

DOCUMENT RESUME

ED 379 338

TM 022 717

AUTHOR Carey, Nancy; And Others.  
 TITLE Curricular Differentiation in Public High Schools. Fast Response Survey System. E.D. Tabs.  
 INSTITUTION Westat, Inc., Rockville, MD.  
 SPONS AGENCY National Center for Education Statistics (ED), Washington, DC.  
 REPORT NO ISBN-0-16-045419-0; NCES-95-360  
 PUB DATE Dec 94  
 NOTE 50p.  
 AVAILABLE FROM U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328.  
 PUB TYPE Reports - Evaluative/Feasibility (142) -- Statistical Data (110)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Ability Grouping; \*Core Curriculum; Educational Policy; \*Educational Practices; English; High Schools; Mathematics; National Surveys; Public Schools; \*Student Placement; Tables (Data); \*Track System (Education)  
 IDENTIFIERS \*Curriculum Differentiation

ABSTRACT

This report contains tabular summaries based on data collected from the Survey of High School Curricular Options. The national survey was conducted in response to the growing controversy over the implications that curriculum differentiation, or tracking, has for American school children. The tables present statistics on the policies and practices of public secondary schools (schools containing grades 10 through 12) regarding curricular options. A national sample of 912 schools replied to the survey. Most are offering core curriculum courses differentiated in terms of content, quantity, or intensity of work, or expectations regarding independent work, but only 15% of schools identified themselves as having traditional tracking policies. Many schools report some student mobility among ability levels in mathematics and English after grade 10, but it frequently happens that the same students are assigned to highest-level ability courses in mathematics and English. Thirteen detailed tables contain survey findings. Four appendixes present supporting information and the questionnaire. (SLD)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 379 338

SCOPE OF INTEREST NOTICE  
The ERIC Facility has assigned this document for processing to:

111

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

LA

# NATIONAL CENTER FOR EDUCATION STATISTICS

E.D. TABS

December 1994

## Curricular Differentiation in Public High Schools



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 95-360

M 022 717

---

# NATIONAL CENTER FOR EDUCATION STATISTICS

---

E.D. TABS

December 1994

---

## Curricular Differentiation in Public High Schools

  
*Fast Response Survey System*

Nancy Carey  
Elizabeth Farris  
Westat, Inc.

Judi Carpenter  
Project Officer  
National Center for Education Statistics

---

U.S. Department of Education  
Office of Educational Research and Improvement

NCES 95-360

**U.S. Department of Education**

Richard W. Riley  
*Secretary*

**Office of Educational Research and Improvement**

Sharon P. Robinson  
*Assistant Secretary*

**National Center for Education Statistics**

Emerson J. Elliott  
*Commissioner*

**National Center for Education Statistics**

"The purpose of the Center shall be to collect, 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).

December 1994

**Contact:**

Judi Carpenter  
(202) 219-1333

## Contents

		Page
	Introduction .....	1
	Glossary.....	3
	Selected Findings .....	5
	Tables .....	7
1	Number and percent of public secondary schools in the study sample that responded and estimated number and percentage in the nation, by school characteristics: 1994.....	7
2	Percent of public secondary schools indicating what best describes their school's approach to providing instruction in the core curriculum, by school characteristics: 1994 .....	8
2a	Standard errors of the percent of public secondary schools indicating what best describes their school's approach to providing instruction in the core curriculum, by school characteristics: 1994.....	9
3	Percent of public secondary schools indicating the extent of various influences on their school's approach to providing instruction: 1994 .....	10
3a	Standard errors of the percent of public secondary schools indicating the extent of various influences on their school's approach to providing instruction: 1994.....	11
4	Percent of public secondary schools indicating the number of years their school's approach has been in effect, and whether any modifications are being considered or have been made in the past 5 years, by school characteristics: 1994 .....	12
4a	Standard errors of the percent of public secondary schools indicating the number of years their school's approach has been in effect, and whether any modifications are being considered or have been made in the past 5 years, by school characteristics: 1994 .....	13
5	Proportion of 10th-graders taking math courses designed for students of different ability levels, by school characteristics: 1994 .....	14
5a	Standard errors of the proportion of 10th-graders taking math courses designed for students of different ability levels, by school characteristics: 1994.....	15
6	Proportion of 10th-graders taking English courses designed for students of different ability levels, by school characteristics: 1994.....	16

6a	Standard errors of the proportion of 10th-graders taking English courses designed for students of different ability levels, by school characteristics: 1994.....	17
7	Percent of public secondary schools indicating the extent to which various individuals and characteristics influence the assignment of teachers to courses in the core curriculum: 1994 ....	18
7a	Standard errors of the percent of public secondary schools indicating the extent to which various individuals and characteristics influence the assignment of teachers to courses in the core curriculum: 1994 .....	19
8	Percent of public secondary schools indicating how often students are moved to a higher ability-level math course after completion of 10th grade: 1994.....	20
8a	Standard errors of the percent of public secondary schools indicating how often students are moved to a higher ability-level math course after completion of 10th grade: 1994.....	21
9	Percent of public secondary schools indicating how often students are moved to a higher ability-level English course after completion of 10th grade: 1994.....	22
9a	Standard errors of the percent of public secondary schools indicating how often students are moved to a higher ability-level English course after completion of 10th grade: 1994 .....	23
10	Percent of public secondary schools indicating how often students are moved to a lower ability-level math course after completion of 10th grade: 1994.....	24
10a	Standard errors of the percent of public secondary schools indicating how often students are moved to a lower ability-level math course after completion of 10th grade: 1994.....	25
11	Percent of public secondary schools indicating how often students are moved to a lower ability-level English course after completion of 10th grade: 1994.....	26
11a	Standard errors of the percent of public secondary schools indicating how often students are moved to a lower ability-level English course after completion of 10th grade: 1994 .....	27
12	Percent of public secondary schools indicating the percent of 10th-graders enrolled in both the highest ability-level math courses and the highest ability-level English courses: 1994 .....	28
12a	Standard errors of the percent of public secondary schools indicating the percent of 10th-graders enrolled in both the highest ability-level math courses and the highest ability-level English courses: 1994.....	29

13	Percent of public secondary schools indicating the extent of influence of various sources of information on the placement of students into differentiated courses in the core curriculum: 1994.....	30
13a	Standard errors of the percent of public secondary schools indicating the extent of influence of various sources of information on the placement of students into differentiated courses in the core curriculum: 1994 .....	31
	Appendix A: Survey Methodology and Data Reliability .....	35
	Appendix B: Background Information .....	39
	Appendix C: References .....	41
	Appendix D: Questionnaire .....	43

## Introduction

American schools are faced with two difficult, competing tasks. First, they are required to provide equal educational opportunity for all students. At the same time, they are expected to offer a differentiated education to students so that differences in abilities, learning styles, and motivational levels can be accommodated. While proponents of curriculum differentiation, traditionally referred to as "tracking," see it as a necessary response to individual educational needs (Biemiller 1993), critics charge that it benefits only students assigned to high-ability courses, and otherwise reproduces the socioeconomic inequities and racial differentiation already present in the larger society (Oakes 1992). In order to fully document the magnitude of the effects of tracking on today's school children, it is important to go beyond what effects tracking *can* have, and determine how and to what degree tracking is actually being implemented in our schools.

