



# The Condition of Education 2015



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# MAY 2015

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# Letter From the Commissioner of the National Center for Education Statistics

#### May 2015

The U.S. Congress has mandated that the National Center for Education Statistics (NCES) produce an annual report to help inform policymakers about the progress of education in the United States. Using data from across the center and from other sources of education data, *The Condition of Education 2015* presents 42 key indicators on important topics and trends in U.S. education. These indicators focus on population characteristics, such as educational attainment and economic outcomes, participation in education at all levels, as well as aspects of elementary, secondary, and postsecondary education, including international comparisons. New to the report this year are three spotlight indicators that describe approaches to learning behaviors for first-time kindergartners, disparities in educational outcomes among male youth of color, and differences in postsecondary degree completion by socioeconomic status. This report also includes a new feature—The At a Glance—that allows readers to quickly make comparisons within and across indicators.

This year's *Condition* shows that 91 percent of young adults ages 25 to 29 had a high school diploma or its equivalent in 2014, and that 34 percent had a bachelor's or higher degree. As in previous years, median earnings were higher for 25- to 34-year-olds with higher levels of education in 2013. Also, in 2014, the unemployment rate was generally lower for those with higher levels of education.

One in five school-age children lived in poverty in 2013, up from about one in seven in 2000. Sixty-five percent of 3- to 5-year-olds were enrolled in preschool in 2013, which is about the same as in the previous year. About 60 percent of these preschool children attended full-day programs. In the fall of 2012, nearly 50 million students were enrolled in public schools—over 2 million of whom were in charter schools. Postsecondary enrollment was at 20 million students in the fall of 2013, including 17 million undergraduate and 3 million graduate students.

In school year 2011–12, some 3.1 million public high school students, or 81 percent, graduated on time with a regular diploma. Sixty-six percent of 2013 high school completers enrolled in college the following fall: 42 percent went to 4-year institutions and 24 percent went to 2-year institutions. Meanwhile, the status dropout rate, or the percentage of 16- to 24-year-olds who are not enrolled in school and do not have a high school credential, declined from 11 percent in 2000 to 7 percent in 2013.

At public and private nonprofit 4-year colleges, most of the full-time undergraduates (88 and 86 percent, respectively) were under the age of 25 in the fall of 2013, compared with only 30 percent of full-time students at private for-profit colleges. About 56 percent of male students and 62 percent of female students who began their bachelor's degree in the fall of 2007, and did not transfer, had completed their degree within six years. In 2013, over 1 million associate's degrees, over 1.8 million bachelor's degrees, and over 750,000 master's degrees were awarded.

As new data are released, the indicators will be updated on *The Condition of Education* website. In addition, NCES produces a wide range of reports and data to help inform policymakers and the American public about trends and conditions in U.S. education.

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Peggy G. Carr Acting Commissioner National Center for Education Statistics

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# **Reader's Guide**

*The Condition of Education* is available on the National Center for Education Statistics (NCES) website as a full pdf of this volume for 2015, as individual pdfs, in html, and on the NCES mobile website (<u>http://nces.ed.gov/mobile</u>). Individual pdfs and html files are updated throughout the year as new data become available. All reference tables are hyperlinked within the html versions, as are the sources for each of the graphics. The reference tables can generally be found in other NCES publications—primarily the *Digest of Education Statistics*.

# **Data Sources and Estimates**

The data in these indicators were obtained from many different sources—including students and teachers, state education agencies, local elementary and secondary schools, and colleges and universities—using surveys and compilations of administrative records. Users should be cautious when comparing data from different sources. Differences in aspects such as procedures, timing, question phrasing, and interviewer training can affect the comparability of results across data sources.

Most indicators summarize data from surveys conducted by NCES or by the Census Bureau with support from NCES. Brief explanations of the major NCES surveys used in these indicators can be found in the Guide to Sources (<u>http://nces.ed.gov/programs/coe/sources.asp</u>). More detailed explanations can be obtained on the NCES website (<u>http://nces.ed.gov</u>) under "Surveys and Programs."

The Guide to Sources also includes information on non-NCES sources used to compile indicators, such as the American Community Survey (ACS) and the Current Population Survey (CPS). These are Census Bureau surveys used extensively in the indicators. For further details on the ACS, see <u>http://www.census.gov/acs/www/</u>. For further details on the CPS, see <u>http://www.census.gov/acs/</u>.

Data for indicators are obtained primarily from two types of surveys: universe surveys and sample surveys. In universe surveys, information is collected from every member of the population. For example, in a survey regarding certain expenditures of public elementary and secondary schools, data would be obtained from each school district in the United States. When data from an entire population are available, estimates of the total population or a subpopulation are made by simply summing the units in the population or subpopulation. As a result, there is no sampling error, and observed differences are reported as true.

Since a universe survey is often expensive and time consuming, many surveys collect data from a sample of the population of interest (sample survey). For example, the National Assessment of Educational Progress (NAEP) assesses a representative sample of students rather than the entire population of students. When a sample survey is used, statistical uncertainty is introduced, because the data come from only a portion of the entire population. This statistical uncertainty must be considered when reporting estimates and making comparisons.

Various types of statistics derived from universe and sample surveys are reported in the indicators. Many indicators report the size of a population or a subpopulation, and often the size of a subpopulation is expressed as a percentage of the total population. In addition, the average (or *mean*) value of some characteristic of the population or subpopulation may be reported. The average is obtained by summing the values for all members of the population and dividing the sum by the size of the population. An example is the annual average salaries of full-time instructional faculty at degree-granting postsecondary institutions. Another measure that is sometimes used is the median. The median is the midpoint value of a characteristic at or above which 50 percent of the population is estimated to fall, and at or *below* which 50 percent of the population is estimated to fall. An example is the median annual earnings of young adults who are full-time, full-year wage and salary workers.

# Standard Errors

Using estimates calculated from data based on a sample of the population requires consideration of several factors before the estimates become meaningful. When using data from a sample, some *margin of error* will always be present in estimations of characteristics of the total population or subpopulation because the data are available from only a portion of the total population. Consequently, data from samples can provide only an approximation of the true or actual value. The margin of error of an estimate, or the range of potential true or actual values, depends on several factors such as the amount of variation in the responses, the size and representativeness of the sample, and the size of the subgroup for which the estimate is computed. The magnitude of this margin of error is measured by what statisticians call the "standard error" of an estimate.

When data from sample surveys are reported, the standard error is calculated for each estimate. The standard errors for all estimated totals, means, medians, or percentages are reported in the reference tables.

In order to caution the reader when interpreting findings in the indicators, estimates from sample surveys are flagged with a "!" when the standard error is between 30 and 50 percent of the estimate, and suppressed with a "‡" when the standard error is 50 percent of the estimate or greater.

# Data Analysis and Interpretation

When estimates are from a sample, caution is warranted when drawing conclusions about one estimate in comparison to another, or about whether a time series of estimates is increasing, decreasing, or staying the same. Although one estimate may appear to be larger than another, a statistical test may find that the apparent difference between them is not reliably measurable due to the uncertainty around the estimates. In this case, the estimates will be described as having *no measurable difference*, meaning that the difference between them is not statistically significant.

Whether differences in means or percentages are statistically significant can be determined using the standard errors of the estimates. In these indicators and other reports produced by NCES, when differences are statistically significant, the probability that the difference occurred by chance is less than 5 percent, according to NCES standards.

Data presented in the indicators do not investigate more complex hypotheses, account for interrelationships among variables, or support causal inferences. We encourage readers who are interested in more complex questions and in-depth analysis to explore other NCES resources, including publications, online data tools, and public- and restricted-use datasets at <u>http://nces.ed.gov</u>.

For all indicators that report estimates based on samples, differences between estimates (including increases and decreases) are stated only when they are statistically significant. To determine whether differences reported are statistically significant, two-tailed *t* tests at the .05 level are typically used. The *t* test formula for determining statistical significance is adjusted when the samples being compared are dependent. The *t* test formula is not adjusted for multiple comparisons, with the exception of statistical tests conducted using the NAEP Data Explorer (http://nces.ed.gov/nationsreportcard/tdw/ database/data tool.asp). When the variables to be tested are postulated to form a trend, the relationship may be tested using linear regression, logistic regression, or ANOVA trend analysis instead of a series of *t* tests. These alternate methods of analysis test for specific relationships (e.g., linear, quadratic, or cubic) among variables. For more information on data analysis, please see the NCES Statistical Standards, Standard 5-1, available at https://nces.ed.gov/statprog/2012/pdf/Chapter5.pdf.

A number of considerations influence the ultimate selection of the data years to feature in the indicators. To make analyses as timely as possible, the latest year of available data is shown. The choice of comparison years is often also based on the need to show the earliest available survey year, as in the case of the NAEP and the international assessment surveys. In the case of surveys with long time frames, such as surveys measuring enrollment, the decade's beginning year (e.g., 1980 or 1990) often starts the trend line. In the figures and tables of the indicators, intervening years are selected in increments in order to show the general trend. The narrative for the indicators typically compares the most current year's data with those from the initial year and then with those from a more recent period. Where applicable, the narrative may also note years in which the data begin to diverge from previous trends.

# **Rounding and Other Considerations**

All calculations within the indicators are based on unrounded estimates. Therefore, the reader may find that a calculation, such as a difference or a percentage change, cited in the text or figure may not be identical to the calculation obtained by using the rounded values shown in the accompanying tables. Although values reported in the reference tables are generally rounded to one decimal place (e.g., 76.5 percent), values reported in each indicator are generally rounded to whole numbers (with any value of 0.50 or above rounded to the next highest whole number). Due to rounding, cumulative percentages may sometimes equal 99 or 101 percent rather than 100 percent.

