89.9	92.9	107.9	132.8	133.0	147.2	177.6	200.5	217.9	8.7
Physical sciences.....	1,393.6	1,567.2	1,728.0	1,815.2	1,914.4	2,096.0	2,199.6	2,529.2	2,753.7	6.9
Environmental sciences.....	520.1	580.1	656.7	699.7	749.1	761.0	872.7	993.4	1,047.6	5.5
Mathematics and computer sciences.....	165.1	206.1	240.6	260.0	293.4	306.4	313.2	336.5	366.8	8.9
Engineering.....	610.5	669.5	645.0	684.2	666.5	699.5	1,006.2	1,138.8	1,106.6	-2.6
Social sciences.....	120.2	137.7	132.6	140.7	113.5	129.5	146.6	166.1	199.1	18.4
Other sciences.....	56.1	73.3	66.6	99.4	122.5	130.9	255.5	274.3	307.6	12.2
<b>Applied research</b> .....	<b>7,540.6</b>	<b>7,993.4</b>	<b>7,911.4</b>	<b>8,314.7</b>	<b>8,349.1</b>	<b>8,998.6</b>	<b>9,176.4</b>	<b>9,951.0</b>	<b>9,890.8</b>	<b>-0.6</b>
<b>Performers:</b>										
Federal intramural <sup>1</sup> .....	2,726.7	3,020.4	2,903.6	3,152.7	3,141.5	3,391.5	3,288.1	3,558.2	3,552.0	-0.2
Industrial firms.....	1,895.7	1,846.9	1,791.8	1,750.7	1,834.7	1,991.7	2,045.6	2,326.5	2,245.4	-3.3
FFRDCS <sup>2</sup> administered by industrial firms.....	400.0	439.7	405.4	363.3	364.5	313.6	322.2	324.2	289.6	-10.6
Universities and colleges.....	1,313.3	1,355.6	1,498.9	1,667.6	1,751.4	1,974.5	2,154.6	2,306.9	2,384.6	3.4
FFRDCS <sup>2</sup> administered by universities and colleges.....	540.0	620.5	634.6	646.6	501.8	564.3	575.0	602.9	610.5	1.3
Other nonprofit institutions.....	387.9	427.3	449.1	489.3	469.6	549.7	571.2	617.3	585.9	-5.1
FFRDCS <sup>2</sup> administered by nonprofit institutions.....	95.2	77.1	79.1	84.6	76.1	76.5	65.2	74.7	75.4	1.0
State and local governments.....	101.4	104.7	60.0	58.9	60.0	62.7	60.4	68.2	59.2	-13.2
Foreign.....	63.4	101.1	66.6	107.0	129.7	94.1	94.1	70.2	87.9	25.2
<b>Fields of science:</b>										
Life sciences.....	2,219.5	2,266.6	2,348.3	2,575.9	2,805.5	2,980.2	3,222.7	3,454.6	3,540.2	2.5
Psychology.....	126.5	147.9	158.6	184.3	201.0	222.4	212.0	230.7	230.6	0.0
Physical sciences.....	1,106.5	1,304.3	1,241.0	1,230.8	1,154.8	1,156.6	1,117.7	1,196.8	1,212.0	1.3
Environmental sciences.....	626.3	671.2	619.2	704.0	732.6	730.6	734.3	780.7	706.1	-9.3
Mathematics and computer sciences.....	185.0	211.3	199.6	314.9	322.0	334.3	329.6	365.8	366.6	0.3
Engineering.....	2,776.1	2,627.5	2,779.1	2,733.4	2,770.5	2,916.7	2,950.0	3,224.9	3,161.2	-2.3

**Table 333.—Summary of Federal funds for research, development, and R & D plant: Fiscal years 1982 to 1990—  
Continued**

[In millions of dollars]

Item	Actual							Estimated		Percent- age change, 1989 to 1990
	1982	1983	1984	1985	1986	1987	1988	1989	1990	
1	2	3	4	5	6	7	8	9	10	11
Social sciences.....	265.6	297.6	303.6	319.3	302.1	350.5	339.0	393.0	369.6	-0.9
Other sciences.....	231.0	247.1	261.7	242.2	260.9	307.4	271.0	264.4	272.1	-4.3
<b>Development.....</b>	<b>23,410.4</b>	<b>24,458.0</b>	<b>27,246.1</b>	<b>32,226.1</b>	<b>34,910.2</b>	<b>37,312.7</b>	<b>36,266.1</b>	<b>41,486.6</b>	<b>44,992.6</b>	<b>6.6</b>
<b>Performers:</b>										
Federal intramural <sup>1</sup> .....	4,946.6	5,871.7	6,607.6	7,669.3	6,374.6	7,975.4	6,942.5	9,904.7	10,800.1	9.0
Industrial firms.....	15,035.7	14,995.2	16,567.3	19,809.6	22,129.3	24,303.4	24,076.7	25,926.7	26,269.0	9.0
FFRDCS <sup>2</sup> administered by industrial firms.....	1,019.1	978.5	1,112.0	1,304.9	1,215.0	1,426.4	1,456.1	1,540.4	1,631.9	5.9
Universities and colleges.....	560.0	498.5	535.4	631.2	666.8	713.2	804.6	800.9	777.7	-2.9
FFRDCS <sup>2</sup> administered by universities and colleges.....	920.0	1,054.2	1,037.4	1,196.3	1,246.9	1,736.6	1,909.1	2,053.0	2,304.9	12.3
Other nonprofit institutions.....	348.1	404.7	574.6	654.1	613.9	503.4	362.6	466.1	429.2	-7.9
FFRDCS <sup>2</sup> administered by nonprofit institutions.....	416.4	496.1	509.8	592.2	463.4	420.6	422.7	496.4	454.5	-8.6
State and local governments.....	56.4	49.3	42.6	39.9	37.4	56.0	39.0	51.0	50.6	-0.4
Foreign.....	106.0	109.9	59.2	106.7	133.9	173.4	251.4	245.5	274.6	11.9
<b>R &amp; D plant obligations.....</b>	<b>1,389.6</b>	<b>1,296.1</b>	<b>1,787.3</b>	<b>1,820.6</b>	<b>1,536.6</b>	<b>1,646.0</b>	<b>2,057.1</b>	<b>2,426.6</b>	<b>2,439.9</b>	<b>0.6</b>
<b>Performers supported:</b>										
Federal intramural <sup>1</sup> .....	426.0	393.9	632.6	630.2	317.1	301.6	319.6	470.7	303.0	--35.6
Industrial firms.....	110.4	260.6	451.7	296.5	409.7	666.7	719.5	1,016.1	1,031.2	1.6
FFRDCS <sup>2</sup> administered by industrial firms.....	362.2	166.4	196.6	167.8	215.9	212.9	204.3	226.6	255.4	11.6
Universities and colleges.....	30.3	32.1	76.3	136.2	132.7	230.6	245.6	192.1	86.4	-55.1
FFRDCS <sup>2</sup> administered by universities and colleges.....	441.7	353.0	363.2	454.2	420.9	400.5	535.3	505.4	749.0	48.2
Other nonprofit institutions.....	6.6	82.1	55.6	69.4	11.6	20.6	23.7	2.4	2.7	11.0
FFRDCS <sup>2</sup> administered by nonprofit institutions.....	9.4	7.9	4.2	9.1	9.6	5.4	6.2	6.7	9.9	48.3
State and local governments.....	—	—	—	0.1	—	—	0.3	0.3	0.3	—
Foreign.....	3.2	1.6	4.9	35.5	21.0	6.8	2.4	6.3	2.1	-66.6

<sup>1</sup> Costs associated with the administration of intramural and extramural programs are covered as well as actual intramural performance.

<sup>2</sup> Federally funded research and development centers.

—Data not available or not applicable.

NOTE.—Some data revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation, *Federal Funds for Research and Development, various years*. (This table was prepared January 1990.)

**Table 334.—Federal obligations to colleges and universities for research and development, by field:  
United States and outlying areas, 1976-77 to 1987-88**

Field of science or engineering	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6	7	8	9	10
<b>Total, all fields</b> .....	<b>\$2,803,017</b>	<b>\$3,385,770</b>	<b>\$3,873,514</b>	<b>\$4,160,543</b>	<b>\$4,410,931</b>	<b>\$4,554,475</b>	<b>\$5,024,330</b>	<b>\$5,448,821</b>	<b>\$6,248,181</b>
<b>Engineering, total</b> .....	<b>265,840</b>	<b>503,686</b>	<b>574,747</b>	<b>812,456</b>	<b>792,223</b>	<b>804,054</b>	<b>913,604</b>	<b>847,874</b>	<b>944,413</b>
Aeronautical.....	13,053	20,840	24,883	28,044	31,056	35,530	39,785	40,878	39,903
Astronautical.....	1,874	849	3,720	4,634	4,875	8,569	18,373	12,405	14,785
Chemical.....	31,065	41,624	20,966	22,210	27,667	30,274	37,685	50,877	68,602
Civil.....	25,018	37,227	37,521	48,130	58,300	38,745	52,231	55,843	45,368
Electrical.....	45,449	76,337	82,158	86,918	115,011	139,442	170,381	181,336	231,457
Mechanical.....	22,109	25,156	26,013	42,593	37,954	37,836	42,577	45,952	53,214
Metallurgy and materials.....	35,577	40,661	36,899	63,057	52,815	63,998	66,146	75,341	80,418
Other engineering.....	91,895	260,972	342,687	316,872	464,545	449,660	488,448	405,442	410,688
<b>All sciences, total</b> .....	<b>2,537,177</b>	<b>2,882,084</b>	<b>3,298,767</b>	<b>3,548,087</b>	<b>3,818,708</b>	<b>3,750,421</b>	<b>4,110,726</b>	<b>4,601,147</b>	<b>5,301,768</b>
<b>Physical sciences, total</b> .....	<b>401,211</b>	<b>445,482</b>	<b>482,967</b>	<b>507,884</b>	<b>500,657</b>	<b>563,440</b>	<b>621,410</b>	<b>715,948</b>	<b>789,184</b>
Astronomy.....	32,427	37,864	45,036	52,736	54,835	54,001	82,278	78,124	78,654
Chemistry.....	123,744	139,507	155,806	170,048	185,189	183,231	192,171	230,689	256,156
Physics.....	198,591	231,405	224,197	249,861	250,342	284,711	325,998	359,757	397,061
Other physical sciences.....	46,449	36,706	37,828	35,439	30,291	41,497	40,963	47,378	57,313
Mathematical sciences.....	48,872	42,781	42,518	53,987	53,668	57,687	64,813	76,438	94,880
Computer sciences.....	26,671	34,856	29,091	37,585	37,493	44,844	52,727	58,667	78,634
<b>Environmental sciences, total</b> .....	<b>302,845</b>	<b>304,118</b>	<b>339,821</b>	<b>379,453</b>	<b>330,079</b>	<b>344,313</b>	<b>372,236</b>	<b>398,538</b>	<b>453,789</b>
Atmospheric sciences.....	88,304	85,496	91,222	88,486	95,112	94,463	103,851	114,183	135,562
Geological sciences.....	107,031	116,077	118,178	109,523	101,207	101,005	101,570	100,801	118,850
Oceanography.....	55,908	57,279	74,789	92,079	91,863	102,340	120,448	136,426	138,732
Other environmental sciences.....	51,402	45,284	55,634	91,385	41,897	48,505	46,387	47,028	82,645
<b>Life sciences, total</b> .....	<b>—</b>	<b>—</b>	<b>2,018,524</b>	<b>2,137,751</b>	<b>2,290,587</b>	<b>2,380,991</b>	<b>2,817,274</b>	<b>2,932,582</b>	<b>3,382,712</b>
Biological sciences.....	—	—	1,054,787	1,085,602	1,192,756	1,201,934	1,339,982	1,548,809	1,775,397
Environmental biology.....	—	—	15,584	13,137	14,636	8,448	8,073	80,595	79,601
Agricultural sciences.....	231,926	—	102,251	111,739	134,660	162,192	170,180	158,369	168,777
Medical sciences.....	779,667	711,002	801,172	885,898	904,963	969,253	1,050,458	1,120,032	1,294,571
Other life sciences.....	32,396	30,834	42,750	41,375	43,572	41,164	48,581	24,777	44,218
<b>Psychological sciences, total</b> .....	<b>57,235</b>	<b>71,891</b>	<b>91,357</b>	<b>86,459</b>	<b>87,734</b>	<b>84,406</b>	<b>93,849</b>	<b>108,787</b>	<b>132,746</b>
Biological aspects.....	19,715	22,818	25,184	26,269	26,273	24,735	24,760	33,515	39,700
Social aspects.....	21,318	27,457	30,800	31,129	28,848	25,166	27,787	30,261	36,205
Other psychological sciences.....	16,202	21,616	35,373	27,061	32,615	34,505	41,302	46,011	56,841
<b>Social sciences, total</b> .....	<b>134,020</b>	<b>184,729</b>	<b>207,258</b>	<b>203,948</b>	<b>197,895</b>	<b>134,323</b>	<b>175,127</b>	<b>182,492</b>	<b>175,909</b>
Anthropology.....	5,882	7,432	7,115	7,757	5,643	11,994	12,878	5,529	8,053
Economics.....	21,581	52,748	52,239	51,414	58,704	52,382	52,756	37,875	45,292
History.....	1,017	1,426	1,451	1,688	1,069	3,200	4,623	1,038	1,494
Linguistics.....	2,300	2,261	2,462	2,997	2,745	3,829	3,419	2,967	3,196
Political science.....	3,837	4,861	8,063	5,890	5,122	10,681	17,149	7,965	8,216
Sociology.....	27,457	39,951	32,217	34,903	38,136	21,142	29,890	33,232	34,887
Other social sciences.....	71,946	78,050	103,711	99,289	88,378	31,295	54,612	74,086	78,771
<b>Other sciences</b> .....	<b>78,368</b>	<b>79,126</b>	<b>109,331</b>	<b>141,020</b>	<b>120,795</b>	<b>140,417</b>	<b>113,290</b>	<b>146,897</b>	<b>214,114</b>

—Data not available.

NOTE.—Some data revised from previously published figures.

SOURCE: National Science Foundation, Science Resources Studies Division, unpublished data. (This table was prepared January 1990.)

**Table 335.—Department of Agriculture obligations for child nutrition programs, by State or other area:  
Fiscal years 1988 and 1989**

(In thousands)

State or other area	Total, fiscal year 1988	Fiscal year 1989								
		Total	Special milk	School lunch <sup>1</sup>	School Breakfast	State administrative expenses	Commodities and cash in lieu of commodities	Child and adult care	Summer food service	Nutrition education and training
1	2	3	4	5	6	7	8	9	10	11
<b>Total</b> .....	<b>\$5,150,884</b>	<b>\$5,558,096</b>	<b>\$19,905</b>	<b>\$3,082,247</b>	<b>\$513,032</b>	<b>\$59,802</b>	<b>\$854,005</b>	<b>\$677,431</b>	<b>\$148,872</b>	<b>\$5,000</b>
Alabama.....	119,123	125,810	53	73,541	13,955	1,389	19,872	13,084	3,880	75
Alaska.....	12,085	13,237	34	7,312	822	312	1,478	3,217	11	50
Arizona.....	68,254	74,413	254	42,198	8,153	808	10,348	11,197	1,401	58
Arkansas.....	59,473	85,129	26	39,428	7,395	828	10,821	5,928	855	50
California.....	509,128	598,899	992	350,920	89,585	5,738	78,228	83,773	11,196	487
Colorado.....	57,933	70,201	362	31,864	3,756	971	10,098	22,087	1,028	55
Connecticut.....	37,343	44,914	594	21,885	2,887	827	8,857	8,886	1,527	52
Delaware.....	12,036	12,700	43	5,177	670	284	2,128	3,107	930	50
District of Columbia.....	18,702	15,114	15	9,345	1,687	328	1,280	1,912	497	50
Florida.....	224,555	245,666	158	141,980	26,100	2,350	39,328	23,571	12,024	177
Georgia.....	164,847	174,718	99	99,045	19,418	1,771	31,509	18,085	4,680	113
Hawaii.....	24,287	24,171	9	14,824	2,333	353	4,228	2,001	374	50
Idaho.....	18,466	20,311	130	13,055	684	319	4,086	1,924	82	50
Illinois.....	205,529	209,924	2,513	126,112	16,553	2,096	31,958	24,747	5,742	205
Indiana.....	79,748	98,590	425	64,812	2,191	874	21,149	7,452	1,588	99
Iowa.....	50,133	54,818	242	29,840	1,992	644	13,289	7,368	1,318	45
Kansas.....	49,940	59,925	433	29,940	1,439	819	9,053	17,959	431	50
Kentucky.....	101,133	101,708	355	58,720	14,750	1,036	18,603	8,819	1,358	85
Louisiana.....	159,380	183,940	80	100,224	17,187	1,774	21,980	18,067	4,538	89
Maine.....	20,868	22,837	178	11,390	947	379	4,028	5,518	347	50
Maryland.....	87,909	88,809	378	38,478	5,436	991	12,459	11,122	1,874	74
Massachusetts.....	94,544	98,766	637	43,160	8,212	1,323	16,055	26,827	2,661	92
Michigan.....	140,778	144,269	1,782	88,493	4,703	1,501	23,685	19,799	4,187	189
Minnesota.....	85,022	92,087	857	48,085	1,518	1,199	18,072	25,535	949	75
Mississippi.....	120,426	130,803	28	75,921	16,400	1,388	15,118	18,943	4,759	52
Missouri.....	88,055	89,830	821	48,788	8,541	1,042	17,931	12,964	1,857	86
Montana.....	18,393	15,703	56	7,904	703	375	3,084	3,277	255	50
Nebraska.....	31,088	31,289	203	14,495	978	482	8,709	8,081	280	43
Nevada.....	11,317	12,107	39	8,668	1,438	253	2,222	1,348	89	50
New Hampshire.....	11,185	11,777	206	5,800	552	311	3,170	1,489	200	50
New Jersey.....	99,388	107,966	1,085	65,133	5,478	1,122	18,873	12,229	4,121	124
New Mexico.....	48,946	53,825	28	28,811	4,195	778	5,973	9,534	3,455	50
New York.....	383,221	399,870	1,760	220,273	42,518	2,767	54,668	47,195	30,181	298
North Carolina.....	146,485	155,555	130	88,803	21,800	1,538	27,543	14,448	3,182	110
North Dakota.....	17,449	17,817	87	7,815	522	378	2,829	5,720	239	50
Ohio.....	191,426	180,404	1,173	114,241	15,068	1,719	31,112	14,539	2,361	191
Oklahoma.....	72,743	74,802	140	42,785	8,041	873	13,086	9,128	894	58
Oregon.....	41,817	47,459	241	28,040	2,815	557	9,051	7,785	940	50
Pennsylvania.....	174,195	178,806	768	100,060	8,872	1,738	34,221	22,395	8,779	188
Rhode Island.....	12,885	12,950	112	7,223	828	327	1,893	1,683	835	50
South Carolina.....	93,265	95,956	35	58,233	10,543	999	14,896	7,088	4,302	63
South Dakota.....	19,749	21,511	64	12,718	1,807	370	3,454	2,408	641	50
Tennessee.....	111,041	111,930	85	65,008	14,366	1,204	21,124	8,422	1,660	82
Texas.....	439,548	482,837	105	280,709	72,587	5,589	89,728	47,388	8,234	319
Utah.....	37,544	37,378	35	19,563	604	520	8,667	7,542	397	50
Vermont.....	8,098	8,859	188	4,101	208	282	1,742	2,239	50	50
Virginia.....	97,080	98,981	282	56,075	9,178	1,003	21,871	9,944	1,729	98
Washington.....	74,047	79,359	310	40,727	4,765	975	12,387	19,344	796	78
West Virginia.....	48,455	47,439	31	28,595	8,387	588	7,486	3,580	743	50
Wisconsin.....	85,022	72,036	1,689	43,905	2,056	812	15,948	8,909	631	86
Wyoming.....	9,638	9,788	17	4,755	280	279	1,894	2,460	65	36
Department of Defense Dependents schools.....	5,880	2,512	0	0	0	0	2,512	0	0	0
<b>Outlying areas</b>										
American Samoa.....	3,937	4,351	0	2,454	1,209	173	466	0	0	50
Guam.....	3,432	3,580	0	2,189	684	210	510	7	0	0
Northern Marianas.....	2,142	2,535	0	1,530	609	163	182	0	0	50
Puerto Rico.....	138,521	128,859	0	95,147	17,425	1,409	11,361	0	3,447	70
Trust Territory of the Pacific <sup>3</sup> .....	1,047	3,639	0	3,332	0	53	239	0	0	15
Virgin Islands.....	5,005	5,440	3	3,524	127	238	812	412	474	50
Undistributed <sup>4</sup> .....	147,468	22,210	0	18,441	0	811	3,700	1,253	4	0

<sup>1</sup> Special Meal Assistance program is combined with "School Lunch" program.<sup>2</sup> Includes commodities purchased for future distribution.<sup>3</sup> Includes the Marshall Islands, Federated States of Micronesia, and Palau.<sup>4</sup> Undistributed amount reflects the difference between preliminary State earnings reports and Federal obligations as of September 30, 1989.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Agriculture, Food and Nutrition Service, Budget Division, unpublished data (This table was prepared February 1990.)

**Table 336.—Department of Health and Human Services allocations for Head Start and enrollment in Head Start, by State or other area: Fiscal years 1987, 1988, and 1989**

State or other area	1987		1988		1989	
	Head Start allocations (in thousands)	Head Start enrollment <sup>1</sup>	Head Start allocations (in thousands)	Head Start enrollment <sup>2</sup>	Head Start allocations (in thousands)	Head Start enrollment <sup>3</sup>
1	2	3	4	5	6	7
<b>Total</b> .....	<b>\$1,102,442</b>	<b>446,623</b>	<b>\$1,176,224</b>	<b>448,484</b>	<b>\$1,203,173</b>	<b>450,870</b>
Alabama.....	22,376	10,690	23,853	10,835	24,367	10,875
Alaska.....	2,320	800	2,446	800	2,462	800
Arizona.....	9,627	3,582	10,349	3,683	10,675	3,743
Arkansas.....	11,566	6,061	12,343	6,061	12,603	6,153
California.....	105,850	35,183	113,657	35,361	116,513	35,835
Colorado.....	10,174	4,730	10,752	4,456	10,936	4,730
Connecticut.....	10,406	4,220	11,021	4,220	11,243	4,199
Delaware.....	2,350	936	2,545	936	2,605	936
District of Columbia.....	6,390	2,063	6,667	2,285	6,761	2,285
Florida.....	30,510	12,991	32,674	13,031	33,763	13,234
Georgia.....	26,034	10,876	27,892	10,958	28,509	10,856
Hawaii.....	4,104	1,371	4,402	1,405	4,475	1,405
Idaho.....	3,107	1,166	3,332	1,166	3,450	1,154
Illinois.....	55,153	22,500	59,909	22,502	60,097	22,850
Indiana.....	15,343	6,954	16,536	7,036	16,917	7,108
Iowa.....	8,117	3,674	8,766	3,678	9,045	3,741
Kansas.....	8,676	3,319	7,405	3,390	7,548	3,394
Kentucky.....	21,281	10,188	22,706	10,188	23,030	10,146
Louisiana.....	23,151	10,523	24,898	10,465	25,557	10,654
Maine.....	4,575	1,661	4,888	2,385	4,998	2,368
Maryland.....	14,524	5,305	15,473	5,305	15,806	5,366
Massachusetts.....	24,099	7,721	25,383	6,147	25,854	6,217
Michigan.....	45,412	20,197	48,370	20,257	49,409	20,348
Minnesota.....	11,631	4,903	12,696	5,039	13,059	5,068
Mississippi.....	53,802	22,524	53,902	19,899	53,670	19,927
Missouri.....	19,072	6,770	20,297	6,777	20,753	6,883
Montana.....	2,744	1,177	2,955	1,177	3,056	1,201
Nebraska.....	4,513	2,044	4,782	2,044	4,894	2,044
Nevada.....	1,556	585	1,703	605	1,726	601
New Hampshire.....	2,069	777	2,213	748	2,234	748
New Jersey.....	32,476	9,709	34,365	9,645	35,016	9,625
New Mexico.....	6,499	3,643	6,996	3,658	7,154	3,603
New York.....	61,481	24,259	67,416	24,811	69,536	24,791
North Carolina.....	23,064	10,553	24,589	10,553	25,207	10,492
North Dakota.....	1,629	705	1,776	710	1,806	710
Ohio.....	45,221	22,175	48,356	22,117	49,466	22,352
Oklahoma.....	13,265	7,202	14,279	7,202	14,551	7,183
Oregon.....	6,756	2,916	6,353	2,952	6,640	2,974
Pennsylvania.....	46,482	16,833	49,439	17,062	50,465	17,130
Rhode Island.....	3,537	1,356	3,761	1,656	3,849	1,838
South Carolina.....	14,309	6,806	15,340	6,543	15,685	6,423
South Dakota.....	2,552	1,097	2,763	1,099	2,821	1,099
Tennessee.....	19,559	6,747	20,915	6,807	21,411	6,926
Texas.....	50,124	22,567	53,999	23,121	55,850	23,211
Utah.....	4,716	2,033	5,120	2,033	5,292	2,116
Vermont.....	2,219	871	2,422	871	2,444	871
Virginia.....	15,606	5,575	16,792	5,591	17,201	5,769
Washington.....	12,480	4,379	13,494	4,373	13,954	4,448
West Virginia.....	9,334	4,006	10,036	4,006	10,259	4,036
Wisconsin.....	16,418	7,137	17,651	7,205	18,074	7,241
Wyoming.....	1,484	696	1,590	696	1,624	699
American Indian programs.....	39,044	13,946	41,640	13,996	42,662	14,302
Migrant programs.....	40,674	16,525	44,345	19,042	45,419	19,103
Special projects.....	2,636	—	2,653	—	3,029	—
Outlying areas						
Puerto Rico.....	45,230	19,001	48,714	19,290	50,163	19,726
Pacific Territories.....	2,626	3,405	2,112	3,405	1,886	2,527
Virgin Islands.....	2,287	1,069	2,452	1,069	2,489	1,069

<sup>1</sup> The distribution of enrollment by age was: 11% were 5 years old and older; 63% were 4 years old; 23% were 3 years old; and 3% were under 3 years of age. Handicapped children accounted for almost 13% of all children in Head Start programs. The racial/ethnic composition was: American Indian, 4%; Hispanic, 22%; black, 39%; white, 32%; and Asian, 3%.

<sup>2</sup> The distribution of enrollment by age was: 10% were 5 years old and older; 62% were 4 years old; 25% were 3 years old; and 3% were under 3 years of age. Handicapped children accounted for more than 13% of all children in Head Start programs. The racial/ethnic composition was: American Indian, 4%; Hispanic, 22%; black, 38%; white, 33%; and Asian, 3%.

<sup>3</sup> The distribution of enrollment by age was: 6% were 5 years old and over; 64% were 4 year-olds; 25% were 3 year-olds; and 3% were under 3 years of age. Handicapped children accounted for almost 13.5% of all children in Head Start programs. The racial/ethnic composition was: American Indian, 4%; Hispanic, 22%; black, 36%; white, 33%; and Asian 3%.

—Data not applicable.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Health and Human Services, Office of Human Development Services. (This table was prepared February 1990.)

**Table 337.—Public and private school students receiving publicly funded free or reduced price lunch, by selected school characteristics: School year 1987-88**

School characteristics	Percent of students participating in program								
	All schools	Public				Private			
		Total	Elementary	Secondary	Combined	Total	Elementary	Secondary	Combined
1	2	3	4	5	6	7	8	9	10
<b>Total.....</b>	<b>25.9</b>	<b>28.5</b>	<b>34.4</b>	<b>18.1</b>	<b>35.1</b>	<b>6.1</b>	<b>7.2</b>	<b>3.7</b>	<b>5.3</b>
<b>Community type:</b>									
Rural/farming.....	30.5	31.8	35.8	22.5	35.5	10.6	12.8	( <sup>1</sup> )	( <sup>1</sup> )
Small city/town.....	23.2	25.0	28.8	16.7	27.3	4.5	5.5	( <sup>1</sup> )	( <sup>1</sup> )
Suburban.....	14.0	15.8	19.8	10.0	17.5	2.7	2.4	( <sup>1</sup> )	( <sup>1</sup> )
Urban.....	32.8	37.9	46.4	22.9	42.5	7.3	9.1	( <sup>1</sup> )	7.4
Other <sup>2</sup> .....	47.1	49.8	50.0	( <sup>1</sup> )					
<b>School size:</b>									
Less than 150.....	21.9	38.2	37.3	35.4	45.5	8.2	7.9	( <sup>1</sup> )	8.5
150-299.....	24.1	32.4	34.4	23.0	37.8	7.5	7.9	( <sup>1</sup> )	( <sup>1</sup> )
300-499.....	27.1	30.0	31.0	23.2	34.5	4.2	4.2	( <sup>1</sup> )	( <sup>1</sup> )
500-749.....	29.9	31.5	34.4	21.5	39.3	5.8	7.2	( <sup>1</sup> )	( <sup>1</sup> )
750 or more.....	23.1	24.0	39.1	18.0	34.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Minority students:</b>									
Less than 5%.....	15.7	17.9	20.5	12.2	25.5	4.5	5.1	( <sup>1</sup> )	4.2
5 to 19%.....	15.4	17.2	21.5	10.3	28.8	3.5	3.5	( <sup>1</sup> )	( <sup>1</sup> )
20 to 49%.....	26.8	28.4	33.4	19.3	41.5	5.9	4.5	( <sup>1</sup> )	( <sup>1</sup> )
50% or more.....	49.9	52.5	61.7	34.0	55.8	16.0	19.7	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Too few sample cases (fewer than 30) for a reliable estimate.  
<sup>2</sup> Includes military bases and Indian reservations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88. (This table was prepared April 1990.)

**Table 338.—Public and private school students receiving publicly funded ECIA<sup>1</sup> Chapter I services, by selected school characteristics: School year 1987-88**

School characteristics	Percent of students participating in program								
	All schools	Public				Private			
		Total	Elementary	Secondary	Combined	Total	Elementary	Secondary	Combined
1	2	3	4	5	6	7	8	9	10
<b>Total.....</b>	<b>10.2</b>	<b>11.1</b>	<b>14.8</b>	<b>4.9</b>	<b>12.1</b>	<b>3.3</b>	<b>3.7</b>	<b>(<sup>2</sup>)</b>	<b>4.3</b>
<b>Community type</b>									
Rural/farming.....	12.1	12.4	16.8	4.8	11.7	5.1	4.0	( <sup>2</sup> )	( <sup>2</sup> )
Small city/town.....	9.3	9.9	13.2	4.2	12.2	3.1	3.4	( <sup>2</sup> )	( <sup>2</sup> )
Suburban.....	5.9	6.8	8.9	3.3	( <sup>2</sup> )	1.8	2.7	( <sup>2</sup> )	( <sup>2</sup> )
Urban.....	12.4	14.1	18.5	6.7	13.7	3.9	4.3	( <sup>2</sup> )	5.6
Other <sup>3</sup> .....	20.9	22.1	21.2	( <sup>2</sup> )	( <sup>2</sup> )				
<b>School size</b>									
Less than 150.....	10.2	17.7	17.5	13.2	24.5	3.8	1.9	( <sup>2</sup> )	7.8
150-299.....	10.7	13.2	15.0	5.9	13.6	5.4	5.7	( <sup>2</sup> )	( <sup>2</sup> )
300-499.....	11.2	12.3	13.9	4.0	11.3	2.5	3.0	( <sup>2</sup> )	( <sup>2</sup> )
500-749.....	11.6	12.4	14.4	5.7	11.9	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
750 or more.....	8.2	8.7	16.4	4.6	9.1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>Minority students</b>									
Less than 5%.....	6.4	7.3	9.9	2.6	9.0	1.8	2.5	( <sup>2</sup> )	( <sup>2</sup> )
5 to 19%.....	6.3	7.0	9.4	3.2	10.2	1.8	2.5	( <sup>2</sup> )	( <sup>2</sup> )
20 to 49%.....	9.0	9.4	12.5	3.9	14.2	5.0	3.1	( <sup>2</sup> )	( <sup>2</sup> )
50% or more.....	20.4	21.2	28.7	10.8	18.1	9.8	9.0	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Education Consolidation Improvement Act.  
<sup>2</sup> Too few sample cases (fewer than 30) for a reliable estimate.  
<sup>3</sup> Includes military bases and Indian reservations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88. (This table was prepared April 1990.)

## CHAPTER 5

# Outcomes of Education

This chapter consists primarily of tables comparing educational attainment and work force characteristics. The data show labor force participation and income levels of high school dropouts, high school graduates, and bachelor's degree recipients. Population characteristics are provided for many of the measures to help evaluate disparities among various demographic groups. The first set of tables contains data from the Bureau of the Census on educational attainment of the labor force and income of the labor force and data from the Bureau of Labor Statistics on employment and unemployment. These tables provide information on the educational attainment of the labor force, by occupation, sex, and race/ethnicity; money income, by level of education attained; and unemployment rates, by years of school completed, sex, and race/ethnicity.

The second group of tables was compiled from Bureau of Labor Statistics data on high school dropouts and graduates. These data show the labor force participation and college enrollment of high school students within the year after they leave school. The tabulations also provide comparative labor force participation and unemployment rates for graduates and dropouts. Additional information on college enrollment rates by race/ethnicity and sex have been included to help form a more complete picture of high school outcomes.

The third set of tables has been prepared from the National Center for Education Statistics survey, Recent College Graduates, and from a Bureau of the Census survey on earnings and education. These tables provide data on employment outcomes for high school and college graduates. A table provides a salary comparison by field of college degree for the entire population. Trends in salaries received by college graduates also are featured in this section.

Statistics on educational attainment of the entire population are in chapter 1. More detailed data on

the number of degree recipients are contained in chapters 2 and 3. Chapter 2 contains trend data on the proportion of high school graduates going to college. Additional data on the income of persons by educational attainment may be obtained from the Bureau of the Census in the *Current Population Reports*, Series P-60. The Bureau of Labor Statistics has a selection of publications dealing with the educational characteristics of the labor force. Further information on survey methodologies is in the "Guide to Sources" in the appendix and in the publications cited in the source notes.

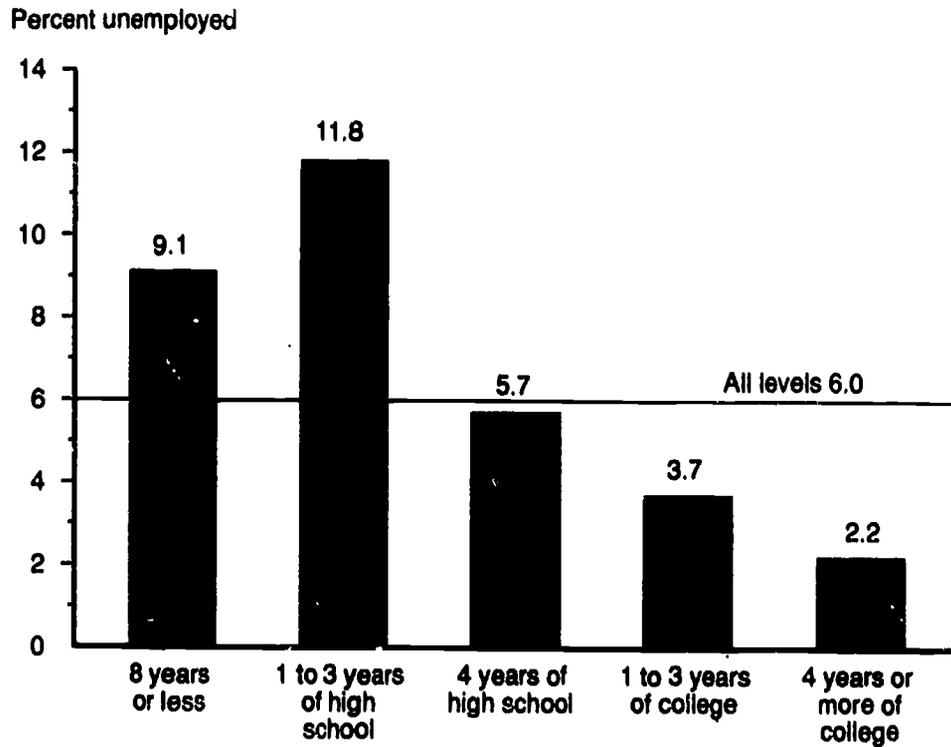
## Highlights

- The life goal most consistently rated "very important" by young men and women was "having a happy family life." Two of the other most highly rated goals in the 1986 survey were "being successful in work" and "finding steady work." (Table 339)
- Persons with lower levels of educational attainment were more likely to be unemployed than those who had higher levels of educational attainment. The March 1989 unemployment rate for those with 1 to 3 years of high school was 11.8 percent compared with 5.7 percent for those with 4 years of high school and 2.2 percent for those with 4 or more years of college.\* Minorities and young people tended to have higher unemployment rates, even after allowing for level of educational attainment. (Table 342)

\*Unemployment rates for all persons with 8 years or less of school were lower than the rate for those who had completed 1 to 3 years of high school. The people with 8 years or less of schooling were generally older workers who tended to have low unemployment rates because of their greater experience in the work force.

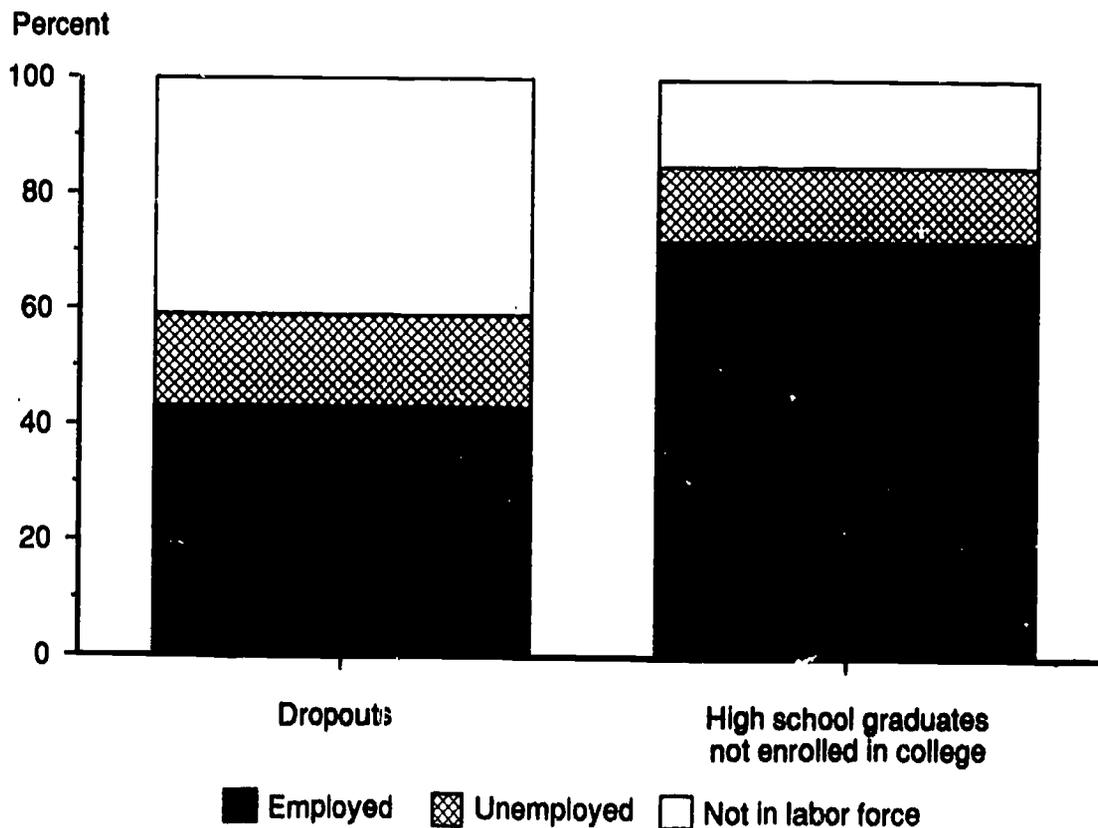
- Between 1978 and 1988, annual income generally rose more rapidly for men with higher levels of educational attainment than for those with lower levels. For example, the income of men who were year-round full-time workers with 4 years of college rose by 74 percent compared with 46 percent for men with 1 to 3 years of high school. Income for men who had completed 4 years of high school increased 59 percent. (Table 344)
- In general, women's incomes rose faster than men's incomes (93 percent compared with 74 percent) between 1978 and 1988. However, for full-time year-round workers, women's salaries remain significantly below those for men at all education levels. (Table 344)
- The problems of dropouts are highlighted by comparing the labor force and unemployment status of 1987-88 dropouts and high school graduates. Only 59 percent of the dropouts were in the labor force (employed or looking for work) and, of those in the labor force, 27 percent were unemployed. Of the 1988 high school graduates who were not in college, 85 percent were in the labor force and 15 percent were unemployed. (Tables 346 and 347)
- About 53 percent of the college graduates of the class of 1985-86 had jobs in professional, managerial, and technical areas in 1987. Thirty-one percent were employed in nonprofessional and non-technical areas, and 4 percent were unemployed. Many of the 11 percent who were not in the labor force were enrolled in graduate school. (Table 349)
- A large number of young adults participate in volunteer organizations. The most common organizations are sports groups (36 percent), church groups (32 percent), and social or hobby clubs (22 percent). (Table 354)
- A 1985 assessment of young adults found that the vast majority (about 96 percent) had basic literacy skills. On the other hand, only about one-fifth had high proficiency in several types of literacy skills. (Table 355)

**Figure 23.—Unemployment rates for persons 16 years old and over, by years of school completed: March 1989**



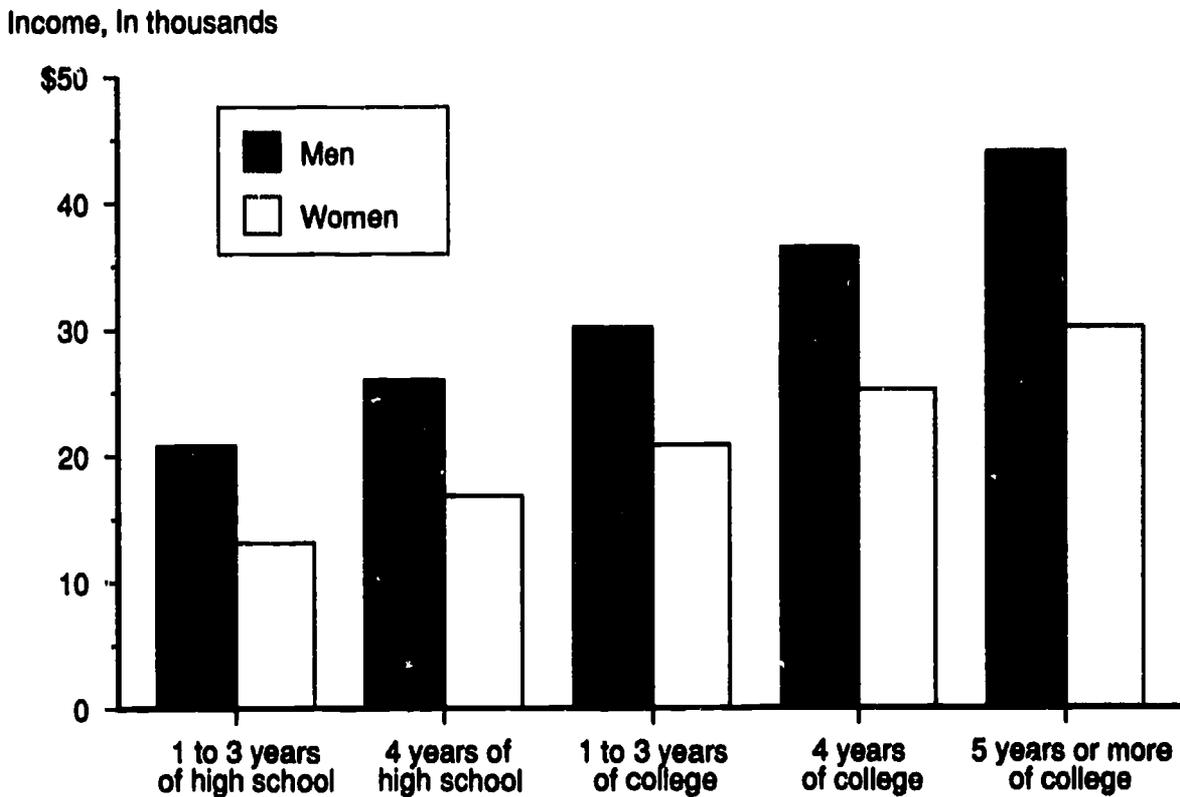
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1989."

**Figure 24.—Labor force status of 1987-88 high school dropouts and graduates: October 1988**



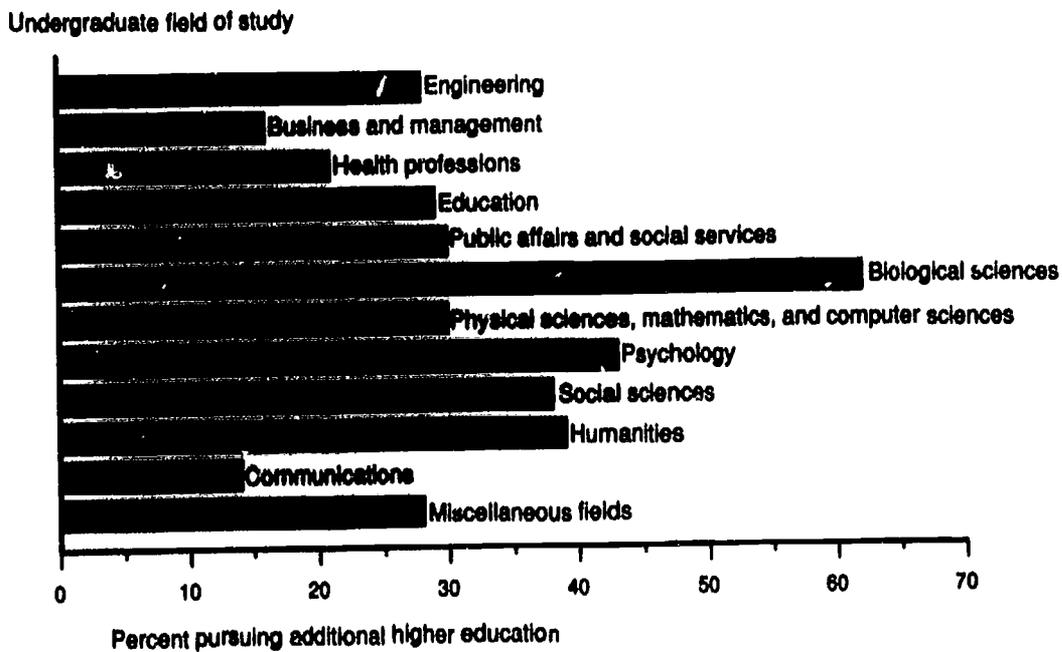
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, "High School Graduates and Dropouts."

**Figure 25.—Median annual income of full-time workers 25 years old and over, by years of school completed and sex: 1988**



SOURCE: U.S. Department of Commerce, Bureau of the Census, *Money Income and Poverty Status of Families and Persons in the United States*, Series P-60, No. 161.

**Figure 26.—Percent of 1985-86 bachelor's degree recipients who have pursued additional higher education, by undergraduate major field of study: 1987**



SOURCE: U.S. Department of Education, National Center for Education Statistics, "Recent College Graduates" survey, 1987.

**Table 339.—Percentage of 1972 and 1982 high school seniors who felt that certain life values were “very important,” by sex: 1972 to 1986**

Value	Percentage of 1972 seniors						Percentage of 1982 seniors					
	1972		1974		1976		1982		1984		1986	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
Being successful in work.....	86.5	83.0	81.2	74.9	80.3	69.7	88.2	85.5	88.7	84.2	84.0	77.2
Finding steady work.....	82.3	73.7	74.7	59.9	79.3	62.1	88.0	84.4	87.4	83.3	84.2	76.3
Having lots of money.....	26.0	9.8	17.8	9.1	17.7	9.4	41.3	24.1	35.8	20.9	27.8	16.9
Being a leader in the community.....	14.9	8.0	8.5	4.4	9.2	4.2	11.3	5.9	13.7	6.4	9.5	4.5
Correcting inequalities.....	22.5	31.1	18.6	18.2	18.2	17.1	11.8	11.7	13.3	13.9	10.7	10.9
Having children.....	—	—	—	—	—	—	37.0	47.0	42.7	56.3	41.4	56.2
Having a happy family life.....	78.6	85.7	83.1	86.7	84.2	86.4	81.6	86.3	86.1	90.2	86.8	87.6
Providing better opportunities for my children.....	66.6	66.2	59.5	61.6	59.8	58.8	71.0	68.7	72.1	69.9	68.4	67.4
Living closer to parents or relatives.....	8.8	8.2	8.3	12.4	7.7	11.9	15.0	15.7	15.8	20.1	12.9	19.8
Moving from area.....	14.3	14.6	8.3	7.4	8.7	8.4	14.4	12.8	10.5	9.1	9.0	7.4
Having strong friendships.....	81.2	76.7	76.5	74.7	78.1	72.1	80.4	79.1	80.1	79.7	76.5	75.0
Having leisure time.....	—	—	60.9	55.1	65.4	60.1	70.2	68.8	74.5	72.0	70.1	68.9

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study and High School and Beyond surveys. (This table was prepared June 1987.)

NOTE.—Percentages are based on the total sample members who responded to the individual survey items in each survey period.

**Table 340.—Labor force participation of persons 16 years old and over, by years of school completed and age, sex, and race/ethnicity: March 1989**

Age, sex, and race/ethnicity	Labor force participation rate <sup>1</sup>						Employment/population ratio <sup>2</sup>					
	Total	8 years or less <sup>3</sup>	High school		College		Total	8 years or less <sup>3</sup>	High school		College	
			1 to 3 years	4 years	1 to 3 years	4 years or more			1 to 3 years	4 years	1 to 3 years	4 years or more
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total, 16 years old and over.....</b>	<b>65.7</b>	<b>33.6</b>	<b>50.0</b>	<b>68.9</b>	<b>74.3</b>	<b>82.1</b>	<b>62.1</b>	<b>30.6</b>	<b>44.1</b>	<b>64.9</b>	<b>71.5</b>	<b>80.3</b>
Men.....	75.8	46.6	60.4	80.8	81.4	88.1	71.3	42.2	53.0	75.8	78.4	86.1
Women.....	56.7	21.1	40.5	59.5	67.6	75.0	53.8	19.4	36.0	56.4	65.2	73.5
White <sup>4</sup> .....	66.0	34.2	51.0	68.4	73.8	81.7	63.0	31.4	46.0	65.0	71.5	80.0
Black <sup>4</sup> .....	62.8	28.9	46.2	73.8	78.9	86.7	55.5	25.0	38.3	64.9	73.1	82.8
Hispanic <sup>5</sup> .....	66.5	55.4	57.2	74.2	79.2	86.5	61.3	50.9	49.0	69.1	75.5	82.8
<b>25 to 34 years old.....</b>	<b>82.9</b>	<b>62.7</b>	<b>71.1</b>	<b>82.1</b>	<b>85.7</b>	<b>90.1</b>	<b>78.3</b>	<b>55.8</b>	<b>61.3</b>	<b>76.9</b>	<b>82.1</b>	<b>88.0</b>
Men.....	93.6	81.1	89.3	94.2	94.7	95.9	88.2	72.8	77.6	87.8	91.1	93.7
Women.....	72.6	42.0	50.6	71.1	77.4	84.1	68.7	36.9	43.0	66.9	74.0	82.1
White <sup>4</sup> .....	83.9	67.0	73.4	82.8	85.7	90.5	79.9	60.1	65.1	78.5	82.7	88.5
Black <sup>4</sup> .....	79.1	35.8	62.1	79.0	87.1	93.3	69.6	25.3	46.3	68.8	80.2	89.1
Hispanic <sup>5</sup> .....	78.7	74.5	74.4	77.5	84.2	89.9	72.7	68.0	64.6	72.8	79.6	84.5

<sup>1</sup> Percent of the civilian population who are employed or seeking employment.

<sup>2</sup> Number of persons employed as a percent of civilian population.

<sup>3</sup> Includes persons reporting no school years completed.

<sup>4</sup> Includes persons of Hispanic origin.

<sup>5</sup> Persons of Hispanic origin may be of any race.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1989," unpublished. (This table was prepared May 1990.)

**Table 341.—Occupation of employed persons 16 years old and over, by years of school completed and sex:  
March 1989**

Sex and occupation	Total employed, in thousands	Percentage distribution, by years of school completed								Median school years completed
		Total	Elementary school		High school		College			
			Less than 8 years <sup>1</sup>	8 years	1 to 3 years	4 years	1 to 3 years	4 years	5 years or more	
1	2	3	4	5	6	7	8	9	10	11
<b>All persons</b>										
All occupational groups.....	115,474	100.0	3.0	2.2	10.9	39.4	20.7	14.0	9.8	12.8
Managerial and professional specialty.....	30,414	100.0	0.4	0.4	2.2	17.4	19.8	29.9	29.9	18.3
Executive, administrative, and managerial.....	14,795	100.0	0.8	0.7	3.2	26.8	24.0	28.1	16.5	15.0
Professional specialty occupations.....	15,619	100.0	0.1	0.1	1.2	8.5	15.8	31.8	42.8	18.8
Teachers, except college and university.....	4,109	100.0	0.1	0.1	1.3	6.6	8.4	38.0	45.8	18.9
Teachers, college and university.....	717	100.0	(2)	(2)	(2)	4.0	7.1	12.0	78.7	18+
Technical, sales, and administrative support.....	35,371	100.0	0.5	0.7	7.5	44.7	27.8	14.1	4.8	12.9
Technicians and related support.....	3,594	100.0	0.1	0.3	2.5	27.9	36.4	22.5	10.2	14.5
Sales occupations.....	13,640	100.0	0.8	1.0	11.6	39.8	23.7	17.5	5.8	12.9
Administrative support, including clerical.....	18,137	100.0	0.4	0.6	5.5	51.8	29.2	9.9	2.8	12.8
Service occupations.....	15,312	100.0	6.0	3.9	21.0	44.4	18.3	5.0	1.4	12.4
Precision production, craft, and repair.....	13,442	100.0	3.9	3.5	14.0	53.9	18.8	4.4	1.4	12.5
Operators, fabricators, and laborers.....	17,927	100.0	7.2	4.7	20.5	51.0	12.7	3.0	0.8	12.3
Farming, forestry, and fishing.....	3,008	100.0	14.2	6.7	17.1	40.8	14.0	5.1	2.1	12.3
<b>Men</b>										
All occupational groups.....	63,066	100.0	3.7	2.7	11.5	37.1	19.7	14.1	11.1	12.9
Managerial and professional specialty.....	18,648	100.0	0.5	0.8	2.4	15.4	18.4	29.2	33.5	16.4
Technical, sales, and administrative support.....	12,272	100.0	0.8	1.0	8.6	34.1	28.9	20.9	7.7	13.9
Service occupations.....	8,124	100.0	8.5	4.3	20.0	39.5	21.0	6.7	2.0	12.5
Precision production, craft, and repair.....	12,263	100.0	3.6	3.5	14.1	53.7	19.3	4.3	1.4	12.5
Operators, fabricators, and laborers.....	13,240	100.0	7.0	4.5	20.1	50.3	13.9	3.2	0.9	12.4
Farming, forestry, and fishing.....	2,519	100.0	15.8	7.4	18.8	39.5	13.8	4.8	2.2	12.3
<b>Women</b>										
All occupational groups.....	52,406	100.0	2.2	1.5	10.3	42.2	21.9	13.8	8.2	12.9
Managerial and professional specialty.....	13,766	100.0	0.2	0.2	2.0	19.9	21.5	30.8	25.4	18.2
Technical, sales, and administrative support.....	23,098	100.0	0.4	0.8	8.0	50.3	27.3	10.5	2.9	12.8
Service occupations.....	9,188	100.0	5.7	3.7	21.7	47.8	18.6	3.8	0.9	12.4
Precision production, craft, and repair.....	1,179	100.0	7.3	3.0	13.2	58.0	13.5	5.8	1.4	12.5
Operators, fabricators, and laborers.....	4,687	100.0	8.1	5.3	21.7	52.9	9.3	2.3	0.5	12.3
Farming, forestry, and fishing.....	489	100.0	7.4	3.3	18.2	47.8	14.9	8.5	2.0	12.4

<sup>1</sup> Includes persons reporting no school years completed.