Tracking has been a fundamental aspect of education in this country since the early part of this century, when public schools devised a system of curriculum tracks in order to accommodate the diverse group of students attending school for the first time. Recently, tracking has generated a large volume of research and policy analysis. There has been much debate over whether or not tracking creates unequal quality in educational experiences and later opportunity (Oakes, Gamoran, and Page 1991). There is also concern about whether tracking perpetuates, rather than alleviates, differences in children created by socioeconomic stratification (Oakes 1992). This issue has been particularly relevant for educators and researchers concerned about equal access to education by minority students who, in racially integrated schools, are disproportionately represented in curricula designed for low-ability or non-college-bound students (Gamoran and Mare 1989).

Hundreds of research projects have studied tracking's effects in terms of student outcomes, such as standardized test scores (see Slavin 1990). Some researchers have conducted case studies or ethnographies of individual schools concerning how tracking is practiced (e.g., Valli 1990). However, many of these studies are subject to mixed interpretations and leave many questions unanswered. In addition, a major weakness in this area of research is that little is known about the pervasiveness of tracking in our nation's schools, and the different ways tracking is being used across different school systems. Most researchers who study student tracking would agree that the policies and practices of curriculum differentiation are varied, although little is known about the degree of this variation across the nation. Without this knowledge, it is difficult to estimate the effects tracking policies and practices are actually having on the nation's children.

This E.D. Tabs report contains tabular summaries based on data collected from the *Survey of High School Curricular Options* for the National Center for Education Statistics (NCES). E.D. Tabs are a collection of tables whose sole purpose is to make data or tables available to the general and research public quickly. E.D. Tabs are not intended to present analyses of the data from the survey. The tabular summaries present the actual data collected and only selected findings are highlighted in this report. Additional, in-depth reports containing detailed analyses of the findings from this survey are forthcoming.

This national survey was in response to the growing controversy over the implications that curriculum differentiation, or tracking, has for American school children today. The summary tables present statistics on the policies and practices of secondary schools regarding curricular options available to students who come to school with different abilities, learning rates, interests, or motivations. For this survey, secondary schools were defined as regular public schools that include grades 10-12. A national sample of 912 schools, taken from the 1990-91 Schools and Staffing Survey (SASS), responded to questions concerning the following: different approaches to curriculum differentiation and policies concerning these practices, course offerings and the ability levels of the students for which the courses are designed, the degree to which students move from one ability-level course to another, student assignment procedures, and teachers' assignment to courses. The tables present data from the 912 surveyed schools, as well as for schools that have been classified according to the following SASS variables: school size, determined by enrollment in grades 10-12 (less than 300, 300 to 799, 800 or more); locale (city, urban fringe, town, rural) (see Johnson 1989); region (northeast, central, southeast, west); and percentage of minority enrollment (5 percent or less, 6-20 percent, 21-50 percent, 51 percent or more). All data have been weighted to provide national estimates. For definitions of specific terms included in the tables, refer to the Glossary that appears on the following two pages.

This survey was conducted for NCES by Westat, Inc., a research firm in Rockville, Maryland, through the Fast Response Survey System (FRSS). FRSS was established by NCES to collect small amounts of policy-oriented data quickly and with minimum burden on respondents.

## Glossary

**Ability levels:** The distinction among students, or courses, on the basis of the students' learning aptitudes or past academic achievements, or each course's adaptation to the students' levels of readiness and learning rates.

**Core curriculum:** Courses in English, math, science, and social studies that students can choose from in order to fulfill the school district's graduation requirements.

**Differentiated courses:** Courses that fulfill the same requirements in the core curriculum but differ in terms of content, quantity and/or intensity of work, or expectations regarding independent work.

**Differentiated grouping:** A school's approach to providing instruction to students who have been grouped because of similar learning aptitudes or past academic achievements for the purpose of providing them instruction in core curriculum areas that is geared to their abilities in terms of content, quantity and/or intensity of work, or expectations regarding independent work.

**Undifferentiated courses:** Courses that are equivalent in terms of content, quantity and/or intensity of work, or expectations regarding independent work, and are open to students who may have widely differing learning aptitudes or past academic achievements.

### Locale

**City:** A central city of a Standard Metropolitan Statistical Area (SMSA).

**Urban fringe:** A place within a SMSA of a large or mid-size central city and defined as urban by the U.S. Bureau of the Census.

**Town:** A place not within an SMSA, but with a population greater than or equal to 2,500, and defined as urban by the U.S. Bureau of the Census.

**Rural:** A place with a population less than 2,500 and defined as rural by the U.S. Bureau of the Census.

### Region

**Northeast:** Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

**Central:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

**Southeast:** Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

**West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.

**Secondary school:** Regular public schools providing instruction in grades 10-12.

**Schools and Staffing Survey (SASS):** An integrated survey of public and private schools, school districts, principals, and teachers conducted during the 1987-88 and 1990-91 school years, and scheduled to be conducted at 3-year intervals. It is a mail survey that collects data on the nation's public and private elementary and secondary teaching force, aspects of teacher supply and demand, teacher workplace conditions, characteristics of school administrators, and school policies and practices. The 1990-91 SASS surveys of schools and school principals were based on the 9,336 public and 3,279 private schools in the schools samples. From these schools, 56,051 public school teachers and 9,166 private school teachers were selected for the sample of teachers. The sampling frame for the 1990-91 SASS was constructed from the 1988-89 NCES Common Core of Data (CCD) public school universe file, and included over 83,000 public elementary and secondary schools.

## Selected Findings

The *Survey of High School Curricular Options* requested information regarding the policies and practices schools use in structuring their curricula to meet the needs of students with different abilities, learning rates, interests, or motivations. The data were gathered from a national representative sample of 912 public secondary schools in fall 1993.

- Most public secondary schools (86 percent) reported offering courses in their core curriculum that are differentiated in terms of content, quantity or intensity of work, or expectations regarding independent work. However, only 15 percent of schools described themselves as having traditional "tracking" policies, reporting that they offer differentiated courses and do differentiated grouping in their core curriculum. The majority of schools (71 percent) indicated that they offer differentiated courses, but give students open access to any course provided they have taken the prerequisite course(s). The remaining 14 percent of schools indicated that they offer a variety of undifferentiated courses in their core curriculum and allow students open access to any course provided they have taken the prerequisite(s) (table 2).
- States and/or school districts have the most influence over schools' approaches to providing instruction to students of differing abilities. Almost three-fifths of public secondary schools (59 percent) indicated that these agencies greatly influence their approach. Principals were reported to greatly influence the instructional approach in 47 percent of schools. A small proportion of schools (13 percent) indicated that parents greatly influence their approach to providing instruction (table 3).
- Over half of all public secondary schools (57 percent) reported that they had modified their approach to curriculum differentiation in the past 5 years. About half (49 percent) also reported that they are considering modifications to their approach (table 4).
- Schools reported that during the 1993 fall term 14 percent of all 10th-graders took math courses designed for students of widely differing abilities. A higher percentage (28 percent) of students were enrolled in English courses designed for widely differing abilities.