# **Race and Ethnicity**

The Office of Management and Budget (OMB) is responsible for the standards that govern the categories used to collect and present federal data on race and ethnicity. The OMB revised the guidelines on racial/ ethnic categories used by the federal government in October 1997, with a January 2003 deadline for implementation. The revised standards require a minimum of these five categories for data on race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. The standards also require the collection of data on the ethnicity categories Hispanic or Latino and Not Hispanic or Latino. It is important to note that Hispanic origin is an ethnicity rather than a race, and therefore persons of Hispanic origin may be of any race. Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. The race categories White, Black, Asian, Native Hawaiian or Other Pacific Islander, and American Indian or Alaska Native, as presented in these indicators, exclude persons of Hispanic origin unless noted otherwise.

The categories are defined as follows:

- *American Indian or Alaska Native:* A person having origins in any of the original peoples of North and South America (including Central America) and maintaining tribal affiliation or community attachment.
- *Asian:* A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- *Black or African American:* A person having origins in any of the black racial groups of Africa.
- *Native Hawaiian or Other Pacific Islander:* A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- *White:* A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- *Hispanic or Latino:* A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race.

Within these indicators, some of the category labels have been shortened in the text, tables, and figures. American Indian or Alaska Native is denoted as American Indian/ Alaska Native (except when separate estimates are available for American Indians alone or Alaska Natives alone); Black or African American is shortened to Black; and Hispanic or Latino is shortened to Hispanic. When discussed separately from Asian estimates, Native Hawaiian or Other Pacific Islander is shortened to Pacific Islander.

The indicators draw from a number of different sources. Many are federal surveys that collect data using the OMB standards for racial/ethnic classification described above; however, some sources have not fully adopted the standards, and some indicators include data collected prior to the adoption of the OMB standards. This report focuses on the six categories that are the most common among the various data sources used: White, Black, Hispanic, Asian, Pacific Islander, and American Indian/ Alaska Native. Asians and Pacific Islanders are combined into one category in indicators for which the data were not collected separately for the two groups, or to preserve continuity in trend analyses even in cases where separate data collection was possible in the more recent data years.

Some of the surveys from which data are presented in these indicators give respondents the option of selecting either an "other" race category, a "Two or more races" or "multiracial" category, or both. Where possible, indicators present data on the "Two or more races" category; however, in some cases this category may not be separately shown because the information was not

collected or due to other data issues. The "other" category is not separately shown. Any comparisons made between persons of one racial/ethnic group to "all other racial/ ethnic groups" include only the racial/ethnic groups shown in the indicator. In some surveys, respondents are not given the option to select more than one race. In these surveys, respondents of Two or more races must select a single race category. Any comparisons between data from surveys that give the option to select more than one race and surveys that do not offer such an option should take into account the fact that there is a potential for bias if members of one racial group are more likely than members of the others to identify themselves as "Two or more races."1 For postsecondary data, foreign students are counted separately and are therefore not included in any racial/ethnic category.

The American Community Survey (ACS), conducted by the U.S. Census Bureau, collects information regarding specific racial/ethnic ancestry. Selected indicators include Hispanic ancestry subgroups (such as Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, Other Central American, and South American) and Asian ancestry subgroups (such as Asian Indian, Chinese, Filipino, Japanese, Korean, and Vietnamese). In addition, selected indicators include "Two or more races" subgroups (such as White and Black, White and Asian, and White and American Indian/Alaska Native).

For more information on the ACS, see the Guide to Sources (<u>http://nces.ed.gov/programs/coe/sources.asp</u>). For more information on race/ethnicity, see the Glossary (<u>http://nces.ed.gov/programs/coe/glossary.asp</u>).

# Limitations of the Data

The relatively small sizes of the American Indian/Alaska Native and Pacific Islander populations pose many measurement difficulties when conducting statistical analysis. Even in larger surveys, the numbers of American Indians/Alaska Natives and Pacific Islanders included in a sample are often small. Researchers studying data on these two populations often face small sample sizes that reduce the reliability of results. Survey data for American Indians/Alaska Natives often have somewhat higher standard errors than data for other racial/ethnic groups. Due to large standard errors, differences that seem substantial are often not statistically significant and, therefore, not cited in the text.

<sup>&</sup>lt;sup>1</sup> Such bias was found by a National Center for Health Statistics study that examined race/ethnicity responses to the 2000 Census. This study found, for example, that as the percentage of multiple-race respondents in a county increased, the likelihood of respondents stating Black as their primary race increased among Black/White respondents but decreased among American Indian or Alaska Native/Black respondents. See Parker, J. et al. (2004). Bridging Between Two Standards for Collecting Information on Race and Ethnicity: An Application to Census 2000 and Vital Rates. *Public Health Reports, 119*(2): 192–205. Available through <u>http://www.pubmedcentral.nih.gov/articlerender.</u> fcgi?artid=1497618.

Data on American Indians/Alaska Natives are often subject to inaccuracies that can result from respondents self-identifying their race/ethnicity. According to research on the collection of race/ethnicity data conducted by the Bureau of Labor Statistics in 1995, the categorization of American Indian and Alaska Native is the least stable selfidentification. The racial/ethnic categories presented to a respondent, and the way in which the question is asked, can influence the response, especially for individuals who consider themselves of mixed race or ethnicity. These data limitations should be kept in mind when reading this report.

As mentioned above, Asians and Pacific Islanders are combined into one category in indicators for which the data were not collected separately for the two groups. The combined category can sometimes mask significant differences between subgroups. For example, prior to 2011, the National Assessment of Educational Progress (NAEP) collected data that did not allow for separate reporting of estimates for Asians and Pacific Islanders. Information from *Digest of Education Statistics, 2014* (table 101.20), based on the Census Bureau Current Population Reports, indicates that 96 percent of all Asian/Pacific Islander 5- to 24-year-olds are Asian. This combined category for Asians/Pacific Islanders.

# **Symbols**

In accordance with the NCES Statistical Standards, many tables in this volume use a series of symbols to alert the reader to special statistical notes. These symbols, and their meanings, are as follows:

- Not available.
- † Not applicable.
- # Rounds to zero.

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) for this estimate is 50 percent or greater.

\* *p* < .05 Significance level.

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# The Condition of Education 2015 At a Glance

More information is available at <u>nces.ed.gov/programs/coe</u>.

Educational Attainment	2013	2014	Change between years
Percentage of 25- to 29-year-olds with selected levels of educational attainment			
High school completion or higher	90%	91%	
Bachelor's or higher degree	34%	34%	
Master's or higher degree	7%	8%	
International Educational Attainment	2011	2012	
Percentage of the population 25 to 34 years old who completed high school			
United States	89%	89%	
Organization for Economic Cooperation and Development (OECD) countries	82%	83%	
Percentage of the population 25 to 34 years old who attained a bachelor's or higher degree			
United States	33%	34%	
OECD countries	29.5%	30.3%	
Annual Earnings of Young Adults	2012	2013	
Median annual earnings for 25- to 34-year-olds <sup>1</sup>			
Total	\$38,600	\$40,000	
With less than high school completion	\$23,200	\$23,900	
Who completed high school as highest level	\$30,400	\$30,000	
Who attained a bachelor's or higher degree	\$50,700	\$50,000	
Employment Rates and Unemployment Rates by Educational Attainment	2013	2014	
Unemployment rates of 25- to 34-year-olds			
Total	8.0%	7.4%	
With less than high school completion	15.1%	13.7%	
Who completed high school as highest level	12.1%	10.5%	
Who attained a bachelor's or higher degree	3.6%	3.7%	
Children Living in Poverty	2012	2013	
Percentage of 5- to 17-year-old children in families living in poverty	21.0%	20.7%	

			Change
Enrollment Trends by Age	2012	2013	between years
Percentage of persons enrolled in school			
3- and 4-year-olds	54%	55%	
5- and 6-year-olds	93%	94%	
7- to 13-year-olds	98%	98%	
14- and 15-year-olds	98%	98%	
16- and 17-year-olds	96%	94%	▼
18- and 19-year-olds	69%	67%	
20- to 24-year-olds	40%	39%	
25- to 29-year-olds	14%	13%	
30- to 34-year-olds	7%	7%	
Preprimary Enrollment	2012	2013	
Percentage of children enrolled in preprimary education			
3-year-olds	41%	42%	
4-year-olds	66%	68%	
5-year-olds	85%	84%	
Public School Enrollment	2011–12	2012–13	
Number of students enrolled in public schools	49.5 million	49.8 million	
Prekindergarten through grade 8	34.8 million	35.0 million	
Grades 9 through 12	14.7 million	14.8 million	
Charter School Enrollment	2011–12	2012–13	
Number of students in public charter schools	2.1 million	2.3 million	
Percentage of public school students in charter schools	4.2%	4.6%	
Number of public charter schools	5,700	6,100	
Percentage of public schools that are charter schools	5.8%	6.2%	
Private School Enrollment	2009–10	2011–12	
Total number of students enrolled in private schools	5.5 million	5.3 million	
Prekindergarten through grade 8	4.2 million	4.0 million	
Grades 9 through 12	1.31 million	1.29 million	
Percentage of all students in private schools	10.0%	9.6%	•