<sup>2</sup> Less than .05 percent.

NO: E.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1989," unpublished. (This table was prepared May 1990.)

**Table 342.—Unemployment rate of persons 16 years old and over, by age, sex, race/ethnicity, and years of school completed: March 1989**

Sex, race/ethnicity, and years of school completed	Percent unemployed <sup>1</sup>							
	Total, 18 years and over	18 to 19 years	20 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
1	2	3	4	5	6	7	8	9
<b>All persons</b>								
All education levels .....	5.4	14.5	8.3	5.8	4.2	3.4	3.3	2.3
8 years or less .....	9.1	28.0	13.6	10.9	9.7	8.1	7.8	2.3
1 to 3 years of high school .....	11.8	18.6	17.1	13.7	9.8	6.1	3.9	2.4
4 years of high school .....	5.7	11.8	9.7	8.4	4.8	3.5	3.0	3.2
1 to 3 years of college .....	3.7	5.3	5.2	4.1	3.8	2.5	1.7	0.9
4 or more years of college .....	2.2	—	2.7	2.3	2.3	1.8	1.9	1.7
<b>Men</b>								
All education levels .....	5.7	18.1	8.5	5.8	4.7	3.5	3.8	2.1
8 years or less .....	9.5	28.2	14.5	10.2	10.4	8.4	9.0	1.4
1 to 3 years of high school .....	12.2	17.9	14.9	13.1	10.2	8.7	5.2	3.3
4 years of high school .....	6.2	12.6	9.1	6.7	5.8	3.8	3.1	3.1
1 to 3 years of college .....	3.8	8.9	5.8	3.9	3.3	1.9	2.1	0.8
4 or more years of college .....	2.3	—	3.3	2.3	2.8	1.9	2.0	1.8
<b>Women</b>								
All education levels .....	5.0	12.8	8.1	5.3	3.7	3.2	2.8	2.5
8 years or less .....	8.2	25.2	11.1	12.2	8.3	5.6	5.4	4.5
1 to 3 years of high school .....	11.3	15.1	21.4	15.0	9.0	5.3	2.3	1.3
4 years of high school .....	5.3	10.7	10.3	5.9	3.6	3.1	2.9	3.3
1 to 3 years of college .....	3.9	4.3	4.8	4.4	3.9	3.2	1.2	1.1
4 or more years of college .....	2.0	—	2.4	2.3	1.8	1.7	1.8	1.5
<b>White<sup>2</sup></b>								
All education levels .....	4.6	12.4	8.7	4.7	3.8	2.9	3.3	2.0
8 years or less .....	8.4	23.1	10.1	10.3	8.5	5.7	7.9	1.9
1 to 3 years of high school .....	9.9	14.5	13.0	11.4	8.1	3.3	4.4	2.7
4 years of high school .....	4.9	9.5	7.8	5.3	4.0	3.3	3.1	2.7
1 to 3 years of college .....	3.2	3.8	4.4	3.5	3.0	2.3	1.8	0.9
4 or more years of college .....	2.0	—	2.9	2.2	2.0	1.7	1.9	1.3
<b>Black<sup>2</sup></b>								
All education levels .....	11.7	32.1	17.8	12.0	8.8	6.9	3.8	8.7
8 years or less .....	13.7	39.8	50.7	29.7	17.7	7.8	8.1	3.5
1 to 3 years of high school .....	21.4	33.1	43.3	25.3	15.0	13.3	2.0	0.0
4 years of high school .....	11.9	30.2	19.2	12.9	8.1	4.8	2.5	17.0
1 to 3 years of college .....	7.4	28.2	8.0	7.9	8.2	8.0	—	—
4 or more years of college .....	4.5	—	—	4.5	5.8	3.0	5.8	16.4
<b>Hispanic origin<sup>3</sup></b>								
All education levels .....	7.8	18.5	9.1	7.6	5.8	8.5	8.5	8.9
8 years or less .....	8.2	13.3	6.9	8.7	8.2	6.3	9.2	3.0
1 to 3 years of high school .....	14.2	21.4	15.0	13.2	11.7	10.9	5.8	—
4 years of high school .....	8.7	11.2	8.8	8.0	4.3	8.2	5.1	13.9
1 to 3 years of college .....	4.8	4.5	4.7	5.5	4.0	2.7	3.9	—
4 or more years of college .....	4.3	—	5.9	5.7	—	5.9	3.2	25.4

<sup>1</sup> The unemployment rate is the percent of individuals in the labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The labor force includes both employed and unemployed persons.

<sup>2</sup> Includes persons of Hispanic origin.

<sup>3</sup> Persons of Hispanic origin may be of any race.

—Data not available or not applicable.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1989," unpublished. (This table was prepared May 1990.)

**Table 343.—Employment status and hourly wages of 1972 high school graduates in Spring 1986, by race/ethnicity and socioeconomic status**

Race/ethnicity, socioeconomic status, and level of education	Percent with specified level of education	Employment status				Average hourly wages of those employed	
		Continuous full-time	Intermittent full-time	Part-time	Not in labor force	Continuous full-time	Intermittent full-time
1	2	3	4	5	6	7	8
<b>Total, all persons</b> .....	100	39	34	8	20	—	—
High school diploma .....	32	33	30	8	29	\$7.01	\$6.60
Some postsecondary education .....	30	42	33	8	19	7.17	7.18
1- or 2-year degree .....	12	40	37	9	14	7.59	7.65
Bachelor's degree .....	19	44	35	8	15	8.71	8.91
Advanced degree .....	7	40	46	5	9	10.80	10.70
<b>Race/ethnicity</b>							
<b>White</b>							
Total .....	100	40	34	7	19	—	—
High school diploma .....	32	34	31	8	28	7.11	6.76
Some postsecondary education .....	29	42	33	7	18	7.32	7.36
1- or 2-year degree .....	12	41	37	9	13	7.70	7.84
Bachelor's degree .....	20	45	35	8	14	8.76	9.03
Advanced degree .....	8	41	47	5	8	10.66	10.55
<b>Black</b>							
Total .....	100	38	35	7	20	—	—
High school diploma .....	31	36	35	10	18	5.89	5.38
Some postsecondary education .....	38	43	32	5	20	5.85	6.29
1- or 2-year degree .....	12	32	44	10	14	6.58	8.33
Bachelor's degree .....	16	36	34	4	26	7.97	7.30
Advanced degree .....	4	37	32	7	24	10.66	( <sup>1</sup> )
<b>Hispanic</b>							
Total .....	100	41	27	5	23	—	—
High school diploma .....	42	30	23	6	41	7.26	5.90
Some postsecondary education .....	35	52	28	4	15	7.28	6.24
1- or 2-year degree .....	12	46	34	4	18	6.67	7.93
Bachelor's degree .....	8	54	27	8	11	8.94	( <sup>1</sup> )
Advanced degree .....	4	27	47	9	17	( <sup>1</sup> )	( <sup>1</sup> )
<b>Socioeconomic status quartile <sup>2</sup> (SES)</b>							
<b>Lower 25 percent</b> .....							
Total .....	100	36	33	8	23	—	—
High school diploma .....	50	31	30	9	30	6.48	5.96
Some postsecondary education .....	27	43	32	7	18	6.67	6.25
1- or 2-year degree .....	11	37	38	9	15	6.71	7.03
Bachelor's degree .....	9	43	37	6	14	7.97	7.79
Advanced degree .....	3	37	40	8	18	9.74	10.24
<b>Middle 50 percent</b> .....							
Total .....	100	39	33	6	22	—	—
High school diploma .....	34	33	31	7	29	7.16	7.06
Some postsecondary education .....	31	41	32	6	21	7.21	7.45
1- or 2-year degree .....	13	41	37	9	13	7.53	7.79
Bachelor's degree .....	17	44	33	5	18	8.39	8.79
Advanced degree .....	5	43	44	3	11	10.46	9.89
<b>Upper 25 percent</b> .....							
Total .....	100	42	36	6	15	—	—
High school diploma .....	9	44	28	7	24	8.02	6.54
Some postsecondary education .....	31	32	33	6	17	7.54	7.45
1- or 2-year degree .....	10	39	35	9	17	8.82	7.96
Bachelor's degree .....	35	44	36	6	14	9.16	9.34
Advanced degree .....	15	38	48	6	7	11.19	11.29

<sup>1</sup> Too few respondents to produce reliable estimates.

<sup>2</sup> The SES index is a composite of five equally-weighted measures: father's education, mother's education, family income, father's occupation, and presence of certain items in the respondent's household.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Longitudinal Study, 1972," unpublished tabulations. (This table was prepared January 1989.)

**Table 344.—Median annual income<sup>1</sup> of year-round full-time workers 25 years old and over, by years of school completed and sex: 1970 to 1988**

Sex and year	Total	Elementary school			High school		College		
		Less than 8 years	8 years	8 years or less	1 to 3 years	4 years	1 to 3 years	4 years	5 years or more
1	2	3	4	5	6	7	8	9	10
<b>Men</b>									
1970.....	\$9,321	\$6,049	\$7,535	—	\$8,514	\$9,567	\$11,193	\$13,264	\$14,747
1971.....	10,038	8,310	7,838	—	8,945	9,996	11,701	13,730	15,300
1972.....	11,148	7,042	8,638	—	9,482	11,073	12,428	14,879	18,877
1973.....	12,088	7,521	9,406	—	10,401	12,017	13,090	15,503	17,726
1974.....	12,766	7,912	9,891	—	11,225	12,642	13,718	16,240	18,214
1975.....	13,821	8,647	10,800	—	11,511	13,542	14,989	17,477	19,858
1976.....	14,732	8,961	11,312	—	12,301	14,295	15,514	18,236	20,597
1977.....	15,726	9,419	12,083	—	13,120	15,434	16,235	19,603	21,941
1978.....	16,882	10,474	12,965	—	14,199	16,396	17,411	20,941	23,578
1979.....	18,711	10,993	14,454	—	15,188	18,100	19,387	22,406	25,860
1980.....	20,297	11,753	14,874	—	16,101	19,489	20,909	24,311	27,890
1981.....	21,689	12,866	16,084	—	16,938	20,598	22,585	26,394	30,434
1982.....	22,857	12,386	16,378	—	17,486	21,344	23,833	28,030	32,325
1983.....	23,891	14,093	18,438	—	17,885	21,823	24,813	29,892	34,643
1984.....	25,497	14,824	18,812	—	19,120	23,269	25,831	31,487	36,836
1985.....	26,365	14,766	18,645	—	18,881	23,853	26,960	32,822	38,335
1986.....	27,337	14,485	18,541	—	20,003	24,701	28,025	34,391	39,592
1987.....	28,232	—	—	8,891	20,863	25,490	29,820	35,527	41,873
1988.....	29,331	—	—	17,190	20,777	26,045	30,129	36,434	43,938
<b>Women</b>									
1970.....	5,818	3,798	4,181	—	4,855	5,580	6,604	8,156	9,581
1971.....	5,872	3,846	4,400	—	4,889	5,800	6,815	8,451	10,581
1972.....	6,331	4,221	4,784	—	5,253	6,100	7,020	8,738	11,036
1973.....	6,791	4,369	5,135	—	5,513	6,823	7,593	9,057	11,340
1974.....	7,370	5,022	5,606	—	5,919	7,150	8,072	9,523	11,790
1975.....	8,117	5,109	5,891	—	6,355	7,777	8,126	10,349	13,138
1976.....	8,728	5,644	6,433	—	6,800	8,377	9,475	11,010	13,569
1977.....	9,257	6,074	6,564	—	7,387	8,894	10,157	11,605	14,338
1978.....	10,121	6,648	7,489	—	7,996	9,789	10,634	12,347	15,310
1979.....	11,071	7,414	7,788	—	8,555	10,513	11,854	13,441	16,893
1980.....	12,156	7,742	8,857	—	9,878	11,537	12,954	15,143	18,100
1981.....	13,259	8,419	9,723	—	10,043	12,332	14,343	16,322	20,148
1982.....	14,477	8,424	10,112	—	10,661	13,240	15,594	17,405	21,449
1983.....	15,292	9,365	10,337	—	11,131	13,787	16,536	18,452	22,877
1984.....	16,189	9,828	10,848	—	11,843	14,569	17,007	20,257	25,078
1985.....	17,124	9,736	11,377	—	11,836	15,481	17,989	21,389	25,928
1986.....	17,875	10,153	11,163	—	12,267	15,947	18,516	22,412	27,279
1987.....	18,608	—	—	11,018	12,939	16,549	19,948	23,399	30,060
1988.....	19,497	—	—	11,358	13,104	16,810	20,845	25,187	30,136

<sup>1</sup> Data have not been adjusted for changes in the purchasing power of the dollar.  
 —Data not available or not applicable.

NOTE.—1987 and 1988 data are computed using a new processing procedure.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Series P-60, Money Income of Families and Persons in the United States, various years; and Money Income and Poverty Status of Families and Persons in the United States, 1988, Series P-60, Nos. 161 and 16A.* (This table was prepared January 1990.)

**Table 345.—Total annual money income of persons 25 years old and over,<sup>1</sup> by years of school completed, sex, and age: 1987**

Sex, income, and age	Total	Years of school completed											Median school years completed	
		Elementary school			High school			College						
		Total	Less than 6	6	Total	1 to 3	4	Total	1 to 3	4 or more				
										Total	4	5 or more		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Number, in thousands														
<b>Men</b>														
Total.....	71,941	6,727	5,127	3,600	33,891	6,217	25,674	29,322	12,052	17,270	9,523	7,746	12.7	
With income.....	70,750	6,451	4,943	3,506	33,224	7,968	25,256	29,075	11,928	17,147	9,441	7,706	12.6	
Percentage distribution of men with income														
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	12.6
\$1 to \$1,999 or less.....	2.7	4.0	4.3	3.6	3.2	4.2	2.6	1.8	2.4	1.4	1.4	1.4	12.4	
\$2,000 to \$2,999.....	1.4	3.4	3.6	2.8	1.4	2.4	1.1	0.7	0.9	0.6	0.7	0.6	12.0	
\$3,000 to \$3,999.....	1.7	4.9	5.8	3.7	1.5	2.4	1.3	0.9	1.3	0.8	0.5	0.7	11.8	
\$4,000 to \$4,999.....	2.5	9.7	12.3	6.0	2.1	3.7	1.6	0.9	1.3	0.6	0.6	0.6	9.7	
\$5,000 to \$5,999.....	2.5	6.7	7.2	6.0	2.5	3.5	2.2	1.2	1.6	1.0	1.1	0.7	12.0	
\$6,000 to \$6,999.....	2.5	6.9	6.9	6.7	2.6	4.6	2.2	1.0	1.4	0.7	0.6	0.4	11.6	
\$7,000 to \$8,499.....	4.1	9.5	9.9	9.1	4.6	6.7	3.9	2.1	2.7	1.7	1.9	1.3	12.1	
\$8,500 to \$9,999.....	3.5	7.6	6.0	7.6	3.9	5.3	3.4	1.9	2.6	1.5	1.7	1.1	12.2	
\$10,000 to \$12,499.....	7.5	11.9	12.0	11.8	9.1	11.5	6.3	4.4	5.4	3.7	4.2	3.1	12.3	
\$12,500 to \$14,999.....	6.0	7.6	7.0	6.6	7.5	6.6	7.2	3.6	5.4	2.7	3.1	2.2	12.4	
\$15,000 to \$17,499.....	6.8	6.9	6.1	6.0	6.3	6.6	6.2	5.1	6.9	3.9	4.7	2.8	12.6	
\$17,500 to \$19,999.....	5.4	4.5	3.2	6.2	6.6	6.1	6.7	4.4	5.4	3.7	4.0	3.3	12.6	
\$20,000 to \$24,999.....	11.4	6.8	5.6	6.5	13.1	11.3	13.6	10.9	13.4	9.1	10.5	7.4	12.7	
\$25,000 to \$29,999.....	9.6	3.6	2.9	4.6	10.7	7.5	11.7	10.7	11.7	10.0	11.0	6.7	12.9	
\$30,000 to \$34,999.....	6.5	2.1	1.9	2.5	6.3	5.7	9.1	10.6	11.0	10.3	11.0	9.5	13.2	
\$35,000 to \$49,999.....	13.9	2.9	2.6	3.2	10.6	5.6	12.3	20.7	17.6	22.8	21.5	24.3	14.6	
\$50,000 to \$74,999.....	6.5	0.7	0.6	0.9	2.9	1.4	3.4	12.3	6.7	16.2	14.4	16.5	16.4	
\$75,000 and over.....	3.1	0.2	0.2	0.2	0.9	0.6	1.0	6.6	2.3	9.6	6.5	13.4	16.9	
Median income														
All ages, 25 and over <sup>1</sup> .....	\$21,229	\$9,449	\$6,468	\$10,933	\$16,713	\$14,156	\$20,314	\$30,077	\$24,724	\$34,215	\$31,371	\$37,640	—	
25 to 34 years.....	20,112	9,950	9,978	8,843	17,246	12,960	16,366	24,840	20,920	26,181	27,423	30,035	—	
35 to 44 years.....	26,828	11,326	10,555	13,904	22,166	16,151	23,687	33,160	27,602	37,229	35,155	40,604	—	
45 to 54 years.....	26,685	12,442	11,145	15,565	24,843	20,112	26,215	38,476	33,159	42,824	39,942	45,353	—	
55 to 64 years.....	21,906	11,776	9,764	14,805	20,557	17,116	21,766	35,061	28,169	39,676	38,190	41,635	—	
65 years and over.....	11,854	7,956	7,028	9,079	12,350	10,626	13,490	20,392	17,133	23,643	20,331	29,258	—	
Number, in thousands														
<b>Women</b>														
Total.....	79,676	9,575	5,216	4,359	42,661	9,596	33,266	27,240	13,730	13,509	6,344	5,166	12.6	
With income.....	74,603	8,485	4,509	3,976	39,676	6,510	31,165	26,442	13,222	13,221	6,136	5,062	12.7	
Percentage distribution of women with income														
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	12.7
\$1 to \$1,999 or less.....	13.7	11.8	12.0	11.4	15.3	14.8	15.4	11.9	13.5	10.2	12.3	7.0	12.6	
\$2,000 to \$2,999.....	4.6	9.2	9.9	8.4	5.0	7.1	4.4	2.7	3.0	2.3	2.3	2.3	12.3	
\$3,000 to \$3,999.....	5.8	11.7	12.6	10.7	6.2	9.1	5.4	3.2	3.9	2.4	2.6	2.0	12.2	
\$4,000 to \$4,999.....	6.2	17.0	19.3	14.3	6.0	9.6	5.1	3.0	3.7	2.2	2.6	1.5	12.0	
\$5,000 to \$5,999.....	5.3	10.2	10.0	10.3	5.9	7.8	5.3	3.0	3.7	2.2	2.5	1.8	12.3	
\$6,000 to \$6,999.....	5.2	9.3	9.0	9.6	5.6	7.3	5.4	2.8	3.5	2.2	2.4	1.9	12.3	
\$7,000 to \$8,499.....	6.9	9.7	9.0	10.4	7.6	9.6	7.4	4.6	5.7	3.4	3.7	3.0	12.4	
\$8,500 to \$9,999.....	4.6	5.4	5.2	5.6	5.6	6.6	5.2	3.5	4.0	2.9	3.2	2.4	12.5	

**Table 345.—Total annual money income of persons 25 years old and over,<sup>1</sup> by years of school completed, sex, and age: 1987—Continued**

Sex, income, and age	Total	Years of school completed											Median school years completed
		Elementary school			High school			College					
		Total	Less than 8	8	Total	1 to 3	4	Total	1 to 3	4 or more			
										Total	4	5 or more	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
\$10,000 to \$12,499.....	9.0	6.7	5.4	8.2	10.4	9.5	10.6	7.5	9.1	8.0	6.5	5.2	12.6
\$12,500 to \$14,999.....	6.5	3.1	2.6	3.6	7.2	8.0	7.5	6.6	7.8	5.4	5.7	4.8	12.7
\$15,000 to \$17,499.....	6.7	1.9	1.6	2.3	7.0	4.5	7.7	7.9	8.7	7.1	8.0	5.8	12.8
\$17,500 to \$19,999.....	4.8	1.3	0.9	1.7	4.6	2.4	5.2	8.2	6.2	6.2	6.5	5.6	12.9
\$20,000 to \$24,999.....	8.0	1.3	1.0	1.6	6.3	2.7	7.3	12.5	11.4	13.7	14.1	13.0	13.7
\$25,000 to \$29,999.....	4.9	0.7	0.6	0.8	3.3	1.2	3.9	8.5	6.2	10.9	10.3	11.7	14.6
\$30,000 to \$34,999.....	3.1	0.2	0.1	0.4	1.7	0.8	1.9	6.1	3.9	8.3	7.2	10.0	15.7
\$35,000 to \$49,999.....	3.4	0.4	0.5	0.4	1.5	0.6	1.7	7.3	4.2	10.5	6.3	16.2	16.2
\$50,000 to \$74,999.....	0.9	0.1	0.1	0.2	0.3	0.1	0.4	2.1	1.2	3.1	2.3	4.3	16.3
\$75,000 and over.....	0.3	( <sup>2</sup> )	( <sup>2</sup> )	0.1	0.2	0.1	0.2	0.7	0.4	1.1	0.8	1.6	16.2
<b>Median income</b>													
All ages, 25 and over <sup>3</sup> .....	\$9,239	\$5,033	\$4,798	\$5,497	\$8,112	\$6,221	8,957	15,453	12,468	18,984	16,926	\$22,277	—
25 to 34 years.....	11,049	4,806	4,823	\$4,788	\$8,539	5,934	9,444	15,444	12,425	18,792	18,076	20,414	—
35 to 44 years.....	11,969	5,561	6,081	4,855	9,581	6,945	10,419	17,188	15,101	20,458	18,898	25,039	—
45 to 54 years.....	11,219	5,309	5,142	5,572	9,914	6,833	10,794	17,786	14,310	22,021	19,134	26,572	—
55 to 64 years.....	7,445	4,820	4,615	5,289	7,098	5,713	7,715	12,363	10,041	16,868	13,320	23,157	—
65 years and over.....	6,734	5,060	4,747	5,623	6,954	6,201	7,488	11,819	9,820	14,500	12,788	16,884	—

<sup>1</sup> Includes full-time and part-time workers.

<sup>2</sup> Less than 0.1 percent.

<sup>3</sup> Age as of March 1988.

—Data not available.

NOTE.—Because of rounding, column totals may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, No. 162, *Money Income of Households, Families and Persons in the United States: 1987*. (This table was prepared January 1990.)

**Table 346.—College enrollment and labor force status of 1987 and 1988 high school graduates 16 to 24 years old, by sex and race/ethnicity: October 1987 and October 1988**

[Numbers in thousands]

Item	Civilian noninstitutional population			Civilian labor force <sup>1</sup>				
	Number	Percent	Percent of high school graduates	Number	Labor force participation rate	Employed	Unemployed	
							Number	Unemployment rate
1	2	3	4	5	6	7	8	9
<b>1987 high school graduates<sup>2</sup></b>								
Total.....	2,647	100.0	100.0	1,857	62.8	1,400	257	15.5
Men.....	1,278	48.3	48.3	813	63.8	717	95	11.7
Women.....	1,369	51.7	51.7	844	61.7	682	162	19.2
White <sup>3</sup> .....	2,207	83.4	83.4	1,405	63.7	1,228	179	12.8
Black <sup>3</sup> .....	337	12.7	12.7	198	58.6	132	68	33.4
Hispanic origin <sup>4</sup> .....	178	6.8	6.8	102	58.0	84	18	17.7
Enrolled in college, October 1987.....	1,503	100.0	56.8	898	48.5	812	86	12.3
Men.....	746	49.6	28.2	339	45.4	308	31	9.0
Women.....	757	50.4	28.8	360	47.5	304	55	15.4
Full-time students.....	1,357	90.3	51.3	578	42.8	507	71	12.3
Part-time students.....	146	9.7	5.5	120	82.4	105	15	12.4
White <sup>3</sup> .....	1,249	83.1	47.2	584	48.8	528	57	9.7
Black <sup>3</sup> .....	175	11.6	8.8	79	45.0	58	23	29.4
Hispanic origin <sup>4</sup> .....	59	3.9	2.2	21	( <sup>5</sup> )	21	—	( <sup>5</sup> )
Not enrolled in college, October 1987.....	1,144	100.0	43.2	959	83.8	788	171	17.8
Men.....	532	48.5	20.1	474	89.0	409	65	13.7
Women.....	612	53.5	23.1	485	79.2	378	106	21.9
White <sup>3</sup> .....	959	83.8	38.2	821	85.8	698	123	15.0
Black <sup>3</sup> .....	182	14.2	8.1	119	73.4	76	43	36.1
Hispanic origin <sup>4</sup> .....	117	10.2	4.4	81	89.5	63	18	22.2
<b>1988 high school graduates<sup>2</sup></b>								
Total.....	2,673	100.0	100.0	1,877	82.7	1,450	227	13.5
Men.....	1,334	49.9	49.9	889	85.1	752	117	13.4
Women.....	1,339	50.1	50.1	808	60.3	698	110	13.7
White <sup>3</sup> .....	2,187	81.8	81.8	1,421	85.0	1,254	167	11.8
Black <sup>3</sup> .....	382	14.3	14.3	205	53.5	154	50	24.6
Hispanic origin <sup>4</sup> .....	179	6.7	6.7	103	57.8	77	27	25.9
Enrolled in college, October 1988.....	1,575	100.0	58.9	747	47.4	660	87	11.6
Men.....	781	48.3	28.5	382	47.6	328	35	9.5
Women.....	814	51.7	30.5	364	47.3	332	62	13.8
Full-time students.....	1,444	91.7	54.0	630	43.8	550	80	12.7
Part-time students.....	131	8.3	4.9	117	89.2	110	7	5.8
White <sup>3</sup> .....	1,328	84.3	49.7	688	50.3	598	70	10.5
Black <sup>3</sup> .....	172	10.9	8.4	49	28.5	37	12	( <sup>5</sup> )
Hispanic origin <sup>4</sup> .....	102	6.5	3.8	40	39.5	33	8	( <sup>5</sup> )
Not enrolled in college, October 1988.....	1,098	100.0	41.1	930	84.7	790	140	15.1
Men.....	572	52.1	21.4	508	88.5	424	82	16.2
Women.....	526	47.9	19.7	424	80.8	365	58	13.7
White <sup>3</sup> .....	859	78.2	32.1	754	87.7	656	97	12.9
Black <sup>3</sup> .....	211	19.2	7.9	158	73.9	117	38	24.5
Hispanic origin <sup>4</sup> .....	77	7.0	2.9	83	82.2	44	19	( <sup>5</sup> )

<sup>1</sup> The labor force includes all employed persons plus those seeking employment. The labor force participation rate is the percentage of persons either employed or seeking employment.

<sup>2</sup> Includes persons who graduated from high school between October 1986 and October 1987.

<sup>3</sup> Includes persons of Hispanic origin.

<sup>4</sup> Persons of Hispanic origin may be of any race.

<sup>5</sup> Data not shown where base is less than 75,000.

<sup>6</sup> Includes persons who graduated from high school between October 1987 and October 1988.

—Data not available or not applicable.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population. Percents are only shown when base is 75,000 or greater. Even though the standard errors are large, smaller estimates are shown to permit users to combine categories in various ways. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Employment Status of School Age Youth, High School Graduates and Dropouts*, various years. (This table was prepared January 1990.)

**Table 347.—Labor force status of 1979–80 to 1987–88 high school dropouts 16 to 24 years old, by sex and race/ethnicity: October 1980 to October 1988**

[Numbers in thousands]

Year, sex, and race	Civilian noninstitutional population		Civilian labor force <sup>1</sup>				
	Number	Percent	Number	Labor force participation rate	Employed	Unemployed	
						Number	Unemployment rate
1	2	3	4	5	6	7	8
<b>1979–80 high school dropouts <sup>2</sup></b> in October 1980 .....	739	100.0	471	63.7	322	149	31.6
Men.....	422	57.1	305	72.3	212	93	30.5
Women.....	317	42.9	166	52.4	110	56	33.7
White <sup>3</sup> .....	580	78.5	392	67.6	286	106	27.0
Black <sup>3</sup> .....	146	19.8	73	50.0	33	40	( <sup>4</sup> )
Hispanic origin <sup>5</sup> .....	91	12.3	60	65.9	43	17	( <sup>4</sup> )
<b>1984–85 high school dropouts <sup>6</sup></b> in October 1985 .....	612	100.0	413	67.5	266	147	35.6
Men.....	321	52.5	261	81.3	163	96	37.5
Women.....	291	47.5	152	52.2	103	49	32.2
Single.....	220	35.9	117	53.2	76	39	33.3
Other marital status.....	72	11.8	36	( <sup>4</sup> )	26	10	( <sup>4</sup> )
White <sup>3</sup> .....	458	74.8	330	72.1	214	116	35.2
Black <sup>3</sup> .....	132	21.6	69	52.3	39	30	( <sup>4</sup> )
Hispanic origin <sup>5</sup> .....	106	17.3	73	68.9	40	33	( <sup>4</sup> )
<b>1985–86 high school dropouts <sup>7</sup></b> in October 1986 .....	562	100.0	359	63.9	259	100	27.9
Men.....	300	53.4	216	72.0	166	48	22.2
Women.....	262	46.6	143	54.6	91	52	36.4
Single.....	196	34.9	107	54.6	69	38	35.5
Other marital status.....	66	11.7	36	( <sup>4</sup> )	23	13	( <sup>4</sup> )
White <sup>3</sup> .....	449	79.9	289	64.4	213	76	26.3
Black <sup>3</sup> .....	90	16.0	50	55.6	29	21	( <sup>4</sup> )
Hispanic origin <sup>5</sup> .....	127	22.6	77	60.6	58	19	24.7
<b>1986–87 high school dropouts <sup>8</sup></b> in October 1987 .....	502	100.0	333	66.4	207	126	37.6
Men.....	274	54.6	202	73.7	125	77	38.1
Women.....	228	45.4	131	57.6	82	49	37.3
White <sup>3</sup> .....	373	74.3	257	68.9	172	65	33.0
Black <sup>3</sup> .....	115	22.9	69	60.1	30	39	( <sup>4</sup> )
Hispanic origin <sup>5</sup> .....	57	11.4	37	( <sup>4</sup> )	22	15	( <sup>4</sup> )
<b>1987–88 high school dropouts <sup>9</sup></b> in October 1988 .....	552	100.0	327	59.2	240	87	26.7
Men.....	307	55.6	229	74.4	164	65	28.5
Women.....	245	44.4	98	40.1	76	22	22.4
White <sup>3</sup> .....	436	79.0	263	64.8	213	70	24.7
Black <sup>3</sup> .....	107	19.4	42	39.4	25	18	( <sup>4</sup> )
Hispanic origin <sup>5</sup> .....	101	18.3	65	64.7	58	9	( <sup>4</sup> )

<sup>1</sup> The labor force includes all employed persons plus those seeking employment. The labor force participation rate is the percentage of persons either employed or seeking employment.

<sup>2</sup> Includes persons who dropped out of school between October 1979 and October 1980.

<sup>3</sup> Includes persons of Hispanic origin.

<sup>4</sup> Data not shown where base is less than 75,000.

<sup>5</sup> Persons of Hispanic origin may be of any race.

<sup>6</sup> Includes persons who dropped out of school between October 1984 and October 1985.

<sup>7</sup> Includes persons who dropped out of school between October 1985 and October 1986.

<sup>8</sup> Includes persons who dropped out of school between October 1986 and October 1987.

<sup>9</sup> Includes persons who dropped out of school between October 1987 and October 1988.

—Data not available.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population. Percents are only shown when the base is 75,000 or greater. Even though the standard errors are large, smaller estimates are shown to permit users to combine categories in various ways. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Students, Graduates, and Dropouts, October 1980–82*; and *Employment Status of School Age Youth, High School Graduates and Dropouts*, various years, and "Nearly Half of College Freshmen Also Hold a Job or Are Looking for One," June 1987. (This table was prepared January 1990.)

**Table 348.—Full-time employment status of bachelor's degree recipients 1 year after graduation, by field of study: 1976 to 1987**

Field of study	Percent employed full-time				Percent employed full-time in a job closely related to field of study				Percent employed full-time in nonprofessional job <sup>1</sup>			
	1974-75 graduates in May 1976	1979-80 graduates in May 1981	1983-84 graduates in June 1985	1985-86 graduates in June 1987	1974-75 graduates in May 1976	1979-80 graduates in May 1981	1983-84 graduates in June 1985	1985-86 graduates in June 1987	1974-75 graduates in May 1976	1979-80 graduates in May 1981	1983-84 graduates in June 1985	1985-86 graduates in June 1987
1	2	3	4	5	6	7	8	9	10	11	12	13
Total.....	67	71	73	74	36	38	38	38	10	12	13	14
Professional fields.....	77	80	82	81	51	51	47	47	9	10	13	11
Arts and sciences fields.....	56	56	56	62	16	17	15	25	12	14	15	15
Other.....	65	74	75	74	36	43	47	36	9	19	12	17
Newly qualified to teach.....	66	75	73	68	43	56	54	47	7	6	9	9
Not newly qualified to teach.....	67	71	73	74	33	36	36	37	12	13	13	14
Professional fields.....	80	81	82	82	52	49	47	47	10	10	13	11
Engineering.....	79	84	84	83	57	55	53	46	4	2	3	5
Business and management.....	84	83	85	85	49	44	41	40	15	14	19	17
Health.....	75	77	75	76	71	66	70	65	2	4	2	3
Education <sup>2</sup> .....	66	67	63	73	22	29	24	57	12	16	16	9
Public affairs and services.....	—	77	74	72	—	48	31	37	—	10	15	20
Arts and sciences fields.....	57	56	56	63	17	16	15	25	13	15	15	15
Biological sciences.....	56	45	43	42	26	18	17	15	6	6	11	11
Physical sciences and mathematics.....	50	58	51	76	19	29	20	48	6	2	7	9
Psychology.....	61	56	57	66	22	17	12	22	16	17	16	19
Social sciences.....	59	61	61	61	12	10	13	12	15	21	14	17
Humanities.....	56	55	59	59	12	14	17	19	17	18	19	19
Other.....	68	75	77	75	36	43	42	36	10	20	14	21
Communications.....	—	71	76	77	—	31	31	33	—	24	16	16
Miscellaneous.....	66	76	77	74	35	46	46	38	11	19	13	23

<sup>1</sup> Includes those not working in technical, managerial, or administrative types of jobs who reported that they did not need a college degree to obtain their job.

<sup>2</sup> Includes those who have not finished all requirements for teaching certification or were previously qualified to teach.

—Data not available.

NOTE.—Data are from a sample survey of recent college graduates. Notes on methodology are included in the Guide to Sources. Data exclude bachelor's recipients from

U.S. Service Schools. Deceased graduates and graduates living at foreign addresses at the time of the survey are not included. Data are not shown where sample size of base is less than 100 persons.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Recent College Graduates" surveys. (This table was prepared March 1989.)

**Table 349.—Occupation of 1985–86 bachelor's degree recipients 1 year after graduation, by field of study and occupational area: 1987**

[Percentage distribution]

Occupational area in June 1987	All fields of study	Professional fields					Arts and sciences					Other fields	
		Business and management	Education	Engineering	Health professions	Public affairs/social services	Biological sciences	Mathematics, computer, and physical sciences	Social sciences	Humanities	Psychology	Communications	Miscellaneous <sup>1</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Total.....</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Professional, managerial and technical.....</b>	<b>53</b>	<b>52</b>	<b>75</b>	<b>71</b>	<b>79</b>	<b>49</b>	<b>28</b>	<b>59</b>	<b>32</b>	<b>39</b>	<b>40</b>	<b>47</b>	<b>37</b>
Business.....	19	46	4	5	3	9	4	6	18	9	12	19	13
Educators.....	10	1	66	2	2	4	7	8	6	12	10	2	7
Engineers.....	6	1	(?)	57	(?)	(?)	(?)	6	(?)	(?)	(?)	1	1
Health professionals.....	5	(?)	1	(?)	65	1	2	(?)	(?)	(?)	5	(?)	3
Public affairs/social services.....	2	(?)	2	(?)	1	31	2	(?)	4	7	7	1	5
Biological scientists.....	(?)	(?)	(?)	(?)	(?)	(?)	4	(?)	(?)	(?)	(?)	(?)	1
Computer/physical scientist, mathematician.....	5	3	(?)	3	(?)	(?)	(?)	35	1	1	1	1	1
Communications.....	1	(?)	(?)	(?)	(?)	(?)	(?)	(?)	1	4	(?)	20	(?)
Writer.....	1	(?)	1	1	(?)	1	1	(?)	(?)	6	1	3	3
Technicians.....	3	1	1	4	7	3	10	4	3	1	4	1	5
<b>Nonprofessional, nonmanagerial, and nontechnical.....</b>	<b>31</b>	<b>37</b>	<b>15</b>	<b>18</b>	<b>9</b>	<b>37</b>	<b>28</b>	<b>25</b>	<b>40</b>	<b>39</b>	<b>40</b>	<b>41</b>	<b>47</b>
Unemployed.....	4	4	3	4	2	3	4	4	6	7	5	6	4
Not in labor force.....	11	6	6	7	10	10	39	10	21	15	15	5	12

<sup>1</sup> Includes agricultural and related studies, home economics, law, liberal/general studies, area studies, library science, recreation, and protective services.

<sup>2</sup> Less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Survey of 1985–86 Recent College Graduates." (This table was prepared March 1989.)

**Table 350.—Percentage of 1985-86 bachelor's degree recipients who have pursued additional higher education, by type of degree sought or obtained, and undergraduate major field of study: 1987**

Undergraduate major field of study	Total	No additional education	Courses not leading to degree or certificate	Associate or bachelor's degree	Post-baccalaureate certificate	Master's degree	Doctor's degree	First-professional degree <sup>1</sup>	Other certificate
1	2	3	4	5	6	7	8	9	10
<b>Total</b> .....	100	72	3	1	1	15	1	4	2
Professional fields.....	100	79	2	1	(2)	14	(2)	2	1
Engineering.....	100	72	2	1	(2)	22	1	1	1
Business and management.....	100	84	2	1	(2)	9	(2)	2	1
Health professions.....	100	79	2	1	(2)	13	(2)	3	1
Education.....	100	71	3	1	1	19	(2)	(2)	3
Public affairs and social services.....	100	70	3	2	(2)	23	(2)	2	(2)
Arts and sciences fields.....	100	61	3	2	1	19	3	9	3
Biological sciences.....	100	38	5	3	1	13	6	28	5
Physical sciences, mathematics, and computer sciences.....	100	70	3	2	(2)	16	4	4	2
Psychology.....	100	57	2	1	1	29	4	3	2
Social sciences.....	100	62	2	1	1	16	2	12	3
Humanities.....	100	61	3	2	1	23	1	5	3
Other.....	100	77	4	2	1	10	(2)	3	4
Communications.....	100	88	3	1	1	6	(2)	2	1
Miscellaneous.....	100	72	4	2	1	12	1	4	5

<sup>1</sup> Includes chiropractic, dentistry, law, medicine, optometry, osteopathic medicine, pharmacy, podiatry, theological studies, and veterinary medicine.  
<sup>2</sup> Less than 0.5 percent.

from U.S. Service Schools. Deceased graduates and graduates living at foreign addresses at the time of the survey are not included. Because of rounding, details may not add to totals.

NOTE.—Data are from a sample survey of recent college graduates. Notes on methodology are included in the Guide to Sources. Data exclude bachelor's degree recipients

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Recent College Graduates" survey. (This table was prepared March 1988.)

**Table 351.—Percentage of 1985-86 bachelor's degree recipients who have applied for additional education and reasons for not applying, by major field of study: 1987**

Undergraduate major field of study	Total	Applied for additional education	Did not apply for additional education, by reason				
			No plans to continue	Wanted to work	Wanted to take time off	Could not afford to continue	Other reasons
1	2	3	4	5	6	7	8
<b>Total</b> .....	100	36	16	34	6	5	3
Professional fields.....	100	29	17	39	7	4	3
Engineering.....	100	37	13	40	4	4	2
Business and management.....	100	24	22	39	6	4	3
Health professions.....	100	29	15	39	3	6	3
Education.....	100	36	10	39	7	6	2
Public affairs and social services.....	100	43	14	34	4	5	(1)
Arts and sciences fields.....	100	47	13	27	5	4	3
Biological sciences.....	100	68	8	17	2	4	3
Physical sciences, mathematics, and computer sciences.....	100	37	18	35	5	4	2
Psychology.....	100	50	10	26	9	3	2
Social sciences.....	100	47	11	28	5	5	4
Humanities.....	100	49	15	23	5	4	3
Other.....	100	32	20	33	6	7	2
Communications.....	100	23	25	39	5	6	2
Miscellaneous.....	100	37	17	29	6	8	3

<sup>1</sup> Less than 0.5 percent.

NOTE.—Data are from a sample survey of recent college graduates. Notes on methodology are included in the Guide to Sources. Data exclude bachelor's degree recipients from U.S. Service Schools. Deceased graduates and graduates living at foreign

addresses at the time of the survey are not included. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Recent College Graduates" survey. (This table was prepared March 1988.)

**Table 352.—Average annual salary of bachelor's degree recipients employed full-time 1 year after graduation, by field of study: 1976 to 1987**

Field of study	Average salary <sup>1</sup> of 1974-75 degree recipients in February 1976		Average salary <sup>1</sup> of 1979-80 degree recipients in May 1981		Average salary <sup>1</sup> of 1983-84 degree recipients in June 1985		Average salary of 1985-86 degree recipients in June 1987	Percentage change in constant dollars, 1976 to 1981	Percentage change in constant dollars, 1981 to 1987
	Current dollars	Constant 1987 dollars	Current dollars	Constant 1987 dollars	Current dollars	Constant 1987 dollars			
1	2	3	4	5	6	7	8	9	10
<b>Total</b> .....	<b>\$7,600</b>	<b>\$15,500</b>	<b>\$15,200</b>	<b>\$19,200</b>	<b>\$17,700</b>	<b>\$18,700</b>	<b>\$20,300</b>	<b>25</b>	<b>6</b>
Engineering.....	12,200	24,800	22,400	28,300	24,100	25,400	26,600	15	-6
Business and management.....	10,200	20,700	16,300	20,600	18,700	19,700	21,100	0	2
Health professions.....	8,600	17,500	17,300	21,900	20,800	21,900	22,800	25	3
Education <sup>2</sup> .....	6,300	12,800	11,500	14,500	13,600	14,600	15,800	14	9
Public affairs and social services.....	( <sup>3</sup> )	( <sup>3</sup> )	13,700	17,300	15,100	15,900	17,700	—	2
Biological sciences.....	6,500	13,200	14,500	18,300	15,100	15,900	18,400	40	-10
Physical sciences, mathematics, and computer sciences.....	7,000	14,200	16,300	20,800	17,500	18,500	22,500	45	9
Psychology.....	( <sup>3</sup> )	( <sup>3</sup> )	12,500	15,800	14,600	15,400	17,300	—	9
Social sciences.....	6,700	13,600	14,000	17,700	15,600	16,700	20,300	31	15
Humanities.....	5,800	11,800	12,600	15,900	14,000	14,800	16,200	36	2
Communications.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	16,200	17,100	( <sup>3</sup> )	—	—
Miscellaneous.....	6,800	13,800	15,100	19,100	16,600	19,600	17,600	39	-8

<sup>1</sup> Reported salaries of full-time workers under \$2,600 in 1976, \$4,200 in 1981, and \$5,000 in 1985 were excluded from the tabulations.  
<sup>2</sup> Most educators work 9- to 10-month contracts.  
<sup>3</sup> Cell contains fewer than 75 respondents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Recent College Graduates" surveys. (This table was prepared February 1989.)

NOTE.—Data exclude bachelor's recipients from U.S. Service Schools and graduates living at foreign addresses at the time of the survey. Constant dollar adjustments based on the Consumer Price Index.

**Table 353.—Income, earnings, and work activity of persons who held a bachelor's or advanced degree, by field of study: Spring 1984**

Field of study	Mean monthly income <sup>1</sup>		Mean monthly earnings <sup>2</sup>		Number of months worked during previous 4 months		Standard errors for monthly income <sup>3</sup>	
	Bachelor's degrees	Advanced degrees	Bachelor's degrees	Advanced degrees	Bachelor's degrees	Advanced degrees	Bachelor's degrees	Advanced degrees
					6	7		
1	2	3	4	5	6	7	8	9
<b>All degree recipients</b> .....	<b>\$1,841</b>	<b>\$2,711</b>	<b>\$1,540</b>	<b>\$2,341</b>	<b>3.08</b>	<b>3.35</b>	<b>\$47</b>	<b>\$80</b>
Agriculture and forestry.....	1,945	( <sup>4</sup> )	1,559	( <sup>4</sup> )	3.25	( <sup>4</sup> )	203	( <sup>4</sup> )
Biology.....	1,559	( <sup>4</sup> )	1,201	( <sup>4</sup> )	2.73	( <sup>4</sup> )	218	( <sup>4</sup> )
Business and management.....	2,381	3,584	2,179	3,192	3.48	3.64	163	253
Economics.....	2,848	( <sup>4</sup> )	2,280	( <sup>4</sup> )	3.36	( <sup>4</sup> )	372	( <sup>4</sup> )
Education.....	1,290	2,082	1,012	1,695	2.76	3.23	51	140
Engineering.....	2,833	3,308	2,282	2,886	3.38	3.55	170	235
English and journalism.....	1,477	1,945	1,095	1,567	2.66	3.48	225	263
Home economics.....	1,085	( <sup>4</sup> )	525	( <sup>4</sup> )	2.12	( <sup>4</sup> )	208	( <sup>4</sup> )
Law.....	( <sup>4</sup> )	4,060	( <sup>4</sup> )	3,624	( <sup>4</sup> )	3.57	( <sup>4</sup> )	385
Liberal arts and humanities.....	1,400	1,720	1,072	1,466	2.87	3.17	92	192
Mathematics and statistics.....	2,116	( <sup>4</sup> )	1,809	( <sup>4</sup> )	3.20	( <sup>4</sup> )	270	( <sup>4</sup> )
Medicine and dentistry.....	( <sup>4</sup> )	4,234	( <sup>4</sup> )	3,797	( <sup>4</sup> )	3.53	( <sup>4</sup> )	385
Nursing, pharmacy, and health.....	1,424	1,804	1,198	1,610	2.99	2.98	92	310
Physical and earth sciences.....	2,529	2,913	2,088	2,431	3.08	3.21	391	406
Psychology.....	1,251	2,282	1,166	1,881	2.91	3.28	157	259
Religion and theology.....	( <sup>4</sup> )	1,584	( <sup>4</sup> )	1,211	( <sup>4</sup> )	3.36	( <sup>4</sup> )	139
Social sciences.....	1,610	2,124	1,371	1,745	3.00	3.20	157	234
Other.....	1,840	2,101	1,656	1,717	3.24	3.15	187	166

<sup>1</sup> Includes money wages and salary and net income from farm and nonfarm self-employment and all other income.  
<sup>2</sup> Includes money wages or salary and net income from farm and nonfarm self-employment.  
<sup>3</sup> See Guide to Sources for information on the use of standard errors.  
<sup>4</sup> Data not shown where base is less than 200,000 persons.

NOTE.—Data are based on sample surveys of the civilian non-institutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Series P-70, No. 1, "Educational Background and Economic Status: Spring 1984."* (This table was prepared October 1987.)

**Table 354.—Participation of young adults<sup>1</sup> in voluntary organizations, by selected characteristics: 1984 to 1986**

Young adult characteristics	Percent participating in voluntary organizations											
	Sports teams or clubs	Church activities	Social or hobby clubs	Union, trade, arm, or other professional associates	Literary, art discussion or study group	Community groups <sup>2</sup>	Youth organizations	PTA or other academic group	Political clubs	Organized volunteer work <sup>3</sup>	Service organizations <sup>4</sup>	Other voluntary group
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	36.0	32.2	21.8	17.7	10.8	9.4	9.2	7.0	6.2	5.8	4.0	9.6
<b>Sex</b>												
Male.....	46.8	29.3	22.5	20.3	10.7	8.8	11.7	4.7	6.7	5.3	5.2	9.7
Female.....	25.6	34.9	21.1	15.3	11.0	10.2	6.9	9.1	5.8	6.2	2.9	9.4
<b>Race/ethnicity</b>												
White, non-Hispanic.....	36.5	30.6	22.3	18.2	10.2	8.5	8.7	8.4	5.9	5.5	3.9	9.7
Black, non-Hispanic.....	31.9	44.2	21.5	14.9	13.1	18.2	12.0	12.0	8.2	8.8	4.0	10.3
Hispanic.....	34.8	32.4	17.1	15.8	11.8	8.5	9.5	5.8	6.9	4.3	4.7	7.1
Asian.....	41.4	31.0	28.7	27.3	23.2	10.5	10.8	9.1	5.9	14.1	5.9	10.3
American Indian.....	41.1	30.0	27.9	19.7	8.9	13.0	11.8	8.5	9.8	4.2	7.2	7.8
<b>Socioeconomic status</b>												
Low.....	29.2	30.9	17.8	12.2	6.8	8.0	7.0	6.0	3.4	4.5	2.2	8.9
Low-middle.....	34.5	31.4	21.7	15.6	9.8	8.6	8.7	8.0	4.5	4.8	4.9	9.6
High-middle.....	39.9	35.4	23.5	21.8	11.8	9.4	10.8	7.2	7.8	8.9	4.7	10.6
High.....	43.1	33.9	28.4	22.4	16.0	12.2	10.7	10.0	9.9	7.4	4.1	13.0
<b>High school curriculum</b>												
General.....	35.8	30.9	21.3	14.5	8.8	8.4	9.3	5.0	5.2	4.5	3.8	9.0
Academic.....	40.7	35.8	25.0	24.2	15.7	11.8	10.3	11.5	9.1	8.2	7	12.6
Vocational.....	31.1	31.5	19.8	13.7	6.3	8.1	7.5	4.3	4.0	4.3	2.9	8.8
<b>Level of participation in high school extracurricular activities<sup>5</sup></b>												
Never participated.....	18.4	14.8	17.1	14.1	5.6	4.8	3.4	2.4	1.5	2.3	2.1	4.6
Participated as a member.....	32.3	29.6	20.9	15.0	8.9	8.2	6.7	5.8	5.0	5.4	3.4	7.8
Participated as a leader.....	45.0	40.8	24.9	21.7	14.0	12.3	13.1	9.8	8.8	7.5	4.6	12.8

<sup>1</sup> Sample survey in 1986 based on people who were high school seniors in spring 1980. Respondents to the survey were asked about their voluntary participation in selected organizations over the previous 24-month period.

<sup>2</sup> Includes participation in community centers, neighborhood improvement, or social action associations or groups.

<sup>3</sup> E.g., hospital volunteer.

<sup>4</sup> Includes participation in organizations such as Rotary, Junior Chamber of Commerce, Veterans, etc.

<sup>5</sup> In 1980, the seniors were asked to indicate the level of participation in each of 15 different extracurricular activity areas (e.g., varsity sports, debate, band, subject-matter

clubs, church activities, etc.). Responses to these earlier inquiries were used to classify overall level of participation in extracurricular activities.

NOTE.—Some adults participated in more than one organization.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond. (This table was prepared October 1987.)

**Table 355.—Literacy skills and reading scores of young adults,<sup>1</sup> by race/ethnicity and level of education: 1985**

Young adult characteristic	Prose literacy scale, <sup>2</sup> percent with score of—				Document literacy, <sup>3</sup> percent with score of—				Quantitative literacy, <sup>4</sup> percent with score of—			
	200 or more	250 or more	300 or more	350 or more	200 or more	250 or more	300 or more	350 or more	200 or more	250 or more	300 or more	350 or more
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b> .....	96.1	82.7	56.4	21.1	95.5	83.8	57.2	20.2	96.4	84.7	56.0	22.5
<b>Race/ethnicity</b>												
White, non-Hispanic.....	96.1	89.7	63.0	24.3	96.2	89.5	64.1	24.9	96.1	89.4	62.9	24.8
Black, non-Hispanic.....	86.3	57.2	21.3	3.5	84.4	56.5	20.1	2.2	87.8	58.0	21.4	3.3
Hispanic.....	93.5	73.8	40.9	13.5	92.0	69.8	35.9	9.4	92.8	72.5	35.2	9.2
<b>Educational attainment</b>												
Not high school graduate.....	85.4	57.9	24.1	3.4	83.4	53.8	18.8	1.5	86.1	57.7	20.8	3.5
High school graduate.....	99.6	81.6	45.1	10.5	96.5	81.8	48.2	9.0	96.9	80.5	45.2	10.1
Some postsecondary.....	96.8	92.0	87.0	26.8	99.0	92.1	68.0	27.2	99.3	92.7	66.8	27.0
College graduate.....	99.9	97.7	84.3	44.8	99.9	96.0	85.6	48.8	99.9	97.8	84.1	45.3

<sup>1</sup> Includes persons 21 to 25 years old. Excludes persons not living in households and those who were unable to speak English.

<sup>2</sup> Prose comprehension test measures the knowledge and skills needed to gain understanding and use information from texts such as editorials, news stories, and poems. A score of 200 indicates an ability to write a simple description of the type of job one would like to have. A score of 300 indicates an ability to locate information in a news article or an almanac. A score of 350 indicates an ability to synthesize the main argument from a lengthy newspaper editorial.

<sup>3</sup> Document literacy test measures the knowledge and skills required to locate and use information from documents such as indexes, tables, paycheck stubs, and order forms. A score of 200 indicates ability to match money-saving coupons to a shopping list

of several items. A score of 300 indicates an ability to follow directions to travel from one location to another using a map. A score of 350 indicates an ability to use a bus schedule to select the appropriate bus for given departures and arrivals.

<sup>4</sup> Quantitative literacy test measures the knowledge and skills needed to apply the arithmetic operations of addition, subtraction, multiplication, and division, either alone or sequentially. A score of 200 indicates an ability to total two entries on a bank deposit slip. A score of 300 indicates an ability to enter deposits and checks and balance a checkbook. A score of 350 indicates an ability to determine the amount of a tip in a restaurant using a given percentage.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Young Adult Literacy and Schooling*. (This table was prepared May 1989.)