The remaining 10th-graders were in math or English courses designed for more discrete levels of abilities. In math, 27 percent of students were enrolled in courses designed for students of higher abilities, 47 percent took courses for students of average abilities, and 16 percent took courses for students of lower abilities. In English, 23 percent of students were enrolled in courses designed for students of higher abilities, 39 percent took courses for students of average abilities, and 9 percent took courses for students of lower abilities (tables 5 and 6).

- In 29 percent of schools the teacher's seniority level was reported to have no influence over the assignment of teachers to courses, and 20 percent of schools also indicated that the ability level of students in the course had no effect on teacher assignments. The greatest influences on teacher assignments that schools reported were the teacher's knowledge of the subject matter (73 percent) and the teacher's teaching skills (66 percent). In the majority of schools (75 percent), the principal was the individual with the most influence over teacher assignments (table 7).

For the 86 percent of schools that offer differentiated courses in math or English:

- A large percentage of schools reported some student mobility between ability levels in math and English courses after 10th grade. About 48 percent indicated that students are sometimes moved to a higher ability-level math or English course. Another 14 percent reported that this often occurs. However, 17 percent of schools reported that students are almost never moved to a higher level English course, while 12 percent indicated that students are almost never moved to a higher level math course (tables 8 and 9).
- Shifting to lower ability courses after completion of 10th grade also occurs. In math, 50 percent of schools indicated that students are sometimes moved to a lower ability-level course, while 39 percent indicated that this sometimes occurs in English. Less than 3 percent of schools reported that this often occurs in math or English. However, 26 percent of schools reported that students are almost never moved to a lower level English course, and a smaller percentage (16 percent) indicated that students are almost never moved to a lower level math course (tables 10 and 11).
- Whether or not schools assign students to courses based on ability, often the same students are enrolled in the highest ability-level courses in math and English. In 43 percent of all schools, 76 percent or more of 10th-graders who took high ability math also took high ability English; an additional 15 percent of schools reported that from 51-75 percent of 10th-graders in high ability math also took high ability English. Twenty-three percent of secondary schools that offer differentiated courses in math offer no ability levels in English (table 12).
- Given a list of potential influences on schools' policies regarding the placement of students into differentiated courses, only 14 percent of schools reported that standardized test scores influence their placement to a great extent. Another 16 percent indicated that principals greatly influence student placement. The greatest influences that schools reported on students' placement included prerequisite course(s) taken by students (66 percent), teacher recommendations (57 percent), and students' previous grades (52 percent) (table 13).

Table 1.--Number and percent of public secondary schools in the study sample that responded and estimated number and percent in the nation, by school characteristics: 1994

School characteristic	Respondent sample (Unweighted N)		National estimate (Weighted N)	
	Number	Percent	Number	Percent
All public secondary schools .....	912	100	15,527	100
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	247	27	7,355	47
300 to 799 .....	324	36	4,703	30
800 or more .....	341	34	3,469	22
<b>Metropolitan status</b>				
City .....	170	19	1,888	12
Urban fringe .....	212	23	2,600	17
Town .....	264	29	4,012	26
Rural .....	266	29	7,026	45
<b>Region</b>				
Northeast .....	169	19	2,578	17
Central .....	279	31	5,086	33
Southeast .....	221	24	3,332	22
West .....	243	27	4,531	29
<b>Percent minority enrollment in school</b>				
0 - 5 .....	344	38	6,938	45
6 - 20 .....	216	24	3,374	22
21 - 50 .....	186	20	2,656	17
51 - 100 .....	165	18	2,523	16
Unknown .....	1	*	37	*

\*Less than .5 percent.

NOTE: Percents may not sum to 100 because of rounding, and details may not add to totals because of item nonresponse and rounding for weighted estimates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 2.--Percent of public secondary schools indicating what best describes their school's approach to providing instruction in the core curriculum, by school characteristics: 1994

School characteristic	Differentiated courses/ students have open access to enrollment	Differentiated courses/ differentiated grouping	Undifferentiated courses/ students have open access to enrollment
All public secondary schools .....	71	15	14
<b>Grades 10-12 enrollment</b>			
Less than 300 .....	65	9	26
300 to 799 .....	77	17	6
800 or more .....	74	24	1
<b>Metropolitan status</b>			
City .....	73	23	5
Urban fringe .....	75	23	1
Town .....	75	16	9
Rural .....	66	9	25
<b>Region</b>			
Northeast .....	73	21	6
Central .....	73	10	17
Southeast .....	74	14	12
West .....	65	17	18
<b>Percent minority enrollment in school</b>			
0 - 5 .....	70	11	19
6 - 20 .....	71	17	12
21 - 50 .....	76	19	5
51 - 100 .....	68	19	13

NOTE: Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 2a.--Standard errors of the percent of public secondary schools indicating what best describes their school's approach to providing instruction in the core curriculum, by school characteristics: 1994

School characteristic	Differentiated courses/ students have open access to enrollment	Differentiated courses/ differentiated grouping	Undifferentiated courses/ students have open access to enrollment
All public secondary schools .....	1.7	1.3	1.6
<b>Grades 10-12 enrollment</b>			
Less than 300 .....	2.8	1.9	2.9
300 to 799 .....	2.6	2.3	1.5
800 or more .....	2.9	2.8	0.5
<b>Metropolitan status</b>			
City .....	3.8	3.3	1.8
Urban fringe .....	3.0	2.9	0.9
Town .....	2.9	2.4	2.3
Rural .....	2.9	1.9	2.9
<b>Region</b>			
Northeast .....	2.9	2.8	2.3
Central .....	3.0	1.7	2.8
Southeast .....	4.0	2.5	3.3
West .....	4.0	2.9	4.5
<b>Percent minority enrollment in school</b>			
0 - 5 .....	2.7	1.4	2.7
6 - 20 .....	4.1	2.8	4.5
21 - 50 .....	3.5	3.3	2.2
51 - 100 .....	4.1	3.6	3.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 3.--Percent of public secondary schools indicating the extent of various influences on their school's approach to providing instruction: 1994

Influence on school's approach	None	Small extent	Moderate extent	Great extent
State and/or school district .....	1	9	31	59
School board.....	2	16	41	41
Principal .....	*	10	44	47
Department head.....	17	24	38	21
Parents .....	4	37	47	13
College entrance requirements .....	2	11	45	43

\*Less than .5 percent.