			Change
Racial/Ethnic Enrollment in Public Schools	2011–12	2012–13	between years
Percentage of public school students			
White	52%	51%	▼
Black	15.8%	15.7%	▼
Hispanic	23.7%	24.3%	
Asian/Pacific Islander	5.07%	5.13%	
American Indian/Alaska Native	1.11%	1.07%	▼
Two or more races	2.6%	2.8%	
English Language Learners	2011–12	2012–13	
Percentage of public school students who are English language learners	9.1%	9.2%	
Children and Youth With Disabilities	2011–12	2012–13	
Number of public school students 3 to 21 years old receiving special education services	6.40 million	6.43 million	
Percentage of public school students 3 to 21 years old receiving special education services	12.93%	12.95%	
Undergraduate Enrollment	2012–13	2013–14	
Total enrollment	17.7 million	17.5 million	$\checkmark$
Full-time enrollment	11.1 million	10.9 million	▼
Part-time enrollment	6.6 million	6.5 million	▼
Percentage enrolled in any distance education course	25.8%	26.5%	
Percentage enrolled exclusively in distance education	11.27%	11.34%	
Postbaccalaureate Enrollment	2012–13	2013–14	
Total enrollment	2.91 million	2.90 million	$\bullet$
Full-time enrollment	1.6 million	1.7 million	
Part-time enrollment	1.3 million	1.2 million	$\bullet$
Percentage enrolled in any distance education course	30%	31%	
Percentage enrolled exclusively in distance education	22%	23%	
Elementary and Secondary Education			
Characteristics of Traditional Public and Public Charter Schools	2011–12	2012–13	Change between years
Traditional public schools Total number of traditional public schools	92,632	92,375	▼
Percentage of traditional public schools	(10)	(00)	<u> </u>
With more than 50% White enrollment	61%	60%	<b>•</b>
With more than 50% Black enrollment	9.4%	9.3%	•
With more than 50% Hispanic enrollment	14.6%	14.9%	
See notes at end of table.			

LEGEND:  $\blacktriangle$  = Higher,  $\blacktriangledown$  = Lower, Blank = Not measurably different

Public charter schools	2011–12	2012–13	Change between years
Total number of public charter schools	5,696	6,079	
Percentage of public charter schools	5,070	0,077	
With more than 50% White enrollment	37.5%	36.6%	-
With more than 50% Black enrollment	25.3%	30.0 <i>%</i> 24.9%	-
	20.3%	24.9%	•
With more than 50% Hispanic enrollment Concentration of Public School Students Eligible for Free or	ZZ /0	23/0	
Reduced-Price Lunch	2011–12	2012–13	
Percentage of students attending high-poverty schools <sup>2</sup>	19%	24%	
Rates of School Crime	2012	2013	
Nonfatal victimization rate per 1,000 students			
Victimization occurred at school	52	55	
Victimization occurred away from school	38	30	
Teachers and Pupil/Teacher Ratios	2011–12	2012–13	
Number of public school teachers	3.10 million	3.11 million	
Pupil/teacher ratio at public schools	15.96	16.01	
Number of private school teachers	421,000	414,000	▼
Pupil/teacher ratio at private schools	12.5	12.5	
Public School Revenue Sources <sup>1</sup>	2010–11	2011–12	
Total revenues	\$642 billion	\$620 billion	▼
Federal sources	\$80 billion	\$63 billion	▼
State sources	\$284 billion	\$280 billion	▼
Local sources	\$278 billion	\$277 billion	▼
Public School Expenditures <sup>1</sup>	2010–11	2011–12	
Total expenditures	\$642 billion	\$621 billion	▼
Current expenditures per student	\$11,332	\$11,014	▼
			Difference
Education Expanditures by Country (2011)	ше		between the
Education Expenditures by Country (2011)	U.S.	OECD	U.S. and OECD
Expenditure per full-time-equivalent (FTE) student	Ċ11 O /1	60 700	*
Elementary and secondary education	\$11,841	\$8,789	
Postsecondary education	\$26,021	\$13,619	

Reading Performance	2011	2013	Change between years
Percentage of students who scored at or above <i>Proficient</i> <sup>3</sup>			
4th-grade	34%	35%	
8th-grade	34%	36%	
	2009	2013	
12th-grade	38%	38%	
Mathematics Performance	2011	2013	
Percentage of students who scored at or above <i>Proficient</i> <sup>3</sup>			
4th-grade	40%	42%	
8th-grade	35%	35%	
	2009	2013	
12th-grade	26%	26%	
			Difference between the U.S. average
	U.S. average	International average	and the international
International Assessments	score	score	average
Program for International Student Assessment (2012)			
Mathematics literacy of 15-year-olds	481	494	▼
Trends in International Mathematics and Science Study (2011)			
Mathematics scores of 4th-grade students	541	500	
Mathematics scores of 8th-grade students	509	500	
Science scores of 4th-grade students	544	500	
Science scores of 8th-grade students	525	500	
Progress in International Reading Literacy Study (2011)			
Reading literacy of 4th-grade students	556	500	
High School Coursetaking	2005	2009	Change between years
Percentage of high school graduates who took selected mathematics courses	2000	2000	Service for your
Algebra II/trigonometry	71%	76%	
Analysis/precalculus	29%	35%	
Percentage of high school graduates who took selected science courses			
Biology and chemistry	64%	68%	
Biology, chemistry, and physics	27%	30%	

Public High School Graduation Rates	2010–11	2011–12	Change between years
Number of graduates with a regular diploma	3.14 million	3.15 million	
Graduation rate <sup>4</sup>	80%	81%	
Status Dropout Rates	2012	2013	-
Percentage of 16- to 24-year-olds not enrolled in school who have	2012	2010	
not completed high school	7%	7%	
Immediate Transition to College	2012	2013	
Percentage of recent high school graduates enrolled in college	66%	66%	
2-year institutions	29%	24%	$\checkmark$
4-year institutions	37%	42%	
Postsecondary Education			
Characteristics of Postsecondary Institutions	2012–13	2013–14	Change between years
Total number of institutions with first-year undergraduates	4,295	4,294	<b>V</b>
Number of 4-year institutions with first-year undergraduates	2,609	2,634	, i i i i i i i i i i i i i i i i i i i
Number of 2-year institutions with first-year undergraduates	1,686	1,660	- -
Characteristics of Postsecondary Students	2012–13	2013–14	· · ·
Total enrollment	17.7 million	17.5 million	•
4-year institutions			
Total undergraduate enrollment	10.6 million	10.5 million	•
Number of undergraduates enrolled full time	8.2 million	8.1 million	•
Percentage of undergraduates enrolled full time	77.17%	77.15%	•
2-year institutions			
, Total undergraduate enrollment	7.2 million	7.0 million	▼
Number of undergraduates enrolled full time	2.9 million	2.8 million	▼
Percentage of undergraduates enrolled full time	41.1%	40.7%	▼
Degrees Conferred by Public and Private Institutions	2011–12	2012–13	
Number of degrees/certificates conferred by postsecondary institutions			
Certificates	989,061	966,084	$\checkmark$
Associate's degrees	1,021,718	1,006,961	▼
Bachelor's degrees	1,792,163	1,840,164	
Master's degrees	755,967	751,751	▼
Doctor's degrees	170,217	175,038	

Undergraduate Degree Fields	2011–12	2012–13	Change between years
Number of bachelor's degrees awarded			,
Business	367,200	360,800	▼
Health professions and related programs	163,700	181,100	
Social sciences and history	178,500	177,800	▼
Graduate Degree Fields	2011–12	2012–13	
Number of master's degrees awarded			
Business	191,600	188,600	$\blacksquare$
Education	179,000	164,600	$\blacksquare$
Health professions and related programs	84,400	90,900	
Price of Attending an Undergraduate Institution	2011–12	2012–13	
Average net price at 4-year institutions <sup>1</sup>			
Public, in-state	\$12,755	\$12,894	
Private nonprofit	\$24,213	\$24,433	
Private for-profit	\$22,130	\$21,742	$\checkmark$
Grants and Loan Aid to Undergraduate Students	2011–12	2012–13	
Percentage of students receiving any financial aid at 4-year institutions	85.3%	85.0%	•
Percentage of students receiving any financial aid at 2-year institutions	79.5%	78.3%	•
Postsecondary Revenues by Source	2011–12	2012–13	
Revenue from tuition and fees per FTE student <sup>1</sup>			
Public institutions	\$6,163	\$6,415	
Private nonprofit institutions	\$19,632	\$19,866	
Private for-profit institutions	\$15,413	\$16,135	
Expenses of Postsecondary Institutions	2011–12	2012–13	
Instruction expenses per FTE student <sup>1</sup>			
Public institutions	\$7,625	\$7,814	
Private nonprofit institutions	\$16,265	\$16,432	
Private for-profit institutions	\$3,597	\$3,893	
Characteristics of Postsecondary Faculty	2011–12	2013–14	
Number of full-time instructional faculty	762,100	791,400	
Number of part-time instructional faculty	762,400	752,700	$\blacksquare$

Student Loan Volume and Default Rate	2011 12	2012–13	Change
	2011–12		between years
Average student loan amount <sup>1</sup>	\$6,900	\$7,000	
	Fiscal year 2010	Fiscal year 2011	
3-year default rate <sup>5</sup>	14.7%	13.7%	▼
Institutional Retention and Graduation Rates for Undergraduates	2011–12	2012–13	
4-year institutions			
Retention rate of first-time undergraduates	79%	80%	
Graduation rate (within 6 years of starting program) of first- time, full-time undergraduates	59.2%	59.4%	
2-year institutions			
Retention rate of first-time undergraduates	59%	60%	
Graduation rate (within 3 years of starting program) of first- time, full-time undergraduates	31%	29%	▼

<sup>1</sup> Data are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI).