## CHAPTER 6

# International Comparisons of Education

This chapter offers a broad perspective on education among the nations of the world. It also provides an international context for examining the condition of education in the United States. Although the National Center for Education Statistics (NCES) has not been active in collecting international data, it has recently funded a number of research studies comparing mathematics and science performance among various nations. It also released a study entitled, *A Comparison of Teachers' Salaries in Japan and the United States*. In addition, the Center has cooperated with international agencies in the compilation of statistics.

The data in this chapter were drawn from material prepared by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the Institute of International Education, and the International Association for the Evaluation of Educational Achievement. The basic summary data on enrollments, teachers, enrollment ratios, and finances were synthesized from information appearing in the annual *Statistical Yearbook* published by UNESCO. Even though UNESCO tabulations are very carefully prepared, international data users should be cautioned about the many problems of definition and reporting involved in the collection of data about the educational systems in the world.

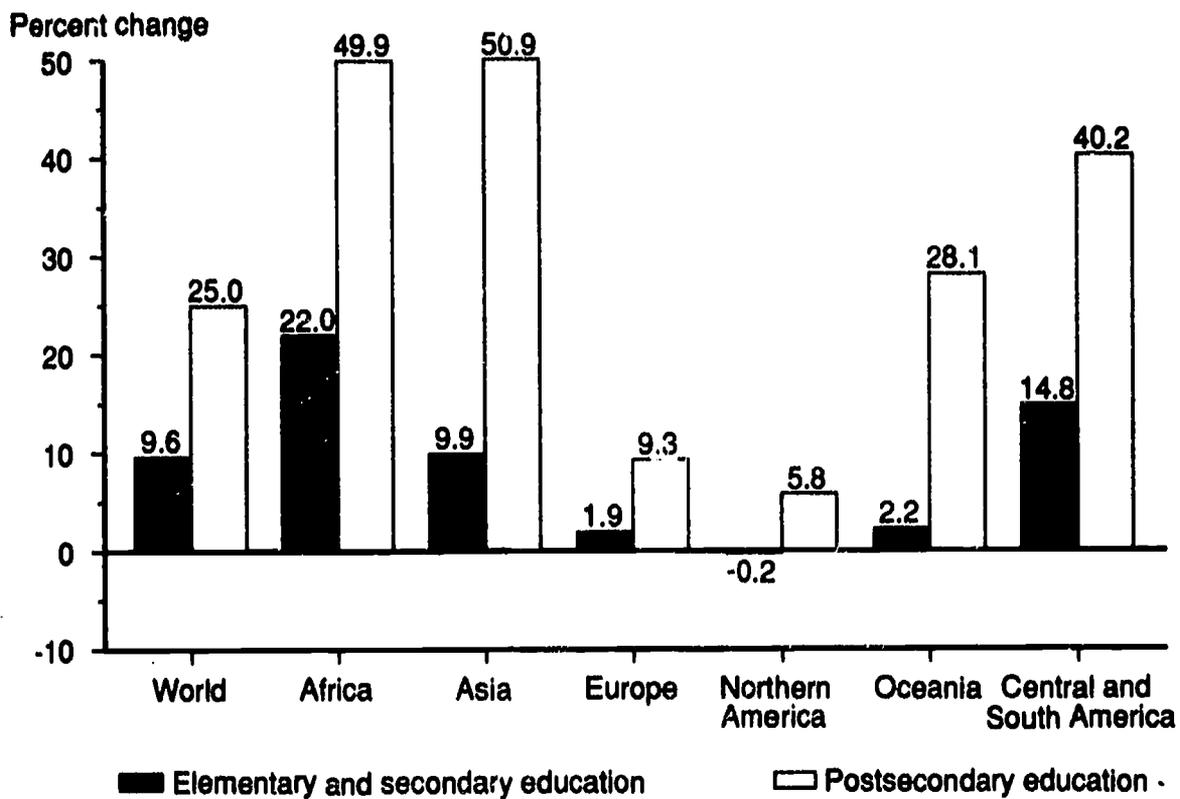
This chapter also contains data from the latest international assessments of mathematics and science achievement. These assessments, coordinated by the International Association for the Evaluation of Educational Achievement, provide comparative data for about 20 countries. Data from other mathematics and geography assessments also are included in this chapter. A different perspective is provided by data on the enrollment of foreign students in U.S. institutions of higher education. These data from the Institute of International Education provide information on the number of foreign students and their countries of origin.

Further information on survey methodologies is in the "Guide to Sources" in the appendix and in the publications cited in the source notes.

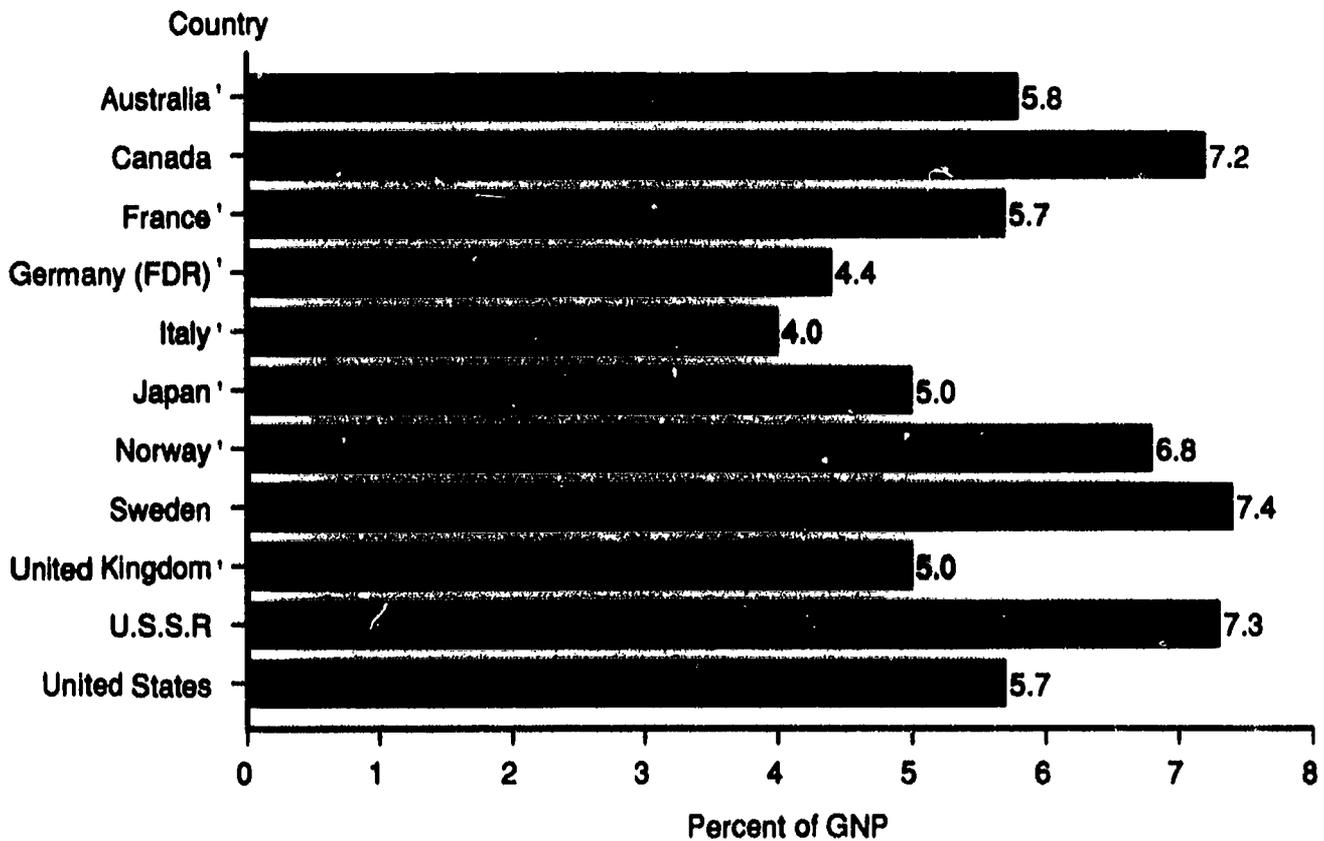
### Highlights

- Enrollments at all levels have increased more rapidly in Africa than in other parts of the world. The smallest enrollment increases occurred in Northern America and in Europe. (Table 356)
- In 1986-87, about 932 million students were in schools around the world. Of these students, 583 million were in elementary-level programs, 290 million were in secondary programs, and 59 million were in postsecondary programs. (Table 356)
- Between 1980-81 and 1986-87, enrollments grew rapidly, particularly in the less-developed areas of the world. Elementary enrollment changes ranged from increases of 15 percent in Africa and 11 percent in Central and South America to modest increases of only 1 percent in Europe and 2 percent in Northern America and a decline of 5 percent in Oceania. Enrollment increases at the secondary level were more dramatic, especially in Africa (51 percent), Central and South America (29 percent) and Asia (24 percent). At the postsecondary level, Asia (51 percent) and Africa (50 percent) had the largest increases followed by Central and South America (40 percent). These increases are a result of large growth in the school attendance rates and sizeable rises in population. (Table 356)
- Pupil-teacher ratios in elementary and secondary schools vary widely from country to country. Countries with relatively low ratios were Italy (12.3 in 1980) and Poland (14.0) and Australia (14.5) in 1987. Countries with relatively high ratios included Korea (33.9) and Philippines (32.4) in 1988 and Mexico (25.3) in 1987. (Table 357)
- A comparison of public expenditures on education as a percent of gross national product (GNP) reveals significant differences among nations. For example, in the United States in 1987 the proportion of GNP for education was 5.7 percent. Other countries ranged from 3.4 percent for Mexico and 3.6 percent for Thailand to 7.4 percent for Sweden and 7.3 percent for the U.S.S.R. (Table 361)
- U.S. students ranked well below average in a 1981-82 international test of mathematical skills of 8th grade students. Only 6 of the 19 other nations and Canadian provinces scored below the United States. U.S. students scored above the international average on arithmetic and statistics, but they

- scored below the international average on algebra, geometry, and measurement tests. (Table 363)
- In an analysis of international mathematics testing for the most advanced 12th grade mathematics students, U.S. students ranked next to last among the 13 participating nations. The best scores were made by Japanese students, who had the highest average scores on each of the three parts of the test: algebra, geometry, and calculus. Japanese schools were also among the most likely to cover the material that was tested on the exam. American schools covered the smallest portion of the material, with the exception of schools in British Columbia. (Table 364)
  - In the 1988 International Assessment of Educational Progress, the U.S. 13-year-olds scored among the lowest in mathematics and in the bottom third on science achievement among a group of countries and Canadian provinces. (Tables 362 and 365)
  - In a series of science tests administered to a selected group of countries between 1983 and 1986, the U.S. 14-year-olds scored somewhat lower than their peers in 12 other countries, better than 1 other country, and about the same as Hong Kong, Singapore, and Thailand. (Table 366)

**Figure 27.—Changes in enrollment, by area of the world and level of education: 1980–81 to 1986–87**

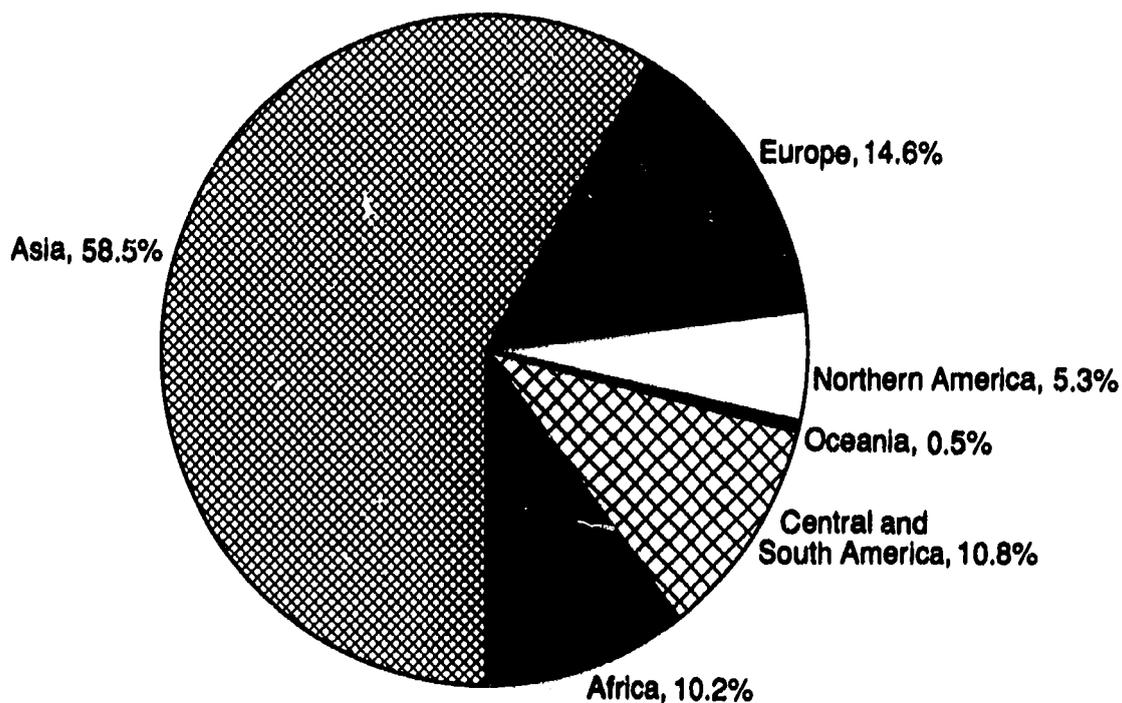
SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook, 1988*.

**Figure 28.—Public expenditures for education as a percentage of gross national product: Selected countries, 1987**

'1986 data.

SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook, 1988*.

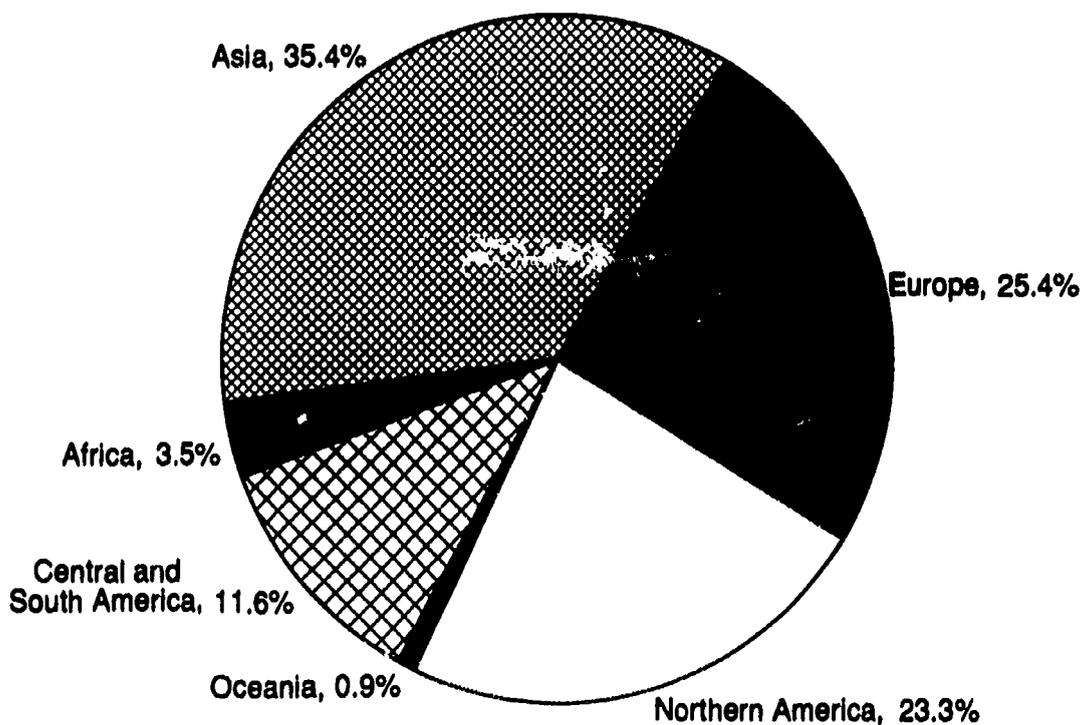
**Figure 29.—Distribution of elementary and secondary enrollment, by major area of the world: 1986-87**



Total elementary and secondary enrollment = 932 million

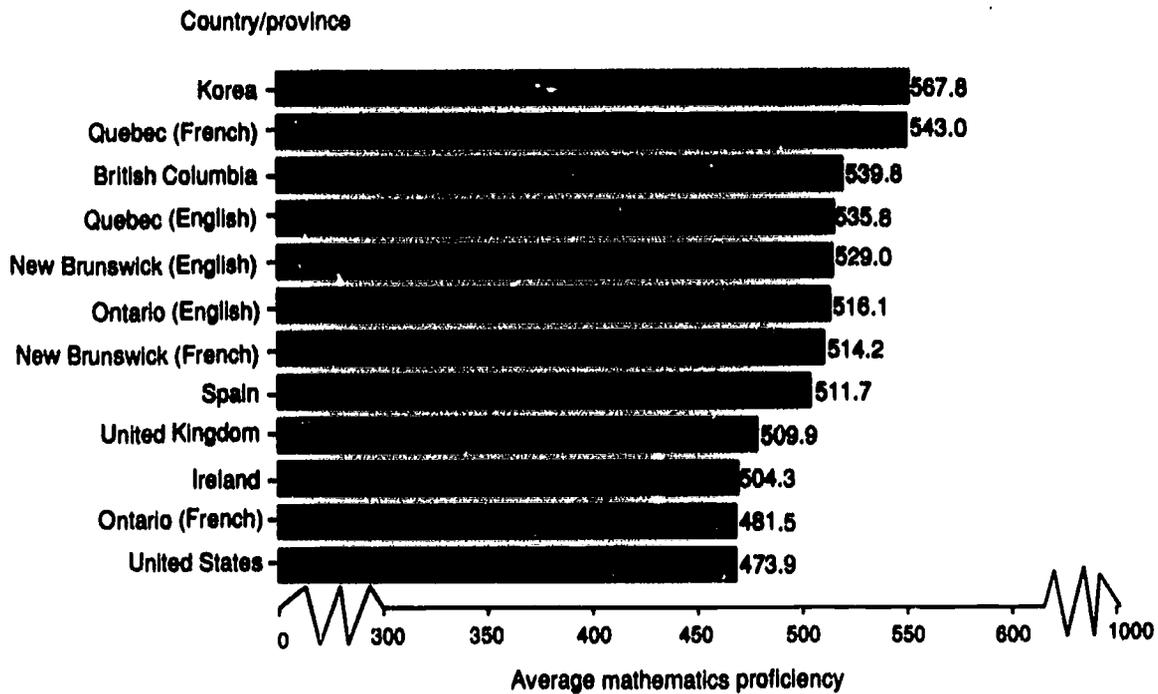
SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook, 1988*.

**Figure 30.—Distribution of higher education enrollment, by major area of the world: 1986-87**

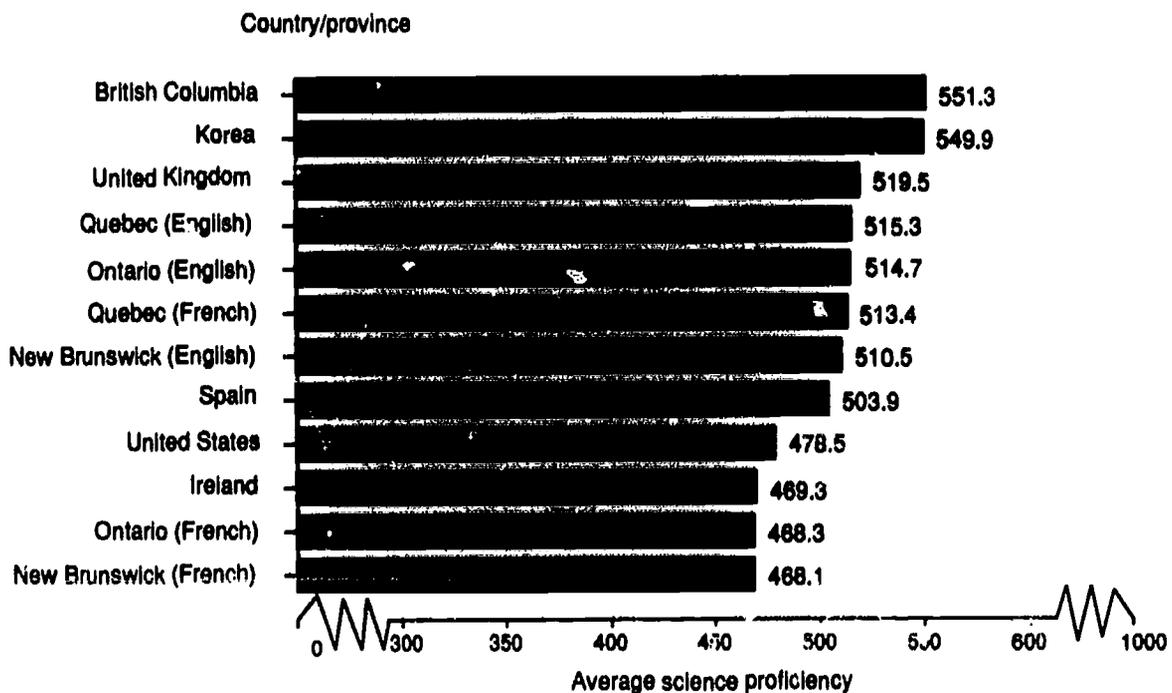


Total higher education enrollment = 59.3 million

SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook, 1988*.

**Figure 31.—Mathematics proficiency at age 13, by country/province: 1988**

SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *A World of Differences*, by Testing Service.

**Figure 32.—Science proficiency at age 13, by country/province: 1988**

SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *A World of Differences*, by Testing Service.

**Table 356.—Estimated population, school enrollment, teachers, and public expenditures for education in major areas of the world: 1970-71, 1980-81, and 1986-87**

Item	World total <sup>1</sup>	Major areas of the world					
		Africa <sup>2</sup>	Asia <sup>3</sup>	Europe <sup>4</sup>	Central and South America <sup>5</sup>	Northern America <sup>6</sup>	Oceania <sup>6</sup>
1	2	3	4	5	6	7	8
<b>1970-71</b>							
Population, all ages, in thousands.....	3,893,220	360,752	2,102,044	701,125	283,408	228,566	19,329
Enrollment, all levels, <sup>7</sup> in thousands.....	617,811	34,226	324,137	135,746	56,323	63,192	4,188
First (primary) level.....	431,934	29,371	243,012	72,871	48,578	37,695	2,609
Second level <sup>8</sup> .....	157,781	4,454	74,239	53,269	8,107	18,357	1,355
Third level <sup>9</sup> .....	28,097	401	8,886	9,806	1,640	9,140	224
Teachers, all levels, <sup>7</sup> in thousands.....	25,937	967	11,476	7,959	2,314	3,037	182
First (primary) level.....	14,601	735	7,420	3,508	1,525	1,317	96
Second level <sup>8</sup> .....	9,211	202	3,490	3,713	629	1,104	72
Third level <sup>9</sup> .....	2,126	29	566	739	160	615	15
Public expenditures on education, in..... millions of U.S. dollars <sup>10</sup> .....	\$159,900	\$2,406	\$13,933	\$64,098	\$5,649	\$71,830	\$1,984
As a percent of gross national product.....	5.2	4.2	3.1	5.1	3.4	8.7	4.4
<b>1980-81</b>							
Population, all ages, <sup>10</sup> in thousands.....	4,449,533	479,456	2,583,891	750,040	361,373	251,923	22,850
Enrollment, all levels, <sup>7</sup> in thousands.....	843,494	74,299	478,480	139,051	67,295	59,594	4,778
First (primary) level.....	551,072	59,238	330,795	63,878	64,796	29,641	2,723
Second level <sup>8</sup> .....	244,989	13,685	133,778	61,401	17,605	18,885	1,638
Third level <sup>9</sup> .....	47,434	1,376	13,910	13,772	4,891	13,069	418
Teachers, all levels, <sup>7</sup> in thousands.....	37,268	2,149	18,778	9,031	3,739	3,304	269
First (primary) level.....	19,407	1,523	10,741	3,440	2,234	1,343	126
Second level <sup>8</sup> .....	14,412	545	7,007	4,436	1,108	1,204	112
Third level <sup>9</sup> .....	3,450	81	1,028	1,156	396	757	31
Public expenditures on education, in..... millions of U.S. dollars <sup>10</sup> .....	\$618,855	\$18,377	\$102,951	\$250,294	\$31,397	\$205,431	\$10,205
As a percent of gross national product.....	5.5	5.3	4.5	5.4	3.9	8.9	5.8
<b>1986-87</b>							
Population, all ages, <sup>11</sup> in thousands.....	4,990,000	594,000	2,905,000	778,000	419,000	270,000	25,000
Enrollment, all levels, <sup>7</sup> in thousands.....	932,066	91,034	531,823	142,894	101,443	60,283	4,989
First (primary) level.....	582,767	68,321	345,192	64,549	71,816	30,296	2,594
Second level <sup>12</sup> .....	289,992	20,650	165,442	63,099	22,769	18,159	1,863
Third level <sup>9</sup> .....	59,318	2,063	20,989	15,046	8,859	13,827	533
Teachers, all levels, <sup>7</sup> in thousands.....	43,075	2,982	22,031	9,680	4,729	3,343	310
First (primary) level.....	21,528	1,900	11,733	3,665	2,703	1,394	133
Second level <sup>12</sup> .....	17,427	953	8,848	4,817	1,486	1,165	140
Third level <sup>9</sup> .....	4,118	129	1,452	1,198	539	764	37
Public expenditures on education, in..... millions of U.S. dollars <sup>13</sup> .....	\$928,256	\$19,923	\$177,010	\$347,565	\$32,558	\$338,104	\$13,096
As a percent of gross national product.....	5.6	6.8	4.5	5.5	4.1	8.9	5.8

<sup>1</sup> Enrollment and teacher data exclude the Democratic People's Republic of Korea and South Africa. Expenditure data exclude Democratic Kampuchea, Democratic People's Republic of Korea, Lao People's Democratic Republic, Lebanon, Mongolia, Mozambique, South Africa, and Vietnam.

<sup>2</sup> Excludes South Africa.

<sup>3</sup> Excludes the U.S.S.R., but includes both the Asian and the European portions of Turkey.

<sup>4</sup> Includes the U.S.S.R.

<sup>5</sup> Northern America includes Bermuda, Canada, Greenland, St. Pierre, Miquelon, and the United States of America. Hawaii is included in North America, not Oceania. Central and South America includes the rest of America.

<sup>6</sup> Includes American Samoa, Australia, Guam, and New Zealand.

<sup>7</sup> Excludes preprimary, special, and adult education.

<sup>8</sup> General, teacher training, and other second-level education of a vocational and technical nature.

<sup>9</sup> Universities and other institutions of higher education.

<sup>10</sup> Excludes data for Democratic Kampuchea, Democratic People's Republic of Korea, Lao People's Democratic Republic, Lebanon, Mongolia, Mozambique, South Africa, and Vietnam.

<sup>11</sup> Data are estimated for 1987.

<sup>12</sup> Includes general, teacher training, and vocational education.

<sup>13</sup> Excludes Albania, Democratic Kampuchea, Democratic People's Republic of Korea, Lao People's Democratic Republic, Lebanon, Mongolia, Mozambique, South Africa, and Vietnam.

NOTE.—Data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook*, various years. (This table was prepared February 1990.)

**Table 357.—Pupils per teacher in public and private elementary and secondary schools:  
Selected countries, 1970, 1980, and 1987**

Country	All schools			Elementary schools			Secondary schools		
	1970	1980	1987	1970	1980	1987	1970	1980	1987
1	2	3	4	5	6	7	8	9	103
Australia	—	18.0	<sup>1</sup> 14.5	28.0	18.8	<sup>2</sup> 18.6	—	12.9	<sup>1</sup> 12.6
Brazil	—	23.5	22.4	23.8	25.8	24.0	13.2	14.2	14.5
Canada	20.9	<sup>3</sup> 17.9	—	23.4	<sup>3</sup> 15.8	7.5	18.9	<sup>4</sup> 17.2	—
China	30.1	23.4	21.0	33.9	26.8	23.8	21.8	17.9	16.6
Egypt	33.2	—	24.0	38.0	—	29.9	25.0	24.0	<sup>6</sup> 18.0
France	20.0	<sup>5</sup> 21.4	—	26.0	<sup>5</sup> 24.0	<sup>6</sup> 20.5	15.8	<sup>6</sup> 19.6	—
Germany, Federal Republic of	19.4	18.3	—	25.5	18.4	<sup>7</sup> 17.4	12.3	14.4	—
Indonesia	30.1	26.7	<sup>8</sup> 21.8	28.9	32.4	<sup>8</sup> 25.3	13.1	14.9	<sup>8</sup> 15.3
Iran, Islamic Republic of	32.8	—	<sup>8</sup> 26.1	32.4	<sup>10</sup> 27.4	<sup>8</sup> 29.3	34.2	—	<sup>8</sup> 21.3
Italy	15.8	12.3	—	21.8	18.2	<sup>11</sup> 14.1	11.5	10.2	—
Japan	21.8	20.9	<sup>7</sup> 20.1	26.2	25.1	<sup>7</sup> 23.3	18.4	17.2	<sup>7</sup> 17.6
Korea	49.9	43.5	33.9	58.9	47.5	38.7	36.5	39.1	31.6
Mexico	34.8	30.2	25.3	45.9	39.1	31.9	14.5	17.7	17.5
Nigeria	32.3	35.7	—	34.1	37.2	<sup>8</sup> 44.1	21.2	28.8	—
Pakistan	<sup>12</sup> 32.1	<sup>12</sup> 27.9	<sup>7</sup> 29.2	<sup>12</sup> 41.5	<sup>12</sup> 36.5	<sup>7</sup> 39.3	<sup>12</sup> 19.8	<sup>13</sup> 17.5	<sup>7</sup> 18.0
Philippines	29.4	31.3	<sup>13</sup> 32.4	28.8	30.4	<sup>13</sup> 31.8	33.1	34.1	<sup>13</sup> 34.1
Poland	17.5	18.8	14.0	23.0	19.7	15.7	10.2	12.0	10.8
Spain	28.5	23.9	<sup>7</sup> 22.8	34.0	28.3	<sup>7</sup> 25.5	21.5	20.9	<sup>7</sup> 21.2
Sweden	13.8	—	—	20.0	<sup>10</sup> 18.3	—	10.1	—	—
Thailand	30.5	<sup>14</sup> 31.1	19.5	34.7	<sup>8</sup> 24.7	20.3	15.5	—	17.1
United Kingdom	19.8	16.9	—	23.3	18.9	<sup>7</sup> 20.3	15.9	15.3	<sup>8</sup> 15.3
United States	22.4	18.6	17.3	24.8	20.1	18.3	19.6	16.8	15.7
U.S.S.R.	—	—	—	<sup>16</sup> 10.9	<sup>16</sup> 9.4	<sup>16</sup> 8.7	—	—	—
Yugoslavia	24.3	20.2	19.1	27.1	24.1	22.9	22.4	18.5	17.4

<sup>1</sup> Data on teaching staff are expressed in full-time equivalents.

<sup>2</sup> Data on teachers include preprimary classes and are expressed in full-time equivalents.

<sup>3</sup> 1983 data.

<sup>4</sup> 1979 data.

<sup>5</sup> Data on teachers refer to public education only.

<sup>6</sup> Includes preprimary classes in primary schools.

<sup>7</sup> 1988 data.

<sup>8</sup> 1985 data.

<sup>9</sup> Data on teachers refer to full-time only.

<sup>10</sup> 1981 data.

<sup>11</sup> 1984 data.

<sup>12</sup> Data include education preceding the first level.

<sup>13</sup> 1988 data.

<sup>14</sup> Data on teaching staff refer to public education only and include education preceding the first level.

<sup>15</sup> Teaching data include general education at the second level.

—Data not available.

NOTE.—Coverage and grade groupings may vary somewhat from country to country and year to year. Some data have been revised from previous figures.

SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook*, various years; and U.S. Department of Education, National Center for Education Statistics, Common Core of Data surveys and surveys of private schools. (This table was prepared March 1990.)

**Table 358.—Public expenditures for education as a percentage of government expenditures for all purposes:  
Selected countries, 1960 to 1987**

Country	1960	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
1	2	3	4	5	6	7	8	9	10	11	12	13
Australia	—	13.3	14.8	15.0	14.8	14.5	14.0	13.6	13.2	12.6	12.6	—
Canada	<sup>1</sup> 14.3	24.1	17.8	18.3	17.3	17.0	—	—	15.2	12.7	15.5	15.4
Chile	12.8	22.0	12.0	—	11.9	—	—	—	—	15.3	—	—
France	—	—	—	<sup>2</sup> 17.8	—	—	—	18.0	—	—	—	—
Germany, Federal Republic of	—	9.2	10.7	10.0	10.1	—	—	9.5	9.2	9.2	9.2	—
Hungary	8.4	8.9	4.2	4.2	5.2	5.5	5.8	6.6	6.4	6.4	6.4	6.3
Italy	—	11.9	9.4	11.1	—	—	—	9.8	<sup>3</sup> 9.8	<sup>3</sup> 9.1	<sup>3</sup> 8.6	—
Japan	—	20.4	22.4	20.1	19.8	19.4	19.1	18.7	18.1	17.9	17.7	—
Mexico	—	8.5	11.9	—	<sup>3</sup> 18.7	<sup>3</sup> 17.2	<sup>3</sup> 17.2	<sup>3</sup> 6.4	—	<sup>3</sup> 16.2	—	—
Netherlands	—	—	23.7	24.1	23.1	19.6	18.8	18.1	18.8	16.4	—	—
Nigeria	—	—	<sup>4</sup> 18.5	18.2	—	24.7	<sup>3</sup> 9.6	<sup>3</sup> 9.3	<sup>3</sup> 11.6	<sup>3</sup> 8.7	<sup>3</sup> 12.0	—
Norway	—	15.5	14.7	—	13.8	13.5	13.5	12.9	12.8	13.6	13.8	—
Sweden	—	—	13.4	13.8	14.1	13.9	13.0	12.5	12.2	12.8	12.6	12.6
Thailand	—	17.3	21.0	18.8	20.6	20.0	20.1	21.1	—	18.5	19.4	17.9
United Kingdom	—	14.1	14.3	13.6	13.9	12.2	11.9	11.5	11.3	—	—	—
United States	15.1	20.3	18.1	20.5	19.9	19.1	18.1	17.7	17.7	17.3	17.5	17.5
U.S.S.R.	11.7	12.8	12.9	11.8	11.2	10.9	10.3	10.2	10.2	—	—	—
Yugoslavia	—	23.3	24.4	28.4	32.5	—	—	—	—	—	—	—

<sup>1</sup> Data for 1961.

<sup>2</sup> Percent based on central government expenditures only.

<sup>3</sup> Expenditures by the Ministry of Education only.

<sup>4</sup> Data for 1976.

—Data not available.

Note.—Some data have been revised.

SOURCES: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook*, various years; and U.S. Department of Commerce, Bureau of the Census, *Governmental Finances*, various years. (This table was prepared March 1990.)

Table 359.—Selected statistics for countries<sup>1</sup> with populations over 10 million, by continent: 1970 to 1987

Country	Population, in millions			Persons per square kilometer in 1987	First level <sup>2</sup>						Second level <sup>3</sup>				Third level <sup>4</sup>				Compulsory age for attendance <sup>5</sup>	
	1970	1980	1987		Enrollment, in thousands			Enrollment ratio <sup>6</sup>		Enrollment, in thousands			Enrollment ratio <sup>6</sup>		Enrollment, in thousands			Enrollment ratio <sup>6</sup>		
					1970	1980	1987	1970	1987	1970	1980	1987	1970	1987	1970	1980	1987	1970		1987
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
<b>World total<sup>7</sup></b>	3,672	4,436	4,990	37	431,934	551,064	582,787	89	100	157,781	247,008	286,862	36	46	23,087	47,401	56,316	8.8	12.6	—
<b>Africa</b>																				
Algeria	13.6	16.7	23.1	10	1,987	3,119	3,802	76	96	242	1,028	101,999	11	55	20	1179	204	1.9	9.4	6-15
Cameroon	6.8	8.3	10.8	23	923	1,379	1,795	91	109	76	234	10,367	8	10	3	16	18	0.6	10.7	—
Cote d'Ivoire	5.5	8.2	11.1	36	503	1,025	1,215	63	107	70	222	10,267	9	18	4	120	10	0.9	12.4	7-13
Egypt	33.1	42.1	50.7	61	3,795	4,663	7,035	72	90	1,448	2,929	4,131	35	69	233	716	1,790	8.6	20.0	6-15
Ethiopia	30.8	38.8	45.2	36	655	2,131	2,684	16	37	135	—	—	4	15	5	14	29	0.2	0.9	7-13
Ghana	8.6	10.7	13.7	57	1,420	1,978	1,582	64	72	99	683	863	14	39	5	16	16	0.8	10.5	6-16
Kenya	11.3	18.7	22.9	39	1,428	3,927	5,031	58	94	136	426	545	9	23	6	13	22	0.8	11.3	—
Madagascar	6.7	8.9	10.8	19	938	1,724	1,488	58	70	113	234	366	9	13	6	23	36	0.8	3.8	6-13
Morocco	15.3	20.1	23.3	52	1,175	2,172	2,177	52	71	209	797	1,347	13	37	16	112	212	1.5	9.8	7-14
Mozambique	8.2	12.1	14.6	18	497	1,387	1,288	47	66	43	1,121	117	5	5	2	1	2	0.3	0.2	7-14
Nigeria	57.2	80.6	101.9	110	3,516	13,760	12,915	37	192	357	2,346	10,561	4	19	16	150	1,208	0.5	10.8	6-12
South Africa	22.5	28.3	33.0	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sudan	13.9	18.7	23.1	9	826	1,484	1,787	36	149	133	384	1,557	7	10	14	29	197	1.2	2.0	—
Uganda	9.6	13.1	16.6	70	720	1,292	1,204	36	107	248	919	1,214	4	13	4	6	10	0.5	10.8	—
United Republic of Tanzania	13.3	18.6	23.2	25	856	3,368	3,180	34	66	45	79	114	3	4	2	—	5	0.2	0.2	7-14
Zaire	21.6	26.4	32.5	14	3,068	10,419	4,158	68	107	248	1,207	10,963	9	15	12	26	41	0.7	1.5	6-12
<b>Asia</b>																				
Afghanistan	13.6	16.0	15.2	24	541	1,118	1,611	28	102	116	137	—	7	10	8	23	18	0.7	10.7	7-15
Bangladesh	88.1	88.7	102.6	712	5,284	8,240	9,207	54	59	—	2,659	10,325	18	18	118	240	1,462	2.3	14.9	6-10
Burma	27.0	33.6	39.1	55	3,178	4,148	14,696	63	195	791	1,066	11,234	21	124	46	165	—	2.2	15.1	5-10
China	830.7	995.1	1,089.8	113	105,280	148,270	128,359	89	132	26,483	56,778	54,031	24	43	24	1,181	2,065	0.1	1.7	7-16
India	539.1	675.0	781.4	238	57,045	73,873	80,993	73	106	20,114	30,632	—	28	139	2,804	5,348	—	6.2	18.9	6-14
Indonesia	117.9	146.4	170.2	69	14,970	25,537	10,983	80	118	2,480	5,722	10,907	18	146	248	1,586	1,980	2.8	13.5	7-13
Iran, Islamic Republic of	28.7	39.3	51.3	31	3,418	4,799	7,758	72	114	1,057	1,836	3,843	27	48	75	151	1,219	3.1	14.9	6-11
Iraq	9.4	13.2	17.1	39	1,099	2,618	2,997	69	96	314	1,033	1,162	24	49	42	107	164	5.2	12.5	6-12
Japan	109.4	118.8	122.1	323	9,558	11,327	10,228	99	102	6,667	9,558	11,456	66	96	1,819	2,412	2,398	17.0	28.3	6-15
Korea, North (DPR)	13.9	18.0	21.4	177	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5-15
Korea, South (Republic of)	32.2	38.1	42.1	427	5,749	5,658	4,772	103	101	1,807	4,266	4,819	42	66	201	648	1,549	7.9	36.0	6-12
Malaysia	10.4	13.7	16.8	50	1,684	2,009	2,274	67	102	609	1,064	1,491	34	59	—	59	106	1.8	8.8	6-15
Nepal	11.5	14.0	17.8	126	390	1,068	1,619	28	182	118	512	1,501	10	126	24	38	54	—	14.9	6-11
Pakistan	60.8	82.8	102.2	128	3,963	5,474	5,709	40	40	1,463	2,196	3,191	13	19	115	157	299	2.3	15.0	—
Philippines	39.9	45.3	57.4	191	6,989	10,518	10,204	108	107	1,719	2,929	10,421	46	167	652	1,278	1,973	19.8	38.0	7-13
Saudi Arabia	5.8	9.4	13.6	6	423	927	1,480	45	101	89	349	1,654	12	144	8	62	1,131	1.7	13.4	—
Sri Lanka	12.5	14.8	16.4	249	1,671	2,061	2,304	99	104	941	—	—	47	106	12	43	162	1.2	14.0	5-15
Syrian Arab Republic	6.3	8.7	11.0	59	925	1,556	2,218	78	110	328	604	1,925	36	59	43	140	163	9.2	17.8	6-11
Thailand	36.4	46.7	53.6	104	5,835	7,393	7,088	83	96	695	1,920	2,109	17	30	55	381	1,027	1.7	19.6	7-15
Turkey	35.3	44.4	51.4	68	5,012	5,656	6,880	110	117	1,309	2,216	3,266	37	48	170	248	534	6.0	10.4	6-14
Vietnam	42.7	53.7	62.8	191	—	7,987	10,128	—	102	—	—	—	—	142	80	115	—	—	—	6-11
<b>Europe</b>																				
Czechoslovakia	14.3	15.3	15.6	122	1,996	1,904	2,082	96	96	321	369	351	31	36	131	197	171	10.4	16.2	6-15
France	50.8	53.9	55.6	102	4,940	4,610	4,152	117	113	4,281	5,014	5,384	74	92	601	1,077	1,328	19.5	30.9	6-16
Germany, East (Dem. Republic)	17.1	16.7	16.6	154	2,534	852	946	93	106	486	1,696	1,426	92	77	303	401	436	32.8	32.0	6-16
Germany, West (Fed. Republic)	60.7	61.6	61.2	246	6,345	2,784	2,324	—	101	2,705	6,581	10,678	—	104	504	1,223	1,579	13.4	30.1	6-16
Hungary	10.3	10.7	10.8	114	1,118	1,162	1,277	87	87	465	357	427	63	70	81	101	99	10.1	15.2	6-16
Italy	59.8	58.4	57.4	190	4,857	4,423	3,371	110	106	3,824	5,308	5,336	81	75	687	1,118	1,141	18.7	24.3	6-13
Netherlands	13.0	14.1	14.7	369	1,482	1,333	1,448	102	115	1,006	1,391	1,394	75	104	231	360	400	19.5	31.3	5-16
Poland	32.5	35.6	37.7	120	5,257	4,167	5,036	101	101	1,734	1,674	1,699	62	80	368	589	459	14.0	17.7	7-14
Portugal	8.8	9.8	10.4	112	992	1,240	1,235	96	124	446	398	1,580	57	126	80	92	104	8.0	12.3	6-14
Romania	20.3	22.2	22.9	97	2,879	3,237	3,027	112	97	680	871	1,529	44	79	152	193	157	10.1	9.3	6-18
Spain	39.8	37.5	36.8	77	3,930	3,810	3,413	123	113	1,950	3,977	4,661	56	102	225	688	964	8.9	30.0	6-15
United Kingdom	55.6	56.4	56.8	233	5,808	4,911	4,322	104	108	4,149	5,342	10,466	73	83	601	827	1,066	14.1	22.3	5-16
Yugoslavia	20.4	22.3	23.4	92	1,579	1,432	1,432	106	95	1,962	2,426	2,358	63	60	261	412	348	15.9	18.6	7-15
<b>North America</b>																				
Canada	21.3	24.0	25.7	3	3,736	2,185	2,291	101	105	—	2,323	2,243	46	104	642	988	1,278	34.6	58.2	6-16
Cuba	8.6	9.7	10.3	93	1,630	1,499	937	121	104	235	1,148	1,143	22	88	26	152	262	3.7	22.6	6-11
Mexico	51.2	69.4	81.2	41	9,248	14,998	14,768	104	118	1,584	4,742	6,906	22	53	248	630	1,311	5.9	15.7	6-14
United States	205.1	227.8	243.8	28	36,629	31,699	32,162	99	104	14,643	14,581	13,325	94	92	6,581	12,097	12,767	49.4	64.5	6-16
<b>South America</b>																				
Argentina	24.0	28.2	31.5	11	3,366	3,917	4,607	105	109	977	1,366	1,981								

- <sup>16</sup> Data for 1963.  
<sup>17</sup> Classification of first and second levels have been revised. Data by level may not be comparable over time.  
<sup>18</sup> Includes government maintained and aided schools only.  
<sup>19</sup> Data for 1981 and refers to government maintained and aided schools only.  
<sup>20</sup> Excludes nomads.  
<sup>21</sup> Data for 1976.  
<sup>22</sup> Includes full-time students only.  
<sup>23</sup> Including data from the Indian held part of Jammu and Kashmir.  
<sup>24</sup> Data pertains to the majority of states.  
<sup>25</sup> Including correspondence courses.  
<sup>26</sup> Not including polytechnics.  
<sup>27</sup> 1985 data for public universities only.  
<sup>28</sup> Excluding data for Jammu and Kashmir. Also excluded are Junagardh, Manavadar, Gilt and Bakhtan.  
<sup>29</sup> Data exclude education preceding the first level.  
<sup>30</sup> 1986 data for universities only.  
<sup>31</sup> Including UNRWA schools with 35,722 pupils.  
<sup>32</sup> Including UNRWA schools with 16,174 pupils.  
<sup>33</sup> Excludes Open University with an enrollment of 243,825.  
<sup>34</sup> Data for 1975.

- <sup>37</sup> The total number of students (all institutions) is overestimated due to inclusion of enrollment of non-university institutions.  
<sup>38</sup> Includes relevant data relating to Berlin.  
<sup>39</sup> Includes evening and correspondence courses.  
<sup>40</sup> 1986 data which include evening and correspondence courses.  
<sup>41</sup> 1986 estimated data.  
<sup>42</sup> Data are for 14- to 19-year-olds in 1970 and 13- to 17-year-olds in 1982.  
<sup>43</sup> Enrollment data and ratios based on data reported by the National Center for Education Statistics and the U.S. Department of Commerce, Bureau of the Census.  
<sup>44</sup> Data for 1971.  
<sup>45</sup> Data include students at the Open University.  
<sup>46</sup> Byelorussian and Ukrainian included in U.S.S.R.  
 —Data not available.

SOURCE: United Nations Educational, Scientific, and Cultural Organization (UNESCO), *Statistical Yearbook*, various years; U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20; and U.S. Department of Education, National Center for Education Statistics, Common Core of Data and "Fall Enrollment in Institutions of Higher Education" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" survey. (This table was prepared March 1990).

Table 360.—Enrollment and current fund expenditures: Selected countries, 1980 and 1986

Country	1980				1986			
	Elementary and secondary enrollment	Elementary and secondary expenditures in U.S. dollars <sup>1</sup>	Expenditure per student <sup>1</sup>	Purchasing power parity rate <sup>2</sup>	Elementary and secondary enrollment	Elementary and secondary expenditures in U.S. dollars <sup>1</sup>	Expenditure per student <sup>1</sup>	Purchasing power parity rate <sup>2</sup>
1	2	3	4	5	6	7	8	9
United States <sup>3</sup> .....	46,318,000	\$94,321,093	\$2,036	1.00	45,290,000	\$144,364,922	\$3,232	1.00
Australia.....	2,984,562	4,557,320	1,527	1.04	2,976,115	6,104,721	2,060	1.28
Austria.....	1,305,710	2,157,712	1,653	16.80	<sup>4</sup> 1,170,062	<sup>4</sup> 3,305,977	<sup>4</sup> 2,825	16.80
Belgium.....	2,061,596	3,498,143	1,697	42.90	<sup>4</sup> 1,905,874	<sup>4</sup> 4,331,147	<sup>4</sup> 2,273	44.50
Canada.....	4,905,413	11,812,537	2,367	1.15	<sup>4</sup> 4,974,096	<sup>4</sup> 18,230,808	<sup>4</sup> 3,665	1.23
Denmark.....	996,515	1,718,483	1,724	8.47	936,802	2,866,752	3,060	10.00
Finland.....	896,803	1,395,327	1,556	4.97	890,945	2,320,952	2,605	6.09
France.....	12,007,492	15,804,215	1,316	5.88	12,048,104	25,110,776	2,084	7.45
Germany, West.....	10,881,123	16,517,845	1,518	2.68	10,751,022	20,662,367	1,941	2.49
Ireland.....	656,132	701,842	818	0.54	<sup>6</sup> 906,400	<sup>6</sup> 1,015,496	<sup>6</sup> 1,120	0.75
Italy <sup>6</sup> .....	11,601,354	10,363,085	893	867.00	10,891,707	13,199,046	1,212	1366.00
Japan.....	23,791,229	27,045,325	1,137	258.00	23,934,179	45,993,213	1,922	218.00
Netherlands.....	3,134,403	5,000,460	1,595	2.70	<sup>6</sup> 2,841,350	<sup>6</sup> 5,849,056	<sup>6</sup> 2,059	2.48
New Zealand.....	790,547	763,593	966	1.02	<sup>4</sup> 722,044	<sup>4</sup> 1,130,378	<sup>4</sup> 1,566	1.69
Norway.....	829,142	1,630,731	1,967	7.30	808,750	2,674,675	3,307	8.30
Portugal.....	1,738,805	1,131,230	651	31.40	<sup>6</sup> 1,943,571	—	—	66.20
Spain <sup>7</sup> .....	7,762,275	1,502,736	194	70.40	8,768,795	2,338,924	267	103.20
Sweden.....	1,500,063	3,454,545	2,303	6.90	<sup>4</sup> 1,213,125	<sup>4</sup> 5,072,054	<sup>4</sup> 4,181	6.69
Switzerland.....	1,030,847	2,448,247	2,375	2.48	<sup>4</sup> 896,507	<sup>4</sup> 3,609,248	<sup>4</sup> 4,026	2.43
Turkey.....	7,879,094	1,683,665	214	39.00	<sup>4</sup> 10,271,817	<sup>4</sup> 2,558,575	<sup>4</sup> 249	262.00
United Kingdom.....	10,578,973	15,572,776	1,472	0.52	9,359,000	23,413,785	2,502	0.57

<sup>1</sup> Conversion to U.S. dollars based on purchasing power parity exchange rate.

<sup>2</sup> Rate used to convert foreign currency to U.S. dollars.

<sup>3</sup> Per pupil expenditure for the United States was based on enrollment of public and private students and public current expenditures. If only public enrollment and public expenditures been used the per pupil expenditures would be: 1980=\$2,517, 1986=\$4,365.

<sup>4</sup> Data are for 1987.

<sup>5</sup> Data are for 1985.

<sup>6</sup> Data for enrollment are for 1980 and 1984, data for expenditures are for 1979 and 1983.

<sup>7</sup> Data for enrollment are for 1975 and 1980, data for expenditures are for 1976 and 1979.

—Not available

NOTE.—Elementary and secondary expenditures for all countries exclude "Other" and "Not Distributed" expenditures.

SOURCE: United Nations Educational, Scientific and Cultural Organization, *Statistical Yearbook, 1986*; and U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey. (This table was prepared June 1990.)

**Table 361.—Public expenditures for education as a percent of gross national product:  
Selected countries, 1960 to 1987**

Country	1960	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
	2	3	4	5	6	7	8	9	10	11	12	13
Australia.....	2.9	4.2	16.5	5.9	15.9	5.9	15.9	18.3	18.1	15.9	5.8	—
Canada.....	<sup>2</sup> 4.8	8.9	17.6	7.7	17.3	7.8	8.3	7.7	7.2	7.0	7.4	7.2
Chile.....	<sup>3</sup> 2.7	5.1	4.1	3.8	4.6	5.4	15.7	14.9	14.8	14.4	—	3.6
France.....	<sup>4</sup> 2.4	4.9	5.2	—	15.0	5.6	5.8	15.8	15.8	5.8	5.7	—
Germany, Federal Republic of.....	—	13.5	5.1	4.8	4.7	4.7	4.8	14.8	4.8	14.5	4.4	—
Hungary <sup>5</sup> .....	4.4	4.4	4.1	4.1	4.7	5.1	5.0	5.8	5.4	5.4	5.7	5.6
Italy.....	<sup>6</sup> 3.8	4.0	13.9	14.4	—	—	—	14.8	<sup>3</sup> 4.0	<sup>3</sup> 4.0	<sup>3</sup> 4.0	—
Japan.....	4.1	3.9	5.5	5.8	15.8	5.9	15.8	5.8	5.2	5.1	5.0	—
Mexico.....	<sup>2,3</sup> 1.3	2.4	13.6	4.0	<sup>3</sup> 3.0	<sup>1,3</sup> 4.2	<sup>3</sup> 4.3	<sup>3</sup> 2.8	<sup>1,3</sup> 2.5	<sup>1,3</sup> 3.9	<sup>1,3</sup> 3.8	3.4
Netherlands.....	<sup>7</sup> 4.9	7.3	8.2	8.1	7.9	17.8	17.8	7.4	18.8	6.8	—	—
Nigeria.....	<sup>4,8</sup> 2.2	—	<sup>8</sup> 4.3	3.9	—	15.5	<sup>3</sup> 2.1	<sup>1,3</sup> 1.7	<sup>1,3</sup> 1.2	<sup>1,3</sup> 1.0	<sup>1,3</sup> 1.4	—
Norway.....	4.2	8.0	7.1	—	7.2	8.9	7.0	7.0	8.7	16.4	18.8	—
Sweden.....	<sup>4</sup> 4.6	7.7	17.0	9.1	9.1	9.2	9.0	8.4	8.0	17.8	7.6	7.4
Thailand.....	<sup>6,8</sup> 2.5	3.5	13.5	3.2	13.4	3.7	3.9	3.9	—	3.9	3.8	3.6
United Kingdom.....	<sup>2</sup> 4.3	5.3	18.6	5.4	15.8	5.5	5.4	15.2	15.1	4.9	5.0	—
United States.....	4.0	5.9	8.8	5.7	5.8	5.4	5.8	5.6	5.5	5.5	5.6	5.7
U.S.S.R. <sup>9</sup> .....	5.9	8.8	7.6	7.3	17.3	8.9	8.7	16.8	8.8	7.0	17.2	7.3
Yugoslavia.....	<sup>10</sup> 2.5	4.6	3.4	5.4	14.7	4.5	4.4	13.7	3.6	3.4	3.8	—

<sup>1</sup> Data revised from previously published figure.

<sup>2</sup> Data for 1961.

<sup>3</sup> Expenditures by the Ministry of Education only.

<sup>4</sup> As percentage of gross domestic product at market prices.

<sup>5</sup> Data are as a percentage of net material product.

<sup>6</sup> Data for 1959.

<sup>7</sup> Includes private expenditures relating to private education.

<sup>8</sup> Data for 1976.

<sup>9</sup> Central or federal government only; not including foreign aid.

<sup>10</sup> As a percent of gross material product.

—Data not available.

SOURCE: United Nations Educational, Scientific, and Cultural Organization, Paris, *Statistical Yearbook*; and U.S. Department of Commerce, Bureau of the Census, *Governmental Finances*, various years. (This table was prepared March 1990.)