NOTE: Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 3a.--Standard errors of the percent of public secondary schools indicating the extent of various influences on their school's approach to providing instruction: 1994

Influence on school's approach	None	Small extent	Moderate extent	Great extent
State and/or school district .....	0.4	1.1	1.6	1.9
School board.....	0.6	1.2	1.9	1.7
Principal .....	0.2	1.5	2.0	2.1
Department head.....	1.5	1.8	1.6	1.7
Parents .....	0.6	2.0	1.8	1.2
College entrance requirements .....	0.7	1.3	1.9	2.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 4.--Percent of public secondary schools indicating the number of years their school's approach has been in effect, and whether any modifications are being considered or have been made in the past 5 years, by school characteristics: 1994

School characteristic	Number of years approach has been in effect			Considering modifications		Modifications made in past 5 years	
	Less than 11	11 - 20	21 or more	Yes	No	Yes	No
All public secondary schools .....	54	32	14	49	51	57	43
<b>Grades 10-12 enrollment</b>							
Less than 300 .....	59	30	11	42	58	52	48
300 to 799 .....	54	31	15	55	45	60	40
800 or more .....	46	36	18	58	42	63	37
<b>Metropolitan status</b>							
City .....	44	35	21	54	46	65	35
Urban fringe .....	47	32	21	59	41	64	36
Town .....	58	31	10	53	47	53	47
Rural .....	58	31	11	42	58	54	46
<b>Region</b>							
Northeast .....	44	34	22	60	40	60	40
Central .....	50	35	15	46	54	51	49
Southeast .....	59	31	10	49	51	59	41
West .....	62	27	11	47	53	61	39
<b>Percent minority enrollment in school</b>							
0 - 5 .....	53	33	14	53	47	53	47
6 - 20 .....	51	35	14	44	56	56	44
21 - 50 .....	56	27	17	50	50	65	35
51 - 100 .....	63	27	10	46	54	61	39

NOTE: Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 4a.--Standard errors of the percent of public secondary schools indicating the number of years their school's approach has been in effect, and whether any modifications are being considered or have been made in the past 5 years, by school characteristics: 1994

School characteristic	Number of years approach has been in affect			Considering modifications		Modifications made in past 5 years	
	Less than 11	11 - 20	21 or more	Yes	No	Yes	No
All public secondary schools .....	2.0	2.0	1.4	1.9	1.9	2.1	2.1
<b>Grades 10-12 enrollment</b>							
Less than 300 .....	3.6	3.2	2.5	3.1	3.1	3.3	3.3
300 to 799 .....	2.7	2.5	2.1	2.3	2.3	2.5	2.5
800 or more .....	2.7	3.0	2.0	2.7	2.7	3.0	3.0
<b>Metropolitan status</b>							
City .....	4.0	4.1	3.0	4.1	4.1	3.7	3.7
Urban fringe .....	3.4	3.7	3.2	3.8	3.8	3.4	3.4
Town .....	3.0	3.1	2.0	3.2	3.2	3.6	3.6
Rural .....	3.5	3.1	2.4	2.7	2.7	2.6	2.6
<b>Region</b>							
Northeast .....	3.8	4.0	3.1	4.0	4.0	4.2	4.2
Central .....	3.4	3.6	2.6	3.3	3.3	3.8	3.8
Southeast .....	3.9	3.6	2.0	3.5	3.5	4.1	4.1
West .....	4.3	4.0	2.5	3.5	3.5	4.5	4.5
<b>Percent minority enrollment in school</b>							
0 - 5 .....	3.2	3.0	2.4	2.6	2.6	3.0	3.0
6 - 20 .....	4.5	4.5	2.4	4.2	4.2	4.8	4.8
21 - 50 .....	3.6	2.9	3.2	3.4	3.4	3.5	3.5
51 - 100 .....	4.4	4.0	2.7	3.4	3.4	4.7	4.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 5.--Proportion of 10th-graders taking math courses designed for students of different ability levels, by school characteristics: 1994

School characteristic	High ability level	Average ability level	Low ability level	Widely differing ability levels
All public secondary schools .....	27	41	16	14
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	31	34	12	19
300 to 799 .....	29	41	14	13
800 or more .....	25	42	17	13
<b>Metropolitan status</b>				
City .....	23	41	20	13
Urban fringe .....	27	44	14	13
Town .....	30	40	14	13
Rural .....	30	36	13	18
<b>Region</b>				
Northeast .....	27	40	18	12
Central .....	30	38	17	12
Southeast .....	28	41	15	13
West .....	24	43	14	16
<b>Percent minority enrollment in school</b>				
0 - 5 .....	29	38	15	15
6 - 20 .....	28	42	15	11
21 - 50 .....	28	44	15	10
51 - 100 .....	22	39	18	19

NOTE: Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 5a.--Standard errors of the proportion of 10th-graders taking math courses designed for students of different ability levels, by school characteristics: 1994

School characteristic	High ability level	Average ability level	Low ability level	Widely differing ability levels
All public secondary schools .....	0.7	1.0	0.7	0.7
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	1.9	2.2	0.9	2.2
300 to 799 .....	1.3	1.4	0.8	1.7
800 or more .....	1.2	1.3	1.1	0.9
<b>Metropolitan status</b>				
City.....	1.6	2.0	1.7	1.6
Urban fringe .....	1.3	2.0	1.0	1.7
Town.....	1.4	1.6	1.0	1.6
Rural.....	1.4	1.8	1.0	2.0
<b>Region</b>				
Northeast.....	1.7	2.3	1.6	2.0
Central.....	1.5	1.7	1.3	1.6
Southeast.....	1.5	2.0	1.0	1.5
West.....	1.5	1.8	1.2	1.9
<b>Percent minority enrollment in school</b>				
0 - 5 .....	1.4	1.5	0.9	1.5
6 - 20 .....	1.4	1.8	1.1	1.7
21 - 50.....	1.4	2.1	1.5	1.4
51 - 100 .....	1.4	2.5	1.9	2.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 6.--Proportion of 10th-graders taking English courses designed for students of different ability levels, by school characteristics: 1994

School characteristic	High ability level	Average ability level	Low ability level	Widely differing ability levels
All public secondary schools .....	23	39	9	28
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	15	28	4	52
300 to 799 .....	24	39	9	27
800 or more .....	25	41	9	24
<b>Metropolitan status</b>				
City.....	21	42	9	26
Urban fringe .....	27	41	8	22
Town.....	23	35	10	30
Rural.....	19	35	8	37
<b>Region</b>				
Northeast.....	25	38	12	24
Central.....	19	37	9	33
Southeast.....	28	39	9	22
West.....	22	39	6	30
<b>Percent minority enrollment in school</b>				
0 - 5 .....	21	35	9	34
6 - 20 .....	24	41	8	26
21 - 50 .....	30	39	8	22
51 - 100 .....	19	41	9	28

NOTE: Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 6a.--Standard errors of the proportion of 10th-graders taking English courses designed for students of different ability levels, by school characteristics: 1994

School characteristic	High ability level	Average ability level	Low ability level	Widely differing ability levels
All public secondary schools .....	0.8	1.2	0.6	1.1
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	1.6	2.6	0.9	3.8
300 to 799 .....	1.3	2.1	0.8	2.4
800 or more .....	1.1	1.6	0.9	1.8
<b>Metropolitan status</b>				
City .....	1.7	2.9	1.4	3.1
Urban fringe .....	1.5	2.5	1.1	2.7
Town.....	1.4	2.2	1.0	2.4
Rural.....	1.5	2.4	1.1	2.4
<b>Region</b>				
Northeast.....	1.6	2.1	1.2	2.6
Central.....	1.5	2.3	1.0	2.7
Southeast.....	1.6	1.9	1.0	2.2
West.....	1.7	2.5	1.2	3.0
<b>Percent minority enrollment in school</b>				
0 - 5 .....	1.2	2.0	0.9	2.3
6 - 20 .....	1.4	2.6	0.9	2.7
21 - 50.....	1.8	2.6	1.2	2.9
51 - 100 .....	1.5	3.3	1.6	3.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 7.--Percent of public secondary schools indicating the extent to which various individuals and characteristics influence the assignment of teachers to courses in the core curriculum: 1994