<sup>2</sup> A high-poverty school is defined as a public school where more than 75 percent of the students are eligible for free or reduced-price lunch.

<sup>3</sup> *Proficient* represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.

<sup>4</sup> The graduation rate is based on the *Averaged Freshman Graduation Rate* (AFGR), which is the number of high school diplomas awarded expressed as a percentage of the estimated freshman class 4 years earlier.

<sup>5</sup>The 3-year cohort default rate is the percentage of students who entered repayment during a given fiscal year and defaulted within the second following fiscal year.

NOTE: All calculations within the At a Glance are based on unrounded numbers. Race categories exclude persons of Hispanic ethnicity.

SOURCE: The Condition of Education 2015.

# Highlights From The Condition of Education 2015

# Spotlights

# Kindergartners' Approaches to Learning Behaviors and Academic Outcomes

In the fall of 2010, about 26 percent of first-time kindergartners were rated by their teachers as demonstrating positive approaches to learning behaviors "very often," 47 percent were rated as demonstrating these behaviors "often," 25 percent were rated as demonstrating them "sometimes," and 1 percent were rated as "never" demonstrating them. Fall kindergarten Approaches to Learning scores were positively associated with reading, mathematics, and science scores in kindergarten and first grade.

# **Disparities in Educational Outcomes Among Male Youth**

In 2013, the percentage of males ages 25–29 who had completed a bachelor's or higher degree was higher for Asians (55 percent) than for Whites (37 percent), those of Two or more races (29 percent), Blacks (17 percent), and Hispanics (13 percent). This percentage was also higher for White males and males of Two or more races than for their Hispanic and Black peers.

# Postsecondary Attainment: Differences by Socioeconomic Status

A smaller percentage of students of low socioeconomic status (SES) than students of middle SES attained a bachelor's or higher degree within 8 years of high school completion (14 vs. 29 percent), and percentages for both groups were smaller than the percentage of high-SES students who attained this level of education (60 percent).

# **Population Characteristics**

# 🗢 ATTAINMENT

# **Educational Attainment**

In 2014, some 91 percent of 25- to 29-year-olds had received at least a high school diploma or its equivalent. Between 1990 and 2014, the size of the White-Black gap in attainment of a high school diploma or its equivalent narrowed from 8 to 4 percentage points, and the size of the White-Hispanic gap narrowed from 32 to 21 percentage points.

# **International Educational Attainment**

The percentage of 25- to 64-year-olds who had earned a bachelor's or higher degree was higher in 2012 than in 2001 in the United States (33 vs. 28 percent) and across OECD countries (24 vs. 15 percent).

# $\mathsf{S}$ economic outcomes

# **Annual Earnings of Young Adults**

In 2013, young adults with a bachelor's degree earned more than twice as much as those without a high school credential (\$48,500 vs. \$23,900) and 62 percent more than young adult high school completers (\$48,500 vs. \$30,000).

# **Employment Rates and Unemployment Rates by Educational Attainment**

The percentage of the adult population who were employed was higher in 2014 than at the end of the recent recession in 2010, but lower than before the recession began in 2008.

# The demographics

# **Children Living in Poverty**

In 2013, approximately 21 percent of school-age children were in families living in poverty. The percentage of school-age children living in poverty ranged across the United States from 9 percent in New Hampshire to 33 percent in Mississippi.

# Participation in Education

# thin ALL AGES

# **Enrollment Trends by Age**

In 2013, some 94 percent of 5- to 6-year-olds and 98 percent of 7- to 13-year-olds were enrolled in elementary or secondary school. In that same year, 47 percent of 18- to 19-year-olds and 39 percent of 20- to 24-year-olds were enrolled in postsecondary education. Although the total school enrollment rate of most age groups from 3 to 34 did not change measurably between 2012 and 2013, the enrollment rate of 16- to 17-year-olds was 2 percentage points lower in 2013 than in 2012.

# OR PREPRIMARY EDUCATION

# **Preprimary Enrollment**

The percentage of 3- to 5-year-olds enrolled in preprimary programs increased from 59 to 64 percent between 1990 and 2000, but there has been no measurable increase since then. The percentage of these children who attended full-day programs increased from 39 to 60 percent between 1990 and 2013 overall, although the 2013 full-day enrollment rate was not measurably different from the 2012 rate.

# ELEMENTARY/SECONDARY ENROLLMENT

# **Public School Enrollment**

From school years 2012–13 through 2024–25, overall public elementary and secondary school enrollment is projected to increase by 6 percent (from 49.8 million to 52.9 million students), with changes across states ranging from an increase of 26 percent in Nevada to a decrease of 11 percent in West Virginia.

# **Charter School Enrollment**

From school year 1999–2000 to 2012–13, the number of students enrolled in public charter schools increased from 0.3 million. During this period, the percentage of public school students who attended charter schools increased from 0.7 to 4.6 percent.

# **Private School Enrollment**

Private school enrollment in prekindergarten through grade 12 increased from 5.9 million in 1995–96 to 6.3 million in 2001–02, then decreased to 5.3 million in 2011–12. The percentage of all students in private schools decreased from 12 percent in 1995–96 to 10 percent in 2011–12.

# **Racial/Ethnic Enrollment in Public Schools**

From fall 2002 through fall 2012, the number of White students enrolled in public elementary and secondary schools decreased from 28.6 million to 25.4 million, and their share of public school enrollment decreased from 59 to 51 percent. In contrast, the number of Hispanic students enrolled during this period increased from 8.6 million to 12.1 million students, and their share of public school enrollment increased from 18 to 24 percent.

# **English Language Learners**

The percentage of public school students in the United States who were English language learners (ELL) was higher in school year 2012–13 (9.2 percent) than in 2002–03 (8.7 percent) and in 2011–12 (9.1 percent). In 2012–13, five of the six states with the highest percentages of ELL students in their public schools were located in the West.

# **Children and Youth With Disabilities**

The number of children and youth ages 3–21 receiving special education services was 6.4 million, or about 13 percent of all public school students, in 2012–13. Some 35 percent of students receiving special education services had specific learning disabilities.

# POSTSECONDARY ENROLLMENT

#### **Undergraduate Enrollment**

Total undergraduate enrollment in degree-granting postsecondary institutions was 17.5 million students in fall 2013, an increase of 46 percent from 1990, when it was 12.0 million students. By 2024, total undergraduate enrollment is projected to increase to 19.6 million students.

# Postbaccalaureate Enrollment

Total enrollment in postbaccalaureate degree programs was 2.9 million students in fall 2013. Between 2013 and 2024, postbaccalaureate enrollment is projected to increase by 20 percent to 3.5 million students.

# **Elementary and Secondary Education**

# SCHOOL CHARACTERISTICS AND CLIMATE

# **Characteristics of Traditional Public and Public Charter Schools**

In school year 2012–13, the majority of charter schools (57 percent) were in cities, compared with 25 percent of traditional public schools. In contrast, 11 percent of charter schools were in rural areas, compared with 29 percent of traditional public schools.

# Concentration of Public School Students Eligible for Free or Reduced-Price Lunch

In school year 2012–13, higher percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty public schools than did Pacific Islander students, students of Two or more races, Asian students, and White students (ordered by descending percentages).

#### **Rates of School Crime**

Through nearly two decades of decline, the nonfatal victimization rate for 12- to 18-year-old students at school fell from 181 crimes per 1,000 students in 1992 to 55 per 1,000 students in 2013. The nonfatal victimization rate away from school for these students also declined from 173 to 30 crimes per 1,000 students during the same period.

# **Teachers and Pupil/Teacher Ratios**

Of the 6.2 million staff members in public elementary and secondary schools in fall 2012, some 3.1 million, or 50 percent, were teachers. The pupil/teacher ratio in public schools decreased over time from 26.9 students per teacher in 1955 to 17.9 in 1985, and then further declined to 15.3 in 2008. In the most recent years, the pupil/teacher ratios in 2010, 2011, and 2012 (all 16.0) were higher than the ratio in 2009 (15.4).

# **\$** FINANCE

#### **Public School Revenue Sources**

From school years 2001–02 through 2011–12, total elementary and secondary public school revenues increased from \$553 billion to \$620 billion (in constant 2013–14 dollars). During the most recent period from 2010–11 through 2011–12, total revenues for public elementary and secondary schools decreased by about \$22 billion, or more than 3 percent.

#### **Public School Expenditures**

From 2000–01 to 2011–12, current expenditures per student in public elementary and secondary schools increased by 11 percent, after adjusting for inflation. Current expenditures per student peaked in 2008–09 at \$11,537 and have decreased each year since then. The amount for 2011–12 (\$11,014) was 3 percent less than the amount for 2010–11 (\$11,332).

#### **Education Expenditures by Country**

In 2011, the United States spent \$11,841 per full-time-equivalent (FTE) student on elementary and secondary education, an amount 35 percent higher than the OECD average of \$8,789. At the postsecondary level, U.S. expenditures per FTE student were \$26,021, almost twice as high as the OECD average of \$13,619.

# 🥕 ASSESSMENTS

### **Reading Performance**

The average grade 8 reading score was higher in 2013 than in 2011, according to data from the National Assessment of Educational Progress. At grade 4, the average score in 2013 was not measurably different from the score in 2011. Similarly, at grade 12 the average score in 2013 was not measurably different from that in 2009.