**Table 362.—International Assessment of Educational Progress in mathematics for age 13, by content area: 1988**

Country or province	Mathematics proficiency score			Percent correct on mathematics test, by content area					
	Mean <sup>1</sup>	Percent with score of 400 or more <sup>2</sup>	Percent with score of 500 or more <sup>3</sup>	Numbers and operations	Relations and functions	Geometry	Measurement	Data organization	Logic and problem solving
1	2	3	4	5	6	7	8	9	10
British Columbia.....	539.8	94.9	89.5	78.8	70.5	59.4	63.4	64.7	77.3
Ireland.....	504.3	86.3	54.7	67.9	89.0	59.4	55.3	48.1	72.3
Korea.....	567.8	95.3	78.1	79.2	80.0	72.3	71.2	74.7	73.9
New Brunswick (English).....	529.0	95.5	65.4	73.2	71.1	58.0	64.9	60.3	73.8
New Brunswick (French).....	514.2	94.8	58.3	72.9	89.2	52.6	59.3	52.4	66.5
Ontario (English).....	518.1	91.8	58.3	70.1	87.7	56.1	58.4	59.7	73.5
Ontario (French).....	481.5	84.8	40.5	62.7	68.2	47.4	52.1	50.2	59.7
Quebec (English).....	535.8	96.7	87.3	75.9	72.3	59.4	62.8	62.3	74.1
Quebec (French).....	543.0	97.2	72.7	77.9	75.8	60.9	65.1	62.1	73.9
Spain.....	511.7	90.7	57.0	68.8	70.8	62.7	59.4	56.5	72.3
United Kingdom.....	549.9	88.7	55.5	61.5	73.8	63.0	58.0	62.3	78.1
United States.....	473.9	77.7	40.3	81.4	59.9	49.1	43.9	54.7	63.0

<sup>1</sup> The scale for the scores ranges from 0 to 1,000, with a mean of 500 and a standard deviation of 100.

<sup>2</sup> Students at this level have the ability to select appropriate basic operations (addition, subtraction, multiplication, and division) to solve simple one-step problems. They can locate numbers on a number line and understand the most basic concepts of logic, percent, estimation, and geometry.

<sup>3</sup> Students at this level demonstrate an understanding of the concept of order and place value; the meaning of remainder in division; the properties of odd and even num-

bers and zero; elementary concepts of ratio and proportion; use of negative and decimal numbers; simple conversions involving fractions, decimals, and percents; and computation of averages. Students can use skills to solve problems requiring two or more steps.

SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *A World of Differences*, by Educational Testing Service. (This table was prepared May 1989.)

**Tab's 363.—Average percentage of items answered correctly on an international mathematics test of 8th grade students: Selected countries, 1981-82**

Country or province	Mean percent correct, all items <sup>1</sup>	Arithmetic	Algebra	Geometry	Measurement	Statistics
1	2	3	4	5	6	7
<b>Average</b> .....	<b>47.4</b>	<b>50.5</b>	<b>43.1</b>	<b>41.4</b>	<b>50.8</b>	<b>54.7</b>
<b>Belgium</b>						
Flemish.....	53.2	58.0	52.9	42.5	58.2	58.2
French.....	51.4	57.0	49.1	42.8	56.8	52.0
<b>Canada</b>						
British Columbia.....	51.8	58.0	47.9	42.3	51.9	61.3
Ontario.....	49.0	54.5	42.0	43.2	50.8	57.0
England and Wales.....	47.2	48.2	40.1	44.8	48.8	60.2
Finland.....	46.8	45.5	43.6	43.2	51.3	57.8
France.....	52.5	57.7	55.0	38.0	59.5	57.4
Hong Kong <sup>2</sup> .....	49.4	55.1	43.2	42.5	52.6	55.9
Hungary.....	56.0	56.8	50.4	53.4	62.1	60.4
Israel.....	45.0	49.9	44.0	35.9	48.4	51.9
Japan <sup>2</sup> .....	62.1	60.3	60.3	57.6	68.6	70.9
Luxembourg.....	37.5	45.4	31.2	25.3	50.1	37.3
Netherlands.....	57.1	59.3	51.3	52.0	61.9	65.9
New Zealand.....	45.5	45.6	39.4	44.8	45.1	57.3
Nigeria.....	33.8	40.8	32.4	26.2	30.7	37.0
Scotland.....	48.4	50.2	42.9	45.5	43.4	59.3
Swaziland.....	31.5	32.3	25.1	31.1	35.2	36.0
Sweden.....	41.8	40.6	32.3	39.4	48.7	56.3
Thailand.....	42.2	43.1	37.7	39.3	48.3	45.3
United States.....	45.3	51.4	42.1	37.8	40.8	57.7

<sup>1</sup> Weighted average determined by the number of items in each test component.

<sup>2</sup> Students in Japan and Hong Kong were attending the seventh grade.

Livingston. This table was based on the "Second International Mathematics Study" conducted by the International Association for the Evaluation of Educational Achievement. (This table was prepared October 1986.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, contractor report, *Perceptions of the Intended and Implemented Curricula*, by Ian

**Table 364.—International mathematics test scores and percentage of age group taking tests in the 12th grade: <sup>1</sup> Selected countries, 1981-82**

Country or province	Average age of students	Percent of age group taking test	Percent of analysis items students had been taught	Achievement scores for top 5 percent of age group			
				Average score <sup>2</sup>	Algebra	Geometry	Analysis (calculus)
1	2	3	4	5	6	7	8
<b>Average</b> .....	<b>17</b>	<b>16</b>	<b>76</b>	<b>57.1</b>	<b>57.6</b>	<b>57.2</b>	<b>56.4</b>
<b>Belgium</b>							
Flemish.....	17	10	88	56.3	57.5	55.9	55.5
French.....	17	10	—	54.2	55.3	53.6	53.7
<b>Canada</b>							
British Columbia.....	17	30	32	57.3	60.9	59.2	51.8
Ontario.....	15	19	83	59.4	59.8	59.3	59.4
England and Wales.....	17	6	85	55.5	54.9	55.5	56.1
Finland.....	18	15	67	60.5	60.7	59.8	61.0
Hungary.....	17	50	67	59.9	60.9	61.1	57.7
Israel.....	17	6	78	50.0	51.5	47.7	50.9
Japan.....	17	12	92	65.0	63.7	64.9	66.5
New Zealand.....	17	11	93	57.2	56.8	57.0	57.7
Scotland.....	16	18	—	55.7	56.2	58.0	52.9
Sweden.....	16	12	86	58.9	58.5	59.0	59.2
Thailand.....	—	—	63	—	—	—	—
United States.....	17	13	54	52.2	52.8	53.0	50.9

<sup>1</sup> For all countries, this table includes students attending precollege mathematics classes at the highest level of secondary school. In some countries, the students had been in school longer than 12 years.

<sup>2</sup> Average of scores on algebra, geometry, and analysis tests with 96 items. This score is based on a standardized distribution of data from all 15 participating countries, then adjusted to a mean of 50 and a standard deviation of 10.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, unpublished contractor report based on the "Second International Mathematics Study" conducted by the International Association for the Evaluation of Educational Achievement. (This table was prepared October 1986.)

**Table 365.—International Assessment of Educational Progress in science for age 13, by content area: 1988**

Country or province	Science proficiency score			Percent correct on science test, by content area				
	Mean <sup>1</sup>	Percent with score of 400 or more <sup>2</sup>	Percent with score of 500 or more <sup>3</sup>	Life sciences	Physics	Chemistry	Earth and space sciences	Nature of science
1	2	3	4	5	6	7	8	9
British Columbia.....	551.3	95.2	71.9	72.6	63.7	64.4	73.0	69.8
Ireland.....	469.3	75.6	37.2	60.0	53.0	46.7	61.0	54.5
Korea.....	549.9	93.1	72.7	72.7	67.6	65.3	71.3	65.8
New Brunswick (English).....	510.5	90.4	55.4	66.0	59.3	53.6	68.2	63.0
New Brunswick (French).....	468.1	77.9	35.3	58.5	56.0	48.8	55.2	57.3
Ontario (English).....	514.7	90.8	55.9	67.4	59.8	52.6	68.0	63.9
Ontario (French).....	468.3	78.8	34.6	60.1	55.1	46.9	57.4	56.6
Quebec (English).....	515.3	91.6	57.4	68.9	58.3	51.4	66.3	64.4
Quebec (French).....	513.4	91.5	56.3	70.8	59.6	54.0	60.7	64.0
Spain.....	503.9	88.0	53.5	69.0	60.2	51.6	65.6	59.5
United Kingdom.....	519.5	89.0	59.0	66.4	62.2	52.4	68.8	64.2
United States.....	478.5	78.3	41.8	64.0	52.9	47.7	61.4	56.0

<sup>1</sup> The scale for the scores ranges from 0 to 1,000, with a mean of 500 and a standard deviation of 100.

<sup>2</sup> Students at this level exhibit a growing knowledge in life sciences and can apply some basic principles from the physical sciences, including force. They also display a beginning understanding of some of the basic methods of reasoning used in science, including classification and interpretation of statements.

<sup>3</sup> Students at this level have a grasp of experimental procedures used in science, such as designing experiments, controlling variables, and using equipment. They can identify

the best conclusions drawn from data on a graph and the best explanation for observed phenomena. Students understand some concepts in a variety of science content areas, including the life sciences, physical sciences, and earth and space sciences.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *International Assessment of Educational Progress, A World of Differences*, by Educational Testing Service. (This table was prepared January 1989.)

**Table 366.—Science test scores for 10- and 14-year-olds, percentage of age groups in school, and mean ages of students tested in selected countries: 1983 to 1986 <sup>1</sup>**

Country	10-year-olds					14-year-olds				
	Grade tested	Average test scores	Percent of age group in school	Mean age, in years and months	Standard deviation of age, in months	Grade tested	Average test scores	Percent of age group in school	Mean age, in years and months	Standard deviation of age, in months
1	2	3	4	5	6	7	8	9	10	11
Australia.....	4, 5, 6	12.9	99	10:6	3.3	8, 9, 10	17.8	98	14:5	3.3
Canada (English).....	5	13.7	99	11:1	7.1	9	18.6	99	15:0	6.1
England.....	5	11.7	99	10:3	3.6	9	16.7	98	14:2	3.6
Finland.....	4	15.3	99	10:10	4.1	8	16.5	99	14:10	4.1
Hong Kong.....	4	11.2	99	10:5	9.8	8	16.4	99	14:7	10.9
Hungary.....	4	14.4	99	10:3	5.2	8	21.7	98	14:3	4.7
Italy.....	5	13.4	99	10:9	5.2	8, 9	16.7	99	14:7	5.4
Japan.....	5	15.4	99	10:7	3.5	9	20.2	99	14:7	3.5
Korea (South).....	5	15.4	99	11:2	7.4	9	18.1	99	15:0	7.2
Netherlands.....	—	—	—	—	—	9	19.8	99	15:6	12.5
Norway.....	4	12.7	99	10:11	4.0	9	17.9	99	15:10	4.0
Philippines.....	5	9.5	97	11:1	11.3	9	11.5	60	16:1	18.9
Poland.....	4	11.9	99	10:11	5.4	8	18.1	91	15:0	5.8
Singapore.....	5	11.2	99	10:10	5.7	9	16.5	91	15:3	9.0
Sweden.....	4	14.7	99	10:10	4.1	8	18.4	99	14:9	3.8
Thailand.....	—	—	—	—	—	9	16.5	32	15:4	8.9
United States.....	5	13.2	99	11:3	6.9	9	16.5	99	15:4	9.1

<sup>1</sup> Tests were conducted between 1983 and 1986.

—Data not available.

SOURCE: International Association for the Evaluation of Educational Achievement, *Science Achievement in Seventeen Countries, A Preliminary Report*. Copyright © 1988 by Pergamon Press. (This table was prepared January 1989.)

**Table 357.—Science test scores for 12th graders enrolled and not enrolled in science classes, by subject: Selected countries, 1983 to 1986<sup>1</sup>**

Country	Grade tested	Average age, years: months	Percent enrolled in school	Biology students		Chemistry students		Physics students		Non-science students <sup>2</sup> As a percent of total enrollment
				Biology test, percent correct	As a percent of total enrollment	Chemistry test, percent correct	As a percent of total enrollment	Physics test, percent correct	As a percent of total enrollment	
1	2	3	4	5	6	7	8	9	10	11
Australia.....	12	17:3	39	48.2	18	48.8	12	48.5	11	10
Canada.....	12, 13	18:3	71	45.9	28	38.9	25	39.8	19	—
England.....	13	18:0	20	63.4	4	69.5	5	58.3	8	10
Finland.....	12	18:7	<sup>3</sup> 45	51.9	45	33.3	14	37.9	14	—
Hong Kong (8) <sup>4</sup> .....	12	18:4	20	50.8	7	64.4	14	59.3	14	—
Hong Kong (7) <sup>5</sup> .....	13	18:2	—	55.8	4	77.0	8	69.9	8	—
Hungary.....	12	18:0	<sup>6</sup> 18	59.7	3	47.7	1	56.5	4	9
Italy.....	12	18:0	52	42.3	14	38.0	2	28.0	19	25
Japan.....	12	18:2	63	46.2	12	51.9	18	56.1	11	35
Norway.....	12	18:11	40	54.8	10	41.9	15	52.8	24	—
Poland.....	12	18:7	28	56.9	9	44.8	9	51.5	9	—
Singapore.....	13	18:1	17	66.8	3	66.1	5	54.9	7	8
Sweden.....	12, 13	18:0	<sup>7</sup> 15	48.5	15	40.0	15	41.8	15	—
United States <sup>8</sup> .....	12	17:7	90	37.9	6	37.7	1	45.5	1	<sup>8</sup> 66

<sup>1</sup> Tests were conducted between 1983 and 1986.

<sup>2</sup> Data for students not enrolled in science classes.

<sup>3</sup> A total of 63 percent of age group was in full-time schooling, but the 18 percent in vocational programs were not sampled.

<sup>4</sup> Form 6 represents grade 12.

<sup>5</sup> Form 7 represents grade 13.

<sup>6</sup> A total of 40 percent of age group was in full-time schooling, but the 22 percent in vocational programs were not sampled.

<sup>7</sup> An additional 15 percent were enrolled in non-science academic programs and were not sampled.

<sup>8</sup> United States test scores are included in this table even though they are not directly comparable with scores from other countries. U.S. students were tested for 25 items in

biology and chemistry and 26 items in physics. Other countries were tested with 30 items in each subject.

<sup>9</sup> Includes students in first-year physics courses.

—Data not available.

NOTE.—The primary sampling units in Hong Kong were classes rather than schools.

SOURCE: International Association for the Evaluation of Educational Achievement, *Science Achievement in Seventeen Countries, A Preliminary Report*. Copyright © 1988 by Pergamon Press. (This table was prepared January 1989.)

**Table 368.—Mean number of areas<sup>1</sup> correctly identified in a test of geography knowledge, by country and age: 1988**

Country	Age				
	18 to 24	25 to 34	35 to 44	45 to 54	55 and over
1	2	3	4	5	6
Canada.....	9.3	9.2	10.5	8.3	8.7
France.....	9.2	9.6	10.1	9.0	8.8
Germany, West.....	11.2	11.2	11.0	11.8	10.9
Italy.....	9.3	9.3	8.4	7.8	5.5
Japan.....	9.5	10.8	10.5	9.7	7.9
Mexico.....	8.2	6.9	7.8	6.4	5.7
Sweden.....	11.9	12.3	12.5	11.5	10.3
United Kingdom.....	9.0	8.4	9.2	8.9	7.8
United States.....	8.9	8.8	9.8	8.8	8.4

<sup>1</sup> Individuals were asked to identify 16 countries or bodies of water on a world map: Canada, Central America, Egypt, France, Italy, Japan, Mexico, Pacific Ocean, Persian Gulf, South Africa, Sweden, United Kingdom, U.S.A., U.S.S.R., West Germany, and Vietnam.

SOURCE: The Gallup Organization, Inc., *Geography: An International Gallup Survey, 1988*. (This table was prepared March 1989.)

**Table 369.—Foreign students enrolled in institutions of higher education in the United States and outlying areas, by continent, region, and selected countries of origin: 1980-81 to 1988-89**

Continent, region, and country	1980-81		1983-84		1984-85		1985-86		1986-87		1987-88		1988-89	
	Number	Percent												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Total</b> .....	<b>311,890</b>	<b>100.0</b>	<b>338,890</b>	<b>100.0</b>	<b>342,110</b>	<b>100.0</b>	<b>343,780</b>	<b>100.0</b>	<b>349,610</b>	<b>100.0</b>	<b>356,190</b>	<b>100.0</b>	<b>366,850</b>	<b>100.0</b>
<b>Africa</b> .....	<b>39,180</b>	<b>12.2</b>	<b>41,690</b>	<b>12.3</b>	<b>39,520</b>	<b>11.6</b>	<b>34,190</b>	<b>9.9</b>	<b>31,580</b>	<b>9.0</b>	<b>28,450</b>	<b>8.0</b>	<b>26,730</b>	<b>7.3</b>
Eastern Africa.....	8,260	2.0	7,050	2.1	7,060	2.1	6,730	2.0	6,600	1.9	6,700	1.9	7,040	1.9
Central Africa.....	1,130	0.4	1,330	0.4	1,350	0.4	1,540	0.4	1,770	0.5	1,890	0.5	1,890	0.5
North Africa.....	7,310	2.3	6,840	2.0	6,490	1.9	5,960	1.7	5,470	1.6	5,360	1.5	5,030	1.4
Southern Africa.....	1,480	0.5	2,110	0.6	2,160	0.6	2,360	0.7	2,530	0.7	2,770	0.8	2,830	0.8
West Africa.....	22,000	7.1	24,360	7.2	22,440	6.6	17,580	5.1	15,210	4.4	11,740	3.3	9,840	2.7
Nigeria.....	17,350	5.6	20,080	5.9	18,370	5.4	13,710	4.0	11,700	3.3	8,340	2.3	6,150	1.7
<b>Europe</b> .....	<b>25,330</b>	<b>8.1</b>	<b>31,860</b>	<b>9.4</b>	<b>33,350</b>	<b>9.7</b>	<b>34,310</b>	<b>10.0</b>	<b>36,140</b>	<b>10.3</b>	<b>36,820</b>	<b>10.3</b>	<b>42,770</b>	<b>11.7</b>
Eastern Europe.....	1,870	0.5	1,810	0.5	1,690	0.5	1,770	0.5	1,880	0.5	2,000	0.6	2,460	0.7
Western Europe.....	23,660	7.6	30,050	8.9	31,660	9.3	32,540	9.5	34,260	9.8	36,820	10.3	40,310	11.0
Germany, Federal														
Republic of.....	3,310	1.1	3,790	1.1	4,190	1.2	4,730	1.4	5,090	1.5	5,730	1.6	6,340	1.7
Greece.....	3,750	1.2	5,030	1.5	4,670	1.4	4,440	1.3	4,240	1.2	4,140	1.2	4,360	1.2
United Kingdom.....	4,440	1.4	5,860	1.7	6,030	1.8	5,940	1.7	6,240	1.8	6,600	1.9	6,900	1.9
<b>Latin America</b> .....	<b>49,610</b>	<b>16.0</b>	<b>52,350</b>	<b>15.4</b>	<b>48,560</b>	<b>14.2</b>	<b>45,480</b>	<b>13.2</b>	<b>43,480</b>	<b>12.4</b>	<b>44,550</b>	<b>12.5</b>	<b>45,030</b>	<b>12.3</b>
Caribbean.....	10,650	3.4	11,170	3.3	11,010	3.2	11,100	3.2	11,250	3.2	11,580	3.3	11,960	3.3
Central America.....	12,970	4.2	12,400	3.7	12,550	3.7	12,740	3.7	13,070	3.7	14,550	4.1	14,650	4.1
Mexico.....	6,730	2.2	5,600	1.7	5,750	1.7	5,460	1.6	5,330	1.5	6,170	1.7	5,780	1.6
South America.....	26,190	8.4	28,780	8.5	25,000	7.3	21,640	6.3	19,160	5.5	18,420	5.2	16,220	5.0
Venezuela.....	11,750	3.8	13,440	4.0	10,290	3.0	7,040	2.0	4,870	1.4	3,790	1.1	3,040	0.8
<b>Middle East</b> .....	<b>64,710</b>	<b>27.2</b>	<b>60,660</b>	<b>17.9</b>	<b>56,580</b>	<b>16.5</b>	<b>52,720</b>	<b>15.3</b>	<b>47,000</b>	<b>13.4</b>	<b>43,630</b>	<b>12.2</b>	<b>40,200</b>	<b>11.0</b>
Iran.....	47,550	15.2	20,360	6.0	16,640	4.9	14,210	4.1	12,230	3.5	10,420	2.9	9,950	2.4
Jordan.....	6,140	2.0	6,890	2.0	6,750	2.0	6,590	1.9	5,850	1.6	5,140	1.4	4,940	1.3
Lebanon.....	6,770	2.2	6,680	2.0	6,940	2.0	7,090	2.1	6,450	1.8	5,620	1.6	5,130	1.4
Saudi Arabia.....	10,440	3.3	6,630	2.5	7,760	2.3	6,900	2.0	5,840	1.7	5,490	1.5	4,970	1.4
<b>North America</b> <sup>1</sup> .....	<b>14,790</b>	<b>4.7</b>	<b>15,670</b>	<b>4.6</b>	<b>15,960</b>	<b>4.7</b>	<b>16,030</b>	<b>4.7</b>	<b>16,300</b>	<b>4.7</b>	<b>16,360</b>	<b>4.6</b>	<b>16,730</b>	<b>4.6</b>
Canada.....	14,320	4.6	15,150	4.5	15,370	4.5	15,410	4.5	15,700	4.5	15,690	4.4	16,030	4.4
<b>Oceania</b> .....	<b>4,180</b>	<b>1.3</b>	<b>4,090</b>	<b>1.2</b>	<b>4,190</b>	<b>1.2</b>	<b>4,030</b>	<b>1.2</b>	<b>4,230</b>	<b>1.2</b>	<b>3,820</b>	<b>1.0</b>	<b>3,810</b>	<b>1.0</b>
<b>South and East Asia</b> .....	<b>94,640</b>	<b>30.3</b>	<b>132,270</b>	<b>39.0</b>	<b>143,680</b>	<b>42.0</b>	<b>156,830</b>	<b>45.6</b>	<b>170,700</b>	<b>48.8</b>	<b>180,540</b>	<b>50.7</b>	<b>191,430</b>	<b>52.2</b>
<b>East Asia</b> .....	<b>51,650</b>	<b>16.6</b>	<b>66,520</b>	<b>19.6</b>	<b>72,630</b>	<b>21.2</b>	<b>80,720</b>	<b>23.5</b>	<b>91,690</b>	<b>26.3</b>	<b>101,210</b>	<b>28.4</b>	<b>113,140</b>	<b>30.9</b>
China.....	2,770	0.9	6,140	2.4	10,100	3.0	13,960	4.1	20,030	5.7	25,170	7.1	29,040	7.9
Hong Kong.....	9,660	3.1	9,420	2.8	10,130	3.0	10,710	3.1	11,010	3.1	10,650	3.0	10,560	2.9
Japan.....	13,500	4.3	13,010	3.8	13,160	3.8	13,360	3.9	15,070	4.3	16,050	4.5	24,000	6.5
Korea, Republic of.....	6,150	2.0	13,860	4.1	16,430	4.8	16,660	4.8	19,940	5.7	20,520	5.8	20,810	5.8
Taiwan.....	19,460	6.2	21,960	6.5	22,590	6.6	23,770	6.9	25,660	7.3	26,660	7.5	28,760	7.8
<b>South East Asia</b> .....	<b>42,990</b>	<b>13.8</b>	<b>65,750</b>	<b>19.4</b>	<b>71,050</b>	<b>20.5</b>	<b>76,110</b>	<b>22.1</b>	<b>79,010</b>	<b>22.6</b>	<b>79,330</b>	<b>22.3</b>	<b>78,290</b>	<b>21.4</b>
Asia.....	14,540	4.7	21,930	6.5	23,340	6.8	25,800	7.5	26,700	7.6	32,410	9.1	35,500	9.7
India.....	9,250	3.0	13,730	4.1	14,610	4.3	16,070	4.7	18,350	5.2	21,010	5.9	23,350	6.4
Pakistan.....	2,990	1.0	4,260	1.3	4,750	1.4	5,440	1.6	5,950	1.7	6,570	1.8	7,050	1.9
South East Asia.....	28,450	9.1	43,820	12.9	47,710	13.9	50,310	14.6	50,110	14.3	46,920	13.2	42,790	11.7
Indonesia.....	3,250	1.0	6,110	1.8	7,190	2.1	8,210	2.4	9,240	2.6	9,010	2.5	8,720	2.4
Malaysia.....	6,010	1.9	16,150	4.8	21,720	6.3	23,020	6.7	21,840	6.2	19,480	5.5	16,170	4.4
Thailand.....	6,550	2.1	6,940	2.0	7,220	2.1	6,940	2.0	6,480	1.9	6,430	1.8	6,560	1.8
<b>Stateless</b> .....	<b>240</b>	<b>0.1</b>	<b>300</b>	<b>0.1</b>	<b>270</b>	<b>0.1</b>	<b>190</b>	<b>0.1</b>	<b>180</b>	<b>0.1</b>	<b>220</b>	<b>0.1</b>	<b>150</b>	<b>(<sup>2</sup>)</b>

<sup>1</sup> Excludes Mexico and Central America, which are included with Latin America.<sup>2</sup> Less than .06 percent.

—Data not available.

NOTE.—Data are for "nonimmigrants," i.e., students who have not migrated to this country. The distribution by continent and region includes estimates for students whose country of origin is unknown. Because of rounding, details may not add to totals.

SOURCE: Institute of International Education, *Open Doors*, various years, and unpublished data. (Latest edition copyright ©1989 by the Institute of International Education. All rights reserved.) (This table was prepared March 1990.)

## CHAPTER 7

# Learning Resources and Technology

This chapter contains statistics on libraries and on the use of information technologies. These data show the extent of America's access to information technologies outside of formal classroom activities. The data also provide a capsule description of the magnitude and availability of library resources. Access to information has been widely cited as the key to success in a growing number of endeavors. Thus, how information is made available and to whom become matters of concern.

The tables in this chapter are based on periodic surveys conducted by the National Center for Education Statistics (NCES).

The first section of the chapter has tables dealing with public libraries, public school libraries, and college and university libraries. They contain data on collections, population served, staff, and expenditures. Two tables provide institutional-level information for the largest public libraries and the largest college libraries in the country.

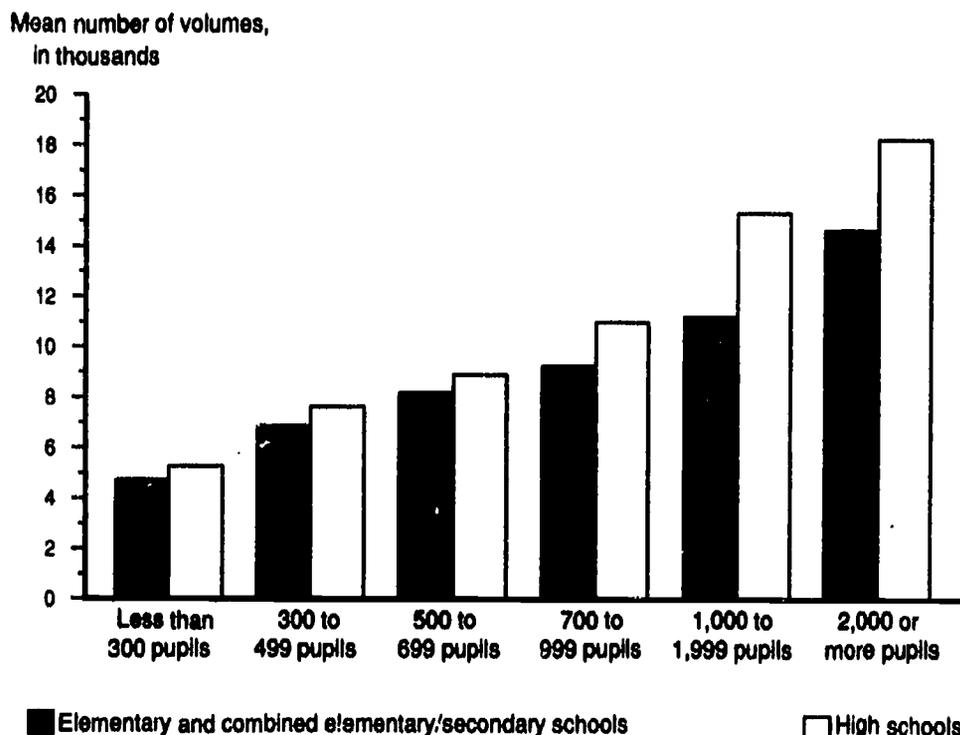
The second half of the chapter provides information on the availability and use of technology. For example, the proportion of schools with microcomputers was tabulated for a period of years to permit trend comparisons. Also included are new data on the use of computers by adults and school children, with comparisons between various demographic groups.

Related data may be found in various sections of this report. For example, statistics on the number of degrees conferred in computer and information sciences and library sciences are in chapter 3. Further information on survey methodologies are in the "Guide to Sources" and in the publications cited in the source notes.

### Highlights

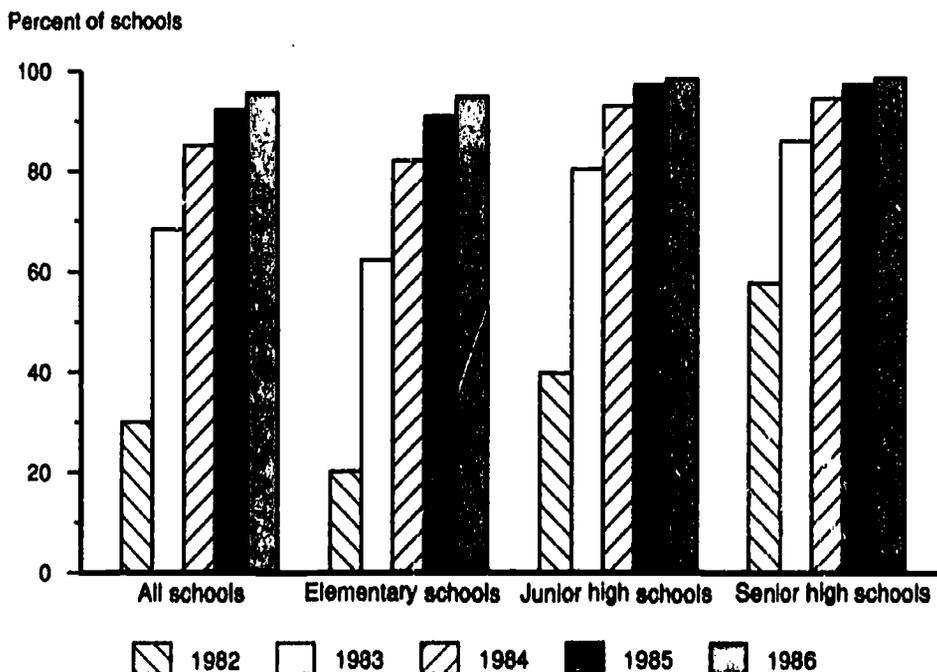
- In fall 1985, almost 94 percent of all public schools and 75 percent of all private schools had libraries or media centers. (Tables 370 and 373)
- During the 1984-85 school year, public school libraries held an average of 7,668 book titles, 34 periodical subscriptions, 353 audio materials, and 540 films and filmstrips. (Table 372)
- Total expenditures for college libraries rose by 78 percent between 1974-75 and 1981-82. However, the proportion of college budgets spent on libraries fell from 3.9 percent to 3.5 percent during the same period. (Table 374)
- The number of public schools using microcomputers has risen rapidly in recent years. Between fall 1981 and fall 1986, the proportion of public schools with computers rose from 18 percent to 96 percent. (Table 378)
- About 38 percent of all American workers used computers on their jobs in October 1989. The percentages ranged from 8 percent for workers who did not complete high school to 60 percent for those with 4 or more years of college. Women who have not completed college were more likely to use computers than men who have not completed college. For men and women who have completed 4 years of college, the percentages using computers were about the same. Computer users with higher levels of education were more likely to use their computers for more diverse applications than those with lower levels of education. (Table 379)
- More than half (52 percent) of all elementary school children used computers at school in October 1989. The computer usage rate was 39 percent for high school students and undergraduate students. Sizeable percentages of students used computers at home, though fewer actually used them for schoolwork. About 18 percent of elementary school children used computers at home and about 6 percent used them for schoolwork. Students at the high school and undergraduate level were about twice as likely as the elementary school children to use computers for schoolwork, even though they were less likely to use them at school. In general, students in higher income families were more likely to use computers at home and use them for schoolwork than students from lower income families. (Table 380)

**Figure 33.—Volumes held by public school libraries, by size of school and level of education: Fall 1985**



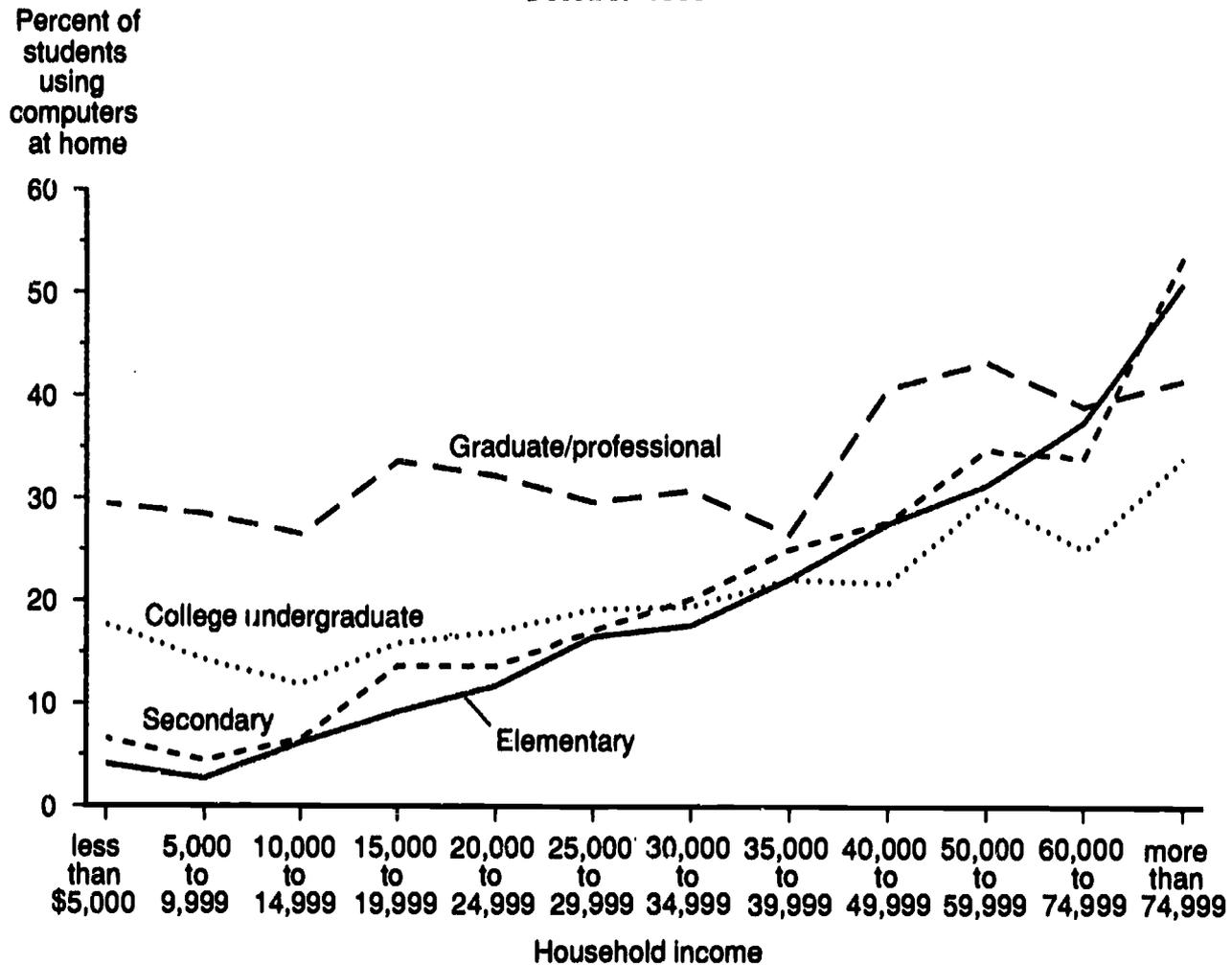
SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Survey of Public and Private School Libraries and Media Centers, 1985."

**Figure 34.—Public schools with computers, by level of school: 1982 to 1986**



SOURCE: Market Data Retrieval, Inc. *Microcomputers in Schools, 1983-1984, 1985*; and unpublished tabulations.

**Figure 35.—Student use of computers at home, by level of instruction and household income: October 1989**



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1989, unpublished data.

**Table 370.—Selected statistics on public school libraries/media centers, by level and size of school: Fall 1985**

School level and size	Number of library/media centers	Percent of schools with library/media centers	Library/media center staff					Mean circulation per week	
			Total staff	Mean number of staff per school	Certified library staff	Other professional staff	Other staff	Per school	Per pupil
1	2	3	4	5	6	7	8	9	10
<b>All schools.....</b>	<b>73,382</b>	<b>93.5</b>	<b>96,324</b>	<b>1.3</b>	<b>54,215</b>	<b>5,282</b>	<b>36,657</b>	<b>523</b>	<b>1.2</b>
Fewer than 300 pupils.....	19,070	82.4	15,906	0.8	9,560	1,048	5,200	261	1.4
300 to 499 pupils.....	23,744	97.5	27,297	1.1	15,552	1,886	9,859	525	1.3
500 to 699 pupils.....	14,915	96.5	19,997	1.3	11,298	1,214	7,487	679	1.2
700 to 999 pupils.....	8,721	98.2	13,961	1.6	7,619	613	5,530	672	0.8
1,000 to 1,999 pupils.....	5,834	99.3	15,188	2.6	7,936	439	6,619	678	0.6
2,000 or more pupils.....	1,068	100.0	4,075	3.8	2,053	60	1,962	679	0.3
<b>Elementary, junior high, and combined schools.....</b>	<b>61,013</b>	<b>92.6</b>	<b>70,916</b>	<b>1.2</b>	<b>39,682</b>	<b>4,394</b>	<b>26,842</b>	<b>560</b>	<b>1.3</b>
Fewer than 300 pupils.....	16,567	81.1	13,232	0.8	7,693	604	4,734	264	1.5
300 to 499 pupils.....	21,883	97.5	24,696	1.1	13,806	1,775	9,113	547	1.4
500 to 699 pupils.....	13,428	96.4	17,703	1.3	9,828	1,132	6,742	720	1.2
700 to 999 pupils.....	6,918	97.7	10,660	1.5	5,904	515	4,241	758	0.9
1,000 to 1,999 pupils.....	2,169	98.2	4,506	2.1	2,369	169	1,966	678	0.8
2,000 or more pupils.....	49	100.0	121	2.5	78	0	43	1,216	0.6
<b>High schools<sup>1</sup>.....</b>	<b>12,339</b>	<b>98.0</b>	<b>25,406</b>	<b>2.1</b>	<b>14,534</b>	<b>858</b>	<b>10,015</b>	<b>368</b>	<b>0.5</b>
Fewer than 300 pupils.....	2,503	91.7	2,574	1.0	1,667	242	465	109	0.6
300 to 499 pupils.....	1,861	98.5	2,901	1.4	1,743	112	746	276	0.7
500 to 699 pupils.....	1,488	100.0	2,294	1.5	1,466	82	744	306	0.5
700 to 999 pupils.....	1,603	100.0	3,301	1.8	1,914	98	1,269	340	0.4
1,000 to 1,999 pupils.....	3,665	100.0	10,882	2.9	5,566	264	4,851	560	0.4
2,000 or more pupils.....	1,019	100.0	3,955	3.9	1,975	60	1,919	663	0.3

<sup>1</sup> Excludes vocational/technical centers and intermediate schools. Intermediate schools are included under elementary and combined schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Survey of Public and Private School Libraries and Media Centers, 1985." (This table was prepared September 1986.)

NOTE.—Data are derived from a sample survey and are subject to sampling error. Because of rounding, details may not add to totals.

**Table 371.—General statistics of public school libraries/media centers, by level of school: 1973-74 to fall 1985**

Item	1973-74			1977-78			1984-85 and fall 1985 <sup>1</sup>		
	Total	Elementary and combined schools	Secondary schools	Total	Elementary and combined schools	Secondary schools	Total	Elementary, junior high, and combined schools	High schools
1	2	3	4	5	6	7	8	9	10
Number of public school libraries/media centers.....	74,825	52,310	22,315	70,854	52,087	18,767	73,352	61,013	12,339
Number of pupils served fall membership, in thousands.....	43,929	25,830	18,099	40,606	24,098	16,509	39,135	27,965	11,169
<b>Collections, in thousands</b>									
Volumes of books held at end of year.....	566,965	308,232	198,733	531,470	343,070	188,400	620,974	468,395	152,579
Volumes of books added during year.....	37,487	22,208	15,281	28,999	18,410	10,589	23,082	17,290	6,792
Periodical subscriptions held at end of year.....	2,892	1,319	1,573	4,026	2,347	1,679	2,487	1,586	901
Audiovisual materials held at end of year.....	68,024	43,719	24,305	75,938	26,734	49,204	—	—	—
<b>Collections per pupil in membership</b>									
Book volumes per pupil.....	11.5	11.9	11.0	13.1	14.2	11.4	15.9	16.7	13.7
Book volumes added per pupil.....	0.9	0.9	0.8	0.7	0.8	0.6	0.6	0.6	0.5
<b>Staff, in full-time-equivalents</b>									
Certified staff <sup>2</sup> .....	62,859	35,045	27,614	68,058	44,764	23,294	54,215	39,682	14,534
Men.....	7,378	2,749	4,629	—	—	—	—	—	—
Women.....	55,281	32,296	22,985	—	—	—	—	—	—
Less than a bachelor's degree.....	3,686	2,109	1,577	1,520	1,216	304	—	—	—
Bachelor's or higher degree.....	58,974	32,937	26,037	66,538	43,548	22,990	—	—	—
Noncertified staff (e.g., technical, secretarial, clerical, etc.).....	38,807	21,482	17,325	—	—	—	42,109	31,236	10,873
<b>Operating expenditures, in thousands</b>									
Total operating expenditures.....	\$1,182,290	\$836,390	\$545,890	\$1,385,608	\$834,744	\$550,864	—	—	—
Salaries and wages.....	618,320	441,660	378,660	1,000,550	611,247	389,303	—	—	—
Books.....	162,960	86,860	78,100	172,473	106,199	66,274	\$205,234	\$143,564	\$61,670
Periodicals.....	24,870	10,560	14,310	30,012	14,054	15,958	48,036	27,576	20,458
Equipment.....	66,450	38,440	29,010	69,587	40,486	29,101	—	—	—
Other operating expenditures <sup>3</sup> .....	109,680	58,870	50,810	112,987	82,758	50,229	—	—	—
<b>Expenditures per student in membership</b>									
Total operating expenditures.....	26.91	24.64	30.18	34.12	34.64	33.37	—	—	—
Salaries and wages.....	18.63	17.10	20.81	24.64	25.37	23.58	—	—	—
Books.....	3.71	3.36	4.20	4.25	4.41	4.01	6.24	6.00	7.40

<sup>1</sup> Data on numbers of library/media centers, membership, and staff are for fall 1985. Data on collections and expenditures are for 1984-85. Definitions of types of schools differ from tabulations for earlier years.

<sup>2</sup> Includes staff holding State certification as librarians, media specialists, or classroom teachers.

<sup>3</sup> Includes audiovisual materials.

—Data not available.

NOTE.—Data are derived from a sample survey and are subject to sampling error. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public School Libraries/Media Centers*, fall 1974 and fall 1978; "National Survey of Public and Private School Libraries and Media Centers, 1985". (This table was prepared September 1986.)

**Table 372.—Holdings and expenditures of public school libraries/media centers, by level and size of school: 1984-85**

School level and size	Mean number of titles held per library/media center				Mean annual expenditure per pupil <sup>1</sup> by object					
	Book titles	Periodical subscriptions	Films and filmstrips	Audio materials	Total <sup>2</sup>	Books	Periodical subscriptions	Audio-visual materials	Computer hardware <sup>3</sup>	Computer software <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11
<b>All schools</b> .....	<b>7,668</b>	<b>34</b>	<b>540</b>	<b>353</b>	<b>\$17.58</b>	<b>\$6.24</b>	<b>\$1.49</b>	<b>\$1.90</b>	<b>\$3.41</b>	<b>\$0.84</b>
Fewer than 300 pupils .....	4,793	23	300	175	27.54	9.18	2.52	2.54	5.96	1.48
300 to 499 pupils .....	6,927	27	499	311	15.37	5.58	1.18	1.85	3.04	0.80
500 to 899 pupils .....	8,250	32	640	396	13.89	5.25	1.01	1.46	2.41	0.54
700 to 999 pupils .....	9,602	48	705	444	12.64	4.87	1.14	1.52	1.94	0.48
1,000 to 1,999 pupils .....	13,802	73	926	765	12.05	4.47	1.23	1.41	1.71	0.35
2,000 or more pupils .....	18,082	115	912	848	11.13	4.53	1.14	1.15	0.94	0.13
<b>Elementary, junior high, and combined schools</b> .....	<b>7,003</b>	<b>26</b>	<b>523</b>	<b>337</b>	<b>16.79</b>	<b>6.00</b>	<b>1.22</b>	<b>1.89</b>	<b>3.44</b>	<b>0.89</b>
Fewer than 300 pupils .....	4,720	19	313	184	25.18	8.63	2.00	2.12	5.57	1.53
300 to 499 pupils .....	6,867	24	509	313	14.65	5.29	1.00	1.82	3.08	0.80
500 to 899 pupils .....	8,178	28	637	396	13.35	5.07	0.88	1.44	2.36	0.55
700 to 999 pupils .....	9,242	38	742	461	12.18	4.44	0.90	1.45	2.09	0.48
1,000 to 1,999 pupils .....	11,214	45	888	991	10.65	3.81	0.70	1.44	1.88	0.36
2,000 or more pupils .....	14,644	73	253	422	8.84	5.13	0.53	1.22	0.00	0.02
<b>High schools</b> <sup>4</sup> .....	<b>10,960</b>	<b>73</b>	<b>625</b>	<b>429</b>	<b>21.46</b>	<b>7.40</b>	<b>2.84</b>	<b>2.36</b>	<b>3.24</b>	<b>0.59</b>
Fewer than 300 pupils .....	5,275	45	216	113	43.13	12.78	5.94	5.37	8.55	1.18
300 to 499 pupils .....	7,624	57	384	268	23.77	9.01	3.31	2.00	2.62	0.79
500 to 899 pupils .....	8,901	68	665	398	18.70	6.87	2.35	1.85	2.87	0.45
700 to 999 pupils .....	10,987	78	563	380	14.48	5.56	2.05	1.77	1.36	0.48
1,000 to 1,999 pupils .....	15,334	90	952	631	12.88	4.86	1.55	1.39	1.62	0.34
2,000 or more pupils .....	18,247	117	943	866	11.24	4.50	1.17	1.15	0.98	0.14

<sup>1</sup> Excludes salaries and wages.<sup>2</sup> Includes expenditures not shown separately.<sup>3</sup> Includes expenditures for computer installations that are administered by library/media centers.<sup>4</sup> Excludes vocational/technical centers and intermediate schools. Intermediate schools are included under elementary and combined schools.

NOTE.—Data are derived from a sample survey and are subject to sampling error. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Survey of Public and Private School Libraries and Media Centers, 1985." (This table was prepared September 1986.)

Table 373.—Selected statistics on private school libraries/media centers, by level and size of school: 1984-85

Selected characteristics	All private schools	Level of school				Number of pupils in school				
		Elementary	Secondary	Combined	Other <sup>1</sup>	Less than 50	50 to 149	150 to 299	300 to 599	600 or more
1	2	3	4	5	6	7	8	9	10	11
Number of schools, fall 1985.....	25,615	15,117	2,479	4,975	3,044	4,649	8,143	6,405	4,670	1,748
Number of schools with library/media centers.....	19,188	11,747	2,364	3,566	1,509	2,356	5,581	5,280	4,225	1,745
Percent of schools with library/media centers.....	75	78	95	72	50	51	69	82	90	100
Percent of pupils in schools with library/media centers.....	88	87	99	83	66	53	70	83	91	100
Library/media FTE staff, total, fall 1985.....	18,827	7,853	4,120	3,033	1,622	705	2,996	4,355	4,948	3,825
Certified library staff.....	5,390	1,900	1,940	1,267	284	47	735	1,299	1,855	1,454
Other professional staff.....	3,534	1,778	851	577	528	114	825	1,039	1,073	683
Other staff.....	7,704	4,175	1,530	1,189	810	545	1,836	2,016	2,018	1,488
Library/media staff, mean FTE per school.....	0.87	0.87	1.74	0.85	1.07	0.30	0.54	0.82	1.17	2.08
Certified library staff.....	0.28	0.18	0.82	0.38	0.19	0.02	0.13	0.25	0.44	0.83
Mean number of titles held per library/media center, 1984-85.....										
Book titles, all centers.....	5,154	4,001	10,583	6,013	3,589	2,242	2,857	4,450	7,603	12,828
Catholic.....	8,117	4,834	11,600	—	—	—	2,884	4,490	8,485	12,562
Other religious orientation.....	3,366	2,290	7,444	4,182	1,678	1,733	2,226	3,854	7,857	—
Not religiously affiliated.....	6,413	4,326	10,452	11,783	3,589	2,821	4,105	6,127	14,788	—
Periodical subscriptions.....	19	10	81	22	18	5	9	18	28	82
Films and filmstrips.....	253	259	492	124	139	42	78	191	512	660
Audio materials.....	225	183	600	121	206	50	111	152	313	832
Mean circulation per week, 1984-85										
Per school.....	200	230	154	171	106	40	96	199	329	441
Per pupil.....	0.9	1.0	0.4	0.9	1.0	1.3	0.9	0.9	0.8	0.5
Mean annual expenditure <sup>2</sup> per pupil, 1984-85										
Total <sup>3</sup> .....	\$21.56	\$15.52	\$22.35	\$34.26	\$37.29	\$59.75	\$20.48	\$14.26	\$13.92	\$13.99
Books.....	9.64	6.03	10.51	16.59	19.88	27.68	9.92	5.66	5.86	5.56
Periodical subscriptions.....	1.42	0.73	3.36	1.35	3.94	1.52	1.80	1.01	1.35	1.47
Audiovisual materials.....	1.84	1.11	1.92	4.31	1.57	5.50	1.43	1.15	1.29	1.66
Computer hardware <sup>4</sup> .....	3.08	3.35	1.97	2.89	3.18	7.83	2.89	2.68	2.08	1.50
Computer software.....	0.93	1.13	0.44	0.42	1.29	1.35	1.00	1.04	0.88	0.42
Mean annual expenditure <sup>2</sup> per pupil, by control										
Total <sup>3</sup> .....	21.56	15.52	22.35	34.26	37.29	59.75	20.48	14.26	13.92	13.99
Catholic.....	13.39	12.29	18.97	—	—	—	15.88	13.73	11.36	12.32
Other religious orientation.....	25.80	20.04	26.07	34.78	9.81	59.81	14.95	13.23	17.17	—
Not religiously affiliated.....	36.54	25.25	44.47	34.30	42.27	82.65	38.73	21.01	25.66	—

<sup>1</sup> Includes special education and alternative schools.<sup>2</sup> Excludes salaries and wages.<sup>3</sup> Includes items not shown separately.<sup>4</sup> This figure often includes the total school budget for computer hardware.

— Data not shown because of small sample size.

NOTE.—Data are derived from a sample survey and are subject to sampling error. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public and Private School Library Media Centers, 1985-86 (with historical comparisons from 1958 to 1985)*. (This table was prepared February 1988.)

**Table 374.—General statistics of college and university libraries: United States and outlying areas, 1974-75 to 1984-85**

Item	1974-75	1975-76	1976-77	1978-79	1981-82 <sup>1</sup>	1984-85 <sup>1</sup>
1	2	3	4	5	6	7
Number of libraries .....	2,972	2,987	3,058	3,122	3,104	3,322
Total enrollment <sup>2</sup> .....	10,322	11,291	11,121	11,392	12,372	12,242
<b>Collections, thousands of units</b>						
Number of volumes at end of year .....	447,059	468,033	481,442	519,895	567,826	631,727
Number of volumes added during year .....	23,242	22,977	22,387	21,608	19,507	20,658
Number of periodical subscriptions <sup>3</sup> .....	4,434	4,618	4,670	4,775	4,890	6,317
<b>Library staff, in full-time equivalents</b>						
Total staff in regular positions <sup>3</sup> .....	56,838	56,852	57,087	58,416	58,476	58,478
Professional library staff .....	23,530	23,104	23,308	23,876	23,816	21,822
Nonprofessional library staff .....	33,308	33,748	33,779	34,740	34,660	36,026
Hours of student and other assistance, in thousands .....	34,687	36,725	39,950	39,552	40,088	28,380
<b>Library operating expenditures (excluding capital outlay)</b>						
Operating expenditures, total, in thousands .....	\$1,091,784	\$1,180,128	\$1,259,637	\$1,502,158	\$1,943,769	\$2,404,524
Salaries <sup>4</sup> .....	592,568	649,374	688,090	824,438	1,081,894	1,156,138
Hourly wages .....	61,474	66,175	68,683	79,535	100,847	—
Fringe benefits .....	—	—	—	—	—	231,209
Binding and rebinding .....	22,206	22,375	22,521	25,274	30,351	32,939
Books and other library materials .....	327,904	357,544	373,699	450,180	561,199	750,282
Other library operating expenditures .....	87,632	84,660	86,643	122,731	169,478	233,957
Operating expenditures, total, in percents .....	100.0	100.0	100.0	100.0	100.0	100.0
Salaries <sup>4</sup> .....	54.3	55.0	55.4	54.9	55.7	48.1
Hourly wages .....	5.6	5.6	5.5	5.3	5.2	—
Fringe benefits .....	—	—	—	—	—	9.8
Binding and rebinding .....	2.0	1.9	1.8	1.7	1.6	1.4
Books and other library materials .....	30.0	30.3	29.7	30.0	28.9	31.2
Other library operating expenditures .....	8.0	7.2	7.7	8.2	8.7	9.7
Library operating expenditures as percent of total institutional expenditures for education and general purposes .....	3.9	3.8	3.8	3.7	3.5	3.4

<sup>1</sup> Data are for the 50 States and the District of Columbia only.

<sup>2</sup> Fall enrollment for the academic year specified.

<sup>3</sup> Data are for the fall term of the succeeding year.

<sup>4</sup> Includes expenditures for fringe benefits (except for 1984-85) and salary equivalents of contributed services staff.

—Data not available.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Library Statistics of Colleges and Universities*, various years. (This table was prepared May 1990.)