Influence	None	Small extent	Moderate extent	Great extent
<b>Individuals</b>				
District administrator.....	43	26	14	18
Principal.....	3	6	17	75
Guidance counselor.....	49	28	17	6
Department head.....	34	16	27	23
Teachers.....	15	24	42	18
Parents.....	70	25	4	1
Students.....	69	24	5	1
<b>Characteristics</b>				
How challenging the material is.....	15	20	39	26
The ability level of students in the course.....	20	24	38	18
The teacher's knowledge of the subject.....	4	2	21	73
The teacher's teaching skill.....	6	5	22	66
The teacher's level of seniority at the school..	29	34	30	7

NOTE: Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 7a.--Standard errors of the percent of public secondary schools indicating the extent to which various individuals and characteristics influence the assignment of teachers to courses in the core curriculum: 1994

Influence	None	Small extent	Moderate extent	Great extent
<b>Individuals</b>				
District administrator .....	1.3	1.6	1.6	1.7
Principal.....	0.6	0.8	1.4	1.5
Guidance counselor.....	1.7	1.3	1.3	1.1
Department head .....	1.7	1.3	1.6	1.2
Teachers .....	1.4	1.9	2.2	1.5
Parents.....	1.8	1.7	0.8	0.2
Students .....	1.6	1.5	1.0	0.5
<b>Characteristics</b>				
How challenging the material is .....	1.4	1.5	1.8	1.6
The ability level of students in the course .....	1.5	1.5	1.3	1.5
The teacher's knowledge of the subject.....	0.9	0.5	1.7	2.0
The teacher's teaching skill.....	1.0	1.0	1.7	2.1
The teacher's level of seniority at the school ..	1.6	2.0	1.4	0.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 8.--Percent of public secondary schools indicating how often students are moved to a higher ability-level math course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	12	27	47	14
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	16	26	40	18
300 to 799 .....	9	25	55	10
800 or more .....	7	30	49	15
<b>Metropolitan status</b>				
City .....	7	20	52	21
Urban fringe .....	9	32	49	10
Town .....	12	29	49	10
Rural .....	14	26	43	17
<b>Region</b>				
Northeast .....	8	27	58	7
Central .....	15	27	43	15
Southeast .....	11	32	49	8
West .....	11	22	43	23
<b>Percent minority enrollment in school</b>				
0 - 5 .....	15	29	45	11
6 - 20 .....	9	32	45	14
21 - 50 .....	9	22	57	11
51 - 100 .....	8	21	45	26

NOTE: Estimates are based on those schools that offer differentiated courses. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 8a.--Standard errors of the percent of public secondary schools indicating how often students are moved to a higher ability-level math course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	1.3	1.6	1.6	1.2+
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	2.7	2.6	3.4	2.2
300 to 799 .....	1.9	2.7	3.1	1.7
800 or more .....	1.4	2.6	2.2	1.8
<b>Metropolitan status</b>				
City .....	2.3	3.2	3.9	3.1
Urban fringe .....	2.3	3.5	3.8	1.9
Town .....	2.4	3.6	3.4	1.8
Rural .....	2.4	3.0	3.0	2.3
<b>Region</b>				
Northeast .....	2.5	3.2	3.0	1.8
Central .....	2.8	3.1	3.0	2.5
Southeast .....	2.3	3.3	3.7	2.1
West .....	2.8	3.3	4.4	3.2
<b>Percent minority enrollment in school</b>				
0 - 5 .....	2.4	2.8	2.7	1.8
6 - 20 .....	1.9	3.7	3.0	3.2
21 - 50 .....	3.1	3.0	3.9	2.8
51 - 100 .....	2.9	3.7	4.7	4.3

NOTE: Standard errors are based on those schools that offer differentiated courses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 9.--Percent of public secondary schools indicating how often students are moved to a higher ability-level English course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	17	23	46	14
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	32	21	28	19
300 to 799 .....	10	24	57	8
800 or more .....	5	24	59	12
<b>Metropolitan status</b>				
City.....	6	21	55	18
Urban fringe .....	8	24	61	8
Town.....	15	24	52	9
Rural .....	28	22	31	18
<b>Region</b>				
Northeast.....	6	24	61	9
Central.....	22	23	38	18
Southeast.....	18	29	47	6
West.....	19	17	46	18
<b>Percent minority enrollment in school</b>				
0 - 5 .....	21	23	42	13
6 - 20 .....	13	28	45	14
21 - 50.....	14	25	51	10
51 - 100 .....	18	13	51	18

NOTE: Estimates are based on those schools that offer differentiated courses. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 9a.--Standard errors of the percent of public secondary schools indicating how often students are moved to a higher ability-level English course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	1.8	1.9	1.4	1.4
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	3.8	3.2	2.8	3.0
300 to 799 .....	1.9	2.6	3.0	1.5
800 or more .....	1.2	2.3	2.7	1.9
<b>Metropolitan status</b>				
City .....	2.6	3.3	4.9	3.2
Urban fringe .....	2.0	3.3	3.5	1.5
Town .....	2.5	3.3	3.1	1.8
Rural .....	3.5	3.6	3.0	2.9
<b>Region</b>				
Northeast .....	2.2	3.4	3.6	2.5
Central .....	3.8	3.1	2.8	2.8
Southeast .....	3.9	3.8	3.4	2.0
West .....	3.5	2.9	3.3	3.1
<b>Percent minority enrollment in school</b>				
0 - 5 .....	2.9	2.7	2.1	2.2
6 - 20 .....	3.2	3.6	3.6	3.5
21 - 50 .....	3.7	4.0	3.7	2.7
51 - 100 .....	4.3	2.9	4.6	3.8

NOTE: Standard errors are based on those schools that offer differentiated courses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 10.--Percent of public secondary schools indicating how often students are moved to a lower ability-level math course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	16	33	50	2
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	21	37	42	0
300 to 799 .....	14	31	54	2
800 or more .....	10	28	58	4
<b>Metropolitan status</b>				
City.....	10	32	52	5
Urban fringe .....	9	29	61	1
Town.....	16	34	48	3
Rural .....	21	34	45	1
<b>Region</b>				
Northeast.....	8	21	70	1
Central.....	15	43	41	1
Southeast.....	17	30	51	2
West.....	20	31	46	3
<b>Percent minority enrollment in school</b>				
0 - 5 .....	13	35	50	1
6 - 20 .....	14	30	55	1
21 - 50.....	18	30	51	1
51 - 100 .....	22	32	41	5