# **Mathematics Performance**

The average 4th- and 8th-grade mathematics scores in 2013 were higher than the scores in all previous assessment years, according to data from the National Assessment of Educational Progress. At grade 12, the average mathematics score in 2013 was higher than in 2005 but not measurably different from the score in 2009.

# **Reading and Mathematics Score Trends**

NAEP long-term trend results indicate that the average reading and mathematics achievement of 9- and 13-year-olds improved between the early 1970s and 2012; however, only 13-year-olds made score gains from 2008 to 2012, and they did so in both subject areas. Average reading and mathematics achievement for 17-year-olds did not change significantly between the early 1970s and 2012 or between 2008 and 2012.

#### **International Assessments**

Among 15-year-old students, 29 education systems had higher average scores than the United States in mathematics literacy, 22 had higher average scores in science literacy, and 19 had higher average scores in reading literacy, according to the 2012 Program in International Student Assessment (PISA).

# STUDENT EFFORT, PERSISTENCE, AND PROGRESS

# **High School Coursetaking**

The percentages of high school graduates who had taken mathematics courses in algebra I, geometry, algebra II/ trigonometry, analysis/precalculus, statistics/probability, and calculus increased from 1990 to 2009. The percentages of high school graduates who had taken science courses in chemistry and physics also increased between 1990 and 2009.

# **Public High School Graduation Rates**

In school year 2011–12, some 3.1 million public high school students, or 81 percent, graduated on time with a regular diploma. Among all public high school students, Asian/Pacific Islander students had the highest graduation rate (93 percent), followed by Whites (85 percent), Hispanics (76 percent), and American Indians/Alaska Natives and Blacks (68 percent each).

# **Status Dropout Rates**

The status dropout rate decreased from 12 percent in 1990 to 7 percent in 2013, with most of the decline occurring since 2000. From 1990 to 2013, the Hispanic status dropout rate declined from 32 percent to 12 percent, while Black and White status dropout rates decreased by 6 and 4 percentage points, respectively. Nevertheless, the Hispanic status dropout rate in 2013 (12 percent) remained higher than the White (5 percent) and Black (7 percent) status dropout rates.

# → TRANSITION TO COLLEGE

# Immediate College Enrollment Rate

The immediate college enrollment rate increased from 60 percent in 1990 to 66 percent in 2013; however, this rate has decreased in recent years—down from 70 percent in 2009. In 2013, the immediate college enrollment rate for high school completers from high-income families (80 percent) was 31 percentage points higher than the rate for those from low-income families (49 percent). The 2013 gap between high school completers from high- and low-income families did not measurably differ from the corresponding gap in 1990 (30 percentage points).

# **H** CHARACTERISTICS OF POSTSECONDARY STUDENTS

# **Characteristics of Degree-Granting Postsecondary Institutions**

In 2013–14, some 29 percent of 4-year institutions had open admissions policies, 26 percent accepted three-quarters or more of their applicants, 32 percent accepted from one-half to less than three-quarters of their applicants, and 13 percent accepted less than one-half of their applicants.

#### **Characteristics of Postsecondary Students**

Some 10.5 million undergraduate students attended 4-year institutions in fall 2013, while 7.0 million attended 2-year institutions. At 4-year institutions in fall 2013, some 77 percent of undergraduate students attended full time, compared with 41 percent at 2-year institutions.

# 📚 PROGRAMS AND COURSES

#### **Undergraduate Degree Fields**

From 2002–03 to 2012–13, the number of associate's degrees awarded increased by 59 percent, from 634,000 to over 1 million, and the number of bachelor's degrees awarded increased by 36 percent, from 1.3 million to 1.8 million.

#### **Graduate Degree Fields**

Between academic years 2002–03 and 2012–13, the number of master's degrees awarded increased by 45 percent, from 519,000 to 752,000, and the number of doctor's degrees awarded increased by 44 percent, from 122,000 to 175,000.

# **I** FINANCE AND RESOURCES

#### Price of Attending an Undergraduate Institution

The average net price of attendance (total cost minus grant and scholarship aid) in 2012–13 (in constant 2013–14 dollars) for first-time, full-time students was \$12,890 at public, in-state 4-year institutions, \$24,430 at private nonprofit 4-year institutions, and \$21,740 at private for-profit 4-year institutions.

# Grants and Loan Aid to Undergraduate Students

The percentage of first-time, full-time undergraduate students at 4-year degree-granting institutions receiving financial aid increased from 80 percent in 2007–08 to 85 percent in 2012–13.

#### **Postsecondary Revenues by Source**

Between 2007–08 and 2012–13, revenues from tuition and fees per full-time-equivalent (FTE) student increased by 17 percent at public institutions (from \$5,478 to \$6,415, in constant 2013–14 dollars) and by 7 percent at private nonprofit institutions (from \$18,550 to \$19,866). At private for-profit institutions, revenues from tuition and fees were 7 percent higher in 2012–13 than in 2007–08 (\$16,135 vs. \$15,110).

#### **Expenses of Postsecondary Institutions**

In 2012–13, instruction expenses per full-time-equivalent (FTE) student were \$7,814 (in constant 2013–14 dollars) at public institutions, \$16,432 at private nonprofit institutions, and \$3,893 at private for-profit institutions. Instruction was the largest expense category at public and private nonprofit institutions and the second largest expense category at private for-profit institutions.

#### **Characteristics of Postsecondary Faculty**

From fall 1993 to fall 2013, the number of full-time faculty in degree-granting postsecondary institutions increased by 45 percent (from 545,700 to 791,400), while the number of part-time faculty increased by 104 percent (from 369,800 to 752,700). As a result of the faster increase in the number of part-time faculty, the percentage of faculty who were part time increased from 40 to 49 percent during this period.

# Student Loan Volume and Default Rates

In 2012–13, the average student loan amount of \$7,000 represented a 39 percent increase over the 2000–01 amount of \$5,100 (in constant 2013–14 dollars). Of the 4.7 million students who entered the repayment phase on their student loans in fiscal year (FY) 2011, some 651,000, or 13.7 percent, defaulted before the end of FY 2013.

# ✓ COMPLETIONS

# Institutional Retention and Graduation Rates for Undergraduate Students

About 59 percent of students who began seeking a bachelor's degree at a 4-year institution in fall 2007 completed that degree within 6 years. The graduation rate for females (62 percent) was higher than the rate for males (56 percent).

# **Degrees Conferred by Public and Private Institutions**

The number of postsecondary degrees conferred at each degree level increased between 2002–03 and 2012–13. The certificates below the associate's degree level awarded during this period increased by 49 percent, associate's degrees increased by 59 percent, bachelor's degrees increased by 36 percent, master's degrees increased by 45 percent, and doctor's degrees increased by 44 percent.

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This chapter of *The Condition of Education* features spotlight indicators on selected issues of current policy interest.

This chapter's indicators, as well as spotlight indicators and special analyses from previous editions, are available at *The Condition of Education* website: <u>http://nces.ed.gov/programs/coe</u>.



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## Kindergartners' Approaches to Learning Behaviors and Academic Outcomes

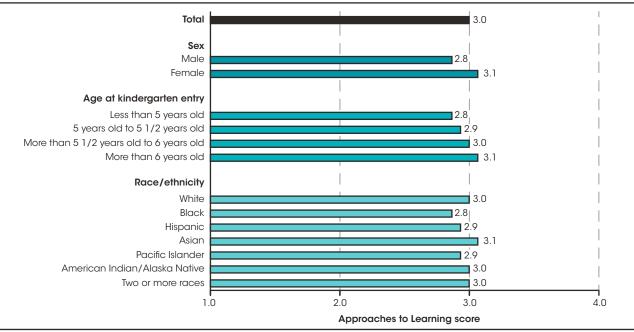
In the fall of 2010, about 26 percent of first-time kindergartners were rated by their teachers as demonstrating positive approaches to learning behaviors "very often," 47 percent were rated as demonstrating these behaviors "often," 25 percent were rated as demonstrating them "sometimes," and 1 percent were rated as "never" demonstrating them. Fall kindergarten Approaches to Learning scores were positively associated with reading, mathematics, and science scores in kindergarten and first grade.