**Table 375.—Selected statistics on the collections, staff, and operating expenditures of 50 large college and university libraries: 1985**

Institution	Rank order, by number of volumes	Number of volumes at end of year, in thousands	Full-time-equivalent staff <sup>1</sup>		Operating expenditures, in thousands <sup>2</sup>				
			Total	Professional	Total	Salaries and wages <sup>3</sup>	Books and other materials <sup>4</sup>	Binding and rebinding	Other
1	2	3	4	5	6	7	8	9	10
Harvard University (Mass.).....	1	10,930	1,001	310	\$30,452	\$17,905	\$6,872	\$621	\$5,054
Yale University (Conn.).....	2	8,192	595	178	18,982	11,242	4,918	279	2,544
University of Illinois—Urbana Campus.....	3	6,808	551	122	15,500	8,932	4,724	228	1,616
University of California—Berkeley.....	4	6,811	721	170	26,024	17,603	5,115	520	2,786
University of Michigan, Ann Arbor.....	5	5,802	544	143	14,795	10,072	3,335	275	1,112
Columbia University, Main Division (N.Y.).....	6	5,461	559	128	18,340	11,318	4,260	393	2,370
University of California—Los Angeles.....	7	5,453	692	180	27,586	16,805	5,850	614	4,317
University of Texas at Austin.....	8	5,402	593	131	19,441	11,261	6,539	182	1,458
Stanford University (Calif.).....	9	5,318	590	155	25,202	16,377	5,755	351	2,720
University of North Carolina at Chapel Hill.....	10	4,851	370	109	12,839	6,475	4,228	246	1,890
University of Chicago (Ill.).....	11	4,661	334	77	12,433	6,942	2,980	247	2,265
University of Wisconsin—Madison.....	12	4,495	519	132	17,179	9,936	4,141	218	2,885
University of Washington.....	13	4,416	483	125	14,833	8,445	4,313	373	1,702
Indiana University at Bloomington.....	14	4,366	495	109	12,092	7,399	3,518	210	967
University of Minnesota, Minneapolis—St. Paul.....	15	4,229	412	109	15,138	9,255	3,570	382	1,832
Cornell University (N.Y.).....	16	4,065	448	91	12,475	7,142	4,146	249	939
Ohio State University, Main Campus.....	17	3,983	467	109	15,078	8,248	4,387	212	2,232
Rutgers University, New Brunswick (N.J.).....	18	3,807	357	78	10,557	6,091	2,582	287	1,596
Princeton University (N.J.).....	19	3,752	388	98	12,603	7,725	3,557	252	1,069
Duke University (N.C.).....	20	3,459	302	97	9,895	5,621	3,103	190	981
University of Florida.....	21	3,409	430	96	9,511	5,061	3,022	117	1,310
University of Pennsylvania.....	22	3,282	319	101	11,942	7,332	2,512	280	1,818
Northwestern University (Ill.).....	23	3,125	348	104	10,352	5,951	3,169	218	1,014
Michigan State University.....	24	3,063	318	75	10,024	5,916	2,681	186	1,241
University of Arizona.....	25	2,966	362	91	13,662	6,075	4,425	301	3,062
New York University.....	26	2,879	372	76	12,301	7,736	3,258	206	1,101
University of Virginia, Main Campus.....	27	2,770	348	90	10,711	4,915	4,333	214	1,248
University of Iowa.....	28	2,662	251	79	8,799	4,475	3,407	235	682
University of Pittsburgh, Main Campus (Penn.).....	29	2,584	328	86	9,802	6,056	2,555	169	1,021
University of Utah.....	30	2,530	283	59	8,048	4,580	2,392	142	834
University of Rochester (N.Y.).....	31	2,473	204	54	7,268	3,592	2,193	104	1,379
University of Southern California.....	32	2,436	342	97	10,402	5,577	2,982	139	1,724
University of Georgia.....	33	2,416	301	76	8,298	3,905	3,447	239	704
University of Kansas, Main Campus.....	34	2,374	250	64	8,244	4,214	2,837	159	1,034
Johns Hopkins University (Md.).....	35	2,296	241	56	7,786	4,371	2,104	60	1,251
Southern Illinois University, Carbondale.....	36	2,263	269	64	6,944	3,608	2,308	139	891
University of Missouri, Columbia.....	37	2,255	211	50	5,707	2,683	2,146	142	736
University of California, Santa Barbara.....	38	2,252	238	57	9,579	5,799	2,673	218	892
Arizona State University.....	39	2,188	311	73	9,442	4,252	3,809	175	1,205
Syracuse University, Main Campus (N.Y.).....	40	2,186	243	55	7,973	4,237	2,446	103	1,186
Louisiana State University and A & M College.....	41	2,158	273	68	8,289	3,410	3,142	178	1,159
University of Hawaii at Manoa.....	42	2,119	234	66	8,210	4,634	2,289	184	603
Wayne State University (Mich.).....	43	2,084	210	55	8,253	3,460	2,445	99	2,249
State University of New York at Buffalo, Main Campus.....	44	2,066	230	61	7,602	4,400	2,097	100	1,205
University of Colorado at Boulder.....	45	2,052	193	45	6,233	3,377	2,224	122	510
University of Massachusetts at Amherst.....	46	2,033	219	45	6,653	4,199	1,813	67	575
Washington University (Missouri).....	47	2,030	229	66	7,826	3,434	2,518	133	1,743
University of California at Davis.....	48	1,995	295	66	12,898	7,695	3,703	345	1,155
Massachusetts Institute of Technology.....	49	1,994	275	86	9,729	6,318	1,811	125	1,475
Brown University (R.I.).....	50	1,966	220	59	6,714	3,475	2,105	139	995

<sup>1</sup> Data are for fall 1985.

<sup>2</sup> Data are for 1984-85.

<sup>3</sup> Includes salary equivalents of contributed services staff, fringe benefits of total staff, and wages of student assistants charged to the library budget.

<sup>4</sup> Includes operating expenses for book stock, periodicals, microforms, audiovisual materials, and other library materials.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Library Statistics of Colleges and Universities, Fall 1985" survey. (This table was prepared October 1986.)

**Table 376.—General statistics of public libraries, by population of area served: Fiscal year 1982**

Item	Population of area served						
	Total	Under 10,000	10,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 and over
1	2	3	4	5	6	7	8
<b>Number of public service outlets</b> .....	<b>70,573</b>	<b>9,422</b>	<b>24,134</b>	<b>14,132</b>	<b>12,225</b>	<b>5,390</b>	<b>5,271</b>
Central libraries .....	8,597	5,495	2,224	483	257	78	83
Branch libraries .....	8,943	360	1,389	1,271	1,361	924	1,649
Bookmobiles and mobile unit stops .....	49,981	3,038	19,227	11,481	9,034	4,029	3,195
Other outlets .....	5,051	542	1,295	918	1,573	361	383
<b>Collections, in thousands</b>							
Volumes of books held at end of year .....	494,149	80,600	127,069	83,984	85,874	48,274	108,347
Volumes of books added during year .....	30,204	4,652	7,847	3,761	3,856	3,419	8,689
Direct circulation of all materials .....	1,113,248	130,361	288,822	158,841	163,785	121,380	250,057
<b>Staff, in full-time-equivalents</b>							
Librarians .....	37,570	6,902	9,861	4,782	4,708	3,631	7,685
Technical, clerical, and other staff .....	49,283	3,114	11,945	7,760	7,589	5,849	13,027
Plant operation and maintenance staff .....	5,324	724	1,253	541	638	478	1,894
<b>Finances, in millions</b>							
Library receipts .....	\$2,271	\$178	\$512	\$308	\$343	\$264	\$666
Library expenditures .....	2,210	185	499	305	333	264	643

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Public Libraries, 1982" survey.

**Table 377.—Public libraries with 1 million or more volumes, by size of collection: 1982**

Library system	Rank order <sup>1</sup>	Number of volumes (book stock and serials)	Library system	Rank order <sup>1</sup>	Number of volumes (book stock and serials)
1	2	3	1	2	3
New York Public Library <sup>2</sup> (N.Y.) .....	1	10,926,535	Dayton and Montgomery County Public Library (Ohio) .....	27	1,808,397
Los Angeles County Public Library (Calif.) .....	2	5,101,872	Baltimore County Public Library (Md.) .....	28	1,554,000
Boston Public Library (Mass.) .....	3	4,999,830	Montgomery County Department of Public Libraries (Md.) .....	29	1,554,000
Los Angeles Public Library (Calif.) .....	4	4,975,566	Public Library of Washington, D.C. ....	30	1,430,326
Queens Borough Public Library (N.Y.) .....	5	4,814,219	St. Louis Public Library (Mo.) .....	31	1,407,344
Chicago Public Library (Ill.) .....	6	4,562,015	Indianapolis—Marion County Public Library (Ind.) .....	32	1,403,317
Brooklyn Public Library (N.Y.) .....	7	3,883,598	Fairfax County Public Library (Va.) .....	33	1,380,154
Buffalo and Erie County Public Library (N.Y.) .....	8	3,467,124	King County Library System (Wash.) .....	34	1,342,959
Cincinnati—Hamilton County Public Library (Ohio) .....	9	3,456,790	Kansas City Public Library (Kans.) .....	35	1,328,021
Free Library of Philadelphia (Penn.) .....	10	3,414,201	Toledo—Lucas County Public Library (Ohio) .....	36	1,280,112
Cleveland Public Library (Ohio) .....	11	2,857,702	Mid-Continent Public Library (Mo.) .....	37	1,279,626
Houston Public Library (Tex.) .....	12	2,848,490	Prince George's County Memorial Library (Md.) .....	38	1,266,213
Detroit Public Library (Mich.) .....	13	2,658,863	Library Association of Portland (Oreg.) .....	39	1,247,045
Hawaii State Library (Hawaii) .....	14	2,442,731	Orange County Public Library (Calif.) .....	40	1,243,572
Milwaukee Public Library (Wis.) .....	15	2,345,180	Public Library of Columbus and Franklin County (Ohio) .....	41	1,241,385
Carnegie Library of Pittsburgh (Penn.) .....	16	2,072,373	San Antonio Public Library (Tex.) .....	42	1,230,044
Miami-Dade Public Library System (Fla.) .....	17	1,978,942	Annapolis and Anne Arundel County Library (Md.) .....	43	1,220,800
Cuyahoga County Public Library (Ohio) .....	18	1,952,528	Atlanta Public Library (Ga.) .....	44	1,210,091
Denver Public Library (Colo.) .....	19	1,918,781	Phoenix Public Library (Ariz.) .....	45	1,206,540
Enoch Pratt Free Library (Baltimore, Md.) .....	20	1,902,403	Sacramento Public Library (Calif.) .....	46	1,206,042
San Francisco Public Library (Calif.) .....	21	1,792,627	San Jose Public Library (Tex.) .....	47	1,195,542
Dallas Public Library (Tex.) .....	22	1,730,807	Louisville Free Public Library (Ky.) .....	48	1,141,771
San Diego Public Library (Calif.) .....	23	1,701,025	Jacksonville Public Library (Fla.) .....	49	1,092,115
St. Louis County Library (Mo.) .....	24	1,695,046	Hennepin County Library (Minn.) .....	50	1,085,995
Fort Wayne—Allen County Public Library (Ind.) .....	25	1,659,896	Akron—Summit County Public Library (Ohio) .....	51	1,085,417
Minneapolis Public Library (Minn.) .....	26	1,640,546			

<sup>1</sup> Libraries ranked by number of volumes held.

<sup>2</sup> Includes the New York Research Library, which reported holding 7,271,592 volumes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Public Libraries, 1982" survey.

**BEST COPY AVAILABLE**

**Table 378.—Microcomputer use by elementary and secondary schools, by level, control, and size of school: 1981 to 1986**

Control and size	Percent of schools using microcomputers			
	All schools	Elementary schools	Junior high schools	Senior high schools
1	2	3	4	5
<b>Public schools</b>				
Fall 1981 .....	18.2	11.1	25.8	42.7
Fall 1982 .....	30.0	20.2	39.8	57.8
Fall 1983 .....	68.4	62.4	80.5	86.1
Fall 1984 .....	85.1	82.2	93.1	94.8
Fall 1985 .....	92.2	91.0	97.3	97.4
Fall 1986 .....	95.8	94.9	98.5	98.7
<b>Enrollment size, fall 1985</b>				
Under 200 .....	81.5	82.0	93.3	92.5
200 to 299 .....	92.7	92.1	97.1	96.8
300 to 499 .....	94.1	93.4	97.3	97.4
500 to 999 .....	95.2	93.2	97.9	96.8
1,000 and over .....	97.9	94.7	96.8	98.9
<b>Private schools 1982-83<sup>1</sup></b>				
Catholic .....	22.8	18.3	27.8	57.8
Other private .....	24.8	21.1	43.4	54.8
<b>1983-84<sup>1</sup></b>				
Catholic .....	63.4	—	—	—
Other private .....	48.4	—	—	—
<b>1984-85<sup>1</sup></b>				
Catholic .....	82.9	81.5	87.7	92.8
Other private .....	81.9	—	—	—
<b>1985-86<sup>1</sup></b>				
Catholic .....	91.4	—	—	—
Other private .....	87.3	—	—	—

<sup>1</sup> Private schools were surveyed in the middle of the school year.  
—Data not available.

SOURCE: Market Data Retrieval, Inc., *Microcomputers in Schools, 1984, 1985, 1987*, and unpublished tabulations. (This table was prepared May 1989.)

NOTE.—Some data have been revised from previously published figures.

**Table 379.—Percentage of workers using computers on the job, by sex, educational attainment, and selected computer activities: October 1989**

Highest educational attainment and sex	Percent using computers at work	Distribution of on-the-job computer users, by selected computer activities <sup>1</sup>				
		Word processing	Bookkeeping	Inventory control	Communications	Databases
1	2	3	4	5	6	7
<b>Total</b> .....	<b>38.31</b>	<b>41.09</b>	<b>28.51</b>	<b>25.51</b>	<b>25.90</b>	<b>27.34</b>
Not high school graduate .....	8.36	17.66	19.95	37.41	13.19	11.70
High school graduate .....	29.81	32.19	27.71	29.66	20.95	20.03
Some college .....	50.00	40.02	28.20	27.29	26.68	27.18
4 years of college .....	59.55	48.48	28.59	22.73	29.82	32.84
More than 4 years of college .....	59.88	57.44	22.48	15.93	31.33	37.66
<b>Male</b> .....	<b>32.25</b>	<b>37.35</b>	<b>24.08</b>	<b>30.93</b>	<b>28.05</b>	<b>29.84</b>
Not high school graduate .....	6.19	12.08	12.33	41.39	10.38	8.99
High school graduate .....	20.15	19.79	20.52	41.87	19.66	17.66
Some college .....	40.58	31.77	24.38	34.55	28.03	29.05
4 years of college .....	59.02	45.58	28.26	27.13	32.24	35.63
More than 4 years of college .....	60.42	56.81	24.18	17.77	34.60	40.09
<b>Female</b> .....	<b>48.01</b>	<b>44.42</b>	<b>28.67</b>	<b>20.70</b>	<b>23.99</b>	<b>25.12</b>
Not high school graduate .....	12.06	22.55	26.82	33.93	15.65	14.06
High school graduate .....	40.62	39.07	31.70	22.88	21.66	21.34
Some college .....	60.89	48.28	31.09	21.79	25.65	25.72
4 years of college .....	60.27	47.65	24.38	18.92	26.49	28.70
More than 4 years of college .....	59.00	56.51	19.59	12.84	25.85	33.58

<sup>1</sup> Individuals may be counted in more than one job category.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October, 1989. (This table was prepared May, 1990.)

NOTE.—Data are based on a sample survey of households and are subject to sampling and nonsampling error.

Table 380.—Student use of computers, by level of instruction and selected characteristics: October 1989

Student and school characteristics	Student level					
	Total	Prekindergarten and kindergarten	Grades 1 through 8	Grades 9 through 12	1st through 4th year of college	5th or later year of college
1	2	3	4	5	6	7
Percent of students using computers at school						
Total.....	42.67	14.69	52.30	39.19	39.15	40.73
Sex:						
Male.....	43.49	13.85	52.89	38.66	42.06	46.95
Female.....	41.85	15.59	51.87	39.75	38.83	34.91
Race/ethnicity:						
White, non-Hispanic.....	45.70	18.95	58.39	40.64	39.96	39.48
Black, non-Hispanic.....	32.54	7.45	35.68	35.98	35.08	34.39
Hispanic.....	42.48	8.53	46.94	40.97	43.51	57.95
Other.....	35.04	9.75	40.27	33.51	33.10	42.12
Household income:						
<\$5,000.....	36.89	8.48	40.38	35.57	40.14	53.53
\$5,000—9,999.....	36.10	9.15	40.25	32.68	40.48	60.17
\$10,000—14,999.....	38.43	14.58	44.40	39.13	30.76	55.20
\$15,000—19,999.....	41.51	11.94	50.88	34.76	39.80	44.02
\$20,000—24,999.....	42.36	14.55	51.75	40.11	32.52	44.39
\$25,000—29,999.....	48.07	16.07	58.36	43.82	40.37	42.05
\$30,000—34,999.....	44.15	17.38	58.77	37.62	37.05	33.29
\$35,000—39,999.....	45.21	16.09	58.30	41.54	34.51	45.31
\$40,000—49,999.....	44.74	15.35	59.71	38.70	38.09	35.42
\$50,000—59,999.....	48.38	17.04	61.17	48.10	43.84	35.31
\$60,000—74,999.....	45.27	15.06	58.94	42.92	43.17	26.27
>\$74,999.....	51.21	21.21	66.95	45.61	49.55	31.03
Control of school:						
Public.....	43.32	16.38	51.85	38.97	37.48	41.27
Private.....	38.68	11.79	56.56	42.59	46.28	39.70
Percent of students using computers at home						
Total.....	18.84	10.16	17.84	20.71	21.29	33.44
Sex:						
Male.....	20.65	11.00	18.72	23.88	25.38	35.96
Female.....	17.02	9.26	16.93	17.37	16.05	31.05
Race/ethnicity:						
White, non-Hispanic.....	22.84	12.26	22.30	25.25	23.58	35.41
Black, non-Hispanic.....	7.30	3.66	6.76	8.47	9.10	18.15
Hispanic.....	18.95	9.93	16.80	22.52	23.45	24.72
Other.....	7.38	2.92	6.57	7.76	11.73	30.23
Household income:						
<\$5,000.....	8.36	4.53	4.11	6.57	17.70	29.41
\$5,000—9,999.....	5.36	1.01	2.89	4.44	14.24	26.43
\$10,000—14,999.....	7.18	1.90	6.15	6.52	11.84	26.46
\$15,000—19,999.....	11.25	3.17	9.19	13.59	15.80	33.55
\$20,000—24,999.....	12.89	6.80	11.63	13.59	16.94	32.16
\$25,000—29,999.....	17.02	11.93	16.50	17.10	19.15	29.60
\$30,000—34,999.....	17.68	8.01	17.56	20.16	19.41	30.71
\$35,000—39,999.....	21.44	6.74	22.18	25.05	22.11	26.48
\$40,000—49,999.....	25.68	14.78	27.50	27.67	21.70	40.67
\$50,000—59,999.....	31.07	20.00	31.24	34.66	29.91	43.19
\$60,000—74,999.....	32.20	21.44	37.38	33.93	24.95	38.94
>\$74,999.....	43.78	25.17	50.89	53.42	33.85	41.44
Control of school:						
Public.....	17.90	8.31	16.80	19.66	20.71	32.16
Private.....	24.35	13.35	27.68	35.93	23.78	35.91
Percent of students using computers at home for school work						
Total.....	8.89	0.57	6.27	12.23	13.65	23.66
Sex:						
Male.....	9.49	0.58	6.31	13.57	16.04	25.88
Female.....	8.30	0.57	6.22	10.62	11.74	22.00
Race:						
White, non-Hispanic.....	10.67	0.61	7.68	15.17	15.12	25.38
Black, non-Hispanic.....	3.36	0.66	2.65	4.01	6.19	12.30
Hispanic.....	9.07	—	5.84	13.22	15.39	14.82
Other.....	3.64	—	2.82	4.38	6.55	27.60
Household income:						
<\$5,000.....	4.96	—	1.50	4.06	12.60	23.60
\$5,000—9,999.....	3.17	—	0.57	2.64	10.32	26.53
\$10,000—14,999.....	3.47	0.68	1.78	3.64	8.09	19.29
\$15,000—19,999.....	4.52	—	2.12	5.19	9.25	30.17
\$20,000—24,999.....	5.69	0.33	3.78	7.58	10.48	23.76
\$25,000—29,999.....	6.43	0.34	4.05	8.24	12.34	19.70
\$30,000—34,999.....	7.95	0.13	5.74	11.96	12.80	19.84
\$35,000—39,999.....	10.54	1.21	7.91	14.96	15.88	18.71
\$40,000—49,999.....	11.85	0.71	9.68	17.07	14.26	29.43
\$50,000—59,999.....	15.70	0.73	12.58	21.88	19.99	31.49
\$60,000—74,999.....	14.63	0.88	13.01	20.38	14.73	25.57
>\$74,999.....	22.00	2.41	21.89	34.16	21.21	22.16
Control:						
Public.....	8.47	0.62	5.93	11.47	13.14	22.19
Private.....	11.39	0.49	9.44	23.57	15.80	27.15

—Data not available.

NOTE.—Data are based on a sample survey of households and are subject to sampling and nonsampling error.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October, 1989, unpublished data. (This table was prepared May, 1990)

# Guide To Tabular Presentation

This section is intended to assist the reader in following the basic structure of the *Digest* tables and to provide a legend for some of the common symbols and indexes used throughout the book. Unless otherwise noted, all data are for the 50 States and the District of Columbia.

## Table Components

**Title** Describes the table content concisely.

**Unit Indicator** Informs the reader of the measurement unit in the table—"In thousands," "In millions of dollars," etc. Noted below the title unless several units are used, in which case the unit indicators are generally given in the spanner or individual column heads.

**Spanner** Describes a group of two or more columns.

**Column head** Describes specific column.

**Stub** Describes a row or a group of rows. Each stub is followed by a number of dots (leaders) or by a semi-colon if no data appears in the data fields.

**Field** The area of the table which contains the data elements.

### Rules in the field

Single horizontal rules indicate

- that the data below the line add to the figure immediately above the line, or
- in the case of derived figures (e.g., percents, medians) that the datum above the line represents a cumulative figure.

Double horizontal rules demarcate groups of related rows.

Single vertical rules delineate columns.

Double vertical rules divide the table into sections with unique stubs.

## Example of Table Structure

**Table Number and Title** { **Table 0.—Total enrollment in institutions of higher education, by type and control of institution: Fall 1979 to fall 1986**

**Unit Indicator** → (In thousands) **Spanner**

Type and control of institution	Year					Percent change, 1979 to 1986
	1979	1981	1983	1986		
1	2	3	4	5	6	
All Institutions .....	11,570	12,372	12,485	12,247	5.85	
Universities .....	2,840	2,901	2,899	2,871	1.10	
Other 4-year institutions .....	4,514	4,754	4,852	4,845	7.35	
2-year institutions .....	4,217	4,716	4,723	4,531	7.46	
Public institutions .....	9,037	9,647	9,693	9,479	4.90	
Universities .....	2,100	2,152	2,155	2,141	1.98	
Other 4-year institutions .....	2,880	3,014	3,069	3,068	6.52	
2-year institutions .....	4,057	4,481	4,459	4,270	5.25	
Private institutions .....	2,533	2,725	2,782	2,768	9.27	
Universities .....	740	749	734	730	-1.42	
Other 4-year institutions .....	1,633	1,740	1,784	1,777	8.80	
2-year institutions .....	160	236	264	261	63.46	

**Footnote** → <sup>1</sup>Large percentage increase is due primarily to the addition of colleges accredited by the National Association of Trade and Technical Schools in 1980 and 1981.

**Note** → NOTE.—Includes undergraduate, graduate, first-professional, and unclassified students.

**Source** → <sup>1</sup>SOURCE: U.S. Department of Education, Center for Education Statistics, "Fall Enrollment in Colleges and Universities" surveys. (This table was prepared July 1986.)

**Footnote** Describes a unique circumstance relating to a specific item within the table. Usually listed below the bottom rule of the table.

**Note** Furnishes general information that relates to the entire table.

**Source** The document or reference from which the data are drawn. This note may also include the organizational unit responsible for preparing the data.

## Descriptive Terms

**Average** A number that is used to represent the "typical value" of a group of numbers. It is regarded as a measure of "location" or "central tendency" of a group of numbers.

**Arithmetic mean** is the most commonly used average. It is derived by summing the individual item values of a particular group and dividing that sum by the number of items. This value is often referred to simply as the "mean" or "average."

**Median** is the measure of central tendency that occupies the middle position in a rank order of values. It generally has the same number of items above it as below it. If there is an even number of items in the group, the median is the average of the middle two items.

**Per capita**, or per person, figure represents an average computed for every person in a specified group, or population. It is derived by dividing the total for an item (such as income or expenditures) by the number of persons in the specified population.

**Index number** A value that provides a means of measuring, summarizing, and communicating the nature of changes that occur from time to time or from place to place. An index is used to express changes in prices over periods of time but may also be used to express differences between related subjects at a single point in time.

The *Digest* most often uses the Consumer Price Index to compare purchasing power over time.

To compute a price index, a base year or period is selected. The base year price is then designated as the base or reference price to which the prices for other years or periods are related.

A method of expressing the price relationship is:

Index number =

$$\frac{\text{Price of a set of one or more items for related year}}{\text{Price of the same set of items for base year}} \times 100$$

When 100 is subtracted from the index number, the result equals the percent change in price from the base year.

**Current and constant dollars** are used in a number of tables to express finance data. Unless otherwise noted, all figures are in current dollars, not adjusted for inflation. Constant dollars provide a measure of the impact of inflation on the current dollars.

**Current dollar** figures reflect actual prices or costs prevailing during the specified year(s).

**Constant dollar** figures attempt to remove the effects of price changes (inflation) from statistical series reported in dollar terms.

The constant dollar value for an item is derived by dividing the base year price index (for example, the Consumer Price Index for 1986) by the price index for the year of data to be adjusted and multiplying by the item to be adjusted. The result is an adjusted dollar value as it would presumably exist if prices were the same as the base year—in other words, as if the dollar had constant purchasing power. Any changes in the constant dollar amounts would reflect only changes in the real values.

NOTE: Tables may not include data for all years implied in table titles.

# Guide to Sources

## Sources and Comparability of Data

The information presented in this report was obtained from many sources, including Federal and State agencies, private research organizations, and professional associations. The data were collected using many research methods, including surveys of a universe (such as all colleges) or of a sample, compilations of administrative records, and statistical projections. Digest users should take particular care when comparing data from different sources. Differences in procedures, timing, phrasing of questions, interviewer training, and so forth mean that the results from the different sources may not be strictly comparable. Following the general discussion of data accuracy below, descriptions of the information sources and data collection methods are presented, grouped by sponsoring organization. More extensive documentation of a particular survey's procedures does not imply more problems with the data, only that more information is available.

### Accuracy of Data

The accuracy of any statistic is determined by the joint effects of "sampling" and "nonsampling" errors. Estimates based on a sample will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey instruments, instructions, and procedures. In addition to such sampling errors, all surveys, both universe and sample, are subject to design, reporting, and processing errors and errors due to nonresponse. To the extent possible, these nonsampling errors are kept to a minimum by methods built into the survey procedures. In general, however, the effects of nonsampling errors are more difficult to gauge than those produced by sampling variability.

### Sampling Errors

The samples used in surveys are selected from a large number of possible samples of the same size that could have been selected using the same sample design. Estimates derived from the different samples would differ from each other. The difference between a sample estimate and the average of all possible samples is called the sampling deviation. The standard or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples and, thus, is a measure of

the precision with which an estimate from a particular sample approximates the average result of all possible samples.

The sample estimate and an estimate of its standard error permit us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples. If all possible samples were selected under essentially the same conditions and an estimate and its estimated standard error were calculated from each sample, then: (1) approximately  $\frac{2}{3}$  of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of all possible samples; and (2) approximately  $\frac{1}{20}$  of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average value of all possible samples. We call an interval from two standard errors below the estimate to two standard errors above the estimate a 95 percent confidence interval.

To illustrate this concept, consider the table of standard errors and 95 percent confidence intervals for estimates from the "1985 Survey of Public and Private School Libraries and Media Centers" sample (table A1, below). For the estimate that 93.5 percent of public schools have library programs, the table shows that the standard error is 0.54 percent. Therefore, we can create a 95 percent confidence interval which is approximately 92.4 to 94.6 (93.5 percent  $\pm$  2 times 0.54 percent).

Analysis of standard errors can help assess how valid a comparison between two estimates might be. The standard error of a difference between two independent sample estimates is equal to the square root of the sum of the squared standard errors of the estimates. The standard error (se) of the difference between independent sample estimates "a" and "b" is:

$$se_{a,b} = \sqrt{se_a^2 + se_b^2}$$

It should be noted that most of the standard error estimates presented in subsequent sections and in the original documents are approximations. That is, to derive estimates of standard errors that would be applicable to a wide variety of items and could be

prepared at a moderate cost, a number of approximations were required. As a result, the standard error estimates provide a general order of magnitude rather than the exact standard error for any specific item. The preceding discussion on sampling variability was directed toward a situation concerning one or two estimates. Determining the accuracy of statistical projections is more difficult. In general, the further away the projection date is from the date of the actual data being used for the projection, the greater the probable error in the projections. If, for instance, annual data from 1970 to 1988 are being used to project enrollment in institutions of higher education, the further beyond 1989 one projects, the more variability in the projection. One will be less sure of the 1995 enrollment projection than of the 1990 projection. A detailed discussion of the projections methodology is contained in *Projections of Education Statistics to 2000* (National Center for Education Statistics, 1989).

## Nonsampling Errors

Universe and sample surveys are subject to nonsampling errors. Nonsampling errors may arise when respondents or interviewers interpret questions differently, when respondents must estimate values, or when coders, keyers, and other processors handle answers differently, when persons who should be included in the universe are not, or when persons fail to respond (completely or partially). Nonsampling errors usually, but not always, result in an understatement of total survey error and thus an overstatement of the precision of survey estimates. Since estimating the magnitude of nonsampling errors would require special experiments or access to independent data, these magnitudes are seldom available.

To compensate for nonresponse, adjustments of the sample estimates are often made. An adjustment made for either type of nonresponse, total or partial, is often referred to as an imputation—substitution of the “average” questionnaire response for the nonresponse. Imputations are usually made separately within various groups of sample members which have similar survey characteristics. Imputation for item nonresponse is usually made by substituting for a missing item the response to that item of a respondent having characteristics that are similar to those of the nonrespondent.

Although the magnitude of nonsampling error in the data collected in this *Digest* is frequently unknown, idiosyncrasies which have been identified are noted on the appropriate tables.

## Federal Agency Sources

### National Center for Education Statistics (NCES)

#### *Common Core of Data*

NCES uses the Common Core of Data (CCD) survey to acquire and maintain statistical data on the 50 States, the District of Columbia, and the outlying areas from the universe of State-level education agencies. Information about staff and students is collected annually at the school, LEA (local education agency or school district), and State levels. Information about revenues and expenditures is also collected at the State level.

Data are collected for a particular school year (July 1 through June 30) via survey instruments sent to the States by October 15 of the subsequent school year. States have 2 years in which to modify the data originally submitted.

Since the CCD is a universe survey, the CCD information presented in this edition of the *Digest* is not subject to sampling errors. However, nonsampling errors could come from two sources—nonreturn and inaccurate reporting. Almost all of the States submit the six CCD survey instruments each year, but submissions are sometimes incomplete or too late for publication.

Understandably, when 57 education agencies compile and submit data for over 85,000 public schools and approximately 15,000 local school districts, misreporting can occur. Typically, this results from varying interpretation of NCES definitions and differing recordkeeping systems. NCES attempts to minimize these errors by working closely with the Council of Chief State School Officers (CCSSO) and its Committee on Evaluation and Information Systems (CEIS).

The State education agencies report data to NCES from data collected and edited in their regular reporting cycles. NCES encourages the agencies to incorporate into their own survey systems the NCES items they do not already collect so that those items will also be available for the subsequent CCD survey. Over time, this has meant fewer missing data cells each State's response, reducing the need to impute data.

NCES subjects data from the education agencies to a comprehensive edit. Where data are determined to be inconsistent, missing, or out of range, NCES contacts the education agencies for verification. NCES-prepared State summary forms are returned to the State education agencies for verification. States are also given an opportunity to revise their State-level aggregates from the previous survey

cycle. Questions concerning the Common Core of Data can be directed to:

John Sietsema  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

### ***Federal Funds for Education***

NCES prepares an annual compilation of Federal funds for education. Data for U.S. Department of Education program totals came from the *Budget of the U.S. Government*. Budget offices of other Federal agencies provided information for all other Federal program support except for research funds, which are obligations reported by the National Science Foundation in *Federal Funds for Research and Development*, fiscal years 1965 to 1990. Some data are estimated, based on reports from the Federal agencies contacted and the *Budget of the U.S. Government, Fiscal Year 1991*.

Except for money spent on research, outlays were used to report program funds to the extent possible. Some tables are obligations as noted in the title of the table. Some Federal program funds not commonly recognized as education assistance are also included in the totals reported. For example, portions of Federal funds paid to some States and counties as shared revenues resulting from the sale of timber and minerals from public lands have been estimated as funds used for education purposes. Parts of the funds received by States (in 1980) and localities (throughout the period) under the General Revenue Sharing Program are also included, as are portions of Federal funds received by the District of Columbia. The share of these funds allocated to education was assumed equal to the share of general funds expended for elementary and secondary education by States and localities in the same year as reported by the U.S. Bureau of the Census in its annual publication, *Governmental Finances*.

All State intergovernmental expenditures for education were assumed earmarked for elementary/secondary education. Contributions of parent governments of dependent school systems to their public schools amounted to approximately 9 percent of local government revenues and local government revenue sharing in each year. Therefore, 9 percent of local government revenue-sharing funds were assumed allocated each fiscal year to elementary and secondary education. Parent government contributions to public school systems were obtained from the U.S. Bureau of the Census, *Finances of Public School Systems*. The amount of State revenue-sharing funds allocated for postsecondary education in

1980 was assumed to be 13 percent, the proportion of direct State expenditures for institutions of higher education reported in *Governmental Finances* for that year.

The share of Federal funds for the District of Columbia assigned to education was assumed equal to the share of the city's general fund expenditures for each level of education.

For the job training programs conducted by the Department of Labor, only estimated sums spent on classroom training have been reported as educational program support.

During the 1970s, The Office of Management and Budget (OMB) prepared annual reports on Federal education program support. These were published in *Budget of the United States Government [Special Analyses]*. The information presented in this report is not, however, a continuation of the OMB series. A number of differences in the two series should be noted. OMB required all Federal agencies to report outlays for education-related programs using a standardized form, thereby assuring agency compliance in reporting. The scope of education programs reported here differs from OMB. Off-budget items such as the annual volume of guaranteed student loans were not included in OMB's reports. Finally, while some mention is made of an annual estimate of Federal tax expenditures, OMB did not include them in its annual analysis of Federal education support. Estimated Federal tax expenditures for education are the difference between current Federal tax receipts and what these receipts would be without existing education deductions to income allowed by Federal tax provisions.

Recipients' data are estimated based on *Estimating Federal Funds for Education: A New Approach Applied to Fiscal Year 1980*, U.S. Department of Education, "Federal Support for Education, Fiscal Years 1980 to 1984," and *Catalog of Federal Domestic Assistance*. The recipients' data are estimated and tend to undercount institutions of higher education (IHEs), students, and local education agencies (LEAs). This is because some of the Federal programs have more than one recipient receiving funds. In these cases the recipients were put into a "mixed recipients" category, because there was no way to disaggregate the amount each recipient received.

### ***High School and Beyond***

High School and Beyond (HSB) is a national longitudinal survey of 1980 high school sophomores and seniors. The base-year survey was a probability sample of 1,015 high schools with a target number of 36 sophomores and 36 seniors in each of the schools. A total of 58,270 students participated in the base-year survey. Substitutions were made for

noncooperating schools—but not for students—in those strata where it was possible. Overall, 1,122 schools were selected in the original sample and 811 of these schools participated in the survey. An additional 204 schools were drawn in a replacement sample. Student refusals and student absences resulted in an 82 percent completion rate for the survey.

Several small groups in the population were oversampled to allow for special study of certain types of schools and students. Students completed questionnaires and took a battery of cognitive tests. In addition, a sample of parents of sophomores and seniors (about 3,600 for each cohort) was surveyed.

HSB first followup activities took place in the spring of 1982. The sample design of the first followup survey called for the selection of approximately 30,000 persons who were sophomores in 1980. The completion rate for sophomores eligible for on-campus survey administration was about 96 percent. About 89 percent of the students who left school between the base year and first followup surveys (dropouts, transfer students, and early graduates) completed the first followup sophomore questionnaire.

As part of the first followup survey of High School and Beyond, transcripts were requested in fall 1982 for an 18,152-member subsample of the sophomore cohort. Of the 15,941 transcripts actually obtained, 1,969 were excluded because the students had dropped out of school before graduation, 799 were excluded because they were incomplete, and 1,057 were excluded because the student graduated before 1982 or the transcript indicated neither a dropout status nor graduation. Thus 12,116 transcripts were utilized for the overall curriculum analysis presented in this publication. All courses in each transcript were assigned a six-digit code based on *A Classification of Secondary School Courses* (developed by Evaluation Technologies, Inc. under contract with NCES). Credits earned in each course were expressed in Carnegie units. (The Carnegie unit is a standard of measurement that represents one credit for the completion of a 1-year course. To receive credit for a course, the student must have received a passing grade—"pass," "D," or higher.) Students who transferred from public to private schools or from private to public schools between their sophomore and senior years were eliminated from public/private analyses.

In designing the senior cohort first followup survey, one of the goals was to reduce the size of the retained sample, while still keeping sufficient numbers of minorities to allow important policy analyses. A total of 11,227 (94 percent) of the 11,995 persons subsampled completed the questionnaire. Information was obtained about the respondents' school and

employment experiences, family status, and attitudes and plans.

The sample for the second followup, which took place in spring 1984, consisted of about 12,000 members of the senior cohort and about 15,000 members of the sophomore cohort. The completion rate for the senior cohort was 91 percent, and the completion rate for the sophomore cohort was 92 percent.

HSB third followup data collection activities were performed in spring of 1986. Both the sophomore and senior cohort samples for this round of data collection were the same as those used for the second followup survey. The completion rates for the sophomore and senior cohort samples were 91 percent and 88 percent, respectively.

Table A2 contains the maximum number of cases that are available for the tabulations of the specific classification variables used throughout this publication.

The standard error (se) of an individual percentage (p) based on HSB data can be approximated by the formula

$$se_p = DEFT \sqrt{p(100-p)/n}$$

where n is the sample size and DEFT, the square root of the design effect, is a factor used to adjust for the particular sample design used in HSB. Table A3 provides the DEFT factors for different HSB samples and subsamples.

In evaluating a difference between two independent percentages, the standard error of the difference may be conservatively approximated by taking the square root of the sum of the squared standard errors of the two percentages. For example, in the 1986 followup of 1980 sophomores, 84.0 percent of the men and 77.2 percent of the women felt that being successful in work was "very important," a difference of 6.8 percentage points. Using the formula and the sample sizes from table A2 and the DEFT factors from table A3, the standard errors of the two percentages being compared are calculated to be:

$$1.43 \sqrt{(84.0)(16.0)/5,391} = .714$$

$$1.43 \sqrt{(77.2)(22.8)/5,857} = .784$$

The standard error of the difference is therefore

$$\sqrt{.714^2 + .784^2} = \sqrt{.510 + .615} = 1.06$$

The sampling error (95 chances in 100) of the difference is approximately double the standard error, or approximately 2.1 percentage points, and the 95

percent confidence interval for the difference is  $6.8 \pm 2.1$ , or 4.7 to 8.9 percentage points.

The standard error estimation procedure outlined above does not compensate for survey item nonresponse, which is a source of nonsampling error. (Table A2 reflects the maximum number of responses that could be tabulated by demographic characteristic.) For example, of the 10,925 respondents in the 1984 followup survey of 1980 high school graduates, 372, or 3.4 percent, did not respond to the particular question on whether they had ever used a pocket calculator. Item nonresponse varied considerably. A very low nonresponse rate of 0.1 percent was obtained for a question asking whether the respondent had attended a postsecondary institution. A much higher item nonresponse rate of 12.2 percent was obtained for a question asking if the respondent had used a micro or minicomputer in high school. Typical item nonresponse rates ranged from 3 to 4 percent.

The Hispanic analyses presented in this report relied on students' self-identification as members of one of four Hispanic subgroups: Mexican, Mexican-American, Chicano; Cuban, Cubano; Puerto-Rican, Puertorriqueno, or Boricua; or other Latin American, Latino, Hispanic, or Spanish descent.

An NCES series of technical reports and data file users manuals provides additional information on the survey methodology.

Further information on the High School and Beyond survey may be obtained from:

Paula Knepper  
Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5653

### ***1987 High School Transcript Study***

Transcripts of 1987 high school graduates were compared with transcripts of 1982 graduates to describe changes in course taking across this 5-year period. The analyses were based on approximately 22,700 transcripts of 1987 graduates selected for the National Assessment of Educational Progress (NAEP), and 12,000 transcripts of 1982 graduates who participated in the High School and Beyond study (see corresponding source note above in this appendix).

The sample of schools for the 1987 High School Transcript Study consisted of a nationally representative sample of 471 eligible secondary schools selected for the 1986 NAEP for grade 11 students; 433 of the schools participated. Only those students who graduated from high school were selected from both studies. Handicapped students (those students receiving special education) were not included.

Further information can be obtained from:

Andrew Kolstad  
Education Assessment Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5653

### ***Integrated Postsecondary Education Data System***

The Integrated Postsecondary Education Data System (IPEDS) surveys all postsecondary institutions, including universities and colleges, as well as institutions offering technical and vocational education beyond the high school level. This survey, which began in 1986, replaces and supplements the Higher Education General Information Survey (HEGIS).

The IPEDS consists of several integrated components that obtain information on who provides postsecondary education (institutions), who participates in it and completes it (students), what programs are offered and what programs are completed, and both the human and financial resources involved in the provision of institutionally based postsecondary education. Specifically, these components include: institutional characteristics, including institutional activity; fall enrollment, including age and residence; fall enrollment in occupationally specific programs; completions; finance; staff; salaries of full-time instructional faculty; and academic libraries.

The higher education portion of this survey is a census of accredited 2- and 4-year colleges. However, data from the technical and vocational institutions are collected through a sample survey. Thus, some portions of the data will be subject to sampling and nonsampling errors, while some portions will be subject only to nonsampling errors. The tabulations on institutional characteristics developed for this edition of the *Digest* are based on lists of all institutions and are not subject to sampling errors.

Further information on IPEDS may be obtained from:

William Freund  
Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5652

### ***Higher Education General Information Survey***

The Higher Education General Information Survey (HEGIS), which acquired and maintained statistical data on the characteristics and operations of institutions of higher education, was a coordinated effort administered by NCES. Implemented in 1966, HEGIS was an annual universe survey of institutions listed in the latest *NCES Education Directory, Colleges and*

*Universities.* As noted above, in 1986, it was replaced by the Integrated Postsecondary Education Data System (IPEDS).

The information presented in this report drew on HEGIS surveys which solicited information concerning institutional characteristics, faculty salaries, finances, enrollment, and degrees. Since these surveys were distributed to all higher education institutions, the data presented were not subject to sampling error. However, they were subject to nonsampling error, the sources of which varied with the survey instrument. Each survey is, therefore, discussed separately. Information concerning the nonsampling error of the enrollment and degrees surveys draws extensively on the "HEGIS Post-Survey Validation Study" conducted in 1979.

### ***Institutional Characteristics of Colleges and Universities***

This survey provided the basis for the universe of institutions presented in the *Education Directory, Colleges and Universities*, and it was used in all other HEGIS data collection activities. The universe comprised institutions that met certain accreditation criteria and offered at least a 1-year program of college-level studies leading toward a degree. All of these institutions were certified as eligible by the U.S. Department of Education's Division of Eligibility and Agency Evaluation. Each fall, institutions listed in the previous year's Directory were asked to update a computer printout of their information.

### ***Opening Fall Enrollment in Colleges and Universities***

This survey was part of the HEGIS series since its development. The enrollment survey response rate was relatively high; the 1985 response rate was 92 percent. Major sources of nonsampling error for this survey were classification problems, the unavailability of needed data, interpretation of definitions, the survey due date, and operational errors. Of these, the classification of students appears to have been the main source of error. Institutions had problems in correctly classifying first-time freshmen, other first-time students, and unclassified students for both full-time and part-time categories. These problems occurred most often at 2-year institutions (private and public) and private 4-year institutions. In 1977-78, the classification problem led to an estimated overcount of 11,000 full-time students and an undercount of 19,000 part-time students. Although the ratio of error to the grand total was quite small (less than 1 percent), the percentage of errors was as high as 5 percent for detailed student levels and even higher at certain aggregation levels.

Beginning with fall 1986, the survey system was redesigned with the introduction of the Integrated Postsecondary Education Data System (IPEDS) (see above). The new survey system comprises all postsecondary institutions, but also maintains comparability with earlier surveys by allowing HEGIS institutions to be tabulated separately. The new system also provides for preliminary and revised data releases. This allows the Center flexibility to release early data sets while still maintaining a more accurate final data base.

### ***Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty***

This survey has been conducted for most years from 1966-67 to 1987-88. Although the survey form was changed a number of times during those years, only comparable data are presented in this report. The data were collected from the individual colleges and universities.

This survey differed from other HEGIS surveys in that imputations were not made for nonrespondents. Thus, there is some possibility that the salary averages presented in this report may differ from the results of a complete enumeration of all colleges and universities. The response rate for the 1984-85 survey was 86.3 percent. The response rate for public colleges was substantially higher than the response rate for private colleges. It is probable that the public colleges' salary data were more accurate than the data for private colleges. Other sources of nonsampling error included computational errors and misclassification in reporting and processing. NCES checked individual colleges' data for internal and longitudinal consistency and contacted the colleges to check inconsistent data.

### ***Earned Degrees Conferred***

This survey was part of the HEGIS series throughout its existence. However, the degree classification taxonomy was revised in 1970-71 and 1982-83.

Though information from survey years 1970-71 through 1981-82 is directly comparable, care must be taken if information before or after that period is included in any comparison. Degrees-conferred trend tables arranged by the 1982-83 classification were added to the *Digest* to provide consistent data from 1970-71 to 1983-84. Data in this edition on associate and other formal awards below the baccalaureate, by field of study, are not comparable with figures for earlier years. The nonresponse rate did not appear to be a significant source of nonsampling error for this survey. The return rate over the years was extremely high, with the response rate for the 1983-84 survey at 95 percent. Because of the high

return rate, nonsampling error caused by imputation was also minimal.

The major sources of nonsampling error for this survey were differences between the HEGIS program taxonomy and taxonomies used by the colleges, classification of double majors and double degrees, operational problems, and survey timing. In the 1979 validation study, these sources of nonsampling were found to contribute to an error rate of 0.3 percent overreporting of bachelor's degrees and 1.3 percent overreporting of master's degrees. The differences, however, varied greatly among fields. Over 50 percent of the fields selected for the validation study had no errors identified. Categories of fields that had large differences were business and management, education, engineering, letters, and psychology. It was also shown that differences in proportion to the published figures were less than 1 percent for most of the selected fields that had some errors. Exceptions to these were: master's and Ph.D. programs in labor and industrial relations (20 percent and 8 percent); bachelor's and master's programs in art education (3 percent and 4 percent); bachelor's and Ph.D. programs in business and commerce, and in distributive education (5 percent and 9 percent); master's programs in philosophy (8 percent); and Ph.D. programs in psychology (11 percent).

### ***Financial Statistics of Institutions of Higher Education***

This survey was part of the HEGIS series throughout its existence. Changes were made in the financial survey instruments in fiscal years (FY) 1976, 1982, and 1987. The FY 76 survey instrument contained numerous revisions to earlier survey forms and made direct comparisons of line items very difficult. Beginning in FY 82, Pell Grant data were collected in Federal restricted grants and contracts revenues and restricted scholarships and fellowships expenditures. The introduction of the Integrated Postsecondary Education Data System (IPEDS) in the FY 87 survey included several important changes to the survey instrument and data processing procedures. While these changes were significant, considerable effort has been made to present only comparable information on trends in this report and to note inconsistencies. Finance tables for this publication have been adjusted by subtracting the Pell Grant amounts from the later data to maintain comparability with pre-FY 82 data.

Possible sources of nonsampling error in the financial statistics include nonresponse, imputation, and misclassification. The response rate has been about 85 to 90 percent for most of the years reported. The response rate for the FY 1986 survey was 86.7 percent. The response rate for the higher education in-

stitutions in the first year of IPEDS (FY 87) was 84.3 percent.

Two general methods of imputation were used in HEGIS. If the prior year's data were available for a nonresponding institution, these data were inflated using the Higher Education Price Index and adjusted according to changes in enrollments. If no previous year's data were available, current data were used from peer institutions selected for location (State or region), control, level, and enrollment size of institution. For the most recent years reported, the imputation method did not include the adjustment for changes in enrollments, and new institutions which never reported to HEGIS surveys were not imputed. For the FY 86 survey, survey forms were mailed to 3,388 institutions. Reports were received from 2,939 institutions, and data for 388 institutions were estimated, based on their FY 84 reports inflated by the Higher Education Price Index. The remaining 61 institutions were not imputed because they had never responded to HEGIS surveys. The imputed current-fund expenditures of the nonrespondents were generally less than 3 percent of the aggregate U.S. total.

Beginning with FY 87, the new survey system (IPEDS, see above) comprises all postsecondary institutions, but also maintains comparability with earlier surveys by allowing HEGIS institutions to be tabulated separately. The finance data tabulated for this publication reflect totals for the HEGIS or higher education institutions only. In order to maintain comparability with the historical time series of HEGIS institutions, data were combined from two of the three different survey forms that make up the IPEDS survey system. The vast majority of the data were tabulated from Form 1, which was used to collect information from public and private nonprofit 2- and 4-year colleges. Form 2, a condensed form, was used to gather data for the 2-year proprietary institutions. Because of the differences in the data requested on the two forms, several assumptions were made about the Form 2 reports so that their figures could be included in the institutions of higher education totals.

In the section on revenue, the Form 2 institutions were not asked to separate appropriations from grants and contracts, nor State from local sources of funding. For the Form 2 institutions, all the Federal revenues were assumed to be Federal grants and contracts and all of the State and local revenues were assumed to be restricted State grants and contracts. All other Form 2 sources of revenue, except for tuition and fees and sales and services of educational activities, were included under "other." Similar adjustments were made to the expenditures accounts. The Form 2 institutions reported instruction

and scholarship and fellowship expenditures. All other educational and general expenditures were allocated to academic support.

To reduce reporting error, NCES used national standards for reporting finance statistics. These standards are contained in *Colleges and University Business Administration: Administrative Services* (1974 Edition), published by the National Association of College and University Business Officers; *Audits of Colleges and Universities* (as amended August 31, 1974), by the American Institute of Certified Public Accountants; and *HEGIS Financial Reporting Guide (1980)*, by NCES. Wherever possible, definitions and formats in the survey form are consistent with those in these three accounting texts.

Questions concerning the surveys used as data sources for this report or other questions concerning HEGIS can be directed to:

Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5652

### ***National Assessment of Educational Progress***

The National Assessment of Educational Progress (NAEP) is a cross-sectional study designed and initially implemented in 1969. NAEP has gathered information about selected levels of educational achievement across the country. NAEP has surveyed the educational attainments of 9-, 13-, and 17-year-olds and young adults (ages 25-35) in 10 learning areas. Different learning areas have been assessed periodically, and all areas have been reassessed in order to measure possible changes in educational achievement.

The assessment data presented in this publication was designed and conducted by the Education Commission of the States (1969-1983) and by the Educational Testing Service (1983 to present). Three-stage probability samples have been used. The primary sampling units have been stratified by region and, within region, by State, size of community, and, for the two smaller sizes of community strata, by socioeconomic level. The first stage of sampling entails defining and selecting primary sampling units (PSU's). For each age/grade level (3, 7, and 11), the second stage entails enumerating, stratifying, and randomly selecting schools, both public and private, within each PSU selected at the first stage. The third stage involves randomly selecting students within a school for participation in NAEP. Assessment exercises have been administered either to individuals or to small groups of students by specially trained personnel.

After NAEP data are scored, they are weighted in accordance with the population structure and adjust-

ed for nonresponse. Analyses include computing the percentage of students giving various responses and using Item Response Theory (IRT) technology to estimate levels of achievement for the nation and various subpopulations. IRT technology enables the assessment of a sample of students in a learning area or subarea on a single scale even if different students have been administered different exercises. The underlying principle is that when a number of items require similar skills, the regularities observed across patterns of response can often be used to characterize both respondents and tasks in terms of a relatively small number of variables. When aggregated through appropriate mathematical formulas, these variables capture the dominant features of the data.

Sample sizes for the reading proficiency portion of the 1987-88 NAEP study were 3,782 for the 9-year-olds, 4,005 for the 13-year-olds, and 3,652 for the 17-year-olds. Response rates were 92 percent, 88 percent, and 77 percent, respectively. Response rates for earlier years (1970-71, 1974-75, and 1979-80) were generally lower. For example, the lowest response rate for the 9-year-olds was 88 percent in 1974-75, and the lowest response rate over all was 70 percent for the 17-year-olds in 1974-75. Data on standard errors are provided in table A4.

The 1987-88 U.S. history assessment data in this report are based on a nationally representative sample of 3,950 4th graders, 6,462 8th graders, and 5,507 12th graders. The response rates were: 93 percent for 4th graders, 88 percent for 8th graders, and 78 percent for 12th graders. Data on standard errors are provided in table A5.

The 1987-88 U.S. civics assessment trend data in this report are based on a nationally representative sample of 1,938 13-year-olds and 1,786 17-year-olds. The response rates were 90 percent for the 8th graders and 79 percent for the 17-year-olds in 1987-88. Sample sizes for the earlier years were much larger with 19,952 13-year-olds and 17,866 17-year-olds in 1976 and 7,268 13-year-olds and 6,751 17-year-olds in 1982. The 1987-88 analyses for 4th, 8th, and 12th graders were based on a somewhat different 1987-88 sample. The sample sizes were 1,974 4th graders, 4,487 8th graders, and 4,275 12th graders. The response rates were: 93 percent for 4th graders, 88 percent for 8th graders, and 78 percent for 12th graders. Data on standard errors are provided in table A5.

The 1983-84 NAEP writing assessment used a stratified, three-stage sampling design. The first stage was counties (or aggregates of counties). The second stage was schools, and the third stage involved selecting students within the schools at random. The 1983-84 assessment included 24,437

students at age 9; 26,228 students at age 13; and 28,992 students at age 17. Student response rates for the 1987-88 writing assessment were 92 percent for the 9-year-olds, 88 percent for the 13-year-olds, and 77 percent for the 17-year-olds. Sample sizes varied depending on the test items and the scoring method used. Table A5 contains standard errors for selected estimates.

The 1985-86 NAEP mathematics and science assessments were administered to 6,932 students age 9, 6,200 students age 13, and 3,868 students still in school at age 17. The response rates were: 93 percent for the 9-year-olds, 89 percent for the 13-year-olds, and 79 percent for the 17-year-olds. Table A6 contains standard errors for selected estimates.

The 1987-88 geography assessment was administered to 3,030 high school students. The response rate for the assessment was 77 percent. The National Geographic Society provided support for conducting the assessment.