NOTE: Estimates are based on those schools that offer differentiated courses. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 10a.--Standard errors of the percent of public secondary schools indicating how often students are moved to a lower ability-level math course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	1.6	1.9	1.8	0.4
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	3.1	3.7	3.3	0.0
300 to 799 .....	2.1	2.3	2.3	0.7
800 or more .....	1.6	3.1	3.3	1.1
<b>Metropolitan status</b>				
City .....	2.3	4.1	3.9	1.5
Urban fringe .....	1.7	3.6	4.3	0.8
Town.....	2.8	3.5	3.5	1.0
Rural.....	3.3	3.6	3.1	0.2
<b>Region</b>				
Northeast.....	2.9	3.5	4.1	0.7
Central.....	3.1	3.8	3.7	0.5
Southeast.....	2.3	2.9	3.3	0.9
West.....	2.8	3.7	3.2	1.0
<b>Percent minority enrollment in school</b>				
0 - 5 .....	2.3	3.3	3.7	0.7
6 - 20 .....	3.2	3.8	4.2	0.5
21 - 50.....	3.9	3.3	4.1	0.6
51 - 100.....	4.5	4.1	4.0	1.5

NOTE: Standard errors are based on those schools that offer differentiated courses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

BEST COPY AVAILABLE

Table 11.--Percent of public secondary schools indicating how often students are moved to a lower ability-level English course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	26	34	39	1
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	40	33	27	1
300 to 799 .....	19	35	44	1
800 or more .....	15	34	49	2
<b>Metropolitan status</b>				
City .....	20	37	40	3
Urban fringe .....	17	34	48	1
Town .....	24	34	42	1
Rural .....	35	33	31	1
<b>Region</b>				
Northeast .....	17	24	59	1
Central .....	28	39	32	2
Southeast .....	25	34	40	1
West .....	32	35	33	1
<b>Percent minority enrollment in school</b>				
0 - 5 .....	23	37	39	1
6 - 20 .....	26	32	42	1
21 - 50 .....	29	35	36	1
51 - 100 .....	33	29	37	1

NOTE: Estimates are based on those schools that offer differentiated courses. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 11a.--Standard errors of the percent of public secondary schools indicating how often students are moved to a lower ability-level English course after completion of 10th grade: 1994

School characteristic	Almost never	Rarely	Sometimes	Often
All public secondary schools .....	1.8	1.8	1.8	0.3
<b>Grades 10-12 enrollment</b>				
Less than 300 .....	3.3	3.5	3.7	0.5
300 to 799 .....	2.4	2.5	2.7	0.7
800 or more .....	2.0	2.7	3.1	0.7
<b>Metropolitan status</b>				
City.....	3.5	3.6	3.8	1.2
Urban fringe .....	2.7	3.5	4.0	0.7
Town.....	2.8	2.5	3.0	0.5
Rural .....	3.2	3.7	3.5	0.6
<b>Region</b>				
Northeast.....	3.2	3.3	4.5	0.6
Central.....	3.9	3.6	3.4	0.9
Southeast.....	3.5	3.6	3.4	0.6
West.....	3.4	4.1	3.1	0.4
<b>Percent minority enrollment in school</b>				
0 - 5 .....	2.9	2.8	2.9	0.7
6 - 20 .....	4.3	3.5	4.2	0.4
21 - 50.....	4.9	3.6	4.1	0.7
51 - 100 .....	4.5	4.3	3.8	0.6

NOTE: Standard errors are based on those schools that offer differentiated courses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 12.--Percent of public secondary schools indicating the percent of 10th-graders enrolled in both the highest ability-level math courses and the highest ability-level English courses: 1994

School characteristic	No levels in English	Percent of 10th grade students				
		Less than 25 percent	26 - 50 percent	51 - 75 percent	76 - 90 percent	More than 90 percent
All public secondary schools .....	23	10	9	15	27	16
<b>Grades 10-12 enrollment</b>						
Less than 300 .....	45	9	5	9	18	14
300 to 799 .....	10	10	11	19	33	18
800 or more .....	6	12	13	19	35	15
<b>Metropolitan status</b>						
City.....	12	11	16	18	29	15
Urban fringe .....	6	10	13	18	34	19
Town.....	13	13	8	17	30	19
Rural.....	42	8	5	12	21	12
<b>Region</b>						
Northeast.....	13	7	8	15	35	22
Central.....	30	9	9	12	23	18
Southeast.....	19	10	10	19	26	15
West.....	27	12	9	16	27	10
<b>Percent minority enrollment in school</b>						
0 - 5 .....	29	10	6	14	26	16
6 - 20 .....	22	9	6	16	31	16
21 - 50.....	16	9	15	17	29	15
51 - 100 .....	20	13	13	15	25	14

NOTE: Estimates are based on those schools that offer differentiated courses. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 12a.--Standard errors of the percent of public secondary schools indicating the percent of 10th-graders enrolled in both the highest ability-level math courses and the highest ability-level English courses: 1994

School characteristic	No levels in English	Percent of 10th grade students				
		Less than 25 percent	26 - 50 percent	51 - 75 percent	76 - 90 percent	More than 90 percent
All public secondary schools .....	1.4	0.9	1.1	1.4	1.5	1.4
Grades 10-12 enrollment						
Less than 300 .....	3.1	1.9	1.8	2.3	2.5	2.6
300 to 799 .....	1.9	1.8	1.5	2.7	3.1	2.2
800 or more .....	1.2	1.9	1.9	2.1	2.8	2.4
Metropolitan status						
City .....	3.0	2.8	2.6	2.4	3.5	2.7
Urban fringe .....	1.8	2.4	2.3	3.3	4.2	3.3
Town .....	2.5	2.2	1.6	2.4	3.1	2.3
Rural .....	2.6	2.0	1.5	1.9	2.3	2.2
Region						
Northeast .....	2.9	2.5	1.9	2.9	3.6	3.8
Central .....	3.1	2.0	2.0	2.2	2.9	2.9
Southeast .....	3.9	2.4	2.1	3.0	3.0	2.5
West .....	3.5	1.9	2.1	2.4	3.1	1.9
Percent minority enrollment in school						
0 - 5 .....	2.8	1.8	1.4	1.9	2.7	2.0
6 - 20 .....	3.2	1.8	1.6	3.1	2.8	3.6
21 - 50 .....	3.9	2.4	3.0	2.7	3.7	2.3
51 - 100 .....	4.7	3.0	2.6	2.5	3.5	3.6

NOTE: Standard errors are based on those schools that offer differentiated courses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

BEST COPY AVAILABLE

Table 13.--Percent of public secondary schools indicating the extent of influence of various sources of information on the placement of students into differentiated courses in the core curriculum: 1994

Source of information	None	Small extent	Moderate extent	Great extent
Students' performance on standardized tests .....	10	31	45	14
Students' previous grades.....	1	7	41	52
Prerequisite course(s) taken .....	1	5	28	66
Level of course taken at "feeder" school.....	8	19	43	30
Students' requests .....	1	17	48	34
Parents' requests .....	1	17	48	34
Teachers' recommendations .....	1	5	38	57
Department head's recommendations .....	30	21	29	19
Principal's recommendations or decisions .....	17	37	30	16
Guidance counselor's recommendations .....	2	18	49	30

NOTE: Estimates are based on those schools that offer differentiated courses. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

Table 13a.--Standard errors of the percent of public secondary schools indicating the extent of influence of various sources of information on the placement of students into differentiated courses in the core curriculum: 1994

Source of information	None	Small extent	Moderate extent	Great extent
Students' performance on standardized tests .....	1.2	2.4	2.2	1.1
Students' previous grades.....	0.3	1.0	2.0	2.0
Prerequisite course(s) taken .....	0.4	1.3	1.7	1.9
Level of course taken at "feeder" school.....	0.9	1.6	2.0	1.6
Students' requests .....	0.4	1.5	2.1	1.7
Parents' requests .....	0.5	1.4	1.8	1.7
Teachers' recommendations .....	0.5	0.9	1.7	1.9
Department head's recommendations .....	1.6	1.4	1.5	1.6
Principal's recommendations or decisions .....	1.1	1.6	2.0	1.4
Guidance counselor's recommendations .....	0.6	1.5	2.1	2.1

NOTE: Standard errors are based on those schools that offer differentiated courses.