At kindergarten entry, children differ not only in their cognitive knowledge and skills but also in their approaches to learning behaviors. In elementary school, positive approaches to learning include behaviors such as paying attention in class, completing tasks independently, organizing materials, and following classroom rules. Differences in children's approaches to learning behaviors have been observed by teachers in the beginning of kindergarten.<sup>1</sup> Research suggests that children who demonstrate positive approaches to learning behaviors have stronger academic skills, on average, in kindergarten and first grade.<sup>2</sup>

In the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011), teachers of kindergarten students reported on how students rate in seven approaches to learning behaviors: paying attention,

persisting in completing tasks, showing eagerness to learn new things, working independently, adapting easily to changes in routine, keeping belongings organized, and following classroom rules. Teachers assigned a rating of 1 (never), 2 (sometimes), 3 (often), or 4 (very often) for each of the seven items during the fall kindergarten round of the ECLS-K:2011. Following data collection, an average of the seven ratings was calculated to represent each child's fall kindergarten Approaches to Learning rating. This Spotlight describes differences in kindergartners' Approaches to Learning ratings in the beginning of their kindergarten year (fall 2010), with respect to characteristics of the children and their families. It also explores associations between children's initial Approaches to Learning category and their reading, mathematics, and science scores in kindergarten (fall 2010 and spring 2011) and first grade (spring 2012).<sup>3</sup>

## Figure 1. Average Approaches to Learning scores of first-time kindergartners, by sex, age at kindergarten entry, and race/ethnicity: Fall 2010

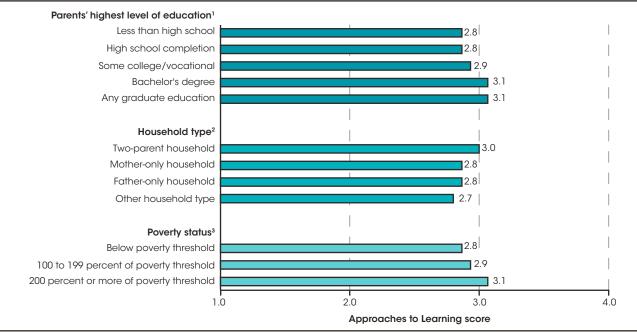


NOTE: The Approaches to Learning scale is based on teachers' reports on how students rate in seven areas: attentiveness, task persistence, eagerness to learn, learning independence, flexibility, organization, and ability to follow classroom rules. Possible scores on the scale range from 1 to 4, with higher scores indicating that a child exhibits positive learning behaviors more often. Following data collection, an average of the seven ratings was calculated to represent each child's fall kindergarten Approaches to Learning rating. Although rounded numbers are displayed, the figures are based on unrounded estimates. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011), Kindergarten-First Grade Restricted-Use Data File. See *Digest of Education Statistics 2014*, table 220.45.

In the fall 2010 kindergarten data collection, the average Approaches to Learning rating for first-time kindergartners was 3.0. Teachers gave higher ratings, on average, to female than to male kindergartners on the Approaches to Learning scale (3.1 vs. 2.8). Kindergartners who were over 5½ years old when they entered kindergarten received higher ratings than younger kindergartners. For example, the average ratings for kindergartners who were more than 6 years old at kindergarten entry (3.1) and those who were 5½ to 6 years old (3.0) were higher than the ratings for those who were less than 5 years old (2.8) and those who were 5 to 5½ years old at kindergarten entry (2.9). Average Approaches to Learning ratings were higher for Asian (3.1) and White kindergartners (3.0) than for Black (2.8) and Hispanic kindergartners (2.9). Hispanic kindergartners, American Indian/Alaska Native kindergartners (3.0), and kindergartners of Two or more races (3.0) also had higher ratings than Black kindergartners.

## Figure 2. Average Approaches to Learning scores of first-time kindergartners, by parents' highest level of education, household type, and poverty status: Fall 2010

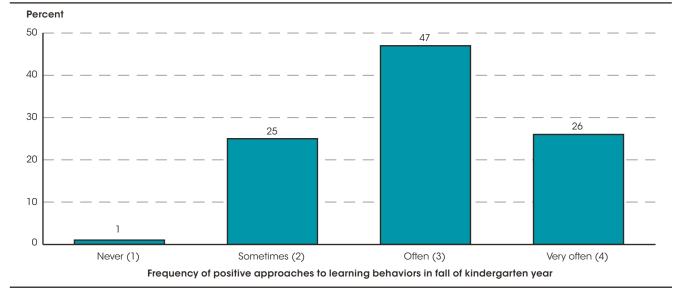


Parents' highest level of education is the highest level of education achieved by either of the parents or guardians in a two-parent household, by the only parent in a single-parent household, or by any guardian in a household with no parents.

<sup>2</sup> Two parents may refer to two biological parents, two adoptive parents, or one biological/adoptive parent and one other parent/partner. Single parent refers to one biological or adoptive parent only. Other household type refers to households without parents, in which the guardian or guardians may be related or unrelated to the child.

<sup>3</sup> Poverty status is based on preliminary U.S. Census income thresholds for 2010, which identify incomes determined to meet household needs, given family size and composition. For example, a family of three with one child was below the poverty threshold if its income was less than \$17,552 in 2010. NOTE: The Approaches to Learning scale is based on teachers' reports on how students rate in seven areas: attentiveness, task persistence, eagerness to learn, learning independence, flexibility, organization, and ability to follow classroom rules. Possible scores on the scale range from 1 to 4, with higher scores indicating that a child exhibits positive learning behaviors more often. Following data collection, an average of the seven ratings was calculated to represent each child's fall kindergarten Approaches to Learning rating. Although rounded numbers are displayed, the figures are based on unrounded estimates. SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011), Kindergarten–First Grade Restricted-Use Data File. See *Digest of Education Statistics 2014*, table 220.45.

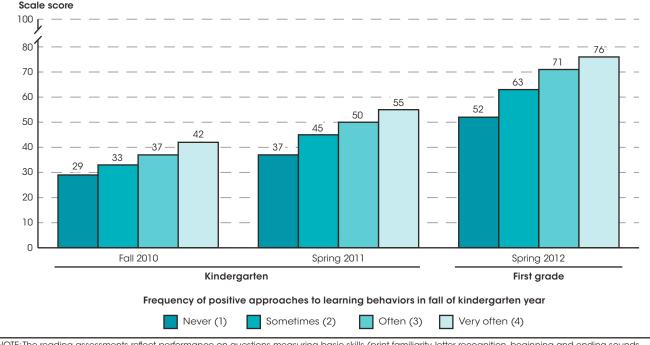
In the fall of kindergarten, first-time kindergartners whose parents' highest level of education was a bachelor's degree or any graduate education received higher Approaches to Learning ratings (both at 3.1), on average, than kindergartners whose parents had some college or vocational training (2.9), students whose parents completed high school (2.8), and students whose parents had completed less than high school (2.8). Kindergartners from two-parent households were rated higher (3.0) than their peers from single-parent, motheror father-only households (2.8) or other household types (2.7). With respect to household poverty status, the average Approaches to Learning rating was highest for kindergartners in households with incomes at or above 200 percent of the federal poverty level (3.1) and lowest for those in households with incomes below the federal poverty level (2.8).



## Figure 3. Percentage distribution of first-time kindergartners, by frequency of positive approaches to learning behaviors in fall of kindergarten year: Fall 2010

NOTE: The Approaches to Learning scale is based on teachers' reports on how students rate in seven areas: attentiveness, task persistence, eagerness to learn, learning independence, flexibility, organization, and ability to follow classroom rules. Possible scores on the scale range from 1 to 4, with higher scores indicating that a child exhibits positive learning behaviors more often. Fall Approaches to Learning scores were categorized into the anchor points on the original scale by rounding the mean score to the nearest whole number. Details may not sum to total because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011), Kindergarten-First Grade Restricted-Use Data File. See *Digest of Education Statistics 2014*, table 220.40.

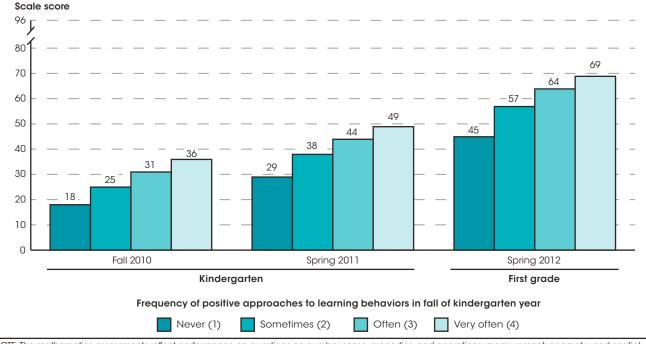
For the remaining sections of the Spotlight discussion, kindergartners' mean ratings on the Approaches to Learning scale in the fall of kindergarten were rounded to the nearest whole number so that students could be grouped into the original categories represented by the 4-point scale. For example, a student with an average rating of 2.4 would be categorized into the "sometimes" (value of 2) group. Overall, 26 percent of first-time kindergartners were rated by their teachers in the fall of kindergarten as demonstrating positive approaches to learning behaviors "very often" (average rating of 4), 47 percent were rated as demonstrating them "often" (average rating of 3), 25 percent were rated as demonstrating them "sometimes" (average rating of 2), and 1 percent were rated as "never" (average rating of 1) demonstrating positive approaches to learning behaviors.



## Figure 4. Average reading scale scores of fall 2010 first-time kindergartners, by frequency of positive approaches to learning behaviors in fall of kindergarten year: Fall 2010, spring 2011, and spring 2012

NOTE: The reading assessments reflect performance on questions measuring basic skills (print familiarity, letter recognition, beginning and ending sounds, rhyming words, and word recognition); vocabulary knowledge; and reading comprehension, including identifying information specifically stated in text (e.g., definitions, facts, and supporting details), making complex inferences from text, and considering the text objectively and judging its appropriateness and quality. Possible scores for the reading assessments range from 0 to 100. Frequency of positive approaches to learning behaviors is derived from kindergartners' fall 2010 Approaches to Learning scale scores. The Approaches to Learning scale is based on teachers' reports on how students rate in seven areas: attentiveness, task persistence, eagerness to learn, learning independence, flexibility, organization, and ability to follow classroom rules. Possible scores on the Approaches to Learning scale range from 1 to 4, with higher scores indicating that a child exhibits positive learning behaviors more often. Fall Approaches to Learning scores core to the nearest whole number. SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten-Class of 2010-11 (ECLS-K:2011), Kindergarten-First Grade Restricted-Use Data File. See *Digest of Education Statistics 2014*, table 220.40.