The literacy assessment data used in this report are based on a nationally representative household sample of 21- to 25-year-olds. Blacks and Hispanics were oversampled to allow samples of sufficient size for reliable results. A total of 38,400 households were screened to locate 4,494 potential respondents. (No more than one person was surveyed from any one household.) Of the potential respondents, 3,618 young adults participated, resulting in a response rate of 80 percent.

Information from NAEP is subject to both nonsampling and sampling error. Two possible sources of nonsampling error are nonparticipation and instrumentation. Certain populations have been oversampled to assure samples of sufficient size for analysis. Instrumentation nonsampling error could result from failure of the test instruments to measure what is being taught and in turn what is being learned by the students.

For further information on NAEP, contact:

Gary Phillips  
Education Assessment Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5653

#### ***National Education Longitudinal Study of 1988***

The National Educational Longitudinal Study of 1988 (NELS:88) is the third major longitudinal study sponsored by the National Center for Education Statistics. The two studies that preceded NELS:88, the National Longitudinal Study of the High School Class of 1972 (NLS-72) and High School and Beyond (HS&B), surveyed high school seniors (and sophomores in HS&B), through high school, postsecondary

education, and work and family formation experiences. Unlike its predecessors though, NELS:88 begins with a cohort of eighth-grade students. In 1988, some 26,000 eighth graders, their parents, their teachers, and their school principals were surveyed. The first followup will revisit the same sample of students in 1990, when they are in the 10th grade.

NELS:88 is designed to provide trend data about critical transitions experienced by young people as they develop, attend school, and embark on their careers. It will complement and strengthen State and local efforts by furnishing new information on how school policies, teacher practices, and family involvement affect student educational outcomes (i.e., academic achievement, persistence in school, and participation in postsecondary education). For the base-year, NELS:88 is a multi-faceted study questionnaire and four cognitive tests, a parent questionnaire, a teacher questionnaire, and a school questionnaire.

Designed to ensure that private schools, rural schools, and schools with high minority membership were adequately represented, sampling was first conducted at the school level and then at the student level within schools. Additionally, oversamples of students with Hispanic and Asian or Pacific Island heritage were drawn. The data represented in this edition of the *Digest* are drawn from a nationally representative sample of 1,000 schools (800 public schools; and 200 private schools, including parochial institutions). Within this school sample, 26,000 eighth-grade students were selected at random. Followups to this survey are to be conducted every 2 years, the first occurring in 1990.

Further information about the NELS:88 survey can be obtained from:

Jeffrey Owings  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5653

#### ***National Longitudinal Study***

The National Longitudinal Study (NLS) of the high school class of 1972 began with the collection of base-year survey data from a sample of about 19,000 high school seniors in spring of 1972. Five more followup surveys of these students were conducted in 1973, 1974, 1976, 1979, and 1986. The NLS was designed to provide the education community with information on the transitions of young adults from high school through postsecondary education and the workplace.

The sample design for the NLS is a stratified, two-stage probability sample of students from all schools, public and private, in the 50 States and the District

of Columbia with a 12th-grade enrollment during the 1971-72 school year. During the first stage of sampling, about 1,070 schools were selected for participation in the base-year survey. As many as 18 students were selected at random from each of the sample schools. Both the size of the school and student samples were increased during the first follow-up survey. Beginning with the first followup and continuing through the fourth followup, about 1,300 schools participated in the survey and slightly under 23,500 students were sampled. The response rates for each of the different rounds of data collection have been 80 percent or higher.

Sample retention rates across the survey years have been quite high. For example, of the individuals responding to the base-year questionnaire, the percentages who responded to the first, second, third, and fourth followup questionnaires were about 94, 93, 89, and 83 percent, respectively.

Approximate standard errors for the percentage estimates based on NLS data reported in this publication may be estimated by the formula

$$se_p = DEFT \sqrt{p(100-p)/n}$$

where  $p$  is the estimated percentage and  $n$  is the sample size. DEFT is the root design effect factor used to adjust for the sample design used in NLS. For the first, second, and third followup surveys, the root design effect adjustment factors are 1.18, 1.16, and 1.20. Standard errors for the fourth followup survey data are adjusted by a generalized design effect factor of 1.20. Table A7 lists the approximate respondent counts for the classification variables used in this year's *Digest*. Table A8 gives examples of the approximate standard errors of percentage estimates based on the fourth followup survey for different sample sizes.

Further information may be obtained from:

Carl Schmitt  
Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5652

#### ***National Postsecondary Student Aid Study***

NCES conducted the National Postsecondary Student Aid Study (NPSAS) for the first time during the 1986-87 school year. This survey established the first comprehensive student financial aid database. Data were gathered from 1,074 postsecondary institutions and approximately 60,000 students and 24,000 parents. These data provided information on the cost of postsecondary education, the distribution

of financial aid, and characteristics of both aided and non-aided students and their families. The survey also provided data on the distribution of financial aid, the nature of aid packages, and a profile of both aided and non-aided students.

In response to the continuing need for these data, NCES will conduct the second cycle of NPSAS for the 1989-90 school year. In addition to replicating the earlier study, the 1990 NPSAS will contain enhancements to the 1987 methodology that will fully meet the data needs of the financial aid community and of policy makers.

The 1990 in-school sample will involve about 70,000 students selected from registrar lists of enrollees at 1,200 postsecondary institutions. The sample will include both aided and non-aided students. Student information such as field of study, education level, and attendance status (part-time or full-time) will be obtained from registrar records. Types and amounts of financial aid and family financial characteristics will be abstracted from school financial aid records. Also, approximately 26,000 parents of students will be sampled. Data concerning family composition and parent financial characteristics will be compiled. Followup data collections are expected at 2-year intervals. Students enrolled in postsecondary education for the first time in 1990 will serve as the base for the longitudinal component of NPSAS.

Further information may be obtained from:

Sandra Garcia or Andrew Malizio  
Postsecondary Education Statistics Division  
National Center for Educational Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5652

#### ***Survey on Principal's Perceptions of Academic Reform***

This sample survey used the NCES Fast Response Survey System (FRSS), which is designed to gather timely information for policy-makers. In October 1987, questionnaires were mailed to a national probability sample of 930 public high schools from a universe of approximately 14,500. A public high school was defined as any regular public school with a principal, enrollment in grade 12, and no pupils below grade 7. Questionnaires were completed by the high school principal. Data collection was completed in December with a response rate of 98 percent. The sampling frame used for the survey was the 1985-86 Common Core of Data Universe of Public School Systems. States were classified by patterns of academic reforms, each of which might be present or absent, giving 64 patterns. Six possible reforms were examined. Twenty-seven patterns occurred and each of the 27 was used as a stratum.

The survey data were weighted using the universe of the probability of selection as the weights, and were adjusted for nonresponse. Since the estimates were obtained from a sample of districts, they are subject to sampling variability. Estimates of standard errors for the estimates were computed using a replication technique known as jackknife replication. This survey is also subject to nonsampling error which can occur from a variety of sources such as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. Considerable effort was made to eliminate these biases. Thus, it appears unlikely that nonsampling errors severely biased the data from this survey.

For more information about this survey, contact:

Helen Ashwick  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

#### ***1985-86 Private School Survey***

The 1985-86 Private School Survey was based on the sampling system developed for the 1983 Private School Survey. The "1983 Private School Survey" was carried out in two parts, one based on a "list" frame and one based on an "area" frame. The area frame was used under the assumption that the lists available to NCES were not comprehensive and that list-building techniques applied to a sample of census areas would reveal some additional private schools. NCES started with the most complete list available, comprising some 21,000 schools, and updated it in 1983, based on review of new directories and other published sources. This effort resulted in a list of just under 27,000 schools. This frame was then stratified into 12 strata based on various combinations of religious affiliation and school level. A systematic sample of 1,320 schools was selected with probabilities equal to the square root of the enrollment of the school divided by the sum of the square roots of enrollment for all of the schools in the stratum. Inflating this sample provided an estimated universe, which was subsequently reduced by removing the estimated numbers of duplicates, nonrespondents, coding errors, and ineligible. The final estimated list universe of schools was 21,710. The response rate for the list sample was 91 percent (1,074 of 1,176 schools), and the response rate for the area sample was 81 percent (733 of 901 schools).

For the area sample, the basic frame was a list of all counties reported from the 1980 census, adjusted

so that independent cities were treated as counties and smaller counties were combined with other contiguous counties. This produced a list of 2,497 sampling units. These sampling units were stratified according to census region, in or out of a Standard Metropolitan Statistical Area (SMSA), and above or below the median private school enrollment for that region and SMSA status, yielding 16 strata. The final sample was a systematic one comprising 75 sampling units, 8 of which were drawn with certainty based upon populations exceeding 1.7 million in the 1980 census. The remaining units were selected with probabilities proportionate to the square root of the population of the unit within the stratum.

For each of the sampling units in the area design, schools not overlapping with the list-frame schools were sought by reviewing directories of various types (e.g., private school organizations, telephone) and by telephoning officials, churches, chambers of commerce, and selected vendors, such as milk companies. This search produced 901 schools which met NCES criteria for functioning private schools. When weighted, these data inflated to approximately 6,000 schools nationally. Since the area frame was designed not to overlap with the list frame, results for the area sample were combined with those for the list sample.

A followup survey was conducted in 1985. The schools within the sampling areas were drawn from the lists of schools created in the same sample areas from the "1983 Private School Survey." Since the lists were not updated, schools established after 1983 were not generally eligible for sampling. The estimates for the 1985-86 study are valid for schools that were in existence in 1983. Some of the estimates contain extrapolations for newly established schools, based on assumptions made from the 1983 survey data.

During the fall of 1985, the principal of each sampled school was contacted to obtain the school's participation in the study and to sample up to 10 teachers at the school. During January 1986, questionnaires were mailed to schools and teachers. Followup for questionnaire and item nonresponse was conducted during the spring of 1986. Imputations were made for item nonresponse. Of the 1,387 eligible schools, 1,174 responded (85 percent). A total of 5,295 teacher questionnaires were completed, for a teacher response rate of 76 percent.

Additional information is available from:

Marilyn McMillen  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

### ***Projections of Education Statistics***

Since 1964, NCES has published projections of key statistics for elementary and secondary schools and institutions of higher education. These projections include statistics such as enrollments, instructional staff, graduates and earned degrees. The *Projections* reports include several alternative projection series and a methodology section describing the techniques and assumptions used to prepare them. Data in this edition of the *Digest* reflect the intermediate projection series only.

Differences between the reported and projected values are, of course, almost inevitable. An evaluation of past projections revealed that, at the elementary and secondary level, projections of enrollments have been quite accurate: mean absolute percentage differences for enrollment were less than 1 percent for projections from 1 to 5 years in the future, while those for teachers were less than 4 percent. At the higher education level, projections of enrollment have been fairly accurate: mean absolute percentage differences were 5 percent or less for projections from 1 to 5 years into the future.

Since projections of time series are subject to errors both by the nature of statistics and the properties of projection methodologies, users are cautioned not to place too much confidence in the numerical values of the projections. Important, but unforeseeable, economic and social changes may lead to differences, particularly at the higher education level. Rather, projections are to be considered as indicators of broad trends.

For further information about projection methodology and accuracy, contact:

Debra E. Gerald  
Statistical Standards and Methodology Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5650

### ***1985 Survey of Public and Private School Libraries and Media Centers***

Statistics of public school libraries have been collected periodically since 1958. Prior to 1985, the last survey was conducted in 1978. The 1978 survey form was substantially revised for the 1985 data collection, based on consultations with various associations and individuals, including the American Library Association and the American Association of School Librarians. This sample survey was conducted under contract to NCES. The survey forms were mailed to a nationally representative sample of 4,500 public schools in the fall of 1985 and to a sample of 1,700 private schools in January of 1986. Data collection continued throughout the 1985-86 school year until

a response rate of 92 percent for public schools and 85 percent for private schools was attained.

Estimates in the library survey tables are based on samples and are subject to sampling variability. Caution should be exercised in interpreting figures based on a relatively small number of cases. Although the standard errors are quite low for most of the national statistics, they can be substantial when comparing data from State to State. In a number of States, budgets restricted sample sizes to 75. Table A1 gives standard errors for several representative statistics. For example, the national estimate of per pupil expenditures for books is \$6.24, and the standard error is \$.15. Thus, the chances are 95 out of 100 that the result from a complete census would differ from the estimate by less than \$.30 (1.96 times the standard error). The 95 percent confidence interval is thus \$5.94 to \$6.54.

Additional information on these school library studies is available from:

Jeffrey Williams  
Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

### ***Survey of Recent College Graduates***

NCES has conducted periodic surveys of persons, about 1 year after graduation, to collect information on college outcomes. The "Recent College Graduates" surveys have concentrated on those graduates entering the teaching profession. To obtain accurate results on this subgroup, graduates who are newly qualified to teach have been oversampled in each of the surveys. The survey involves a two-stage sampling procedure. First, a sample of institutions awarding bachelor's and master's degrees is selected and stratified by percentage of education graduates, control, and type of institution. Second, for each of the selected institutions, a sample of degree recipients is chosen. The response rates on the Recent College Graduates survey have tended to be low because of the great difficulty in tracing the students after graduation. Much more of the nonresponse can be attributed to invalid mailing addresses than to refusals to participate. Despite their shortcomings, the data are presented in this report because they provide valuable information not available elsewhere about college outcomes. Users should be cautious about drawing conclusions based on data from small samples. It is also likely that the data are somewhat biased since the more mobile students, such as graduate students, are the most difficult to track for the survey.

The 1976 survey of 1974-75 college graduates was the first and smallest of the series. The sample

consisted of 209 schools, of which 200 (96 percent) responded. Of the 5,506 graduates in the sample, 4,350 responded, for a response rate of 79 percent.

The 1981 survey was somewhat larger, with a coverage of 301 institutions and 15,852 graduates. Responses were obtained from 286 institutions, for an institutional response rate of 95 percent, and from 9,312 graduates (716 others were determined to be out of scope), for a response rate of 62 percent.

The 1985 survey requested data from 18,738 graduates from 404 colleges. Responses were obtained from 13,200 students, for a response rate of 74 percent (885 were out of scope). The response rate for the colleges was 90 percent. The 1987 survey form was sent to 21,957 graduates. Responses were received from 16,878, for a response rate of 79.7 percent. Table A9 contains sample sizes for number of graduates, by field, for the 1976, 1981, 1985, and 1987 surveys.

Further information on this survey may be obtained from:

Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5652

#### ***Survey of School Discipline Policies and Practices***

This sample survey used the NCES Fast Response Survey System (FRSS), which is designed to gather timely information for policy makers. In February 1985, questionnaires were mailed to a stratified national probability sample of 900 public junior and senior high schools, representing approximately 30,000 schools. About 60 schools were determined to be out of the scope for the survey since they did not have regular secondary school programs. The final sample represents an estimated 26,365 schools. The sample was allocated proportionately to the number of schools in each of four strata—junior high, senior high, combined, and other (including ungraded, vocational education, special education, and alternative schools). The survey form was completed by the school administrator (often the principal) most familiar with discipline policies of the school. The response rate for the survey was 93 percent. Responses were adjusted for nonresponse and weighted to national totals. Standard errors for selected items are shown in table A10 as a general guide to the precision of the numbers.

For more information about this survey contact:

Helen Ashwick

#### **Elementary and Secondary Education Statistics Division**

National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

#### ***Second International Mathematics Study***

The "Second International Mathematics Study" was organized as a cooperative undertaking of research institutes in about 24 countries represented in the International Association for Evaluation of Educational Achievement (IEA). Sample surveys of two population groups were conducted during the 1981-82 school year in 20 countries. Data were collected from school administrators, teachers, and students.

"Population A" included all students in the grade in which the majority of students had attained the age of 13.0 to 13.1 years by the middle of the school year. In all countries, school enrollment is nearly universal at that age, which represents the final year of elementary school for most countries. For the United States, Population A was the eighth grade. For Japan and Hong Kong, the seventh grade was chosen for study because the cognitive mathematics tests were more appropriate for that grade level.

"Population B" was defined as all students who were in the terminal grade of secondary education and who were studying mathematics as a substantial part of their academic program, taking at least 5 hours of mathematics classes each week. In the United States, classes of precalculus and calculus were chosen. These classes represented about 12 percent of the total age group. In other countries, Population B represented between 6 and 50 percent of the age group.

About 20 countries' education systems participated in the Population A survey and 15 systems participated in the Population B survey. The 35 samples ranged in size from 1,000 to 8,800 students.

Because of the variations in student curriculum, survey design, and other factors from country to country, the results of this survey should be used with care. Further information on the sampling methodology and response rates is available from:

Larry E. Suter  
Data Development Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5653

#### ***Schools and Staffing Survey***

The "Schools and Staffing Survey" (SASS) data were collected through a sample survey of school districts, schools, school administrators, and teachers. The surveys of schools and school principals were based on the 9,317 public and 3,513 private

schools in the school samples. In addition, 56,242 public school teachers and 11,529 private school teachers participated in the teacher survey.

The public school sample was selected from the Quality Education Data (QED) file of public schools. All public schools in the file were stratified by State and by three grade levels (elementary, secondary, and combined). Within each stratum, the schools were sorted by urbanicity, zip code, highest grade in the school, and the enrollment. For each stratum within each State, sample schools were selected by systematic sampling with probability proportional to the square root of the number of teachers within a school.

The private school sample was selected primarily from the QED file of private schools. To improve coverage, two additional steps were taken. The first step was to update the QED file with current lists of schools from 17 private school associations. All private schools in the file were stratified by State and then by three grade levels (elementary, secondary, and combined) and 13 affiliation groups. Within each stratum, the schools were sorted by urbanicity, zip code, highest grade in the school, and the enrollment. For each stratum within each State, sample schools were selected by systematic sampling with probability proportional to the square root of the number of teachers within a school. The second step was to include an area frame sample, contained in 75 Primary Sampling Units (PSU's), each PSU consisting of a county or group of counties. Within each PSU, an attempt was made to find all eligible private schools. A telephone search was made, using such sources as yellow pages, religious institutions, local education agencies, chamber of commerce, local government offices, commercial milk companies, and real estate offices. The PSU's were stratified by Census geographic region, Standard Metropolitan Statistical Area status, and private school enrollment. These PSU's were selected from the universe of 2,497 PSU's with probability proportional to the square root of the PSU population. All schools not on the QED file or the lists from the private school associations were eligible to be selected for the area frame sample. Schools in the area frame that could be contacted were sampled with probability proportional to the square root of the number of teachers. A systematic equal probability sample was then drawn from the schools in the area frame that could not be contacted.

The School Administrator Questionnaire was mailed to the administrator of each sampled school in February 1988. Weighted response rates for the School Administrator Questionnaire were 94.4 percent for public school administrators and 79.3 percent for private school administrators. There was no explicit imputation for item nonresponse and for a

small number of schools which were found to be missing from the QED lists of public schools. The national estimate for public school principals is underestimated because of missing schools.

The weighted response rate for the Private School Questionnaire was 78.6 percent for private schools. The data were weighted to reflect the universe of private schools, and the weights were adjusted for non-response. A private school was excluded from the sample if it did not have any students in any of the grades from 1 to 12, if it operated in a private home that was used as a family residence, or if it was undetermined whether it operated in a private home and its enrollment was less than 10 or it had only one teacher.

For more information about this survey, contact:

Charles Hammer or Marilyn M. McMillen  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

### ***Second International Science Study***

The "Second International Science Study" was organized by the International Association for the Evaluation of Educational Achievement (IEA). Sample surveys were conducted in 19 countries in 1970, and in the mid-1980s the same was done in 24 countries.

"Population 1" is defined as either 10-year-olds or all children in grades where most 10-year-olds were to be found in the system. This population was given a core test of 24 items.

"Population 2" is constituted in the same manner as Population 1, but the test population consists of 14-year-olds. This population was given a core test of 30 items.

"Population 3" includes science students in the terminal grade. This is grade 12 except for Ontario, Canada (English), England, Hong Kong, Singapore, and the technology track in Sweden, where it is grade 13. Population 3 consists of two groups: (a) the group studying biology, chemistry or physics (these three subgroups are known as populations 3B, 3C, and 3P, respectively); and (b) those students not studying science (population 3N) in the terminal grade.

Further information on the sampling methodology and response rates is available from:

Larry E. Suter  
Data Development Division  
National Center for Education Statistics  
555 New Jersey Ave NW  
Washington, DC 20208-5653

### ***State Survey on Substance Abuse Education***

This survey used the NCES Fast Response Survey System (FRSS), which is designed to gather timely information for policy makers. In May of 1987, questionnaires were mailed to each State's coordinator of alcohol and drug abuse education, who was asked to have it completed by the person most knowledgeable about the State's substance abuse prevention activities. Surveys were mailed to the 50 States and the District of Columbia. Data collection was completed in June with a response rate of 100 percent. Because this survey was a census and had a 100 percent response rate, sampling error is not a factor. However, nonsampling error can occur for a variety of reasons, such as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. Considerable effort was made to eliminate these biases. Thus, it appears unlikely that nonsampling errors severely biased the data from this survey.

For more information about this survey, contact:

Helen Ashwick  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

### ***District Survey on Substance Abuse Education***

This sample survey, compiled by NCES, used the NCES Fast Response Survey System (FRSS), which is designed to gather timely information for policy makers. In May of 1987, questionnaires were mailed to a national probability sample of 700 public school districts from a universe of approximately 15,300. Questionnaires were mailed to the school district superintendents who were asked to have it completed by the person most knowledgeable about the district's substance abuse prevention activities. Data collection was completed in June with a response rate of 98 percent. The sampling frame used for the survey was the 1983-84 Common Core of Data, "Universe of Public School Systems." The sample was stratified by enrollment size and metropolitan status. Districts within a stratum were sampled with equal probability. The survey data were weighted to reflect these sampling rates and were adjusted for nonresponse. Since the estimates were obtained from a sample of districts, they are subject to sampling variability. Estimates of standard errors for the estimates were computed using a balanced half-sampling technique known as balanced repeated replications. This survey is also subject to nonsampling error which can occur for a variety of reasons,

such as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. Considerable effort was made to eliminate these biases. Thus, it appears unlikely that nonsampling errors severely biased the data from this survey.

For more information about this survey, contact

Helen Ashwick  
Elementary and Secondary Education Statistics  
Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208-5651

## **Other Governmental Agencies**

### **Office for Civil Rights**

#### ***Civil Rights Survey of Elementary and Secondary Schools***

The Office for Civil Rights (OCR), U.S. Department of Education, conducts biennial surveys of public school districts and of schools within those districts. Data are obtained on the characteristics of pupils enrolled in public schools throughout the Nation. Such information is required under Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973 to enable for OCR to carry out its compliance responsibilities. The 1988 survey included the 100 largest public school districts, those of special interest (i.e., court order, compliance review), and a stratified random sample of approximately 3,700 districts representing approximately 37,000 schools. The sample was stratified by State, district size, and estimated number of minority students.

Further information is available from:

Lawrence Bussey  
Chief, Surveys Branch  
Office for Civil Rights  
U.S. Department of Education  
330 C Street SW  
Washington, DC 20202

### **The Office of Special Education and Rehabilitative Services**

#### ***Annual Report to Congress on the Implementation of the Education of the Handicapped Act***

The Education of the Handicapped Act (EHA) requires the Secretary of Education to transmit to Congress annually a report describing the progress in serving the Nation's handicapped children. The annual report contains information on children

served by the public schools under the provisions of Part B of the EHA and for children served in State-operated programs (SCP) for the handicapped under Chapter 1 of the Education Consolidation and Improvement Act (ECIA). Statistics on children receiving special education and related services in various settings and school personnel providing such services are reported in an annual submission of data to the Office of Special Education and Rehabilitative Services (OSERS) by the 50 States, the District of Columbia, and the outlying areas. The child count information is based on the number of handicapped children receiving special education and related services on December 1st of each year for EHA and October 1st for Chapter 1 of ECIA/SOP.

Since each participant in programs for the handicapped is reported to OSERS, the data are not subject to sampling error. However, nonsampling error can occur from a variety of sources. Some States follow a noncategorical approach to the delivery of special education services, but produce counts by handicapping condition because EHA-B requires it. In those States that do categorize their handicapped students, definitions and labeling practices vary.

Further information on the *Annual Report to Congress* may be obtained from:

Lou Danielson  
Office of Special Education and Rehabilitative  
Services  
Office of Special Education Programs  
Room 3523, Switzer Building  
330 C Street SW  
Washington, DC 20202

#### ***National Longitudinal Transition Study of Special Education Students***

As part of the 1983 amendments to the Education of All Handicapped Children Act (EHA), Congress requested that the U.S. Department of Education conduct a national longitudinal study of the transition of secondary special education students to determine how they fare in terms of education, employment, and independent living. A 5-year study was mandated, which was to include youth from ages 13 to 21 who were in special education at the time they were selected and who represented all 11 Federal disability categories. Data are drawn from extensive telephone interviews with parents, from school records, and from a survey of educators in secondary schools attended by youth in the study.

The study is being conducted by SRI International and began in April, 1987. The National Transition Study involves a nationally representative sample of more than 8,000 secondary-age youth with disabilities. A sample of 450 school districts was randomly selected from the universe of approximately 14,000

school districts serving secondary special education students. An additional replacement sample of 176 additional districts was selected due to a low rate of agreement to participate from the initial group of districts. Participation in the study was invited from the approximately 80 special schools serving secondary-age deaf, blind, and deaf-blind schools. A total of approximately 300 school districts and 25 special schools agreed to have youth selected for the study.

For further information about this study, contact:

Office of Special Education and Rehabilitative  
Services  
Office of Special Education Programs  
330 C Street SW  
Washington, DC 20202

#### **Bureau of the Census**

##### ***Current Population Survey***

Current estimates of school enrollment, as well as social and economic characteristics of students, are based on data collected in the Census Bureau's monthly household survey of about 60,000 households. The monthly Current Population Survey (CPS) sample consists of 729 areas comprising 1,973 counties, independent cities, and minor civil divisions throughout the 50 States and the District of Columbia. The sample was initially selected from the 1980 census files and is periodically updated to reflect new housing construction.

The monthly CPS deals primarily with labor force data for the civilian noninstitutional population (i.e., excluding military personnel and their families living on post and inmates of institutions). In addition, in October of each year, supplemental questions are asked about highest grade completed, level and grade of current enrollment, attendance status, number and type of courses, degree or certificate objective, and type of organization offering instruction for each member of the household. In March of each year, supplemental questions on income are asked. The responses to these questions are combined with answers to two questions on educational attainment: highest grade of school ever attended, and whether that grade was completed.

The estimation procedure employed for the monthly CPS data involves inflating weighted sample results to independent estimates of characteristics of the civilian noninstitutional population in the United States by age, sex, and race. These independent estimates are based on statistics from decennial censuses; statistics on births, deaths, immigration, and emigration; and statistics on the population in the armed services. Generalized standard error tables are provided in the *Current Population Reports*. The

data are subject to both nonsampling and sampling errors.

Further information is available in the *Current Population Reports*. Series P-20, or by contacting:

Education and Social Stratification Branch  
Population Division  
Bureau of the Census  
U.S. Department of Commerce  
Washington, DC 20233

### ***School Enrollment***

Each October, the Current Population Survey (CPS) includes supplemental questions on the enrollment status of the population 3 years old and over. The main sources of nonsampling variability in the responses to the supplement are those inherent in the survey instrument. The question of current enrollment may not be answered accurately for various reasons. Some respondents may not know current grade information for every student in the household, a problem especially prevalent for households with members in college or in nursery school. Confusion over college credits or hours taken by a student may make it difficult to determine the year in which the student is enrolled. Problems may occur with the definition of nursery school (a group or class organized to provide educational experiences for children), where respondents' interpretations of "educational experiences" vary.

Examples of sampling variability in the estimates of school enrollment rates are given in table A11. Questions concerning the CPS "School Enrollment" survey may be directed to:

Education and Social Stratification Branch  
Bureau of the Census  
U.S. Department of Commerce  
Washington, DC 20233

### ***Educational Attainment***

Data on years of school completed are derived from two questions on the Current Population Survey (CPS) instrument. Formal reports documenting educational attainment are produced by the Bureau of the Census using March CPS results. The latest report is *Educational Attainment in the United States, March 1987 and 1986*, Series P-20, No. 415, which is available from the Government Printing Office.

In addition to the general constraints of the CPS, some data indicate that the respondents have a tendency to overestimate the educational level of members of their household. Some inaccuracy is due to a lack of the respondent's knowledge of the exact educational attainment of each household member and the hesitancy to acknowledge anything less than a high school education. Another cause of nonsampling variability is the change in the numbers in the

armed services over the years. In 1970, 25 percent of all males 20 and 21 years old were in the armed services. By 1974, this had decreased to less than 10 percent. The exclusion of members of the armed services appears to increase the proportion of the CPS population with some college and decrease the proportion of those who finished high school but went no further. After 1974, there was more stability in the proportion of young men in the military.

Beginning with the data for March 1980, tabulations have been controlled to the 1980 census. Examples of the sampling variability in the estimates of educational attainment are given in table A12. The figures shown in the table hold for total or white population estimates only. The variability in estimates for subgroups (region, household relationships, etc.) can be estimated using the tables presented in *Current Population Reports*.

Questions concerning "Educational Attainment in the United States" may be directed to:

Education and Social Stratification Branch  
Bureau of the Census  
U.S. Department of Commerce  
Washington, DC 20233

### ***Participation in Adult Education Survey***

In May of 1969, 1972, 1975, 1978, 1981, and 1984, the Current Population Survey (CPS) included a supplemental inquiry on "Participation in Adult Education" (PAE). In addition to the questions on the CPS, interviewers asked if anyone in the household 17 years of age or older had participated in adult education in the 12-month period prior to the survey date. A survey form was filled out by the interviewer or left with a proxy member of the household for participants who were not at home at the time of the interview. In 1981, the supplement form was no longer left with the proxy but completed by the interviewer.

The PAE response rate of 94 percent in 1981 must be viewed in conjunction with the 96 percent response rate of the CPS. The overall response rate for the PAE survey in 1981 is then 90 percent. Examples of the sampling variability in the estimates from the PAE survey are given in tables A13 and A14.

The figures shown in the tables hold for total or white population estimates only. The variability in estimates for subgroups (employment status, income, education, etc.) can be estimated using the tables *Current Population Reports*.

Further information concerning the PAE survey

may be obtained from:

Postsecondary Education Statistics Division  
National Center for Education Statistics  
555 New Jersey Avenue NW  
Washington, DC 20208

### ***Governmental Finances***

The Census Bureau conducts an Annual Survey of Government Finances as authorized by law under Title 13, United States Code, Section 182. This survey covers the entire range of government finance activities: revenue, expenditure, debt, and assets. Revenues and expenditures comprise actual receipts and payments of a government and its agencies including government-operated enterprises, utilities, and public trust funds. The expenditure reporting categories comprise all amounts of money paid out by a government and its agencies with the exception of amounts for debt retirement and for loan, investment, agency, and private trust transactions.

Most of the Federal Government statistics for 1988 are based on figures for 1986 that appear in *The Budget of the United States Government for the Fiscal Year 1990*. Since the classification used by the Census Bureau for reporting State and local government finance statistics differs in a number of important respects from the classification used in the United States Budget, it was necessary to adjust the Federal data. For this report, Federal budget expenditures include interest accrued, but not paid, during the fiscal year; Census data on interest are on a disbursement basis.

The State government finances for 1988 are based primarily on the annual Census Bureau survey of State finances for fiscal year 1988. Census staff compiled figures from official records and reports of the various States for most of the State financial data.

The sample of local governments is drawn from the 1982 Census of Governments and consists of certain local governments taken with certainty plus a sample below the certainty level.

The statistics in this Census report, *Governmental Finances*, that are based wholly or partly on data from the sample are subject to sampling error. State government finance data are not subject to sampling error. Estimates of major United States totals for local governments are subject to a computed sampling variability of less than one-half of 1 percent. The estimates are also subject to the inaccuracies in classification, response, and processing which would occur if a complete census had been conducted under the same conditions as the sample.

Further information can be obtained from:

Governments Division  
Bureau of the Census  
U.S. Department of Commerce  
Washington, DC 20233

### **National Center for Health Statistics**

#### ***Monthly Vital Statistics Report***

Data in this report are based on the birth certificates in all States and the District of Columbia. The data are provided to the National Center for Health Statistics through the Vital Statistics Cooperative Program. In 1983 and 1984, the Program included 46 States, accounting for 83 to 84 percent of all births in the United States. Data for Arizona, California, the District of Columbia, and Georgia were based on a 50 percent sample of birth certificates filed as far back as 1982.

Birth and fertility rates are based on population estimates by the Census Bureau. Birth and fertility rates for 1985 are based on the 1980 Census count.

Further information may be obtained from:

U.S. Department of Health and Human Services  
Public Health Services  
National Center for Health Statistics  
3700 East-West Highway  
Hyattsville, MD 20782

#### ***National Institute on Drug Abuse***

The National Institute on Drug Abuse of the U.S. Department of Health and Human Services is the primary supporter of the long term study entitled "Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth," conducted at the University of Michigan, Institute for Social Research. One component of the study deals with student drug abuse. Results of a national sample survey have been published annually since 1975. Approximately 125 to 135 schools have participated each year. With the exception of 1975 when about 9,400 students participated in the survey, more than 15,000 students have participated in the survey annually. For the class of 1988, about 16,300 students responded to the survey. Over the years, the response rate has varied from 77 to 84 percent. Table A15 provides examples of the survey's sampling error.

The data in this survey represent only high school seniors. Understandably, there will be some reluctance to admit illegal activities. Also, students who were out of school on the day of the survey were nonrespondents. The survey did not include high school dropouts. The inclusion of these two groups would tend to increase the proportion of individuals who had used drugs. A 1983 study found that the inclusion of the absentees could increase some of the

drug usage estimates by as much as 2.7 percent. (Details on that study and its methodology were published in *Drug Use Among American High School Students, College Students, and Other Young Adults*, by Lloyd D. Johnston, Patrick M. O'Malley, and Jerald G. Bachman, available from the National Clearinghouse on Drug Abuse Information, 5600 Fishers Lane, Rockville, MD 20857.)

Further information on this survey may be obtained from:

National Institute of Drug Abuse  
Division of Epidemiology and Statistical Analysis  
5600 Fishers Lane  
Rockville, MD 20857

### **National Science Foundation**

#### ***Survey of Earned Doctorates Awarded in the United States***

The Survey of Earned Doctorates Awarded in the United States has collected basic statistics from the universe of doctoral recipients in the United States each year since the 1920s. It has been supported by five Federal agencies: the National Science Foundation, in conjunction with the U.S. Department of Education; the National Endowment for the Humanities; the U. S. Department of Agriculture; and the National Institute of Health.

A survey form is distributed, with the assistance of graduate deans, to each person completing the requirements for a doctorate. Of the approximately 31,000 persons eligible for the survey, approximately 95 percent respond. The questionnaire obtains information on sex, race/ethnicity, marital status, citizenship, handicaps, dependents, specialty field of doctorate, educational institutions attended, time spent in completion of doctorate, financial support, educational debt, postgraduation plans, and educational attainment of parents. The data are collected, edited, and published by the National Academy of Sciences.

For further information contact:

Susan Hill  
National Science Foundation  
1800 G Street NW  
Washington, DC 20550

#### ***Federal Obligations to Colleges and Universities and Selected Nonprofit Institutions***

Each year, the National Science Foundation collects data on obligations to colleges and universities from Federal agencies. Obligations differ from expenditures in that funds obligated during one fiscal year may be spent by the recipient in later years. The fiscal year 1987 data were submitted by 15 Federal agencies. Obligation amounts include direct Fed-

eral support, so that amounts subcontracted to other institutions are included. Those funds received through subcontracts are excluded. Also excluded from the data are certain types of financial assistance, such as the Department of Education's Guaranteed Student Loan Program and obligations to the U.S. service academies. For purposes of tabulations in this publication, university administered federally funded research and development centers (FFRDCs) have been included in appropriate State totals.

The universe of academic institutions for this survey is based on the Integrated Postsecondary Education Data Survey conducted by the National Center for Education Statistics (see above). Institutions without Federal support were excluded and some systems were combined into single reporting units.

Further information on this survey may be obtained from *Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*, published by the National Science Foundation, or by contacting:

Universities and Nonprofit Institutions Study Group  
Division of Science Resources Studies  
National Science Foundation, Room L-602  
Washington, DC 20550

#### ***Survey of Scientific and Engineering Expenditures at Universities and Colleges***

The universe for this survey included 563 institutions in the United States and outlying areas that had a master's or doctor's degree program in the sciences or engineering. In addition, schools that had \$50,000 or more in separately budgeted research and development expenditures and the 19 federally funded research and development centers were included. Altogether, these institutions represented approximately 99 percent of all college and university research and development.

The survey instrument has remained essentially unchanged in recent years to facilitate consistent responses. The field of study details match the standard field codes in the *Classification of Instructional Programs*, published by NCES. The response rate for the 1982 survey was 81 percent. The remaining institutions were imputed. The imputation amounted to only 6 percent of the total expenditures reported, since the nonrespondents tended to be smaller institutions. The survey process included a verification procedure in which trend data for the past two reports and the current survey were sent to each institution. The institutions were given an opportunity to amend the current and past figures. These revisions have been incorporated in the National Science Foundation database.

Further information on this survey may be obtained from *Academic Science/Engineering, R&D Funds*,

published by the National Science Foundation, or by contacting:

Universities and Nonprofit Institutions Study Group  
 Division of Science Resources Studies  
 National Science Foundation, Room L-602  
 Washington, DC 20550

## Other Organization Sources

### ***American Association of Colleges for Teacher Education***

The Committee on Research and Information of the American Association of Colleges for Teacher Education (AACTE) initiated the Research About Teacher Education (RATE) Project in 1985. The project is devoted to collecting information about institutions of higher education that engage in teacher education. The data in the report, *Teaching Teachers: Facts and Figures*, were culled from analyses of three survey instruments—institutional, faculty, and student. Archival data from institutions covered the 1985 calendar year. Self-reported perceptual and factual data from faculty and students were collected in spring 1986. The institutions were selected from a stratified random sample of the 713 member institutions of AACTE in 1985. The institutions were stratified according to the highest degree offered within the school, college, or department of education. Thirty institutions were randomly selected from each stratum for a total of 90 institutions. Of these, 76 institutions provided complete data, representing 84 percent of the sample.

To provide a more complete picture, surveys were administered to 360 education faculty and 900 students. These groups were drawn from secondary education methods courses. The current report contains data from 215 faculty and 876 students.

For those interested in more technical information from the RATE Project, supporting documentation for this report is available from:

American Association of Colleges for Teacher Education  
 One Dupont Circle  
 Suite 610  
 Washington, DC 20036-2412

### ***American College Testing Program***

The American College Testing (ACT) Assessment is designed to measure educational development in the areas of English, mathematics, social studies, and natural sciences. The ACT Assessment is taken by college-bound high school students and the test results are used to predict how well students might perform in college.

Prior to the 1984-85 school year, national norms were based on a 10 percent sample of the students taking the test. Since then, national norms are based on the test scores of all students taking the test. Moreover, beginning with 1984-85 these norms have been based on the most recent ACT scores available from students scheduled to graduate in the spring of the year. Duplicate test records are no longer used to produce national figures.

Separate ACT standard scores are computed for English, mathematics, social studies, and natural science. ACT standard scores are reported for each subject area on a scale from 1 to 36. The four ACT standard scores have a mean (average) of about 19 and a standard deviation of about 6 for college-bound students nationally. A composite score is obtained by taking the simple average of the four standard scores and is an indication of student's overall academic development across these subject areas.

It should be noted that college-bound students who take the ACT Assessment are not representative in some respects of college-bound students nationally. First, students who live in the Midwest, Rocky Mountains and Plains, and the South are overrepresented among ACT-tested students as compared with college-bound students nationally. Second, ACT-tested students tend to enroll in public colleges and universities more frequently than do college-bound students nationally.

For further information, contact:

The American College Testing Program  
 2201 North Dodge Street  
 P.O. Box 168  
 Iowa City, IA 52243

### ***American Federation of Teachers***

The American Federation of Teachers (AFT) reports national and State average salaries and earnings for teachers, other school employees, government workers, and professional employees over the past 25 years. The AFT's survey of State departments of education obtains information on minimum salaries, experienced teachers reentering the classroom, and teacher age and experience. Most data from the survey are reported as received, although some data are confirmed by telephone. These data are available in the AFT's annual report *Salary and Analysis of Salary Trends*. While serving as the primary vehicle for reporting the results of the AFT's annual survey of State departments of education, several other data sources are also used in this report.

Further information on this survey can be obtained from:

American Federation of Teachers  
555 New Jersey Avenue NW  
Washington, DC 20001

***The Carnegie Foundation for the  
Advancement of Teaching***

The Carnegie Foundation for the Advancement of Teaching (CFAT) conducted the National Survey of Public School Teachers in the spring of 1987. The survey was mailed to 40,000 public elementary and secondary school teachers in all 50 States. Questionnaires were returned by 21,698 teachers, representing a response rate of 54.3 percent. Elementary teachers compose 29.6 percent (11,827) of the sample and secondary teachers make up 29.1 percent (11,651). Some of the teachers taught at both levels.

A stratified random sample design was used. The total survey size is composed of simple random samples from each State. Each survey response was weighted based on the level and State of the responding teacher. The maximum sampling error for this survey is less than plus or minus 1 percent for the total sample. In general, more than 95 percent of the teachers who returned the questionnaire answered each question.

Results from this survey may be found in, *Teacher Involvement in Decisionmaking: A State-By-State Profile* and *The Condition of Teaching: A State-By-State Analysis, 1988*. For additional information on the data obtained from this survey, contact:

Robert Hochstein  
The Carnegie Foundation for the Advancement of  
Teaching  
1775 Massachusetts Avenue NW  
Washington, DC 20036

***College Entrance Examination Board***

The Admissions Testing Program of the College Board comprises a number of college admissions tests, including the Preliminary Scholastic Aptitude Test (PSAT) and the Scholastic Aptitude Test (SAT). High school students participate in the testing program as sophomores, juniors, or seniors—some more than once during these 3 years. If they have taken the tests more than once, only the most recent scores are tabulated. The PSAT and SAT report subscores in the areas of mathematics and verbal ability.

The SAT results are not representative of high school students or college-bound students nationally since the sample is self-selected. Generally, tests are taken by students who need the results to attend a particular college or university. The State totals are greatly affected by the requirements of its State colleges. Public colleges in a number of States require

ACT scores rather than SAT scores. Thus, the proportion of students taking the SAT in these States is very low and is inappropriate for any comparison. In recent years, about 1 million high school students have taken the examination annually.

Further information on the SAT can be obtained from:

College Entrance Examination Board  
Educational Testing Service  
Princeton, NJ 08541

***Council for Aid to Education***

The Council for Aid to Education, Inc. (CFAE) is a not-for-profit corporation funded by contributions from business. CFAE sponsors public service campaigns and provides consulting and research services on voluntary support for education institutions. Each year, CFAE conducts a survey of colleges and universities and private elementary and secondary schools to obtain information on the amounts, sources, and purposes of private gifts, grants, and bequests received during the academic year. In the 1986-87 study, survey forms were sent to approximately 2,800 colleges and universities and 1,174 responded, which was 1.7 percent below the 1985-86 level. The response rates were much higher for the 4-year colleges than for the 2-year colleges. For example, 90 percent of the doctoral-level institutions and 63 percent of the comprehensive and general baccalaureate colleges participated in the survey. CFAE estimates that about 85 percent of all voluntary support is reported in the survey because of the high participation of institutions receiving large amounts of funding. Survey forms are reviewed by CFAE for internal consistency before preparing a computerized database. Institutional reports of voluntary support data from the CFAE "Survey of Voluntary Support of Education" are more comprehensive and detailed than the related data in the "Financial Statistics of Institutions of Higher Education" survey conducted by NCES. The results from the "Survey of Voluntary Support of Education" are published in the annual Voluntary Support of Education, which may be purchased from CFAE.

Further information is available from:

Director of Research  
Council for Aid to Education, Inc.  
680 Fifth Avenue  
New York, NY 10019

***Council of Chief State School Officers***

The Council of Chief State School Officers (CCSSO) is a nationwide nonprofit organization of the 57 public officials who head departments of public education in every State, the outlying areas,

the District of Columbia, and the Department of Defense Dependents Schools. In 1985, the CCSSO founded the State Education Assessment Center to provide a locus of leadership by the States to improve the monitoring and assessment of education. *State Education Indicators, 1988* is the principle report of the Assessment Center's program of indicators on education. Most of the data is obtained from a member questionnaire; the remainder of the data is obtained from Federal Government agencies.

For additional information on this report, contact:

Ramsay Selden  
State Education Assessment Center  
Council of Chief State School Officers  
379 Hall of States  
400 North Capitol Street NW  
Washington, DC 20001

#### ***Council of State Directors of Programs for the Gifted***

The Council of State Directors of Programs for the Gifted is comprised of the director or individual in the leadership position for gifted education in each of the 50 States, the District of Columbia, and the outlying areas. They have conducted many surveys in the past and most recently have conducted two comprehensive State surveys in order to gain a profile of gifted education throughout the Nation. These data are reported in the 1985 and 1987 "State of the States Gifted and Talented Education" reports. This edition of the *Digest* uses data from the 1986-87 school year. Responses for the 1986-87 survey were received from all 50 States, Puerto Rico, and Guam. The Council is in the process of deciding whether future surveys will be conducted annually or biennially.

Further information is available from:

Nancy Lukenbill, President  
Council of State Directors of Programs for the Gifted  
Office of Public Instruction  
Room 106, State Capitol  
Helena, MT 59620

#### ***Education Commission of the States***

The Education Commission of the States (ECS) Clearinghouse collects information on laws and standards in the field of education and reports them periodically in "Clearinghouse Notes." They collect information about administrators, principals, and teachers. They also examine policy areas, such as assessment and testing, collective bargaining, early childhood issues, quality education, and school schedules. The information is collected by reading State newsletters, tracking State legislation, and surveying the State education agencies. Data are verified by the individual States when necessary. Even

though ECS monitors State activity on a continuous basis, they update the reports only when there is significant change in State activity.

Further information is available from:

Melody Bush or Chris Pipho  
Education Commission of the States  
1860 Lincoln Street, Suite 300  
Denver, CO 80295

#### ***Gallup Poll***

Each year the Gallup Poll conducts the "Public Attitudes Toward the Public Schools" survey, funded by Phi Delta Kappa. The survey includes interviews with over 1,600 adults representing the civilian non-institutional population 18 years old and over.

The sample used in the 20th annual survey was made up of a total of 2,117 respondents and is described as a modified probability sample of the Nation. Personal, in-home interviewing was conducted in representative communities of the Nation.

The survey is a sample survey and is subject to sampling error. The size of error depends largely on the number of respondents providing data. Table A16 shows the approximate sampling errors associated with different percentages and sample sizes for the survey. Table A17 also provides approximate sampling errors for comparisons of two sample percentages.

For example, an estimated percentage of about 10 percent based on the responses of 1,000 sample members has an approximate sampling error of 2 percent at the 95 percent confidence level. The sampling error for the difference in two percentages (50 percent versus 41 percent) based on two samples of 750 members and 400 members, respectively, is about 8 percent at the 95 percent confidence level. Table A17 contains approximate sampling errors for the difference in two percentages.

Further information on this survey can be obtained from:

Gallup Poll  
Phi Delta Kappa  
P.O. Box 789  
Bloomington, IN 47402-0789

#### ***Independent Sector***

In 1988, Independent Sector commissioned the Gallop Organization to conduct a national survey on the giving and volunteering behavior of Americans. This survey is the beginning of a series of surveys that will be conducted every 2 years. The information was obtained from in-home personal interviews conducted from March 8 to March 22, 1988, with a representative national sample of 2,775 adult Americans 18 years of age or older. The sampling procedure

did not include those with incomes above \$200,000 because they constitute such a small percentage of the population.

The results from this survey are published in *Giving and Volunteering in the United States* and may be purchased from:

Independent Sector  
1828 I. Street NW  
Washington, DC 20036

#### ***Institute of International Education***

Each year the Institute of International Education (IIE) conducts a survey of the number of foreign students studying in American colleges and universities and reports these data in *Open Doors*, an annual publication. All of the regionally accredited institutions in the *Education Directory, Colleges and Universities* published by NCES are surveyed by IIE. The data presented in the *Digest* are drawn from the IIE two-part survey. The first part of the survey requests the total enrollment of foreign students in an institution. For the 1984-85 survey, 2,766 out of 2,833 (98 percent) institutions surveyed reported data for the first part of the survey. The second part of the questionnaire asked for information on student characteristics, such as country of origin. The response rate for this portion of the study was 91 percent in 1984-85. For those institutions not reporting data for part two of the survey, distributions by country of origin, were estimated by applying distributions from the reporting institutions.

Additional information can be obtained from the publication *Open Doors* or by contacting:

Alfred Julian  
Institute of International Education  
809 United Nations Plaza  
New York, NY 10017

#### ***Market Data Retrieval***

Market Data Retrieval (MDR) is a market research company that compiles mailing lists of schools and school districts. MDR also conducts special analyses of school characteristics. In recent years, MDR has conducted surveys of computer use in public and private schools.

During its annual summer survey of public school districts, MDR included questions on computer use in public schools. All school districts were contacted about the number of their schools using computers. In the fall, an additional mail survey was conducted to gather more information on the number and type of computers being used. Data on computer utilization were reported for 86 percent of public schools. These data were used to generate State-by-State estimates which were aggregated to construct a national total.

Private school data were compiled through mail and telephone surveys during the middle of the 1982-83 and 1983-84 school years. The 1983-84 response rate for the Catholic schools was 96 percent, and the rate for the other private schools was 89 percent.

Further information on these surveys may be obtained from:

Market Data Retrieval  
16 Progress Drive  
Shelton, CT 06484

#### ***Metropolitan Life Insurance Company***

The 1988 "Metropolitan Life Survey of the American Teacher" was conducted by Louis Harris and Associates for Metropolitan Life Insurance Company. A total of 1,208 telephone interviews was conducted during April-June 1988. The teachers came from all types of public schools throughout the United States. For earlier surveys in 1985, 1986, and 1987 the sample sizes were 1,846, 1,602 and 1,022, respectively.

The survey sample was drawn at random from a list of 1.2 million current teachers compiled by Market Data Retrieval. Sample sizes for completed interviews were set for each State, based on the proportion of elementary and secondary public school classroom teachers in the State. The State sample sizes were based on statistics published by NCES.

Each selected current teacher was contacted at his or her school and requested to participate in the survey. Thirty-one percent of the teachers contacted (or for whom a message was left) participated in the survey. Of the teachers who were successfully contacted by Louis Harris and Associates and who were eligible to participate in the survey, 84 percent completed the interview. While the "interview completion rate" is just as high as or higher than in previous survey years, the 1988 "contact success rate" is lower than the typical 50 percent level experienced in past years.

In 1987, the survey sought the views of parents of public school children. Telephone interviews were conducted with 2,011 randomly selected parents across the Nation during May and June, 1987. Approximately 9,000 households were screened in order to obtain the required sample size. The overall completion rate for the survey was 75 percent of the eligible households reached.

The parent survey was based on a sample of the civilian population of the continental United States. The sample was stratified by geographic region and metropolitan versus nonmetropolitan residence. Households were selected via random-digit-dialing procedures.

Tables A18 and A19 show the sampling errors that apply to the percentages presented in this publication. The tables also display the sampling tolerances involved in the comparison of percentage results from different surveys or from different subsamples. For the *Digest* table which compares the beliefs of white, black, and Hispanic parents, the sample sizes for these racial/ethnic groups were 1,573, 211, and 150, respectively.

Further information on this survey may be obtained from:

Metropolitan Life Survey of the American Teacher  
Metropolitan Life Insurance Company  
One Madison Avenue  
New York, NY 10010

***National Association of Secondary School Principals***

The National Association of Secondary School Principals (NASSP) survey is the third in a series of national studies of high school principals dating back to 1965. The major purpose of this study is to analyze and describe high school leaders and their schools.

A sample of 1,028 secondary schools was drawn randomly from NASSP's national database of all American schools with grade 12. Survey forms were mailed in early 1987. A preliminary analysis of the returns indicated a disproportionate response rate, primarily from smaller schools in the Midwest. A second set of surveys was mailed in late March of 1987 and targeted by zip codes to redress the imbalance in preliminary returns. In all, 1,544 survey forms were sent and 716 were returned by principals. The response rate for principals was 46 percent.

Further information on this survey may be obtained from *High School Leaders and Their Schools* or by contacting:

National Association of Secondary School Principals  
1904 Association Drive  
Reston, VA 22091

***National Association of State Scholarship and Grant Programs***

The National Association of State Scholarship and Grant Programs (NASSGP) is an association of States with general programs of scholarship or grant assistance for undergraduate study. Executive officers responsible for grant program administration represent each State in the Association. The publication of the *19th Annual Survey Report: 1987-88 Academic Year* represents the eighth year that the Pennsylvania Higher Education Assistance Agency has produced the NASSGP annual report. Data are reported for all 50 States, the District of Columbia, and Puerto Rico.

For more information on this survey, contact:

Jerry S. Davis  
Research and Statistics  
Pennsylvania Higher Education Assistance Agency  
Towne House  
660 Boas Street  
Harrisburg, PA 17102

***National Education Association***

The National Education Association (NEA) reports enrollment, expenditure, revenue, graduate, teacher, and instructional staff salary data in its annual publication, *Estimates of School Statistics*. Each year NEA prepares regression-based estimates of financial and other education statistics and submits them to the States for verification. Generally about 30 States adjust these estimates based on their own data. These preliminary data are published by NEA along with revised data from previous years. States are asked to revise previously submitted data as final figures become available. The most recent publication contains all changes reported to the NEA.

Further information on NEA surveys can be obtained from:

National Education Association—Research  
1201 16th Street NW  
Washington, DC 20036

***Status of the American Public School Teacher***

The "Status of the American Public School Teacher" survey is conducted every 5 years by the National Education Association (NEA). The survey was designed by the NEA Research Division and initially administered in 1956. The intent of the survey is to solicit information covering various aspects of public school teachers' professional, family, and civic lives.

Participants for the survey are selected using a two-stage sample design, with the first-stage stratum determined by the number of students enrolled in the districts. Selection probabilities are determined so that the resulting sample is self-weighting. In 1985-86, a sample of 1,998 was selected from the approximately 2,207,000 public school teachers. The sample was adjusted to 1,784 to reflect the 214 responses that were unusable because the respondent could not be located or the respondent was not a teacher. After followup procedures, 1,291 usable replies were obtained, yielding a response rate of 72 percent.

Possible sources of nonsampling errors are nonresponses, misinterpretation, and—when comparing data over years—changes in the sampling method and instrument. Misinterpretation of the survey items should be minimal, as the sample responding is not

from the general population but one knowledgeable about the area of concern. Since the sampling procedure changed after 1956, and some wording of items has changed over the different administrations, care is taken to present only comparable data.

Since sampling is used, sampling variability is inherent in the data. An approximation to the maximum standard error for estimating the population percentages is 1.4 percent. To estimate the 90 percent confidence interval for population percentages, the maximum standard error of 1.4 percent is multiplied by 1.65 (1.4 x 1.65). The resulting percentage (2.3) is added and subtracted from the population estimate to establish upper and lower bounds for the confidence interval. For example, if a sample percentage is 60 percent, there is a 90 percent chance that the population percentage lies between 57.7 percent and 62.3 percent (60 percent  $\pm$  2.3 percent). If comparisons of two percentages are to be made, table A20 gives maximum differences for significance at the 90 percent confidence level.