SOURCE: Estimates are based on those schools that offer differentiated courses. U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey of High School Curricular Options, FRSS 48, 1994."

## Appendices

## Appendix A: Survey Methodology and Data Reliability

### Sample Selection

The sampling frame for FRSS Survey of High School Curricular Options was the 1990-91 Schools and Staffing Survey (SASS). The 1990-91 SASS was conducted by the National Center for Education Statistics (NCES) to collect nationally representative data on critical aspects of teaching supply and demand, the composition of the administrator and teaching work force, and the status of teaching and schooling generally. The sampling frame for the SASS was constructed from the 1988-89 NCES Common Core of Data (CCD) public school universe file, and included over 83,000 public elementary and secondary schools. Over 9,000 schools were selected from the public school frame for the 1990-91 SASS. Of these, about 4,000 are elementary schools and therefore were not eligible for this FRSS survey. Also, for this survey, secondary schools were defined as regular public schools that provide instruction to grades 10-12. Thus, the "sampling frame" for this survey was approximately 5,000 public secondary or combined schools in the 1990-91 SASS.

A stratified sample of 1,000 public schools was selected from the approximately 5,000 eligible schools in the 1990-91 SASS sample. The SASS sample was originally stratified by state and instructional level, and schools within each state/level stratum were selected with probabilities proportionate to the square root of the number of teachers in the school. For this FRSS survey, schools were stratified by geographic region, locale (Johnson 1989), and enrollment size. Within these primary strata, schools were further sorted by percentage of minority enrollment. The SASS schools were subsampled within strata at rates designed to yield a PPS (probability-proportionate-to-size) sample, where the size measure is the square root of the enrollment of the school. That is, conditional on the SASS sample, schools were selected with probabilities proportionate to the square-root of enrollment times the final SASS weight. Use of the square root of enrollment as the sampling measure of size was efficient for estimating school characteristics and quantitative measures correlated with enrollment. The allocation of the sample to the major strata was made in a manner that was expected to be reasonably efficient for national estimates, as well as for estimates for the major subclasses: geographic regions, grades 10-12 enrollment, locale, and percentage of minority enrollment.

## **Response Rates**

In October 1993, questionnaires (see appendix D) were mailed to 1,000 public secondary school principals. Principals were asked to have the questionnaire completed by the person in their school who was most knowledgeable about the school's academic curriculum and policies regarding the assignment of students to courses. Ten schools were found to be out of scope (no longer at the same location or serving the same population), leaving 990 eligible schools in the sample. Telephone followup of nonrespondents was initiated in early December; data collection was completed by early March 1994 with 912 schools completing the survey. Of these, 703 schools (77 percent) completed the mailed questionnaire; telephone followup was conducted with the remaining 209 schools (23 percent). The survey response rate was 92 percent (912 schools divided by the 990 eligible schools in the sample). Item nonresponse ranged from 0.0 to .9 percent.

## **Sampling and Nonsampling Errors**

The response data were weighted to produce national estimates. The weights were designed to adjust for the variable probabilities of selection and differential nonresponse. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability.

The survey estimates are also subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage) errors, errors of reporting, and errors made in collection of the data. These errors can sometimes bias the data. Nonsampling errors may include such problems as the differences in the respondents' interpretation of the meaning of the questions; memory effects; misrecording of responses; incorrect editing, coding, and data entry; differences related to the particular time the survey was conducted; or errors in data preparation. While general sampling theory can be used in part to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and, for measurement purposes, usually require that an experiment be conducted as part of the data collection procedures or that data external to the study be used.

To minimize the potential for nonsampling errors, the questionnaire was pretested with principals and assistant principals like those who completed the survey. During the design of the survey and the survey pretest, an effort was made to check for consistency of interpretation of

questions and to eliminate ambiguous items. The questionnaire and instructions were extensively reviewed by the National Center for Education Statistics. Manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone. Imputations for item nonresponse were not implemented, as item nonresponse rates were less than 1 percent (for nearly all items, nonresponse rates were less than 0.5 percent). Data were keyed with 100 percent verification.

## Variances

The standard error is a measure of the variability of estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of schools reporting that they offer differentiated courses but allow students open access to any course provided they have taken the required prerequisite(s) is 71 percent, and the estimated standard error is 1.7. The 95 percent confidence interval for the statistic extends from  $[71 - (1.7 \text{ times } 1.96)]$  to  $[71 + (1.7 \text{ times } 1.96)]$ , or from 67.4 to 73.9.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic (see Wolter 1985, Chapter 4). To construct the replications, 40 stratified subsamples of the full sample were created and then dropped one at a time to define 40 jackknife replicates (see Wolter 1985, page 183). A proprietary computer program (WESVAR), available at Westat, Inc., was used to calculate the estimates of standard errors. The software runs under IBM/OS and VAX/VMX systems.

## Appendix B: Background Information

The survey was performed under contract with Westat, Inc., using the Fast Response Survey System (FRSS). Westat's Project Director was Elizabeth Farris, and the Survey Manager was Nancy Carey. Judi Carpenter was the NCES Project Officer. The data were requested by David Baker, AERA Senior Fellow at NCES, in coordination with John Ralph, Data Development Division of NCES. Jennifer Manlove at NCES also collaborated with Westat on the data analyses and report writing.

This report was reviewed by the following individuals:

### Outside NCES

- Rita Foy, Office of Research, U.S. Department of Education
- Paul George, College of Education, University of Florida
- Stafford Hood, College of Education, Arizona State University

### Inside NCES

- Patricia Dabbs, Education Assessment Division
- Kerry Gruber, Elementary/Secondary Education Statistics Division
- Elvie Germino Hausken, Elementary/Secondary Education Statistics Division
- James Houser, Data Development Division
- Dan Kasprzyk, Special Surveys and Analysis Branch

For more information about the Fast Response Survey System or the Survey of High School Curricular Options, contact Judi Carpenter, Elementary/Secondary Education Statistics Division, Special Surveys and Analysis Branch, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Avenue, NW, Washington, DC 20208-5651, telephone (202) 219-1333.