First-time kindergartners' average Approaches to Learning rating categories in the fall of kindergarten were positively associated with their reading and mathematics scores in kindergarten and first grade. In both subjects, students who received an average rating of "never" on the Approaches to Learning scale in the fall of kindergarten had the lowest scores at each time period, and those who had an average rating of "very often" in the fall of kindergarten had the highest reading and mathematics scores. For example, students who were rated as "never" demonstrating positive approaches to learning behaviors by teachers in the fall of kindergarten had an average spring first-grade reading score of 52 points, compared with an average score of 63 points for those with a rating of "sometimes," 71 points for those with a rating of "often," and 76 points for those with a rating of "very often."



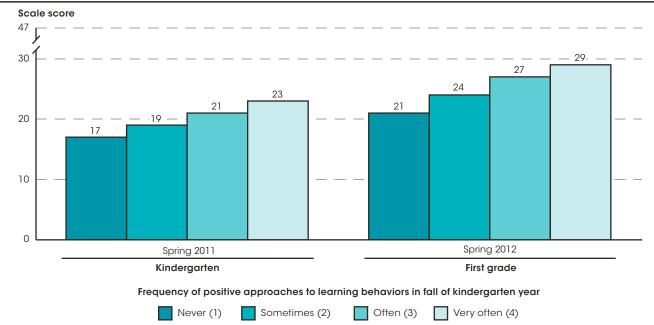
## Figure 5. Average mathematics scale scores of fall 2010 first-time kindergartners, by frequency of positive approaches to learning behaviors in fall of kindergarten year: Fall 2010, spring 2011, and spring 2012

NOTE: The mathematics assessments reflect performance on questions on number sense, properties, and operations; measurement; geometry and spatial sense; data analysis, statistics, and probability (measured with a set of simple questions assessing children's ability to read a graph); and prealgebra skills such as identification of patterns. Possible scores for the mathematics assessments range from 0 to 96. Frequency of positive approaches to learning behaviors is derived from kindergartners' fall 2010 Approaches to Learning scale scores. The Approaches to Learning scale is based on teachers' reports on how students rate in seven areas: attentiveness, task persistence, eagerness to learn, learning independence, flexibility, organization, and ability to follow classroom rules. Possible scores on the Approaches to Learning scale range from 1 to 4, with higher scores indicating that a child exhibits positive learning behaviors more often. Fall Approaches to Learning scores were categorized into the anchor points on the original scale by rounding the average score to the nearest whole number.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011), Kindergarten-First Grade Restricted-Use Data File. See *Digest of Education Statistics 2014*, table 220.40.

First-time kindergartners who received an average Approaches to Learning rating of "never" in the fall of kindergarten not only scored the lowest on the reading and mathematics assessments at each time point, but they also had not yet caught up by the next round of data collection to the performance at the prior assessment time of their peers who had received a rating of "very often" in the fall of kindergarten. For example, the average fall kindergarten mathematics scores for students with average Approaches to Learning ratings in the fall of kindergarten of "often" (31 points) or "very often" (36 points) were higher than the average spring kindergarten mathematics score (i.e., the score at the end of the kindergarten year) for students with an average Approaches to Learning rating of "never" in the fall of kindergarten (29 points).





NOTE: Science was not assessed in the fall of kindergarten. The science assessments reflect performance on questions on physical sciences, life sciences, environmental sciences, and scientific inquiry. Possible scores for the science assessments range from 0 to 47. Frequency of positive approaches to learning behaviors is derived from kindergartners' fall 2010 Approaches to Learning scale scores. The Approaches to Learning scale is based on teachers' reports on how students rate in seven areas: attentiveness, task persistence, eagerness to learn, learning independence, flexibility, organization, and ability to follow classroom rules. Possible scores on the Approaches to Learning scale range from 1 to 4, with higher scores indicating that a child exhibits positive learning behaviors more often. Fall Approaches to Learning scores were categorized into the anchor points on the original scale by rounding the average score to the nearest whole number.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011), Kindergarten-First Grade Restricted-Use Data File. See *Digest of Education Statistics 2014*, table 220.40.

Patterns of performance in science were consistent with those observed in reading and mathematics. First-time kindergartners who received an average Approaches to Learning rating of "never" in the fall of kindergarten had the lowest science scores in the spring of kindergarten (17 points) and in the spring of first grade (21 points), and those receiving a rating of "very often" in the fall of kindergarten had the highest scores in the spring of kindergarten (23 points) and in the spring of first grade (29 points).<sup>4</sup> In addition, the average spring kindergarten science score for students with a "very often" Approaches to Learning rating in the fall of kindergarten (23 points) was higher than the average spring first-grade science score (i.e., the score at the end of the following school year) for those students with an average rating of "never" in the fall of kindergarten (21 points).

#### **Endnotes:**

<sup>1</sup> Zill, N., and West, J. (2001). *Entering Kindergarten: A Portrait of American Children When They Begin School: Findings From the Condition of Education 2000* (NCES 2001-035). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

<sup>2</sup> Entwisle, D.R., and Alexander, K.L. (1998). Facilitating the Transition to First Grade: The Nature of Transition

and Research on Factors Affecting It. *The Elementary School Journal*, *98*(4): 351–364.

 <sup>3</sup> Fall 2011 first-grade scores are excluded from the Spotlight discussion because data were only collected from a subsample of ECLS-K:2011 students at that time period.
 <sup>4</sup> Science was not assessed in the fall of kindergarten.

**Reference tables:** *Digest of Education Statistics 2014*, tables 220.40 and 220.45

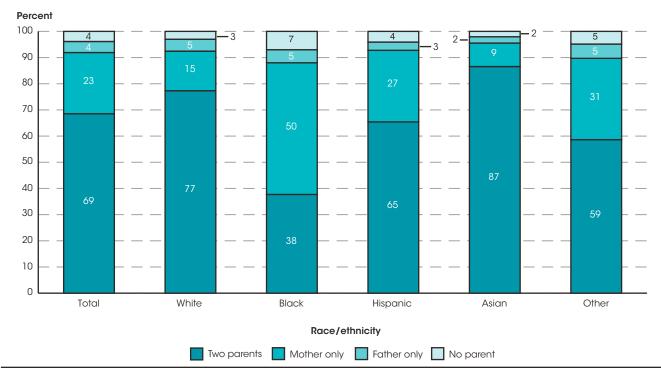
**Related indicators:** Preprimary Enrollment (indicator 7), Kindergarten Entry Status: On-Time, Delayed-Entry, and Repeating Kindergartners [*The Condition of Education 2013 Spotlight*] Glossary: Educational attainment, Poverty, Racial/ethnic group

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## Disparities in Educational Outcomes Among Male Youth

In 2013, the percentage of males ages 25–29 who had completed a bachelor's or higher degree was higher for Asians (55 percent) than for Whites (37 percent), those of Two or more races (29 percent), Blacks (17 percent), and Hispanics (13 percent). This percentage was also higher for White males and males of Two or more races than for their Hispanic and Black peers.

The United States has seen progress in many areas related to the education of its young people. Despite these achievements, disparities in educational and other outcomes persist in the aggregate for male youth compared to their female peers in general, and for boys and young men of color in particular.<sup>1</sup> In February 2014, President Barack Obama launched My Brother's Keeper, an initiative designed to help address underlying issues and improve the expected life outcomes for those boys and young men of color who continue to struggle.<sup>2</sup> As part of this undertaking, the Federal Interagency Forum on Child and Family Statistics and many of its component agencies, including the U.S. Department of Education, were tasked with making available relevant statistics to track progress in closing gaps.<sup>3</sup> With a focus on boys and young men of color,<sup>4</sup> this Spotlight features a selection of national-level measures using data from the latest available year to describe the educational pipeline that young people navigate. Information on certain measures that tend to be associated with educational outcomes, such as household poverty, are also included to frame the education data in the broader context of young people's lives.





NOTE: "Two parents" refers to all children who have both a mother and father identified in the household, including biological, step, and adoptive parents. "Mother only" and "father only" refer to children for whom only one parent in the household has been identified, whether biological, step, or adoptive. Race categories exclude persons of Hispanic ethnicity. "Other" includes race and ethnicity categories such as American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander.

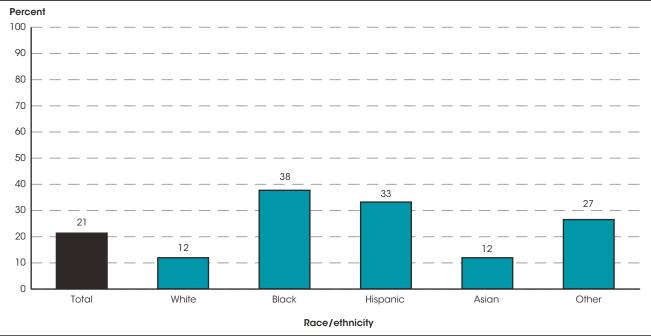
SOURCE: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, 2013. Retrieved May 2015, from http://mbk.ed.gov/data/.