Questions concerning the "Status of the American Public School Teacher" survey may be directed to:

National Education Association—Research  
1201 16th Street NW  
Washington, DC 20036

#### ***Planned Parenthood***

Planned Parenthood commissioned Louis Harris and Associates to conduct two polls for them; one in 1986 and one in 1988.

The 1986 poll asked a representative sample of American teenagers, age 12 through 17, about their views on teenage pregnancy. In the survey, conducted during September and October 1986, Louis Harris and Associates interviewed 1,000 teenagers in their homes across the country. A national area probability sample of locations was drawn and interviewers were sent to pre-designated locations. Although black and Hispanic teenagers were oversampled, (the sample contains 451 whites, 341 blacks, and 208 Hispanics), the final results have been weighted to reflect the actual racial composition of the United States. Results from the survey are published in *American Teens Speak: Sex, Myths, TV, and Birth Control*.

To obtain copies of these publications or further

information, contact:

Planned Parenthood Federation of America  
810 Seventh Avenue  
New York, NY 10019

#### ***United Nations Educational, Scientific, and Cultural Organization***

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) conducts annual surveys of education statistics of its member countries. Besides official surveys, data are supplemented by information obtained by UNESCO through other publications and sources. Each year more than 200 countries reply to the UNESCO surveys. In some cases, estimates are made by UNESCO for particular items such as world and continent totals. While great efforts are made to make them as comparable as possible, the data still reflect the vast differences among the countries of the world in the structure of education. While there is some agreement about the reporting of first- and second-level data, the third level (postsecondary education) presents numerous substantial problems. Some countries report only university enrollment while other countries report all postsecondary, including vocational and technical schools and correspondence programs. A very high proportion of some countries' third-level students attend institutions in other countries. While definition problems are many in this sort of study, other survey problems should not be overlooked. The member countries that provide data to UNESCO are responsible for their validity. Thus, data for particular countries are subject to nonsampling error and perhaps sampling error as well. Some countries may furnish only rough estimates while data from other countries may be very accurate. Other difficulties are caused by the varying periodicity of data collection among the countries of the world. In spite of such problems, many researchers use UNESCO data because they are the best available. Users should examine footnotes carefully to recognize some of the data limitations.

More complete information may be obtained from the *Statistical Yearbook* published by UNESCO or from:

Office of Statistics  
UNESCO  
Place de Fontenoy  
75700 Paris  
France

**Table A1.—Selected standard errors for selected items in the 1985 Survey of Public and Private School Libraries and Media Centers**

Items for public school libraries	Estimate	Standard error	95% confidence interval	
			Lower	Upper
<b>Percent of schools having library/media centers</b>				
All schools.....	93.5	0.54	92.4	94.6
Secondary schools.....	98.0	0.97	96.1	99.9
Schools with 500 to 699 pupils.....	98.5	0.39	97.7	99.3
<b>Average expenditure per pupil for books</b>				
All schools.....	\$6.24	0.1524	\$5.94	\$6.54
Secondary schools.....	7.40	0.3253	6.77	8.04
Schools with 700 to 999 pupils.....	4.67	0.1743	4.33	5.01
<b>Average book volumes held per pupil</b>				
All schools.....	20.3	0.3784	19.5	21.0
Elementary and combined schools.....	20.6	0.4275	19.8	21.5
Schools with over 2,000 pupils.....	9.5	0.3782	8.7	10.2

Table A2.—Respondent counts for selected High School and Beyond surveys

Classification variable and subgroup	Followup survey of 1980 sophomores in 1982	Followup survey of 1980 seniors in 1982	Followup survey of 1980 sophomores in 1984	Followup survey of 1980 seniors in 1984	Followup survey of 1980 sophomores in 1986	Followup survey of 1980 seniors in 1986
<b>Total respondents (unweighted).....</b>	<b>25,830</b>	<b>11,227</b>	<b>11,463</b>	<b>10,925</b>	<b>11,248</b>	<b>10,536</b>
<b>Sex</b>						
Male.....	12,717	5,213	5,514	5,058	5,391	4,832
Female.....	13,113	6,014	5,949	5,867	5,857	5,704
<b>Race/ethnicity</b>						
White, non-Hispanic.....	17,295	5,180	7,285	5,057	7,194	5,246
Black, non-Hispanic.....	3,338	2,724	1,651	2,625	1,585	2,726
Hispanic.....	4,439	2,749	1,795	2,654	1,745	1,950
Asian or Pacific Islander.....	413	387	425	355	413	356
American Indian or Alaskan.....						
Native.....	248	191	253	185	246	200
Other or unclassified.....	97	16	54	49	65	58
<b>Socioeconomic status composite (SES) <sup>1</sup></b>						
Low.....	6,752	3,940	2,831	3,857	2,751	3,660
Low-middle.....	6,234	2,390	2,624	2,314	2,559	2,289
High-middle.....	6,134	2,168	2,849	2,107	2,817	1,995
High.....	6,341	1,988	3,086	1,936	3,044	1,900
Unclassified.....	369	741	73	711	77	684
<b>Father's highest level of education</b>						
Less than high school.....	5,179	—	—	—	—	—
High school graduate <sup>2</sup> .....	11,981	—	—	—	—	—
College graduate <sup>3</sup> .....	5,169	—	—	—	—	—
Don't know/missing.....	3,521	—	—	—	—	—
<b>High school prog:am (self-reported)</b>						
Academic.....	10,152	4,145	6,547	4,007	—	3,899
General.....	8,789	3,829	3,468	3,764	—	3,602
Vocational.....	6,664	2,660	3,611	2,581	—	2,481
Unclassified.....	225	593	56	573	—	554
<b>High school type</b>						
Public.....	—	9,969	8,647	9,727	—	9,385
Catholic.....	—	964	2,479	911	—	876
Other private.....	—	294	337	287	—	275
<b>Postsecondary education status <sup>4</sup></b>						
Full-time.....	—	—	4,466	—	—	—
Part-time.....	—	—	3,275	—	—	—
Never enrolled.....	—	—	3,678	—	—	—
Missing/unclassified.....	—	—	44	—	—	—
<b>October 1980 postsecondary education attendance status</b>						
Part-time 2-year public institution.....	—	—	—	—	—	352
Part-time 4-year public institution.....	—	—	—	—	—	152
Full-time 2-year public institution.....	—	—	—	—	—	1,312
Full-time 4-year public institution.....	—	—	—	—	—	1,966
Full-time 4-year private institution.....	—	—	—	—	—	1,015
Not a student.....	—	—	—	—	—	4,523
Other and missing.....	—	—	—	—	—	1,196
<b>Postsecondary education plans</b>						
No plans.....	—	—	—	—	—	1,623
Attend vocational/technical school.....	—	—	—	—	—	1,835
Attend college less than four years.....	—	—	—	—	—	1,528
Earn bachelor's degree.....	—	—	—	—	—	2,631
Earn advanced degree.....	—	—	—	—	—	2,265
Missing.....	—	—	—	—	—	654
<b>Participation in high school extracurricular activities <sup>6</sup></b>						
Never participated.....	—	—	—	—	—	1,024
Participated as a member.....	—	—	—	—	—	4,104
Participated as a leader.....	—	—	—	—	—	4,457

<sup>1</sup> The SES index is a composite of five equally-weighted measures: father's education, mother's education, family income, father's occupation, and presence of certain items in the respondent's household.

<sup>2</sup> Includes attendance at a vocational, trade, or business school, or 2-year college; or attendance at a 4-year college resulting in less than a bachelor's degree.

<sup>3</sup> Includes those with a bachelor's or higher level degree.

<sup>4</sup> Postsecondary education status was determined by students' enrollment in academic or vocational study during the four semesters—fall 1982, spring 1983, fall 1983, and spring 1984—following their scheduled high school graduation. Students who enrolled in full-time study in each of the four semesters were classified as full-time. Students who were enrolled in part-time study in any of the four semesters and those who were enrolled in full-time study in fewer than four semesters were classified as part-time. Students who had neither enrolled on a full-time nor part-time basis in each of the four semesters were classified as never enrolled.

<sup>6</sup> Responses to questions concerning participation in each of 15 different extracurricular activity areas (i.e., varsity sports, debate, band, subject-matter clubs, etc.) were used to classify students' overall level of participation in extracurricular activities. The difference between the sum of the three category respondent counts and the total sample size is due to missing data.

—Data not applicable.

NOTE.—Data from students who dropped out of school between the 10th and 12th grades were not used in analyses of sophomore samples.

**Table A3.—Design effects (DEFF) and 1 root design effects (DEFT) for selected High School and Beyond surveys and subsamples**

Subsample characteristic	Followup survey of 1980 sophomores in 1984	Followup survey of 1980 seniors in 1984	Followup survey of 1980 sophomores in 1986	Followup survey of 1980 seniors in 1986
<b>Total sample</b> .....	<b>2.40 (1.54)</b>	<b>2.87 (1.69)</b>	<b>2.19 (1.47)</b>	<b>2.28 (1.50)</b>
<b>Sex</b>				
Male .....		—	2.07 (1.43)	2.13 (1.45)
Female .....		—	2.06 (1.43)	2.26 (1.50)
<b>Race/ethnicity</b>				
White and other .....	2.06 (1.42)	2.09 (1.44)	1.92 (1.38)	1.70 (1.30)
Black .....	2.22 (1.47)	2.26 (1.50)	2.19 (1.47)	2.40 (1.54)
Hispanic .....	3.15 (1.73)	3.72 (1.92)	3.11 (1.76)	4.06 (2.01)
<b>Socioeconomic status composite (SES)</b>				
Low .....	1.91 (1.37)	2.28 (1.50)	1.83 (1.35)	2.31 (1.51)
Middle .....	1.95 (1.39)	1.81 (1.34)	2.06 (1.42)	2.02 (1.42)
High .....	2.05 (1.42)	1.93 (1.38)	1.92 (1.36)	1.71 (1.30)

—Not available.

NOTE.—The average design effect for the 1980 sophomore cohort first followup (1982) survey is 3.59(1.69) and the average design effect for the 1980 senior first followup (1982) survey is 2.94(1.62).

**Table A4.—Standard errors for the NAEP reading proficiency study: 1970-71 to 1987-88**

Item	Standard error for estimate (mean) <sup>1</sup>		Standard error for percent of students reading at or above a basic level					Standard error for percent of students reading at or above intermediate level				
	1983-84	1987-88	1970-71	1974-75	1979-80	1983-84	1987-88	1970-71	1974-75	1979-80	1983-84	1987-88
<b>9-year-olds</b>												
Total .....	1.0	1.2	0.9	0.8	0.9	1.0	1.2	0.5	0.5	0.8	0.6	0.9
White .....	0.8	1.5	0.9	0.8	0.7	0.8	1.6	0.6	0.5	0.8	0.7	1.2
Black .....	1.2	2.6	1.4	1.1	1.6	1.2	2.4	0.3	0.2	0.5	0.5	0.8
Hispanic .....	1.6	3.9	—	2.7	2.6	1.8	3.2	—	0.5	1.0	0.4	1.9
<b>13-year-olds</b>												
Total .....	0.7	0.9	0.4	0.4	0.4	0.3	0.5	1.1	1.0	1.0	0.7	1.1
White .....	0.8	1.0	0.3	0.2	0.2	0.2	0.5	0.9	0.8	0.7	0.6	1.4
Black .....	1.2	2.3	1.4	1.2	1.5	0.9	1.6	1.0	1.4	1.4	1.2	2.1
Hispanic .....	1.6	3.5	—	2.2	1.8	1.1	2.2	—	3.6	2.1	1.6	3.4
<b>17-year-olds</b>												
Total .....	0.9	1.1	0.3	0.3	0.4	0.1	0.2	0.9	0.7	1.0	0.7	0.7
White .....	0.7	1.3	0.2	0.1	0.1	0.1	0.1	0.7	0.5	0.7	0.4	0.6
Black .....	1.2	2.6	1.2	1.6	2.1	0.4	0.6	1.4	1.6	2.2	1.1	1.9
Hispanic .....	1.9	4.0	—	2.3	1.5	0.5	1.5	—	4.0	2.5	1.5	4.0

<sup>1</sup> Item response theory used as a basis to estimate performance at the three levels on a common scale from 0 to 500.

—Data not available.

**Table A5.—Standard errors for the NAEP writing, history, and civics proficiency studies: 1976 to 1988**

Item	Standard error for estimated (mean) <sup>1</sup> writing performance						Standard error for estimated (mean) <sup>1</sup> history performance, 1988			Standard error for estimated percent correct in civics					
	4th grade		8th grade		11th grade		4th grade	8th grade	12th grade	13-year-olds			17-year-olds		
	1984	1988	1984	1988	1984	1988				1976	1982	1988	1976	1982	1988
<b>Total</b> .....	<b>1.7</b>	<b>1.3</b>	<b>1.4</b>	<b>0.8</b>	<b>2.1</b>	<b>1.2</b>	<b>0.9</b>	<b>0.7</b>	<b>1.0</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>
<b>Male</b> .....	<b>2.7</b>	<b>1.9</b>	<b>2.4</b>	<b>1.4</b>	<b>3.0</b>	<b>1.6</b>	<b>1.2</b>	<b>1.0</b>	<b>1.3</b>	<b>0.2</b>	<b>0.4</b>	<b>0.6</b>	<b>0.3</b>	<b>0.6</b>	<b>0.7</b>
<b>Female</b> .....	<b>1.9</b>	<b>1.6</b>	<b>1.5</b>	<b>1.1</b>	<b>2.4</b>	<b>1.4</b>	<b>1.0</b>	<b>0.8</b>	<b>1.1</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>0.6</b>
<b>White</b> .....	<b>1.9</b>	<b>1.6</b>	<b>1.5</b>	<b>1.0</b>	<b>2.1</b>	<b>1.3</b>	<b>1.0</b>	<b>0.6</b>	<b>1.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>	<b>0.6</b>
<b>Black</b> .....	<b>4.0</b>	<b>3.1</b>	<b>4.1</b>	<b>2.3</b>	<b>4.1</b>	<b>2.6</b>	<b>1.9</b>	<b>1.5</b>	<b>1.7</b>	<b>0.3</b>	<b>0.4</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>1.0</b>
<b>Hispanic</b> .....	<b>4.5</b>	<b>3.6</b>	<b>6.9</b>	<b>3.2</b>	<b>4.6</b>	<b>3.2</b>	<b>1.7</b>	<b>1.9</b>	<b>1.8</b>	<b>0.6</b>	<b>0.5</b>	<b>1.8</b>	<b>0.8</b>	<b>1.2</b>	<b>1.7</b>

<sup>1</sup> Item response theory used as a basis to estimate performance at the three levels on a common scale from 0 to 400.

**Table A6.—Standard errors for the NAEP mathematics and science proficiency studies: 1976-77 to 1985-86**

Item	Standard error for percent of students at or above—											
	Basic operations mathematics proficiency			Moderately complex mathematics proficiency			Understand scientific principles			Apply basic scientific information		
	1977-78	1981-82	1985-86	1977-78	1981-82	1985-86	1976-77	1981-82	1985-86	1976-77	1981-82	1985-86
<b>9-year-olds</b>												
Total.....	0.8	0.8	0.9	0.1	0.1	0.2	1.1	1.8	1.0	0.7	1.7	1.0
White.....	0.7	0.9	1.0	0.1	0.1	0.2	0.7	1.8	0.9	0.8	2.0	1.1
Black.....	0.5	0.5	0.7	0.0	0.0	0.0	1.5	2.6	1.9	0.5	1.0	0.9
Hispanic.....	1.3	1.1	2.5	0.4	0.0	0.0	3.1	5.0	3.3	1.8	2.3	1.9
<b>13-year-olds</b>												
Total.....	1.2	1.2	1.5	0.7	0.9	1.0	0.7	0.7	0.9	1.1	1.4	1.4
White.....	0.8	0.9	1.8	0.7	0.9	1.1	0.4	0.4	0.7	0.9	1.3	1.5
Black.....	1.8	1.7	3.8	0.4	0.9	1.4	2.1	1.6	2.0	1.8	1.4	2.7
Hispanic.....	2.5	2.1	4.9	0.8	1.0	1.0	2.7	2.8	3.1	1.8	5.0	3.7
<b>17-year-olds</b>												
Total.....	0.5	0.5	0.4	1.1	1.2	1.2	0.2	0.4	0.4	0.7	1.0	1.2
White.....	0.3	0.3	0.2	1.1	1.3	1.4	0.1	0.2	0.3	0.4	0.8	1.4
Black.....	1.4	1.3	1.7	1.3	1.5	2.8	0.9	1.4	1.7	1.4	1.8	2.7
Hispanic.....	2.2	1.0	2.1	2.4	2.2	3.9	1.5	1.8	1.7	1.6	1.8	5.0

**Table A7.—Respondent counts for selected National Longitudinal Study surveys**

Classification variable and subgroup	Base year survey of 1972 seniors	Followup survey of 1972 seniors in 1974-75	Followup survey of 1972 seniors in 1976-77	Followup survey of 1972 seniors in 1979-80
<b>Total respondents (unweighted).....</b>	<b>16,409</b>	<b>19,328</b>	<b>19,422</b>	<b>17,519</b>
<b>Sex</b>				
Male.....	7,081	9,350	9,394	8,385
Female.....	7,290	9,962	9,698	9,036
<b>Race/ethnicity</b>	14,371	—	—	15,914
White, non-Hispanic.....	12,333	—	—	13,812
Black, non-Hispanic.....	2,038	—	—	2,102
Hispanic.....	—	—	—	665
Asian.....	—	—	—	210
<b>Socioeconomic status composite (SES) <sup>1</sup></b>				
Low.....	—	—	—	4,766
Middle.....	—	—	—	8,322
High.....	—	—	—	4,171
<b>Father's highest level of education</b>				
Less than high school.....	3,811	—	—	—
High school graduate <sup>2</sup> .....	8,223	—	—	—
College graduate <sup>3</sup> .....	2,404	—	—	—
<b>High school program (self-reported)</b>				
Academic.....	4,471	—	—	—
General.....	8,336	—	—	—
Vocational.....	3,564	—	—	—

<sup>1</sup> The SES index is a composite of five equally-weighted measures: father's education, mother's education, family income, father's occupation, and presence of certain items in the respondent's household.

<sup>2</sup> Includes attendance at a vocational, trade, or business school, or 2-year college; or attendance at a 4-year college resulting in less than a bachelor's degree.

<sup>3</sup> Includes those with a bachelor's or higher-level degree.

—Data not applicable.

NOTE.—Sample sizes for categories of classification variables may not sum to the total number of respondents because of missing or excluded data. Because of item nonresponse, the actual number of respondents answering each question in a series of related questions will vary.

**Table A8.—Approximate standard errors for percentages estimated from National Longitudinal Study survey: 1979**

Size of sample	Estimated percentages				
	10 or 90	20 or 80	30 or 70	40 or 60	50
250 .....	2.28	3.04	3.48	3.72	3.79
500 .....	1.61	2.15	2.46	2.63	2.68
1,000 .....	1.14	1.52	1.74	1.86	1.90
2,000 .....	0.81	1.07	1.23	1.31	1.34
3,000 .....	0.66	0.88	1.00	1.07	1.10
4,000 .....	0.57	0.76	0.87	0.93	0.95
5,000 .....	0.51	0.68	0.78	0.83	0.85
6,000 .....	0.46	0.62	0.71	0.76	0.77
8,000 .....	0.40	0.54	0.61	0.63	0.67
10,000 .....	0.36	0.48	0.55	0.59	0.60
12,000 .....	0.33	0.44	0.50	0.54	0.55
18,000 .....	0.28	0.38	0.43	0.46	0.47
20,000 .....	0.25	0.34	0.39	0.42	0.42

**Table A9.—Respondent counts of full-time workers from the Recent College Graduate survey: 1976 to 1987**

Field of study	Number employed full time			
	1974-75 graduates in May 1976	1979-80 graduates in May 1981	1983-84 graduates in June 1985	1985-86 graduates in June 1987
<b>Total respondents (unweighted) .....</b>	<b>2,464</b>	<b>5,521</b>	<b>6,799</b>	<b>15,024</b>
Professions .....	1,840	4,260	2,743	8,987
Arts and sciences .....	514	811	1,373	4,869
Other .....	110	450	2,683	1,168
Newly qualified to teach .....	1,337	2,419	1,215	2,546
Not newly qualified to teach .....	1,127	3,052	5,584	12,478
Professions .....	601	1,841	2,743	7,043
Engineering .....	80	270	601	915
Business and management .....	290	749	1,522	2,407
Health .....	72	252	379	3,106
Education <sup>1</sup> .....	141	484	100	521
Public affairs and services .....	18	106	141	94
Arts and sciences .....	433	770	1,373	4,369
Biological sciences .....	83	116	136	380
Physical sciences and mathematics .....	40	103	136	1,782
Psychology .....	64	105	188	366
Social sciences .....	107	252	432	780
Humanities .....	139	194	481	1,061
Other .....	93	441	1,468	1,068
Communications .....	7	73	240	392
Miscellaneous .....	86	368	1,228	674

<sup>1</sup> Includes those who had not finished all requirements for teaching certification or were previously qualified to teach.

**Table A10.—Standard errors for selected items in the 1985 Survey of School Discipline Policies and Practices**

Items for secondary schools	Estimate	Standard error	95% confidence interval	
			Lower	Upper
Percent of secondary schools indicating that compared with 5 years ago, disruptive classroom behavior is:				
Less now, all schools.....	65.9	1.8	62.8	69.0
Less now, junior high schools.....	59.1	2.5	54.2	64.0
Less now, senior high schools.....	72.7	2.2	68.4	77.0
More now, all schools.....	12.0	1.3	9.5	14.5
Percent of schools with one or more occurrences of the following infractions <sup>1</sup> :				
Student caught selling illegal drugs at school, all schools.....	34.9	1.9	31.2	38.8
Student caught selling illegal drugs at school, junior high schools.....	30.5	2.9	24.8	36.2
Student caught selling illegal drugs at school, senior high schools.....	39.4	2.3	34.9	43.9
Thefts of personal items, <sup>2</sup> all schools.....	82.3	1.7	79.0	85.6
Thefts of personal items, <sup>2</sup> small schools (less than 400 students).....	71.3	4.3	82.9	79.7
Thefts of personal items, <sup>2</sup> large schools (1,000 or more students).....	93.2	1.6	90.1	96.3
Percent of schools with one or more occurrences of the following disciplinary actions <sup>1</sup> :				
Suspension for disciplinary reasons, all schools.....	95.7	0.8	94.1	97.3
Suspension for disciplinary reasons, small schools (less than 400 students).....	89.3	2.7	84.0	94.6
Suspension for disciplinary reasons, large schools (1,000 or more students).....	99.3	0.5	98.3	100.3
Expulsions, all schools.....	36.8	1.8	33.3	40.3
Expulsions, urban schools.....	44.9	4.9	35.3	54.5
Expulsions, rural schools.....	35.4	2.8	30.3	40.5
Average number of occurrences per 100 students of the following disciplinary actions: <sup>1</sup>				
Suspension for disciplinary reasons, all schools.....	10.0	0.50	9.0	11.0
Suspension for disciplinary reasons, small schools (less than 400 students).....	7.1	1.10	4.9	9.3
Suspension for disciplinary reasons, large schools (1,000 or more students).....	13.7	1.00	11.7	15.7
Expulsions, all schools.....	0.3	0.04	0.2	0.4
Expulsions, urban schools.....	0.6	0.20	0.2	1.0
Expulsions, rural schools.....	0.2	0.03	0.1	0.3

<sup>1</sup> Data are for the 1983-84 school year.

<sup>2</sup> Includes only reported thefts of personal items valued at \$10.00 or more.

**Table A11.—Estimated enrollment rates and standard errors in the October Current Population Survey**

Base of percentage, in thousands	Estimated percentage				
	2 or 98	5 or 95	10 or 90	25 or 75	50
<b>Total or white persons</b>					
100.....	2.1	3.3	4.6	6.6	7.6
250.....	1.3	2.1	2.9	4.2	4.8
500.....	1.0	1.5	2.0	2.9	3.4
1,000.....	0.7	1.0	1.4	2.1	2.4
2,500.....	0.4	0.7	0.9	1.3	1.5
5,000.....	0.3	0.5	0.8	0.9	1.1
10,000.....	0.2	0.3	0.5	0.7	0.8
25,000.....	0.13	0.2	0.3	0.4	0.5
50,000.....	0.09	0.15	0.2	0.3	0.3
100,000.....	0.07	0.10	0.05	0.2	0.2
150,000.....	0.05	0.12	0.12	0.2	0.2
<b>Black or Hispanic persons</b>					
75.....	2.8	4.1	5.8	8.1	9.3
100.....	2.3	3.5	4.8	7.0	8.1
250.....	1.4	2.2	3.1	4.4	5.1
500.....	1.0	1.6	2.2	3.1	3.6
1,000.....	0.7	1.1	1.5	2.2	2.5
2,500.....	0.5	0.7	1.0	1.4	1.6
5,000.....	0.3	0.5	0.7	1.0	1.1
10,000.....	0.2	0.4	0.5	0.7	0.8
15,000.....	0.2	0.3	0.4	0.8	0.7
20,000.....	0.2	0.2	0.3	0.5	0.6

**Table A12.—Estimated educational attainment rates and standard errors in the March Current Population Survey**

Estimate	Base of percentage, in thousands	Standard error	90 percent confidence interval
2 or 98 <sup>1</sup> .....	100	2.00	0 to 5.2
	100,000	0.06	1.9 to 2.1
10 or 90.....	100	4.3	3.1 to 16.9
	100,000	0.14	9.8 to 10.2
50.....	100	7.20	38.5 to 61.5
	100,000	0.20	49.7 to 50.3

<sup>1</sup> The confidence interval for the larger values can be found by taking the complement of that shown, e.g. for 98 it would be 94.8 to 100.

**Table A13.—Estimated standard errors for selected estimates of persons from the "Participation in Adult Education" CPS supplement**

Estimate	Standard Error	90 percent confidence interval
10.....	4.5	2.8 to 17.2
50.....	10.2	33.7 to 66.3
500.....	30.0	452 to 548
50,000.....	253.0	49,595 to 50,405

**Table A14.—Estimated participation rates and standard errors in the "Participation in Adult Education" CPS supplement**

	Base of Percentage in thousands	Standard error	90 percent estimate confidence interval
1 or 99 <sup>1</sup> .....	50	2.4	0 to 4.8
	5,000	0.2	0.68 to 1.3
10 or 90.....	50	7.1	0 to 21.4
	5,000	0.7	8.9 to 11.1
50.....	50	11.8	31.1 to 68.9
	5,000	1.2	48.1 to 51.9

<sup>1</sup> The confidence interval for the larger values can be found by taking the complement of that shown, e.g., for 99 it would be 95.2 to 100.

**Table A15.—Percent of seniors who had ever used selected drugs and 95 percent confidence limits: 1996<sup>1</sup>**

Drug	Lower limit	Observed estimate	Upper limit
Alcohol .....	89.7	91.3	92.7
Marijuana/hashish .....	48.7	50.9	53.1
LSD .....	6.3	7.2	8.2
PCP .....	3.8	4.8	6.0
Cocaine .....	15.5	16.9	18.4
Heroin .....	0.8	1.1	1.4

<sup>1</sup> Approximate sample size = 15,200.

**Table A16.—Sampling errors (95 percent confidence level) for percentages estimated from the Gallup Poll, 1987**

Percent	Size of sample						
	1,500	1,000	750	600	400	200	100
Recommended allowance for sampling error of a percentage							
Percentages near 10 or 90.....	2	2	3	3	4	5	6
Percentages near 20 or 80.....	3	3	4	4	5	7	10
Percentages near 30 or 70.....	3	4	4	5	6	8	12
Percentages near 40 or 60.....	3	4	5	5	6	9	12
Percentages near 50.....	3	4	5	5	6	9	13

**Table A17.—Sampling errors (95 percent confidence level) for the difference in two percentages estimated from the Gallup Poll: 1987**

Size of sample	Size of sample						
	1,000	750	600	400	200	100	
Recommended allowance for sampling error of a difference in percentages (percentages near 80 or 20)							
1,500 .....	4						
1,000 .....	4	5					
750 .....	5	5	5				
600 .....	5	5	8	6			
400 .....	6	6	6	7	7		
200 .....	8	8	8	8	9		10
Recommended allowance for sampling error of a difference in percentages (percentages near 50)							
1,500 .....	5						
1,000 .....	5	6					
750 .....	6	6	7				
600 .....	6	7	7	7			
400 .....	7	8	8	8	8		
200 .....	10	10	10	10	11		13

**Table A18.—Approximate sampling errors (95 percent confidence level) for percentages estimated from Metropolitan Life Survey of the American Teacher, 1987**

Percentage	Size of sample					
	2000	1500	1000	500	200	100
Recommended allowance for sampling error of a percentage						
Percentages near 10 or 90.....	1	2	2	3	4	8
Percentages near 20 or 80.....	2	2	2	4	6	8
Percentages near 30 or 70.....	2	2	3	4	6	9
Percentages near 40 or 60.....	2	3	3	4	7	10
Percentages near 50.....	2	3	3	4	7	10

**Table A19.—Approximate sampling errors (95 percent confidence level) for the differences in two percentages estimated from the Metropolitan Life Survey of the American Teacher, 1987**

Sample sizes of two groups being compared	Recommended allowance for sampling error of a difference in percentages				
	Percentage result at 10% or 90%	Percentage result at 20% or 80%	Percentage result at 30% or 70%	Percentage result at 40% or 60%	Percentage result at 50%
2,000 vs. 1,000.....	2	3	4	4	4
1,000 vs. 1,000.....	3	4	4	4	4
1,000 vs. 200.....	5	6	7	7	8
1,000 vs. 100.....	8	8	9	10	10
200 vs. 100.....	7	10	11	12	12

**Table A20.—Maximum differences required for significance (90 percent confidence level) between sample subgroups of the Status of the American Public School Teacher survey**

Size of one subgroup	Size of other subgroup						
	100	200	300	400	500	600	700
100.....	11.8	10.1	9.5	9.2	9.0	8.9	8.8
200.....	10.1	8.2	7.5	7.1	6.9	6.7	6.6
300.....	9.5	7.5	8.7	6.3	8.0	5.8	5.7
400.....	9.2	7.1	6.3	5.8	5.5	5.3	5.2
500.....	9.0	6.9	6.0	5.5	5.2	5.0	4.8
600.....	8.9	6.7	5.8	5.3	5.0	4.7	4.6
700.....	8.8	6.6	5.7	5.2	4.8	4.6	4.4

## Definitions

**Academic support** This category of college expenditures includes expenditures for support services that are an integral part of the institution's primary missions of instruction, research, or public service. Includes expenditures for libraries, galleries, audio/visual services, academic computing support, ancillary support, academic administration, personnel development, and course and curriculum development.

**Achievement test** An examination that measures the extent to which a person has acquired certain information or mastered certain skills, usually as a result of specific instruction.

**Agriculture** Courses designed to improve competencies in agricultural occupations. Included is the study of agricultural production, supplies, mechanization and products, agricultural science, forestry, and related services.

**American College Testing Program (ACT)** The ACT assessment program measures educational development and readiness to pursue college-level coursework in English, mathematics, natural science, and social studies. Student performance on the tests does not reflect innate ability and is influenced by a student's educational preparedness.

**Appropriations (Federal funds)** Budget authority provided through the congressional appropriation process that permits Federal agencies to incur obligations and to make payments.

**Appropriation (Institutional revenues)** An amount (other than a grant or contract) received from or made available to an institution through an act of a legislative body.

**Associate degree** A degree granted for the successful completion of a sub-baccalaureate program of studies, usually requiring at least 2 years (or equivalent) of full-time college-level study. This includes degrees granted in a cooperative or work-study program.

**Auxiliary enterprises** This category includes those essentially self-supporting operations which exist to furnish a service to students, faculty, or staff, and which charge a fee that is directly related to, although not necessarily equal to, the cost of the serv-

ice. Examples are residence halls, food services, college stores, and intercollegiate athletics.

**Average daily attendance (ADA)** The aggregate attendance of a school during a reporting period (normally a school year) divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered days in session.

**Average daily membership (ADM)** The aggregate membership of a school during a reporting period (normally a school year) divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered as days in session. The average daily membership for groups of schools having varying lengths of terms is the average of the average daily memberships obtained for the individual schools.

**Bachelor's degree** A degree granted for the successful completion of a baccalaureate program of studies, usually requiring at least 4 years (or equivalent) of full-time college-level study. This includes degrees granted in a cooperative or work-study program.

**Budget authority (BA)** Authority provided by law to enter into obligations that will result in immediate or future outlays. It may be classified by the period of availability (1-year, multiple-year, no-year), by the timing of congressional action (current or permanent), or by the manner of determining the amount available (definite or indefinite).

**Business** Program of instruction that prepares individuals for a variety of activities in planning, organizing, directing, and controlling business office systems and procedures.

**Carnegie unit** A standard of measurement that represents one credit for the completion of a 1-year course.

**Catholic school** A private school over which a Roman Catholic church group exercises some control or provides some form of subsidy. Catholic schools for the most part include those operated or

supported by: a parish, a group of parishes, a diocese, or a Catholic religious order.

**Central cities** The largest cities, with 50,000 or more inhabitants, in a Metropolitan Statistical Area (MSA). A smaller city within a MSA may also qualify if it has at least 25,000 inhabitants or has a population of one-third or more of that of the largest city and a minimum population of 25,000. An exception occurs where two cities have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000, the smaller of which must have a population of at least 15,000.

**Class size** The membership of a class at a given date.

**Classroom teacher** A staff member assigned the professional activities of instructing pupils in self-contained classes or courses, or in classroom situations. Usually expressed in full-time equivalents.

**Cohort** A group of individuals that have a statistical factor in common, for example, year of birth.

**College** A postsecondary school which offers general or liberal arts education, usually leading to an associate, bachelor's, master's, doctor's, or first-professional degree. Junior colleges and community colleges are included under this terminology.

**Combined elementary and secondary school** A school which encompasses instruction at both the elementary and the secondary levels. Examples of combined elementary and secondary school grade spans would be 1 through 12 or 5 through 12.

**Computer science** A group of instructional programs that describes computer and information sciences, including computer programming, data processing, and information systems.

**Constant dollars** Dollar amounts that have been adjusted by means of price and cost indexes to eliminate inflationary factors and allow direct comparison across years.

**Consumer, personal, and miscellaneous services** A group of instructional programs that describes the fundamental skills a person is normally thought to need in order to function productively in society. Some examples are child development, consumer education, and family relations.

**Consumer Price Index (CPI)** This price index measures the average change in the cost of a fixed market basket of goods and services purchased by consumers.

**Consumption** That portion of income which is spent on the purchase of goods and services rather than being saved.

**Credit** The unit of value, awarded for the successful completion of certain courses, intended to indicate the quantity of course instruction in relation to the total requirements for a diploma, certificate, or degree. Credits are frequently expressed in terms such as "Carnegie units," "semester credit hours," and "quarter credit hours."

**Current dollars** Dollar amounts that have not been adjusted to compensate for inflation.

**Current expenditures (elementary/secondary)** The expenditures for operating local public schools, excluding capital outlay and interest on school debt. These expenditures include such items as salaries for school personnel, fixed charges, student transportation, school books and materials, and energy costs. Beginning in 1980-81, expenditures for State administration are excluded.

**Current expenditures per pupil in average daily attendance** Current expenditures for the regular school term divided by the average daily attendance of full-time pupils (or full-time equivalency of pupils) during the term. See also *current expenditures* and *average daily attendance*.

**Current-fund expenditures (higher education)** Money spent to meet current operating costs, including salaries, wages, utilities, student services, public services, research libraries, scholarships and fellowships, auxiliary enterprises, hospitals, and independent operations. Excludes loans, capital expenditures, and investments.

**Current-fund revenues (higher education)** Money received during the current fiscal year from revenue which can be used to pay obligations currently due, and surpluses reappropriated for the current fiscal year.

**Current Population Survey** See Guide to Sources.

**Disposable personal income** Current income received by persons less their contributions for social insurance, personal tax, and nontax payments. It is the income available to persons for spending and saving. Nontax payments include passport fees, fines and penalties, donations, and tuitions and fees paid to schools and hospitals operated mainly by the government. See also *Personal income*.

**Doctor's degree** An earned degree carrying the title of Doctor. The Doctor of Philosophy degree

(Ph.D.) is the highest academic degree and requires mastery within a field of knowledge and demonstrated ability to perform scholarly research. Other doctorates are awarded for fulfilling specialized requirements in professional fields, such as education (Ed.D.), musical arts (D.M.A.), business administration (D.B.A.), and engineering (D.Eng. or D.E.S.). Many doctor's degrees in academic and professional fields require an earned master's degree as a prerequisite. First-professional degrees, such as M.D. and D.D.S., are not included under this heading.

**Educational attainment** The highest grade of regular school attended and completed.

**Educational and general expenditures** The sum of current funds expenditures on instruction, research, public service, academic support, student services, institutional support, operation and maintenance of plant, and awards from restricted and unrestricted funds.

**Elementary education/programs** Learning experiences concerned with the knowledge, skills, appreciations, attitudes, and behavioral characteristics which are considered to be needed by all pupils in terms of their awareness of life within our culture and the world of work, and which normally may be achieved during the elementary school years (usually kindergarten through grade 8 or kindergarten through grade 6), as defined by applicable State laws and regulations.

**Elementary school** A school classified as elementary by State and local practice and composed of any span of grades not above grade 8. A preschool or kindergarten school is included under this heading only if it is an integral part of an elementary school or a regularly established school system.

**Elementary/secondary school** As reported in this publication, includes only regular school, i.e., schools that are part of State and local school systems, and also most not-for-profit private elementary/secondary schools, both religiously affiliated and nonsectarian. Schools not reported include subcollegiate departments of institutions of higher education, residential schools for exceptional children, Federal schools for American Indians, and Federal schools on military posts and other Federal installations.

**Employment** Includes civilian, noninstitutional persons who (1) worked during any part of the survey week as paid employees; worked in their own business, profession, or farm; or worked 15 hours or more as unpaid workers in a family-owned enterprise; or (2) were not working but had jobs or businesses from which they were temporarily absent due

to illness, bad weather, vacation, labor-management dispute, or personal reasons—whether or not they were seeking another job.

**Endowment** A trust fund set aside to provide a perpetual source of revenue from the proceeds of the endowment investments. Endowment funds are often created by donations from benefactors of an institution, who may designate the use of the endowment revenue. Normally, institutions or their representatives manage the investments, but they are not permitted to spend the endowment fund itself, only the proceeds from the investments. Typical uses of endowments would be an endowed chair for a particular department or for a scholarship fund. Endowment totals tabulated in this book also include funds functioning as endowments, such as funds left over from the previous year and placed with the endowment investments by the institution. These funds may be withdrawn by the institution and spent as current funds at any time. Endowments are evaluated by two different measures, book value and market value. Book value is the purchase price of the endowment investment. Market value is the current worth of the endowment investment. Thus, the book value of a stock held in an endowment fund would be the purchase price of the stock. The market value of the stock would be its selling price as of a given day.

**English** A group of instructional programs that describes the English language arts, including composition, creative writing, and the study of literature.

**Enrollment** The total number of students registered in a given school unit at a given time, generally in the fall of a year.

**Expenditures** Charges incurred, whether paid or unpaid, which are presumed to benefit the current fiscal year. For elementary/secondary schools, these include all charges for current outlays plus capital outlays and interest on school debt. For institutions of higher education, these include current outlays plus capital outlays. For government, these include charges net of recoveries and other correcting transactions other than for retirement of debt, investment in securities, extension of credit, or as agency transaction. Government expenditures include only external transactions, such as the provision of perquisites or other payments in kind. Aggregates for groups of governments exclude intergovernmental transactions among the government.

**Expenditures per pupil** Charges incurred for a particular period of time divided by a student unit of

measure, such as average daily attendance or average daily membership.

**Extracurricular activities** Activities that are not part of the required curriculum and that take place outside of the regular course of study. As used here, they include both school-sponsored (e.g., varsity athletics, drama and debate clubs) and community-sponsored (e.g., hobby clubs and youth organizations like the Junior Chamber of Commerce or Boy Scouts) activities.

**Family** A group of two persons or more (one of whom is the householder) related by birth, marriage, or adoption and residing together. All such persons (including related subfamily members) are considered as members of one family.

**Federal funds** Amounts collected and used by the Federal Government for the general purposes of the Government. There are four types of Federal fund accounts: the general fund, special funds, public enterprise funds, and intragovernmental funds. The major Federal fund is the general fund, which is derived from general taxes and borrowing. Federal funds also include certain earmarked collections, such as those generated by and used to finance a continuing cycle of business-type operations.

**First-professional degree** A degree that signifies both completion of the academic requirements for beginning practice in a given profession and a level of professional skill beyond that normally required for a bachelor's degree. This degree usually is based on a program requiring at least 2 academic years of work prior to entrance and a total of at least 6 academic years of work to complete the degree program, including both prior-required college work and the professional program itself. By NCES definition, first-professional degrees are awarded in the fields of dentistry (D.D.S or D.M.D.), medicine (M.D.), optometry (O.D.), osteopathic medicine (D.O.), pharmacy (D.Pharm.), podiatric medicine (D.P.M.), veterinary medicine (D.V.M.), chiropractic (D.C. or D.C.M.), law (J.D.), and theological professions (M.Div. or M.H.L.).

**First-professional enrollment** The number of students enrolled in a professional school or program which requires at least 2 years of academic college work for entrance and a total of at least 6 years for a degree. By NCES definition, first-professional enrollment includes only students in certain programs. (See *First-professional degree* for a list of programs.)

**Fiscal year** The yearly accounting period for the Federal Government, which begins on October 1 and ends on the following September 30. The fiscal year is designated by the calendar year in which it ends;

e.g., fiscal year 1988 begins on October 1, 1987, and ends on September 30, 1988. (From fiscal year 1844 to fiscal year 1976, the fiscal year began on July 1 and ended on the following June 30.)

**Foreign languages** A group of instructional programs that describes the structure and use of language that is common or indigenous to people of the same community or nation, the same geographical area, or the same cultural traditions. Programs cover such features as sound, literature, syntax, phonology, semantics, sentences, prose, and verse, as well as the development of skills and attitudes used in communicating and evaluating thoughts and feelings through oral and written language.

**Full-time-equivalent (FTE) enrollment** For institutions of higher education, enrollment of full-time students, plus the full-time equivalent of part-time students as reported by institutions. In the absence of an equivalent reported by an institution, the FTE enrollment is estimated by adding one-third of part-time enrollment to full-time enrollment.

**Full-time instructional faculty** Those members of the instruction/research staff who are employed full time as defined by the institution, including faculty with released time for research and faculty on sabbatical leave. Full-time counts exclude faculty who are employed to teach less than two semesters, three quarters, two trimesters, or two 4-month sessions; replacements for faculty on sabbatical leave or those on leave without pay; faculty for preclinical and clinical medicine; faculty who are donating their services; faculty who are members of military organizations and paid on a different pay scale from civilian employees; academic officers, whose primary duties are administrative; and graduate students who assist in the instruction of courses.

**Full-time enrollment** The number of students enrolled in higher education courses with total credit load equal to at least 75 percent of the normal full-time course load.

**Full-time worker** In educational institutions, an employee whose position requires being on the job on school days throughout the school year at least the number of hours the schools are in session. For higher education, a member of an educational institution's staff who is employed full time.

**General Educational Development (GED) program** Academic instruction to prepare persons to take the high school equivalency examination. See *GED recipient*.

**GED recipient** A person who has obtained certification of high school equivalency by meeting State requirements and passing an approved exam, which is intended to provide an appraisal of the person's achievement or performance in the broad subject matter areas usually required for high school graduation.

**General program** A program of studies designed to prepare students for the common activities of a citizen, family member, and worker. A general program of studies may include instruction in both academic and vocational areas.

**Geographic region** 1) One of four regions used by the Bureau of Economic Analysis of the U.S. Department of Commerce, the National Assessment of Educational Progress, and the National Education Association, as follows: (The National Education Association designated the Central region as Middle region in its classification.)

**Northeast**

Connecticut  
Delaware  
District of Columbia  
Maine  
Maryland  
Massachusetts  
New Hampshire  
New Jersey  
New York  
Pennsylvania  
Rhode Island  
Vermont

**Southeast**

Alabama  
Arkansas  
Florida  
Georgia  
Kentucky  
Louisiana  
Mississippi  
North Carolina  
South Carolina  
Tennessee  
Virginia  
West Virginia

**Central (Middle)**

Illinois  
Indiana  
Iowa  
Kansas  
Michigan  
Minnesota  
Missouri  
Nebraska  
North Dakota  
Ohio  
South Dakota  
Wisconsin

**West**

Alaska  
Arizona  
California  
Colorado  
Hawaii  
Idaho  
Montana  
Nevada  
New Mexico  
Oklahoma  
Oregon  
Texas  
Utah  
Washington  
Wyoming

2) One of the regions or divisions used by the U.S. Bureau of the Census in Current Population Survey tabulations, as follows:

**Northeast**

*(New England)*  
Maine  
New Hampshire  
Vermont  
Massachusetts  
Rhode Island  
Connecticut

*(Middle Atlantic)*  
New York  
New Jersey  
Pennsylvania

**Midwest**

*(East North Central)*  
Ohio  
Indiana  
Illinois  
Michigan  
Wisconsin

*(West North Central)*  
Minnesota  
Iowa  
Missouri  
North Dakota  
South Dakota  
Nebraska  
Kansas

**South**

*(South Atlantic)*  
Delaware  
Maryland  
District of Columbia  
Virginia  
West Virginia  
North Carolina  
South Carolina  
Georgia  
Florida

*(East South Central)*  
Kentucky  
Tennessee  
Alabama  
Mississippi

*(West South Central)*

Arkansas  
Louisiana  
Oklahoma  
Texas

**West**

*(Mountain)*  
Montana  
Idaho  
Wyoming  
Colorado  
New Mexico  
Arizona  
Utah  
Nevada

*(Pacific)*  
Washington  
Oregon  
California  
Alaska  
Hawaii

**Government appropriation** An amount (other than a grant or contract) received from or made available to an institution through an act of a legislative body.

**Government grant or contract** Revenues from a government agency for a specific research project or other program.

**Graduate** An individual who has received formal recognition for the successful completion of a prescribed program of studies.

**Graduate enrollment** The number of students who hold the bachelor's or first-professional degree, or the equivalent, and who are working towards a mas-

ter's or doctor's degree. First-professional students are counted separately. These enrollment data measure those students who are registered at a particular time during the fall. At some institutions, graduate enrollment also includes students who are in postbaccalaureate classes but not in degree programs. In specified tables, graduate enrollment includes all students in regular graduate programs and all students in postbaccalaureate classes but not in degree programs (unclassified postbaccalaureate students).

**Graduate Record Examination (GRE)** Multiple-choice examinations administered by the Educational Testing Service and taken by applicants who are intending to attend certain graduate schools. Two generalized tests are offered, plus specialized tests in a variety of subject areas. Ordinarily, a student will take only the specialized test that applies to the intended field of study.

**Graduation** Formal recognition given an individual for the successful completion of a prescribed program of studies.

**Gross national product (GNP)** The total national output of goods and services valued at market prices. GNP can be viewed in terms of expenditure categories which include purchases of goods and services by consumers and government, gross private domestic investment, and net exports of goods and services. The goods and services included are largely those bought for final use (excluding illegal transactions) in the market economy. A number of inclusions, however, represent imputed values, the most important of which is rental value of owner-occupied housing. GNP, in this broad context, measures the output attributable to the factors of production—labor and property—supplied by U.S. residents.

**Handicapped** Those children evaluated as having any of the following impairments, who because of these impairments need special education and related services. (These definitions apply specifically to data from the U.S. Office of Special Education) and Rehabilitative Services presented in this publication.)

**Deaf** Having a hearing impairment which is so severe that the student is impaired in processing linguistic information through hearing (with or without amplification) and which adversely affects educational performance.

**Deaf-blind** Having concomitant hearing and visual impairments which cause such severe communication and other developmental and educational problems that the student cannot be accommodated in special education programs solely for deaf or blind students.

**Hard of hearing** Having a hearing impairment, whether permanent or fluctuating, which adversely affects the student's educational performance, but which is not included under the definition of "deaf" in this section.

**Mentally retarded** Having significantly subaverage general intellectual functioning, existing concurrently with defects in adaptive behavior and manifested during the developmental period, which adversely affects the child's educational performance.

**Multihandicapped** Having concomitant impairments (such as mentally retarded-blind, mentally retarded-orthopedically impaired, etc.), the combination of which causes such severe educational problems that the student cannot be accommodated in special education programs solely for one of the impairments. Term does not include deaf-blind students but does include those students who are severely or profoundly mentally retarded.

**Orthopedically impaired** Having a severe orthopedic impairment which adversely affects a student's educational performance. The term includes impairment resulting from congenital anomaly, disease, or other causes.

**Other health impaired** Having limited strength, vitality, or alertness—due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes—which adversely affects the student's educational performance.

**Seriously emotionally disturbed** Exhibiting one or more of the following characteristics over a long period of time, to a marked degree, and adversely affecting educational performance: an inability to learn which cannot be explained by intellectual, sensory, or health factor; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems. This term does not include children who are socially maladjusted, unless they also display one or more of the listed characteristics.

**Specific learning disabled** Having a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language, which may manifest itself in an

imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or environmental, cultural, or economic disadvantage.

**Speech impaired** Having a communication disorder, such as stuttering, impaired articulation, language impairment, or voice impairment, which adversely affects the student's educational performance.

**Visually handicapped** Having a visual impairment which, even with correction, adversely affects the student's educational performance. The term includes partially seeing and blind children.

**Higher education** Study beyond secondary school at an institution that offers programs terminating in an associate, baccalaureate, or higher degree.

**Higher education institutions (alternative classification)**

**Doctoral-granting** Characterized by a significant level and breadth of activity in commitment to doctoral-level education as measured by the number of doctorate recipients and the diversity in doctoral-level program offerings.

**Comprehensive** Characterized by diverse post-baccalaureate programs (including first-professional) but not engaged in significant doctoral-level education.

**General baccalaureate** Characterized by primary emphasis on general undergraduate, baccalaureate-level education. Not significantly engaged in postbaccalaureate education.

**Specialized** Baccalaureate or postbaccalaureate institution emphasizing one area (plus closely related specialties), such as business or engineering. The programmatic emphasis is measured by the percentage of degrees granted in the program area.

**2-year** Conferring at least 75 percent of its degrees and awards for work below the bachelor's level.

**New** These institutions, though not necessarily newly organized, are new additions to the Integrated Postsecondary Education Data System (IPEDS) universe. When degree and award data become available, they will be reclassified.

**Non-degree-granting** Offering undergraduate or graduate study but not conferring degrees or awards. In this volume, these institutions are included under *Specialized*.

**Higher education institutions (traditional classification)**

**4-year institution** An institution legally authorized to offer and offering at least a 4-year program of college-level studies wholly or principally creditable toward a baccalaureate degree. In some tables, a further division between universities and other 4-year institutions is made. A "university" is a postsecondary institution which typically comprises one or more graduate professional schools (also see *University*). For purposes of trend comparisons in this volume, the selection of universities has been held constant for all tabulations after 1982. "Other 4-year institutions" would include the rest of the nonuniversity 4-year institutions.

**2-year institution** An institution legally authorized to offer and offering at least a 2-year program of college-level studies which terminates in an associate degree or is principally creditable toward a baccalaureate degree.

**Higher Education Price Index** A price index which measures average changes in the prices of goods and services purchased by colleges and universities through current-fund education and general expenditures (excluding expenditures for sponsored research and auxiliary enterprises).

**High school** A secondary school offering the final years of high school work necessary for graduation, usually including grades 10, 11, 12 (in a 6-3-3 plan) or grades 9, 10, 11, and 12 (in a 6-2-4 plan).

**High school program** A program of studies designed to prepare students for their postsecondary education and occupation. Three types of programs are usually distinguished—academic, vocational, and general. An academic program is designed to prepare students for continued study at a college or university. A vocational program is designed to prepare students for employment in one or more semiskilled, skilled, or technical occupations. A general program is designed to provide students with the understanding and competence to function effectively in a free society and usually represents a mixture of academic and vocational components.

**Household** All the persons who occupy a housing unit. A house, apartment, or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate

living quarters, that is, when the occupants do not live and eat with any other persons in the structure, and there is direct access from the outside or through a common hall.

**Imaginative writing** This type of writing can take a variety of forms, such as stories, poems, plays, or lyrics. It represents a special approach to sharing experiences and understanding the world and ourselves. In this form of writing, special attention is given to rhythm and tone; the use of anecdote; the presence of metaphor and simile; shifts in plots; and the unexpected use of words, phrases, or punctuation.

**Income tax** Taxes levied on net income, that is, on gross income less certain deductions permitted by law. These taxes can be levied on individuals or on corporations or unincorporated businesses where the income is taxed distinctly from individual income.

**Independent operations** A group of self-supporting activities under control of a college or university. For purposes of financial surveys conducted by the National Center for Education Statistics, this category is composed principally of Federally Funded Research and Development Centers (FFRDC).

**Informative writing** This type of writing is used to share information and to convey messages, directions, and ideas. It often involves reporting or retelling events or experiences that have already occurred.

**Institutional support** The category of higher education expenditures that includes day-to-day operational support for colleges, excluding expenditures for physical plant operations. Examples of institutional support include general administrative services, executive direction and planning, legal and fiscal operations, and community relations.

**Instruction** That category including expenditures of the colleges, schools, departments, and other instructional divisions of higher education institutions and expenditures for departmental research and public service which are not separately budgeted. Includes expenditures for both credit and noncredit activities. Excludes expenditures for academic administration where the primary function is administration (e.g., academic deans).

**Instructional staff** Full-time-equivalent number of positions, not the number of different individuals occupying the positions during the school year. In local schools, includes all public elementary and secondary (junior and senior high) day-school positions that are in the nature of teaching or in the improvement

of the teaching-learning situation. Includes consultants or supervisors of instruction, principals, teachers, guidance personnel, librarians, psychological personnel, and other instructional staff. Excludes administrative staff, attendance personnel, clerical personnel, and junior college staff.

**Junior high school** A separately organized and administered secondary school intermediate between the elementary and senior high schools, usually including grades 7, 8, and 9 (in a 6-3-3 plan) or grades 7 and 8 (in a 6-2-4 plan).

**Labor force** Persons employed as civilians, unemployed (but looking for work), or in the armed services during the survey week. The "civilian labor force" comprises all civilians classified as employed or unemployed.

**Local education agency** See *School district*.

**Mandatory transfer** A transfer of current funds that must be made in order to fulfill a binding legal obligation of the institution. Included under mandatory transfers are debt service provisions relating to academic and administrative buildings, including (1) amounts set aside for debt retirement and interest and (2) required provisions for renewal and replacement of buildings to the extent these are not financed from other funds.

**Master's degree** A degree awarded for successful completion of a program generally requiring 1 or 2 years of full-time college-level study beyond the bachelor's degree. One type of master's degree, including the Master of Arts degree, or M.A., and the Master of Science degree, or M.S., is awarded in the liberal arts and sciences for advanced scholarship in a subject field or discipline and demonstrated ability to perform scholarly research. A second type of master's degree is awarded for the completion of a professionally oriented program, for example, an M.Ed. in education, an M.B.A. in business administration, an M.F.A. in fine arts, an M.M. in music, an M.S.W. in social work, and an M.P.A. in public administration. A third type of master's degree is awarded in professional fields for study beyond the first-professional degree, for example, the Master of Laws (LL.M.) and Master of Science in various medical specializations.