## Appendix C: References

- Biemiller, A. 1993. "Lake Wobegon Revisited: On Diversity and Education." *Educational Research*, 22(8):7-12.
- Gamoran, A., and Mare, R. D. 1989. "Secondary School Tracking and Educational Inequality: Compensation, Reinforcement, or Neutrality?" *American Journal of Sociology* 94(5): 1146-1183.
- Johnson, F. 1989. *Assigning Type Locale Codes to the 1987-88 CCD Public School Universe*. U.S. Department of Education. National Center for Education Statistics.
- Oakes, J., Gamoran, A., and Page, R. 1991. "Curriculum Differentiation: Opportunities, Consequences, and Meanings." pp. 570-608 in *Handbook of Research on Curriculum*, edited by P. Jackson. New York: Macmillan.
- Oakes, J. 1992. "Can Tracking Research Inform Practice? Technical, Normative, and Political Considerations." *Educational Researcher*, 21(4):12-21.
- Slavin, R. 1990. "Achievement Effects in Ability Grouping in Secondary Schools: A Best-Evidence Synthesis." *Review of Educational Research* 60(3): 471-499.
- Valli, L. 1990. "A Curriculum of Effort: Tracking Students in a Catholic High School." Pp. 43-66 in *Curriculum Differentiation: Interpretive Studies in U.S. Secondary Schools*, edited by R. Page and L. Valli. Albany: State University of New York Press.
- The WESVAR Procedures*. 1989. Rockville, MD: Westat, Inc.
- Wolter, K. 1985. *Introduction to Variance Estimation*. Springer-Verlag.

☆ U S GOVERNMENT PRINTING OFFICE: 1994 — 3 8 6 - 7 9 5 / 2 3 1 3 6

## Appendix D: Questionnaire

U.S. DEPARTMENT OF EDUCATION  
NATIONAL CENTER FOR EDUCATION STATISTICS  
WASHINGTON, D.C. 20208-5651

**SURVEY OF HIGH SCHOOL CURRICULAR OPTIONS**

**FAST RESPONSE SURVEY SYSTEM**

FORM APPROVED  
O.M.B. No.: 1850-0691  
EXPIRATION DATE: 11/94

This survey is authorized by law (20 U.S.C. 1221e-1). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

**DEFINITIONS FOR THIS SURVEY:**

**Ability levels** - the distinction among students, or courses, on the basis of the students' learning aptitudes or past academic achievements, or each course's adaptation to the students' levels of readiness and learning rates.

**Core curriculum** - courses in English, Math, Science, and Social Studies that students can choose from in order to fulfill the school district's graduation requirements.

**Differentiated courses** - courses that fulfill the same requirements in the core curriculum but differ in terms of content, quantity and/or intensity of work, or expectations regarding independent work.

**Differentiated grouping** - a school's approach to providing instruction to students who have been grouped because of similar learning aptitudes or past academic achievements for the purpose of providing them instruction in core curriculum areas that is geared to their abilities in terms of content, quantity and/or intensity of work, or expectations regarding independent work.

**Undifferentiated courses** - courses that are equivalent in terms of content, quantity and/or intensity of work, or expectations regarding independent work, and are open to students who may have widely differing learning aptitudes or past academic achievements.

**PUT LABEL HERE**

IF ABOVE INFORMATION IS INCORRECT, PLEASE CORRECT DIRECTLY ON LABEL.

Name of person completing this form: \_\_\_\_\_ Telephone number: \_\_\_\_\_

Title/position: \_\_\_\_\_

What is the best day/time to reach you at this number, if we have any questions? Day: \_\_\_\_\_ Time: \_\_\_\_\_

**RETURN COMPLETED FORM TO:**

**IF YOU HAVE ANY QUESTIONS, CALL:**

WESTAT, INC.  
1650 Research Boulevard  
Rockville, Maryland 20850  
ATTN: Carey, 928142

Nancy Carey  
1-800-937-8281, Ext. 4467

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, Information Management and Compliance Division, Washington, D.C. 20202-4651, and to the Office of Management and Budget, Paperwork Reduction Project 1850-0691, Washington, D.C. 20503.



6. How often are students changed to a higher ability-level course after completion of 10th grade?

a. In Math?

- Almost never ..... 1
- Rarely ..... 2
- Sometimes ..... 3
- Often ..... 4

b. In English?

- Almost never ..... 1
- Rarely ..... 2
- Sometimes ..... 3
- Often ..... 4

7. How often are students changed to a lower ability-level course after completion of 10th grade?

a. In Math?

- Almost never ..... 1
- Rarely ..... 2
- Sometimes ..... 3
- Often ..... 4

b. In English?

- Almost never ..... 1
- Rarely ..... 2
- Sometimes ..... 3
- Often ..... 4

8. a. Students can be enrolled in the same ability-level courses across academic subject areas for a variety of reasons. In your school, about what percentage of 10th grade students in your highest ability-level MATH course are also in your highest ability-level ENGLISH course?

- Less than 25 percent ..... 1
- 26 - 50 percent ..... 2
- 51 - 75 percent ..... 3
- 76 - 90 percent ..... 4
- More than 90 percent ..... 5
- Not applicable, no levels in English ..... 6 (SKIP TO Q 9.)

b. To what extent is this percentage a result of scheduling constraints imposed by the Math curriculum?

- Not at all ..... 1
- Small extent ..... 2
- Moderate extent ..... 3
- Great extent ..... 4

c. Is the information you provided in Question 8a readily available from your data on student enrollment characteristics?

- Yes ..... 1
- No ..... 2

9. To what extent do each of the following sources of information influence the placement of students into the differentiated courses of your core curriculum?

	Not at all	Small extent	Moderate extent	Great extent
a. Students' performance on standardized tests.....	1	2	3	4
b. Students' previous grades.....	1	2	3	4
c. Prerequisite course(s) taken.....	1	2	3	4
d. Level of course taken at "feeder" school (i.e., middle or junior high).....	1	2	3	4
e. Students' requests.....	1	2	3	4
f. Parents' requests.....	1	2	3	4
g. Teachers' recommendations.....	1	2	3	4
h. Department head's recommendations.....	1	2	3	4
i. Principal's recommendations or decisions.....	1	2	3	4
j. Guidance counselor's recommendations.....	1	2	3	4

### III. TEACHER ASSIGNMENT

10. To what extent do each of the following individuals determine the assignment of teachers to courses in your core curriculum?

	Not at all	Small extent	Moderate extent	Great extent
a. District administrator.....	1	2	3	4
b. Principal.....	1	2	3	4
c. Guidance counselor.....	1	2	3	4
d. Department head.....	1	2	3	4
e. Teachers.....	1	2	3	4
f. Parents.....	1	2	3	4
g. Students.....	1	2	3	4

11. To what extent do each of the following characteristics influence decisions about the assignment of teachers to courses in your core curriculum?

	Not at all	Small extent	Moderate extent	Great extent
a. How challenging the course material is.....	1	2	3	4
b. The ability level of the students in the course.....	1	2	3	4
c. The teacher's knowledge of the subject.....	1	2	3	4
d. The teacher's teaching skills.....	1	2	3	4
e. The teacher's level of seniority at your school.....	1	2	3	4

THANK YOU FOR YOUR TIME.

Please keep a copy of this form in case we have any questions.

ISBN 0-16-045419-0



United States  
Department of Education  
Washington, DC 20208-5651

---

Official Business  
Penalty for Private Use, \$300

Postage and Fees Paid  
U.S. Department of Education  
Permit No. G-17

**Third Class**



BEST COPY AVAILABLE