**Mathematics** A group of instructional programs that describes the science of logical symbolic language and its application.

**Mean test score** The score obtained by dividing the sum of the scores of all individuals in a group by the number of individuals in that group.

**Metropolitan population** The population residing in Metropolitan Statistical Areas (MSAs). See *Metropolitan Statistical Area*.

**Metropolitan Statistical Area (MSA)** A large population nucleus and the nearby communities which have a high degree of economic and social integration with that nucleus. Each MSA consists of one or more entire counties (or county equivalents) that meet specified standards pertaining to population, commuting ties, and metropolitan character. In New England, towns and cities, rather than counties, are the basic units. MSAs are designated by the Office of Management and Budget. An MSA includes a city and, generally, its entire urban area and the remainder of the county or counties in which the urban area is located. An MSA also includes such additional outlying counties which meet specified criteria relating to metropolitan character and level of commuting of workers into the central city or counties. Specified criteria governing the definition of MSAs recognized before 1980 are published in *Standard Metropolitan Statistical Areas: 1975*, issued by the Office of Management and Budget. New MSA's were designated when 1980 counts showed that they met one or both of the following criteria:

1. Included a city with a population of at least 50,000 within their corporate limits, or
2. Included a Census Bureau-defined urbanized area (which must have a population of at least 50,000) and a total MSA population of at least 100,000 (or, in New England, 75,000).

**Migration** Geographic mobility involving a change of usual residence between clearly defined geographic units, that is, between counties, States, or regions.

**Minimum-competency testing** Measuring the acquisition of competence or skills to or beyond a certain specified standard.

**National Assessment of Educational Progress (NAEP)** See Guide to Sources.

**Newly qualified teacher** Persons who (1) first became eligible for a teaching license during the period of the study referenced or who were teaching at the time of survey but were not certified or eligible for a teaching license and (2) had never held full-time, regular teaching positions (as opposed to substitute) prior to completing the requirements for the degree which brought them into the survey.

**Nonmetropolitan residence group** The population residing outside Metropolitan Statistical Areas. See *Metropolitan Statistical Area*.

**Nonresident alien** A person who is not a citizen of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely.

**Nonsupervisory instructional staff** Persons such as curriculum specialists, counselors, librarians, remedial specialists, and others possessing education certification but not responsible for day-to-day teaching of the same group of pupils.

**Obligations** Amounts of orders placed, contracts awarded, services received, or similar legally binding commitments made by Federal agencies during a given period that will require outlays during the same or some future period.

**Occupational home economics** Courses of instruction emphasizing the acquisition of competencies needed for getting and holding a job or preparing for advancement in an occupational area using home economics knowledge and skills.

**Off-Budget Federal entities** Organizational entities, federally owned in whole or in part, whose transactions belong in the budget under current budget accounting concepts but that have been excluded from the budget totals under provisions of law.

**Outlays** The value of checks issued, interest accrued on the public debt, or other payments made, net of refunds and reimbursements.

**Part-time enrollment** The number of students enrolled in higher education courses with a total credit load less than 75 percent of the normal full-time credit load.

**Personal income** Current income received by persons from all sources minus their personal contributions for social insurance. Classified as "persons" are individuals (including owners of unincorporated firms), nonprofit institutions serving individuals, private trust funds, and private noninsured welfare funds. Personal income includes transfers (payments not resulting from current production) from government and business such as social security benefits, military pensions, etc., but excludes transfers among persons.

**Persuasive writing** This type of writing attempts to bring about some action or change. Its primary purpose is to influence others. It is concerned with the positions, beliefs, and attitudes of the readers.

**Physical plant assets** Includes the values of land, buildings, and equipment owned, rented, or utilized

by colleges. Does not include those plant values which are a part of endowment or other capital fund investments in real estate. Excludes construction in progress.

**Postbaccalaureate enrollment** The number of graduate and first-professional students working towards advanced degrees and of students enrolled in graduate-level classes but not enrolled in degree programs. See also *Graduate enrollment* and *First-professional enrollment*.

**Postsecondary education** The provision of formal instructional programs with a curriculum designed primarily for students who have completed the requirements for a high school diploma or equivalent. This includes programs of an academic, vocational, and continuing professional education purpose, and excludes avocational and adult basic education programs.

**Private school or institution** A school or institution which is controlled by an individual or agency other than a State, a subdivision of a State, or the Federal Government, which is usually supported primarily by other than public funds, and the operation of whose program rests with other than publicly elected or appointed officials.

**Property tax** The sum of money collected from a tax levied against the value of property.

**Proprietary institution** An educational institution that is under private control but whose profits derive from revenues subject to taxation.

**Public school or institution** A school or institution controlled and operated by publicly elected or appointed officials and deriving its primary support from public funds.

**Pupil-teacher ratio** The enrollment of pupils at a given period of time, divided by the full-time-equivalent number of classroom teachers serving these pupils during the same period.

**Racial/ethnic group** Classification indicating general racial or ethnic heritage based on self-identification, as in data collected by the Bureau of the Census, or on observer identification, as in data collected by the Office for Civil Rights. These categories are in accordance with the Office of Management and Budget standard classification scheme presented below:

**White** A person having origins in any of the original peoples of Europe, North Africa, or the Middle East. Normally excludes persons of Hispanic origin except for tabulations produced by the Bureau of

the Census, which are noted accordingly in this volume.

**Black** A person having origins in any of the black racial groups in Africa. Normally excludes persons of Hispanic origin except for tabulations produced by the Bureau of the Census, which are noted accordingly in this volume.

**Hispanic** A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

**Asian or Pacific Islander** A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

**American Indian or Alaskan Native** A person having origins in any of the original peoples of North America and maintaining cultural identification through tribal affiliation or community recognition.

**Remedial education** Instruction for a student lacking those reading, writing, or math skills necessary to perform college-level work at the level required by the attended institution.

**Resident population** Includes civilian population and armed forces personnel residing within the United States. Excludes armed forces personnel residing overseas.

**Revenues** All funds received from external sources, net of refunds, and correcting transactions. Noncash transactions such as receipt of services, commodities, or other receipts "in kind" are excluded as are funds received from the issuance of debt, liquidation of investments, and nonroutine sale of property.

**Salary** The total amount regularly paid or stipulated to be paid to an individual, before deductions, for personal services rendered while on the payroll of a business or organization.

**Sales tax** Tax imposed upon the sale and consumption of goods and services. It can be imposed either as a general tax on the retail price of all goods and services sold or as a tax on the sale of selected goods and services.

**Scholarships and fellowships** This category of college expenditures applies only to money given in the form of outright grants and trainee stipends to in-

dividuals enrolled in formal coursework, either for credit or not. Aid to students in the form of tuition or fee remissions is included. College Work-Study funds are excluded and are reported under the program in which the student is working. In the tabulations in this volume, Pell Grants are not included in this expenditure category.

**Scholastic Aptitude Test (SAT)** An examination administered by the Educational Testing Service and used to predict the facility with which an individual will progress in learning college-level academic subjects.

**School** A division of the school system consisting of students in one or more grades or other identifiable groups and organized to give instruction of a defined type. One school may share a building with another school or one school may be housed in several buildings.

**School climate** The social system and culture of the school, including the organizational structure of the school and values and expectations within it.

**School district** An education agency at the local level that exists primarily to operate public schools or to contract for public school services. Synonyms are "local basic administrative unit" and "local education agency."

**Science** The body of related courses concerned with knowledge of the physical and biological world and with the processes of discovering and validating this knowledge.

**Secondary instructional level** The general level of instruction provided for pupils in secondary schools (generally covering grades 7 through 12 or 9 through 12) and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance.

**Secondary school** A school comprising any span of grades beginning with the next grade following an elementary or middle-school (usually 7, 8, or 9) and ending with or below grade 12. Both junior high schools and senior high schools are included.

**Senior high school** A secondary school offering the final years of high school work necessary for graduation and invariably preceded by a junior high school.

**Social studies** A group of instructional programs that describes the substantive portions of behavior, past and present activities, interactions, and organizations of people associated together for religious, benevolent, cultural, scientific, political, patriotic, or other purposes.

**Socioeconomic status (SES)** For the High School and Beyond study and the National Longitudinal Study of the High School Class of 1972, the SES index is a composite of five equally weighted, standardized components: father's education, mother's education, family income, father's occupation, and household items. The terms high, middle, and low SES refer to the upper, middle two, and lower quartiles of the weighted SES composite index distribution.

**Special education** Direct instructional activities or special learning experiences designed primarily for students identified as having exceptionalities in one or more aspects of the cognitive process or as being underachievers in relation to general level or model of their overall abilities. Such services usually are directed at students with the following conditions: (1) physically handicapped; (2) emotionally handicapped; (3) culturally different, including compensatory education; (4) mentally retarded; and (5) students with learning disabilities. Programs for the mentally gifted and talented are also included in some special education programs. See also *Handicapped*.

**Standardized test** A test composed of a systematic sampling of behavior, administered and scored according to specific instructions, capable of being interpreted in terms of adequate norms, and for which there is data on reliability and validity.

**Standardized test performance** The weighted distributions of composite scores from standardized tests used to group students according to performance.

**Standard Metropolitan Statistical Area (SMSA)**  
See *Metropolitan Statistical Area (MSA)*.

**Student** An individual for whom instruction is provided in an educational program under the jurisdiction of a school, school system, or other education institution. No distinction is made between the terms "student" and "pupil," though "student" may refer to one receiving instruction at any level while "pupil" refers only to one attending school at the elementary or secondary level. The term "student" is used to include individuals at all instructional levels. A student may receive instruction in a school facility or in another location, such as at home or in a hospital. Instruction may be provided by direct student-teacher interaction or by some other approved medium such as television, radio, telephone, and correspondence.

**Subject-matter club** Organizations that are formed around a shared interest in a particular area of study and whose primary activities promote that interest.

Examples of such organizations are math, science, business, and history clubs.

**Supervisory staff** Principals, assistant principals, and supervisors of instruction. Does not include superintendents or assistant superintendents.

**Tax base** The collective value of objects, assets, and income components against which a tax is levied.

**Tax expenditures** Losses of tax revenue attributable to provisions of the Federal income tax laws that allow a special exclusion, exemption, or deduction from gross income or provide a special credit, preferential rate of tax, or a deferral of tax liability affecting individual or corporate income tax liabilities.

**Teacher shortage** The number of teaching positions vacant, abolished, or withdrawn because a candidate was sought and not found, courses were eliminated because of budget cuts or administrative decisions not to offer courses in a given field, a teacher was laid off, or a position was filled by a temporary substitute.

**Technical education** A program of vocational instruction that ordinarily includes the study of the sciences and mathematics underlying a technology, as well as the methods, skills, and materials commonly used and the services performed in the technology. Technical education prepares individuals for positions—such as draftsman or lab technician—in the occupational area between the skilled craftsman and the professional person.

**Total expenditure per pupil in average daily attendance** Includes all expenditures allocable to per pupil costs divided by average daily attendance. These allocable expenditures include current expenditures for regular school programs, interest on school debt, and capital outlay. Beginning in 1980–81, expenditures for State administration are excluded and expenditures for other programs (summer schools, community colleges, and private schools) are included.

**Trade and industrial occupations** The branch of vocational education which is concerned with preparing persons for initial employment or with updating or retraining workers in a wide range of trade and industrial occupations. Such occupations are skilled or semiskilled and are concerned with layout designing, producing, processing, assembling, testing, maintaining, servicing, or repairing any product or commodity.

**Transcript** An official list of all courses taken by a student at a school or college showing the final grade received for each course, with definitions of the various grades given at the institution.

**Trust funds** Amounts collected and used by the Federal Government for carrying out specific purposes and programs according to terms of a trust agreement or statute, such as the social security and unemployment trust funds. Trust fund receipts that are not anticipated to be used in the immediate future are generally invested in interest-bearing Government securities and earn interest for the trust fund.

**Tuition and fees** A payment or charge for instruction or compensation for services, privileges, or the use of equipment, books, or other goods.

**Unclassified students** Students who are not candidates for a degree or other formal award, although they are taking higher education courses for credit in regular classes with other students.

**Undergraduate students** Students registered at an institution of higher education who are working in a program leading to a baccalaureate degree or other formal award below the baccalaureate, such as an associate degree.

**Unemployed** Civilians who had no employment but were available for work and (1) had engaged in any specific jobseeking activity within the past 4 weeks, (2) were waiting to be called back to a job from which they had been laid off, or (3) were waiting to report to a new wage or salary job within 30 days.

**U.S. Service Schools** These institutions of higher education are controlled by the U.S. Department of Defense and the U.S. Department of Transportation. The 10 institutions counted in the NCES surveys of higher education institutions include: the Air Force Institute of Technology, Community College of the Air Force, Naval Postgraduate School, Uniformed Services University of the Health Sciences, U.S. Air Force Academy, U.S. Army Command and General Staff College, U.S. Coast Guard Academy, U.S. Merchant Marine Academy, U.S. Military Academy, and the U.S. Naval Academy.

**University** An institution of higher education consisting of a liberal arts college, a diverse graduate program, and usually two or more professional schools or faculties and empowered to confer degrees in various fields of study. For purposes of maintaining trend data in this publication, the selection of university institutions has not been revised since 1982.

**Visual and performing arts** A group of instructional programs that generally describes the historic development, aesthetic qualities, and creative processes of two or more of the visual and performing arts.

***Vocational education*** Organized educational programs, services, and activities which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career, requiring other than a baccalaureate or advanced degree.

***Vocational home economics*** Vocational courses of instruction emphasizing the acquisition of competencies needed for getting and holding a job or preparing for advancement in an occupational area using home economics knowledge or skills.

# Index of Table Numbers

## A

Accounting, degrees conferred, 222-224  
Additions to plant value, higher education, 316  
Administrative units (school districts), 84-88  
Adult basic education, 321  
Adult education participants in, 317-320  
    courses taken in, 319, 320  
Adult and vocational education, 222, 223, 317-320,  
    322, 323  
    Federal funds for, 326, 327, 329  
Age, enrollment, 6,7  
    for compulsory school attendance, 139  
    of college students, 159-161, 170, 195  
Agriculture  
    degrees conferred, 222-227, 229, 233, 235, 237,  
    239, 241  
    enrollment, higher education, 196, 198  
    enrollment, vocational education, 319, 320, 322  
    formal awards, organized occupational curricula,  
    222, 223  
Alcohol use by students, 138  
All levels of education, 1-34  
American Indians  
    degrees conferred, 233-240, 263-269  
    enrolled in colleges and universities, 190-192  
    enrolled in public schools, 43  
    testing, 118  
Annual expenditure per pupil, public schools, 35, 87,  
    154, 155, 360  
Annual salary. See Salaries.  
Annuity funds, higher education, 294  
Applications, college, 169  
Applied research funds, 299-309, 312, 324, 325  
Architecture  
    degrees conferred, 222-227, 229, 233, 235, 237,  
    239, 242  
    enrollment, higher education, 196, 197  
Area studies,  
    degrees conferred, 222-227, 229, 233, 235, 237,  
    239  
Art, degrees conferred, 222-227, 229, 233, 235, 237,  
    239, 262  
Asian or Pacific Islander  
    degrees conferred, 233-240, 263-269  
    enrolled in colleges and universities, 190-192  
    enrolled in public schools, 43  
    testing, 118  
Associate degrees, 156, 200, 220-223, 228-230,  
    233

Attendance patterns, 140  
Attitudes about selected classes, 130  
Attrition, college student, 275-278  
Auxiliary enterprises, higher education, 291-294,  
    299-303  
Average daily attendance, 35, 41, 42  
Average daily membership, 35, 41  
Average length of school year, 35

## B

Bachelor's degrees, 10, 11, 156, 200, 220, 224, 225,  
    228-230, 234, 235, 241-262  
Basic administrative units, 84-88  
Basic student charges, higher education, 280-281  
Behavior, student, 135-137  
Biological sciences  
    credits earned by college graduates, 273  
    degrees conferred, 222-227, 229, 230, 233, 235,  
    237, 239, 253, 254, 263, 267  
    enrollment, higher education, 196-198  
Blacks  
    adult education, 317, 318  
    attendance patterns, 140  
    attitudes about school, 130, 132  
    degrees conferred, 233-240, 263-269  
    dropouts, 97, 98, 347  
    enrolled in colleges and universities, 168, 170,  
    190-192, 195, 271, 272, 346  
    enrolled in public schools, 43  
    enrolled in school, 7  
    expected occupations, 131  
    family characteristics, 18  
    financial aid, 282  
    high school courses completed, 127-129  
    labor force participation, 340, 343, 346, 347  
    literacy, 355  
    persistence in higher education, 275-278  
    population, 15  
    poverty status, 19  
    testing, 101, 105-108, 110, 111, 113-118, 120  
    unemployment rate, 342, 346, 347  
    years of school completed, 8-11  
Black colleges, 202  
Board rates, 280-281  
Business and management  
    credits earned by college graduates, 273  
    degrees conferred, 222-227, 229, 233, 235, 237,  
    239, 243

enrollment, higher education, 196, 197  
 enrollment, vocational education, 319, 320, 322  
 formal awards, organized occupational curricula,  
 222, 223

### C

Capital outlay  
 higher education, 312, 316  
 public elementary and secondary schools, 35, 151  
 Catholic schools  
 achievement test scores, 118  
 elementary and secondary, 53-56  
 institutions of higher education, 164, 217  
 student attitudes about classes, 130  
 student attitudes about school climate, 132  
 student attendance patterns, 125  
 Chapter 1, 331, 338  
 Chemical engineering, 224, 248  
 Chemistry, degrees conferred, 224, 257  
 Church affiliation  
 elementary and secondary schools, 53-55  
 institutions of higher education, 164, 217  
 City school systems, 87-88  
 Civics testing, 117  
 Civil engineering, 224, 248  
 Class size, 63, 66  
 Classroom teachers  
 attitudes about schools, 22-24, 67, 68, 70, 136,  
 137  
 characteristics of private school teachers, 61  
 characteristics of public school teachers, 61, 63  
 private schools, 4, 54, 56, 58, 61  
 public schools, 4, 35, 58-73, 76-79  
 reasons for majoring in education, 65  
 salaries of private school teachers, 69  
 salaries of public school teachers, 69, 71-73  
 satisfaction with teaching, 63, 70  
 teaching assignments, 66  
 Climate in schools, 132  
 Closing of institutions of higher education, 219  
 College faculty. See Faculty, higher education.  
 College and university education, 156-315  
 College applications, 169  
 Communications, degrees conferred, 222-227, 229,  
 233, 235, 237, 239, 244  
 Competency testing  
 students, 143  
 teachers, 144  
 Compulsory attendance, age for, 139  
 Computer and information sciences  
 courses taken by high school graduates, 126, 128  
 credits earned by college graduates, 273  
 degrees conferred, 222-227, 229, 233, 235, 237,  
 239, 245  
 enrollment in graduate programs, 198  
 Computers, use of, 378-380  
 Consumer price index, 34

Courses completed by high school graduates, 126-  
 129  
 Current expenditures  
 higher education, 156, 200, 298-303, 310, 311  
 public schools, 35, 151-155  
 Current-fund revenues in higher education, 156, 200,  
 291-295

### D

Daily attendance as a percent of enrollment, 35, 41  
 Degrees, earned  
 associate, 156, 220-223, 228, 229, 233  
 bachelor's and higher, 156, 220, 221, 224-229,  
 231, 232, 234-270  
 by sex, 156, 220, 223, 224, 231-247, 249, 250,  
 252, 253, 255, 256, 258-260, 262-269  
 by race, 253-240, 263-269  
 first-professional, 156, 220, 231, 232, 240  
 historical summary, 156, 220  
 large institutions of higher education, 200  
 major field of study, 222-227, 229-233, 235, 237,  
 239, 269  
 number of institutions, by field, 230  
 Denominational affiliation  
 elementary and secondary schools, 53-56  
 institutions of higher education, 164, 217  
 Dentistry  
 degrees conferred, 231, 232, 240  
 dental assisting, awards in, 222, 223  
 enrollment, higher education, 196, 197  
 enrollment, vocational, 322  
 Department of Education outlays, 328-330  
 For other Departments, see Federal funds.  
 Disciplinary actions, 135  
 Disposable personal income, 33  
 Districts, school, 84-88  
 Doctor's degrees, 156, 200, 220, 221, 224, 227-229,  
 238, 239, 241-270  
 Dormitory rooms, charges for, 280, 281  
 Dramatic arts, degrees conferred, 224  
 Dropouts (high school)  
 employment of, 340, 341, 347  
 income of, 344, 345  
 number, 347  
 percent, by age group, 8, 9, 11-13, 97, 98  
 Dropouts (college), 275-278  
 Drug abuse, 21, 24, 135, 138, 146

### E

Earned degrees. See Degrees, earned.  
 Earnings by years of school completed, 343-345,  
 352, 353  
 Earnings of recent college graduates, 352  
 Economics, degrees conferred, 224, 261  
 Education

- adult, 318-320
- all levels, 1-34
- bilingual, 52
- credits earned by college graduates, 273
- degrees conferred, 156, 200, 202, 220-270
- degrees conferred in education, 221-229, 233, 235, 237, 239, 246
- elementary and secondary, 35-155
- enrollment, higher education, 156-202
- Federal programs, 324-338
- handicapped students, 46-49, 52, 100, 193, 194
- higher, 156-323
- international, 356-369
- outcomes, 8-13, 94-128, 271-279, 339-355, 362-368
- price indexes, 34
- reasons for majoring in education, 65
- statistics related to, 339-355
- structure, (figure 1)
- vocational, 52, 127, 222, 223, 317-323
- Education in the U.S., structure of, (figure 1)
- Educational administration and supervision, degrees conferred, 224
- Educational attainment, 8-13
- Educational attainment in the work force, 340-344
- Electrical engineering, 224, 248
- Elementary and secondary education, 1-5, 27-29, 35-155
- Elementary and secondary price index, 34
- Elementary education, degrees conferred, 224
- Elementary schools, number
  - private, 5, 53, 55, 56, 84
  - public, 5, 84, 87, 89-93
- Employees
  - colleges, 203-205
  - private elementary and secondary schools, 54
  - public elementary and secondary schools, 76-80
- Employment
  - college graduates, 340, 341, 343, 348, 349, 353
  - handicapped students, 100
  - high school dropouts, 340, 341, 343, 347
  - high school graduates, 340, 341, 343, 346
- Endowment funds, 156, 294, 313-315
- Engineering credits earned by college graduates, 273
  - degrees conferred, 222-227, 229, 233, 235, 237, 239, 247, 248, 265
  - enrollment, higher education, 196-198
  - graduates, organized occupational curricula, 222, 223
- English
  - attitudes about classes, 130
  - credits earned by high school graduates, 126, 127
  - degrees conferred, 224, 249
  - requirements for graduation, 142
  - teachers, public high schools, 64
- Enrollment
  - adult basic education, 321
  - adult education, 317, 318
  - affiliation,
    - elementary and secondary schools, 53, 55-57
    - institutions of higher education, 164, 217
  - ages, 6, 7, 159-161, 170, 195, 317
  - all levels of education, 1-3, 6, 7
  - by grade, 36, 38, 39, 40
  - by grade span of school, 90
  - by race, 7, 43, 53, 170, 190-192, 195, 317, 318, 336
  - by sex, 6, 7, 156, 157, 159, 160, 162-166, 168, 172, 173, 177-179, 191, 194-197, 200, 202, 317, 318, 346
  - elementary and secondary
    - private, 1-3, 44, 50, 53, 55-57
    - public, 1-3, 35-44, 50, 51, 60, 80, 85, 87, 88, 90
    - total, 1-3
  - elementary schools
    - private, 2, 3, 55, 56
    - public, 2, 3, 35-44, 90
    - total, 1-3
  - engineering, 196-198
  - exceptional children, 46-48, 52, 193, 194
  - foreign languages, public secondary schools, 51
  - foreign students in American colleges, 190-192, 369
  - handicapped, 46-48, 52, 193, 194
  - higher education
    - affiliation, 164
    - age, 159-161, 170, 195, 317
    - engineering, 196-198
    - first-professional, 2, 160, 162, 173, 181, 191, 197
    - first-time freshmen, 165, 166, 187-189
    - four-year colleges, 158, 161-163, 165, 180, 182-185, 189, 199, 200, 201, 314
    - full-time, 157, 159-163, 165-173, 177-179, 166, 197, 200, 202
    - full-time-equivalent, 184-186, 200, 314
    - graduate, 2, 160, 162, 172, 181-183, 191, 196-198
    - handicapped students, 193, 194
    - large institutions of higher education, 199-201
    - major field of study, 196-198
    - minority students, 170, 190-192, 195, 202
    - part-time, 157, 159-163, 165-173, 177-179, 166, 197, 200, 202
    - private institutions, 2, 3, 157, 158, 161-166, 171-173, 176, 179, 180, 182-185, 190, 199, 200, 314
    - public institutions, 2, 3, 157, 158, 161-166, 171-173, 175, 178, 180, 182-185, 190, 199, 200, 314
    - race, 170, 190-192, 195, 202
    - rate, 6, 7, 167-170, 272, 346
    - sex, 156, 157, 159, 160, 162-166, 171-173, 177-179, 191, 194-197, 200, 202

- total, 1-3, 156-174, 177, 180-183, 190-192, 196, 197, 200, 201, 202
- traditionally black colleges, 202
- two-year colleges, 158, 161-163, 165, 180, 182-185, 189, 199, 200, 201, 314
- type of institution, 158, 161-163, 165, 180, 182-185, 189, 199, 200, 201, 314
- undergraduate, 2, 160, 162, 171, 181-183, 191, 196, 197
- high schools. *See* Secondary schools.
- kindergartens, 36, 38-40, 44
- large school districts, 85, 87, 88
- mathematics, higher education, 196-198
- preprimary programs, 36, 38-40, 44
- race, elementary and secondary schools, 43
- science, 196-198
- secondary schools
- private, 2, 3, 55, 56
  - public, 2, 3, 35-44, 90
  - total, 1-3
- school districts, 80, 82, 83
- social sciences, higher education, 198
- special education for exceptional children, 46-48, 52, 193, 194
- two-year colleges, 158, 161-163, 165, 180, 182-185, 189, 199, 200, 201, 314
- vocational education, 317, 322
- ethnicity. *See* Spanish origin and race.
- Exceptional children, enrollment, 46-48, 52, 99, 100, 193, 194
- Expenditures**
- all schools, 27-29
  - by country, 358-361
    - Federal Government, 324-336
  - governmental, 30
  - higher education, 27-29, 156, 298-311
  - instruction, 151, 152, 153, 299-309, 311
  - libraries, 299-309, 311, 371-376
  - per pupil, public schools, 35, 87, 154, 155
  - per pupil, by country, 360
  - per student, higher education, 298, 304-309, 311
  - public elementary and secondary schools, 25, 26, 28, 35, 87, 151-155
  - private elementary and secondary schools, 27, 28
  - pupil transportation, 45, 151
  - research, 299-309, 311
  - State and local expenditures, 30-33. *Also see* Revenues.
- Extracurricular activities participation, 134
- F**
- Faculty, higher education**
- academic rank, 207, 208, 211-212, 214, 215
  - control of institution, 1, 4, 203-206, 208-210, 212-215
  - employment status, 203-206
  - salary, 208, 211-214
  - sex, 156, 204, 205, 207-212, 215
  - tenure, 215
- Faculty salaries, 208, 211-214
- Families**
- income, 33
  - number, 17, 18
  - poverty status, 19
  - with children, 17, 18
- Federally affected areas, aid to, 326, 327, 329, 330
- Federal funds for education, 324-338
- Federal sources, receipts from
- higher education, 29, 291-294, 297
  - public elementary and secondary schools, 29, 35, 87, 147-149
- Fees, higher education students, 280-281
- Fellowships and scholarships, 282-288, 299-301, 304-308, 311
- Field of study**
- achievement scores. *See* Tests.
  - characteristics of the population, 10, 332
  - earned degrees, 222-227, 229, 231-233, 235, 237, 239-269
  - enrollment in higher education, 196-198
  - employment, 348, 349, 353
  - Federal funds for colleges, 312
  - salaries, 352, 353
- Finances. *See* Capital outlay, Current expenditures, Expenditures, Income, Property, Revenues, Salaries.**
- Financial aid to college students, 282-290
- Fine and applied arts, degrees conferred, 222-227, 229, 233, 235, 237, 239, 262
- First-time freshmen, 165, 166, 187-189
- First-professional degrees, 156, 220, 231, 232, 240
- First-professional enrollment, 2, 160, 162, 173, 181-183, 191, 197
- Foreign languages**
- degrees conferred, 222-227, 229, 233, 235, 237, 239, 250, 251
  - courses taken by high school students, 126, 128, 129
  - enrollment, public high schools, 51
- Foreign students in American colleges, 190-192, 369
- Forestry, degrees conferred, 224
- Four-year institutions**
- enrollment, 158, 161-163, 165, 180, 182-185, 189, 199, 200, 201, 314
  - faculty, 204, 205, 208-210, 212, 213-215
  - finance, 289, 298, 304, 305, 307, 308, 311, 314
  - number, 5, 216-219, 314
  - staff, 204, 205
- French**
- degrees conferred, 224, 251
  - enrollment, public secondary schools, 51
- Full-time college students, 157, 159-166, 171-173, 177-179, 194, 197, 200, 202

Full-time-equivalent enrollment, 184-186, 314  
 Funds, Federal, for education, 324-338

## G

GED, 96  
 Geography, degrees conferred, 224  
 Geology, degrees conferred, 224, 257  
 German  
   degrees conferred, 224, 251  
   enrollment, public secondary schools, 51  
 Gifted and talented, State legislation, 49  
 Gifts and grants, higher education, 291-294, 302  
 Governmental finances, 30-32  
 Government and political science, degrees  
   conferred, 224, 261  
 Grade enrollment, 36, 38-40  
 Graduate enrollment, 2, 160, 162, 172, 181-183,  
   191, 196-198  
 Graduates  
   high school  
     attainment, 8-13  
     attainment in the work force, 340-345  
     college attendance of, 167-169, 346  
     employment, 346  
     GED, 96  
     number, 57, 94, 95, 167, 168, 346  
     institutions of higher education. See Degrees.  
     organized occupational curricula, 222, 223  
 Graduate Record Examination, 279  
 Graduation rate, college, 275-278  
 Graduation requirements, 142  
 Greek, degrees conferred, 224  
 Gross national product, 33  
 Gross national product price deflator, 34  
 Guidance personnel, public elementary and  
   secondary schools, 76-78

## H

Health and physical education, activities of high  
 school students, 126, 134  
 Handicapped, special education for the, 46-49, 52,  
   193, 194  
 Health occupations (vocational) enrollment, 319,  
   320, 322  
 Health professions  
   degrees conferred, 222-227, 229, 231-233, 235,  
     237, 239, 240, 252  
   enrollment, higher education, 196-198  
 High school graduates  
   attainment, 8-13  
   attainment in the work force, 340-345  
   college attendance of, 167-169, 346  
   employment, 346  
   GED, 96  
   number, 57, 94, 95, 167, 168, 346  
   private, 57, 94

public, 94, 95  
 total, 94, 346

High school seniors' extracurricular activities, 134  
 High schools. See Secondary schools.  
 Higher education, 1-5, 156-317  
 Higher education price index, 34  
 Hispanics  
   degrees conferred, 233-240, 263-269  
   dropouts, 97, 98, 347  
   educational attainment, 9  
   enrolled in colleges and universities, 167, 170,  
     190-192, 195  
   enrolled in school, 1  
   enrolled in public schools, 43  
   high school courses completed, 126, 127  
   literacy, 355  
   population, 15  
   poverty, 19  
   testing, 101, 105, 106, 108, 110, 111, 113-118,  
     120  
   years of school completed, 9  
 Historical summary statistics  
   enrollment, all levels, 3  
   higher education, 156  
   public schools, 35  
 History,  
   degrees conferred, 224, 261  
   testing, 110-112, 118  
 Home economics  
   courses taken by high school students, 127  
   degrees conferred, 222-227, 229, 233, 235, 237,  
     239  
   enrollment, vocational education, 319, 320, 322  
   graduates, organized occupational curricula, 222,  
     223  
 Homework, 22, 103, 110  
 Hospitals, university, 291-294, 299-301  
 Humanities, degrees conferred, 224, 266

## I

Illiteracy, 355. Also see educational attainment.  
 Income  
   by years of school completed, 344, 345  
   higher education, 156, 291-297  
   personal, 33  
   public schools, 147-149  
 Institutions of higher education  
   by control, 5, 156, 164, 199, 216-219, 314  
   by denominational affiliation, 164, 217  
   by highest level of offering, 217  
   by size of enrollment, 199  
   by type, 5, 199, 216, 218, 314  
   closing, 219  
   conferring most doctor's degrees, 270  
   enrolling largest numbers of students, 200, 201  
   for men, for women and coeducational, 217

offering remedial instruction, 274  
 receiving most Federal funds, 297  
 traditionally black, 202  
 with large endowments, 315  
 with large libraries, 375  
 Instructional staff, elementary and secondary schools  
   private, 54, 56  
   public, 35, 74-78  
 Interest on school debt, 35, 151  
 International educational activities, 356-369  
 Italian  
   degrees conferred, 224  
   enrollment, public secondary schools, 51

## J

Journalism, degrees conferred, 224  
 Junior colleges  
   enrollment, 158, 161-163, 165, 180, 182-185, 189, 199, 200, 201, 314  
   number, 5, 199, 213, 218, 314  
 Junior high schools, 89, 93  
 Junior-senior high schools, 5, 89, 90, 91, 93

## K

Kindergarten, enrollment, 36, 38-40, 44

## L

Labor force status  
   by educational attainment, 340-343, 346, 347  
   recent college graduates, 348, 349  
   recent high school dropouts, 347  
   recent high school graduates, 346  
 Latin  
   degrees conferred, 224  
   enrollment, public secondary schools, 51  
 Law  
   degrees conferred, 231, 232, 240  
   enrollment, 196, 197  
 Letters, degrees conferred, 222-227, 229, 233, 235, 237, 239, 249, 266  
 Level of school completed, 8-13  
 Librarians  
   higher education institutions, 374, 375  
   public, 376  
   private schools, 54, 373  
   public schools, 76-78, 370, 371  
 Libraries  
   college and university, 374  
   large public, 377  
   large university, 375  
   private school, 373  
   public, 376  
   public school, 370-372  
 Library expenditures  
   college and university, 299-309, 374, 375

  private school, 373  
   public, 376  
   public school, 371, 372  
 Library science, degrees conferred, 222-227, 229, 233, 235, 237, 239  
 Life sciences  
   credits earned by college graduates, 273  
   degrees conferred, 222-227, 229, 233, 235, 237, 239, 253, 254, 263, 267  
   enrollment, higher education, 196-198  
 Life values, 339  
 Literacy rates, 355  
 Literature, degrees conferred, 224, 249  
 Local basic administrative units, 84-88  
 Local public school systems with largest enrollments, 87, 88  
 Local sources, receipts from  
   higher education, 29, 291-294  
   public schools, 29, 147-149  
 Lunch, school program, 337

## M

Major field of study  
   earned degrees, 222-227, 229, 233, 235, 237, 239-269  
   enrollment in higher education, 196-198  
 Federal obligations to colleges, 312  
 Master's degrees, 156, 200, 220, 221, 224-230, 236, 237, 241-262  
 Mathematics  
   attitudes about classes, 130  
   courses taken by high school students, 126, 128  
   courses taken by adults, 129  
   credits earned by college graduates, 373  
   degrees conferred, 222-227, 229, 223, 225, 227, 229, 255, 263  
   enrollment, higher education, 196-198  
   testing, 113, 114, 118, 119-125, 279, 362-264  
 Medical laboratory technologies, degrees conferred, 222-224  
 Medicine  
   degrees conferred, 231, 232, 240  
   enrollment, 196-198  
 Membership, public schools, 35, 41, 42. Also see Enrollment.  
 Mentally retarded, special education, 46, 47  
 Metropolitan area,  
   testing, 110, 124  
   years of school completed, 13  
 Microcomputers, use of, 378-380  
 Middle schools, number, 89, 92  
 Migration of college students, 187-189  
 Military sciences, degrees conferred, 222-227, 229, 233, 235, 237, 239  
 Minimum-competency testing for students, 143  
 Minimum-competency testing for teachers, 144

**Minorities**

- college graduation rates, 275-278
- degrees conferred, 233-240, 263-269
- educational attainment, 8-11
- enrolled in colleges, 170, 190-192, 195
- enrolled in elementary and secondary schools, 43
- enrolled in school, 7
- going to college, 167, 168, 346, 347
- high school dropouts, 97, 98, 347
- high school graduates, 346
- testing, 101, 105, 106, 108, 110, 111, 113-118, 120
- Music, degrees conferred, 224
- Music education, degrees conferred, 224

**N****National Assessment of Educational Progress**

- civics, 117
- geography, 110
- history, 110-112
- international mathematics, 362
- international science, 365
- literature, 110
- mathematics, 113, 114
- reading, 102-105
- science, 115
- writing, 106-109
- Natural science, courses taken by high school students, 126
- Nonpublic schools. See Private schools.
- Nursing, degrees conferred, 222-224

**O****Occupational programs (postsecondary)**

- average charges, 322
- awards, 222, 223
- enrollment, 317, 318, 322
- instructional staff, 322
- schools offering, 5, 322, 323
- Occupational programs (secondary), 127
- Occupation and employment
  - college graduates, 340-345, 348, 349
  - expected occupations of 8th graders, 131
  - high school graduates, 100, 340-346
  - school dropouts, 340-345, 347
- Office occupations (vocational) enrollment, 322
- One-teacher schools, public, 84, 89
- Opinions on education
  - attitudes about 8th grade classes, 130
  - average grade for schools, 20
  - opinions about school climate, 132
  - opinions about schools, 22, 23, 67, 68, 70
  - opinions about sex education, 133
  - perception about student behavior, 136, 137
  - principals' attitudes, 82, 83
  - problems in schools, 21, 24, 68

- reasons for majoring in education, 65
- Organized occupational curricula, formal awards based on, 222, 223
- Outcomes of education, 339-355. Also see Degrees and Graduates.

**P**

- Parental involvement in school-related activities, 22
- Part-time college students, 157, 159-166, 171-173, 177-179, 194, 197, 200, 202
- Pell grants, finance, 289, 326, 327
- Pell grants, received by students, 286
- Per capita personal income, 33
- Per pupil cost of transportation, 45
- Per pupil expenditures, 35, 87, 154, 155, 360
- Per student expenditures (higher education), 298, 304-309, 311
- Persistence in higher education, 275-276
- Personal income, 33
- Pharmacy, degrees conferred, 224, 232, 240
- Philosophy and religion, degrees conferred, 222-227, 229, 233, 235, 237, 239
- Physical education, degrees conferred, 224
- Physical plant additions, 312, 316
- Physical plant, higher education, value of, 313, 314
- Physical sciences
  - courses taken by high school students, 126, 128
  - credits earned by college graduates, 273
  - degrees conferred, 222-227, 229, 233, 235, 237, 239, 256, 257, 263, 268
  - enrollment in higher education, 196-198
- Physics, degrees conferred, 224, 257
- Plant value, higher education, 156, 313, 314
- Political science, degrees conferred, 224, 261
- Population
  - by continent, 356
  - by country, 359
  - by years of school completed, 8-13
  - percent enrolled in school, 6, 7
  - poverty, 19
  - school-age, 15, 16
  - total, 14, 16, 33, 35
- Postsecondary education, 5, 317. Also see Higher education.
- Poverty, 19
- Preprimary programs, enrollment in, 44
- Price indexes, 34
- Principals, private schools, 54, 81
- Principals, public schools, 76-78, 81-83
- Private elementary and secondary schools
  - enrollment, 2, 3, 44, 50, 53, 55-57
  - expenditures, 27, 28
  - graduates, 57, 94
  - libraries, 373
  - number, 5, 53, 55-57, 84
  - principals, 81

pupils per teacher, 54, 58  
 staff, 54  
 teachers, 4, 54, 56, 57, 61, 69  
**Private gifts and grants, higher education, 291-302**  
**Private institutions of higher education**  
   degrees conferred, 229  
   endowment, 314  
   enrollment, 2, 3, 157, 158, 161-166, 171-173, 176,  
     179, 180, 182-185, 190, 199, 200, 314  
   expenditures, 27, 28, 298, 301, 307-309  
   faculty number, 203-206  
   faculty salaries, 212-214  
   number, 5, 164, 199, 216-219, 314  
   physical plant value, 314  
   revenues, 29, 293  
   student charges, 280, 281  
**Professional degrees. See Degrees and First-  
 professional degrees.**  
**Property, higher education, value of, 156, 312-316**  
**Protective services, degrees conferred, 222-227,  
 229, 233, 235, 237, 239**  
**Protestant institutions of higher education, 164, 217**  
**Psychology, degrees conferred, 222-227, 229, 233,  
 235, 237, 239, 258**  
**Public affairs, degrees conferred, 222-227, 229, 233,  
 235, 237, 239, 259**  
**Public elementary and secondary schools**  
   districts, 84-88  
   enrollment, 1-3, 35-45, 60, 80, 85, 87, 88, 90  
   expenditures, 27-29, 35, 87, 150-155  
   finance, 30-32  
   graduates, 94, 95  
   graduation requirements, 142  
   instructional staff, 35, 75-78  
   libraries, 371-372  
   minimum-competency testing, 143, 144  
   number, 5, 84, 87, 89-93  
   principals, 81-83  
   revenue receipts, 147-149  
   teachers, 4, 59-73, 76-79, 87  
**Public institutions of higher education**  
   degrees conferred, 229  
   endowment, 314  
   enrollment, 2, 3, 157, 158, 161-166, 171-173, 175,  
     178, 180, 182-185, 190, 199, 200, 314  
   expenditures, 28, 29, 298, 300, 304-306, 310, 311  
   faculty number, 203-206  
   faculty salaries, 212-214  
   number, 5, 164, 199, 216-219, 314  
   physical plant value, 314  
   revenues, 29, 292, 295  
   student charges, 280, 281  
**Public school systems, 84-88**  
**Pupils. See Enrollment.**  
**Pupil-staff ratio, 54, 76, 80**  
**Pupil-teacher ratio, 54, 58, 60, 76**  
**Pupil, expenditure per, 35, 87, 154, 155**

Pupils transported at public expense, 45

## R

### Race

adult education, 318  
 college graduation rates, 275-278  
 courses completed by high school students, 126-  
   128  
 degrees conferred, 233-240, 263-269  
 enrolled in public elementary and secondary  
   schools, 43  
 enrolled in college, 170, 190-192, 195  
 enrolled in school, 7  
 going to college, 167, 168, 346-347  
 high school dropouts, 97-99, 347  
 high school graduates, 167, 346  
 labor force participation, 340, 343, 346, 347  
 parental involvement in school-related activities,  
   22  
 population, 15  
 testing, 101, 105, 106, 108, 110, 111, 113-118,  
   120  
 unemployment, 342  
 years of school completed, 8-11  
**Reading tests, 101-105, 106, 108-114, 118, 119-  
 123**  
**Receipts. See Revenue.**  
**Regular 4-year high schools, 89, 93**  
**Religion degrees conferred, 224. Also see  
 Philosophy and religion.**  
**Religious affiliation**  
   elementary and secondary schools, 53-57  
   institutions of higher education, 164, 217  
**Remedial instruction, 274**  
**Research funds, 299-309, 311, 324, 326, 334**  
**Residence and migration of college students, 187-  
 189**  
**Resident population, 14-16**  
**Retention rates in higher education, 275-278**  
**Revenues, institutions of higher education, 156, 291-  
 297**  
**Revenues, receipts, public schools, 35, 147-149**  
**Room charges, 280, 281**  
**Russian**  
   degrees conferred, 224  
   enrollment, public secondary schools, 51

## S

### Salaries

higher education  
   bachelor's degree recipients, 352, 353  
   faculty, 211-214  
   library expenditures for, 374  
   private school teachers, 69  
   public schools

- teachers, 69-73
- total instructional staff, 35, 74, 75
- Scholarships and fellowships, 288, 299-301, 304-309, 311
- Scholastic Aptitude Test, 119-124
- School-age population, 15, 16, 35
- School assistance in federally affected areas, 326, 327, 329, 330
- School districts, 84-88
- School lunch program, 326, 335, 337
- School systems, 84-88
- School year, length, 35, 141
- School years completed, 8-13
- Schools
  - climate, 132
  - elementary and secondary
    - private, 5, 53, 55-57, 84
    - public, 5, 84, 87-93
  - higher education, 5, 156, 164, 199, 216-219
  - noncollegiate postsecondary, 323
- Science
  - attitudes about classes, 130
  - courses taken by college graduates, 273
  - courses taken by high school students, 126, 128
  - degrees conferred, 222-227, 229, 233, 235, 237, 239, 253, 254, 256, 257, 263, 267, 268
  - enrollment in higher education, 196-198
  - testing, 115, 116, 118, 365-367
- Secondary schools
  - private, 5, 53, 55-57, 84
  - public
    - junior high, 89, 93
    - total, 5, 84, 89-91, 93
- Secondary school teachers, public, by field, 64
- Senior high schools, 89, 93
- Sex education, 133
- Size of enrollment
  - institutions of higher education, 199
  - largest colleges, 199, 200
  - largest school districts, 87, 88
  - school districts, 85
  - schools, 90
- Social sciences
  - credits earned by college graduates, 273
  - degrees conferred, 222-227, 229, 233, 235, 237, 239, 260, 261, 263, 269
  - enrollment, higher education, 198
- Social work, degrees conferred, 224
- Sociology, degrees conferred, 224, 261
- Spanish
  - degrees conferred, 224, 251
  - enrollment, public high schools, 51
- Spanish origin. See Hispanic.
- Special education, 46-48, 52, 99, 100, 193, 194
- Speech, degrees conferred, 224
- Staff. See Faculty, Classroom teachers, Instructional Staff
- private elementary and secondary schools, 54
- public elementary and secondary schools, 76-80
- all schools, 1
- pupil-staff ratio, 54, 76, 80
- State
  - adult basic education, 321
  - compulsory school attendance, 139
  - degrees conferred, 221
  - Department of Agriculture obligations, 335
  - Department of Education obligations, 329, 330
  - Department of Health and Human Services
    - allocations, 336
  - enrollment in higher education, 174-183, 185, 192
  - enrollment in private schools, 57
  - enrollment in public schools, 37-43, 60, 80
  - expenditure per pupil, 155
  - expenditures for public higher education, 310
  - expenditures for public schools, 150, 152, 153
  - Federal obligations to colleges, 332, 334, 335
  - governmental expenditures, 31, 32
  - graduation requirements, 142
  - Head Start allocations, 336
  - high school graduates, private, 57
  - high school graduates, public, 95
  - minimum-competency testing, 143, 144
  - number of institutions of higher education, 218
  - number of noncollegiate institutions, 323
  - number of public schools, 91-93
  - number of school districts, 86
  - population, 16
  - pupil-teacher ratio, 60
  - residence and migration of college students, 187-189
  - revenues for higher education, 295, 296
  - revenues for public schools, 148, 149
  - salaries, public school teachers, 72, 73
  - salaries, higher education faculty, 213, 214
  - scholastic aptitude test, 123
  - staff, public schools, 77-80
  - State regulations, 49, 139-146
  - State student financial aid, 290
  - teachers, private schools, 57
  - teachers, public schools, 59, 60, 77-79
  - teachers, characteristics of public school, 62
  - tuition and fees in higher education, 280
  - years of school completed, 12, 13
- State governments, receipts from
  - higher education, 296
  - public schools, 148, 149
- Statistics, degrees conferred, 224
- Statistics related to American education, 339-380
- Structure of education in the U.S., (figure 1)
- Student fees,
  - higher education, 280, 281
  - private elementary and secondary, 55
- Student loan funds, 294

Student loan (Federal) program, 286, 324, 326-330  
 Students. See Enrollment.  
 Students receiving financial aid, 282-287

## T

### Teachers

all levels of education, 1,4  
 elementary and secondary schools  
   by field, 64  
   by sex, 35, 61, 63  
   characteristics, 61-63  
   large districts, 87  
   private, 4, 54, 56-58  
   pupil-teacher ratio, 54, 58, 60, 76, 87  
   public, 4, 58-64, 76-79, 87  
   salaries, 69, 71-73  
 higher education instructional staff,  
   number, 4, 204-210  
   salaries, 211-213  
   tenure, 215

Technology, use of, 378-380

Technical education (vocational), enrollment, 317,  
 322

Technical programs, degrees, 222, 223

Television, 101, 110, 113,

Tenure of higher education faculty, 215

### Tests

American College Testing, 125  
 Graduate Record Examination, 279  
 international, 362-368  
 minimum-competency, 143, 144  
 National Assessment of Educational Progress,  
   101-114  
 National Education Longitudinal Study, 130  
 Scholastic Aptitude Test, 119-124

Theology, degrees conferred, 222-227, 229, 232,  
 233, 235, 237, 239, 240

Total expenditures. See Expenditures.

Trade and industry courses taken by high school  
 students, 126, 127

Trades and industry (vocational) enrollment, 317,  
 322

Traditionally black colleges, 202

Transportation of public school pupils, 45

Tuition and fees, higher education, 280, 281

Tuition, private elementary and secondary schools,  
 55

### Two-year institutions

enrollment, 158, 161-163, 165, 180, 182-185, 189,  
 199, 200, 201, 314  
 faculty, 204, 205, 208-210, 212, 213-215  
 finance, 289, 298, 306, 309, 311, 314  
 number, 5, 216-219, 314  
 staff, 204, 205

## U

Undergraduate enrollment, 2, 160, 162, 171, 181-  
 183, 191, 197, 200

Unemployment, 342, 346, 347

U.S. education, structure of, (figure 1)

### Universities

enrollment, 158, 199  
 expenditures, 304, 307, 311  
 number, 199, 218

## V

Value of physical plant, higher education, 156, 313,  
 314

Value of endowment funds, higher education, 156,  
 313-315

Value of property, higher education, 313

Values, life, 339

### Veterinary medicine

degrees conferred, 232, 240  
 enrollment for professional degrees, 196-198

Visual and performing arts, degrees conferred, 222-  
 227, 229, 233, 235, 237, 239, 262

### Vocational education

credits earned by high school students, 126, 127  
 enrollment, 317, 318, 322  
 Federal funds, 327, 329, 330  
 institutions offering, 323  
 teachers, 64

### Volumes

college and university libraries, 374, 375  
 public libraries, 376-377  
 private school libraries, 373  
 public school libraries, 370-372

Voluntary support for education, 25, 26, 302

## W

Wages. See Income.

### Whites

adult education, 317, 318  
 attendance patterns, 140  
 attitudes about school, 130, 132  
 degrees conferred, 233-240, 263-269  
 dropouts, 97, 98, 167, 347  
 enrolled in colleges and universities, 167, 168,  
   170, 190-192, 194, 195, 323-325, 346  
 enrolled in public schools, 43  
 enrolled in school, 7  
 expected occupations, 131  
 family characteristics, 18  
 financial aid, 282  
 high school courses completed, 127-129  
 labor force participation, 340, 343, 346, 347  
 literacy, 355  
 persistence in higher education, 275-278  
 population, 15  
 poverty status, 19

testing, 101, 105, 106, 108, 110, 111, 113-118,  
 120  
 unemployment rate, 342  
 years of school completed, 8-11  
 Writing tests, 106-109

**Y**

Years of school completed

income, 343-345  
 occupations, 341  
 persons 25 years old and over, 8, 9, 12, 13  
 persons 25 to 29 years old, 8, 9  
 unemployment, 342

**Z**

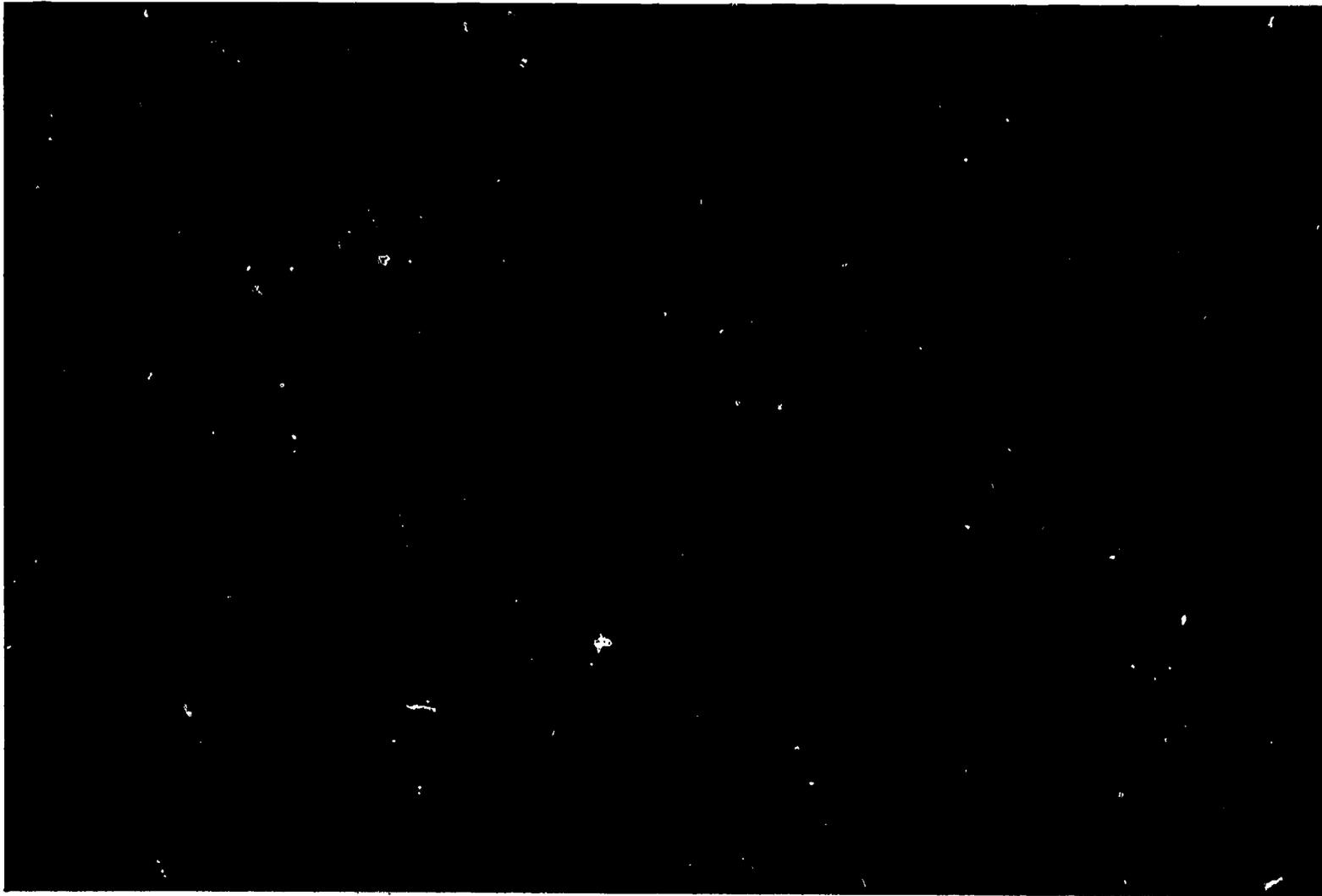
Zoology, degrees conferred, 224

United States  
Department of Education  
Washington, D.C. 20208-5650

Official Business  
Penalty for Private Use, \$300



POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF EDUCATION  
ED 395  
SPECIAL FOURTH CLASS RATE



**BEST COPY AVAILABLE**