#### For more information, see the Reader's Guide and the Guide to Sources.

Living with two parents is associated with positive educational, economic, and other life outcomes.<sup>5</sup> The majority of male youth ages 0–17 lived with two parents in 2013 (87 percent of Asians, 77 percent of Whites, and 65 percent of Hispanics); Black males were the exception:

38 percent lived with two parents. Instead, 50 percent of young Black males lived with only their mother. Families headed by single parents, particularly single mothers, are associated with a higher incidence of poverty.<sup>6</sup>



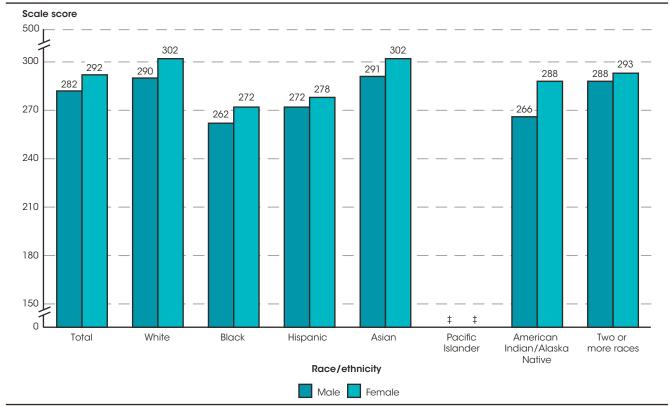


NOTE: Race categories exclude persons of Hispanic ethnicity. "Other" includes race and ethnicity categories such as American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander.

SOURCE: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, 2012. Retrieved May 2015, from <a href="http://mbk.ed.gov/data/">http://mbk.ed.gov/data/</a>.

The percentages of Black and Hispanic males ages 0–17 living in poverty in 2012 (38 and 33 percent, respectively) were higher than the percentages for Whites and Asians (12 percent each). There were no measurable differences between males and females (overall or within the racial/ ethnic groups) in the percentages of children living in different household types or the percentage living in poverty. Research suggests that living in poverty during early childhood is associated with lower than average academic performance that begins in kindergarten<sup>7</sup> and extends through elementary and high school. Living in poverty during early childhood is also associated with lower than average rates of school completion.<sup>1</sup>

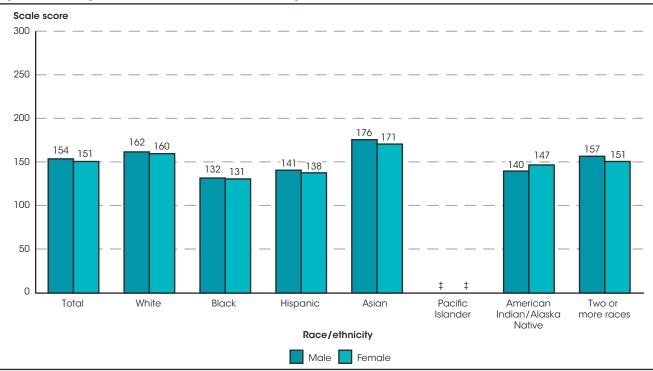
Regarding academic performance, gaps in learning behaviors, knowledge, and skills among children in various racial/ethnic groups are found as early as infancy, preschool, and kindergarten.<sup>8,9</sup> Differences in achievement are also observed in the National Assessment of Educational Progress (NAEP) at grades 4, 8, and 12.<sup>10</sup> As the 12th grade marks a key period of transition from school to postsecondary education and the labor force, reading and mathematics scores at grade 12 are highlighted here.





‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater. NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 2013. Retrieved May 2015, from http://mbk.ed.gov/data/.

NAEP reading scores<sup>11</sup> in 2013 were higher at grade 12 for female than male students overall (292 vs. 282) and for students in most of the racial/ethnic groups; however, the apparent difference for students of Two or more races was not significant. Among 12th-grade males, Asians (291), Whites (290), and those of Two or more races (288) scored higher, on average, than Hispanics (272), American Indians/Alaska Natives (266), and Blacks (262); Hispanic males also scored higher than Black males. Average reading scores were higher in 2013 than in 2002 for 12th-grade males who were White (290 vs. 281) and Asian (291 vs. 280), but no measurable differences were found for males in the other racial/ethnic groups for which data were available.





<sup>‡</sup> Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater. NOTE: The National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 300 at grade 12. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 2013. Retrieved May 2015, from <a href="http://mbk.ed.gov/data/">http://mbk.ed.gov/data/</a>.

In contrast to the reading scores, NAEP mathematics scores,<sup>12</sup> were higher overall for males than for females among students in 12th grade in 2013 (154 vs. 151). Math scores were also higher for male than female students among Whites (162 vs. 160) and Asians (176 vs. 171), but not measurably different between male and female students in the other racial/ethnic groups. Among male

12th-grade students, Asians had the highest average math score (176); scores were also higher for White males (162) and males of Two or more races (157) than for Hispanic (141), American Indian/Alaska Native (140), and Black males (132). In addition, Hispanic males scored higher than Black males in the 12th grade.

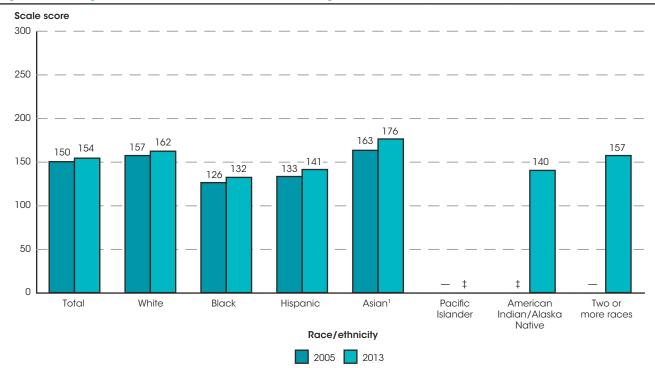


Figure 5. Average mathematics scale scores of male 12th-grade students, by race/ethnicity: 2005 and 2013

— Not available.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

<sup>1</sup> 2005 data include Pacific Islander students.

NOTE: The National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 300 at grade 12. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 2013. Retrieved May 2015, from <a href="http://mbk.ed.gov/data/">http://mbk.ed.gov/data/</a>.

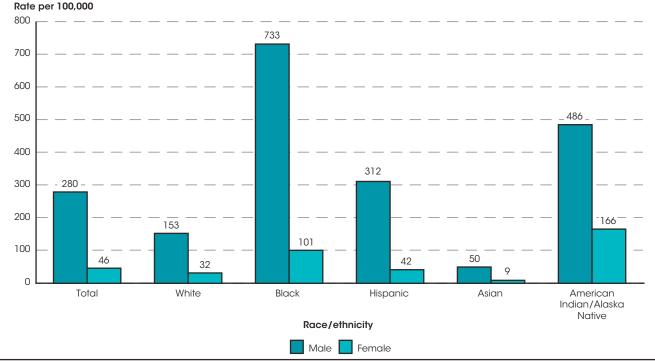
Average mathematics scores were higher in 2013 than in 2005 for 12th-grade males in each racial/ethnic group for which data were available: White (162 vs. 157),

Black (132 vs. 126), Hispanic (141 vs. 133), and Asian (176 vs. 163).

For more information, see the Reader's Guide and the Guide to Sources.

Following secondary education, many young people make transitions to employment, further schooling, or both. Some, however, engage in delinquent or criminal behaviors and enter the juvenile or adult correction systems. Research indicates that contact with these systems typically impacts youth negatively by, among other things, interrupting their education and increasing the likelihood that they will drop out of school altogether.<sup>13</sup> Criminal convictions can also have a negative impact on employment outcomes.<sup>14</sup>

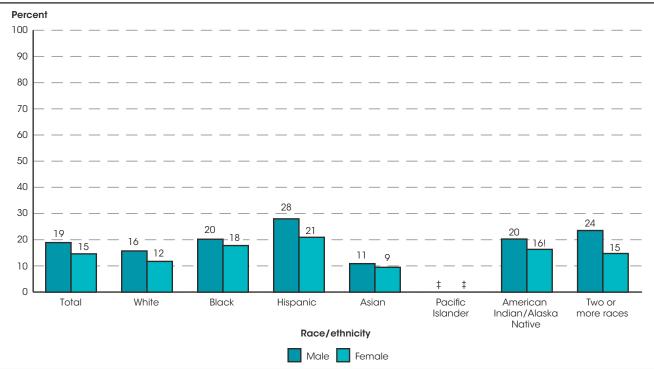




NOTE: Data from the Census of Juveniles in Residential Placement (CJRP) are based on a 1-day count of youth younger than age 21 held in a juvenile residential placement facility for an offense. CJRP does not include facilities used exclusively for abused/neglected children, mental health, or drug treatment. Nor are federal or adult jails or prisons included. Therefore, counts based on CJRP data do not include youth younger than 18 tried in criminal courts and confined in adult correctional facilities. Rate is per 100,000 persons ages 12 through the extended age of juvenile court jurisdiction in each state. More information about the extended age of juvenile court jurisdiction in each state. More Practice Islanders and those of Two or more races are not available. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, Census of Juveniles in Residential Placement, Easy Access to Juvenile Populations, 2011. Retrieved May 2015, from http://mbk.ed.gov/data/.

The rate of juvenile placement in residential correction facilities<sup>15</sup> in 2011 was about 6 times higher for males than females (280 per 100,000 persons vs. 46 per 100,000 persons). This rate was also considerably higher for Black male youth than for male or female youth of any other racial/ethnic group. The rate of residential placement for Black males in 2011 was 733 per 100,000, which was 1.5 times the rate for American Indian/Alaska Native males (486 per 100,000), more than twice the rate for Hispanic males (312 per 100,000), nearly 5 times the rate for White males (153 per 100,000), and over 14 times the rate for Asian males (50 per 100,000). Black males made up over one-third (35 percent) of all youth in residential placement in 2011.

Additionally, males ages 18–24 had notably higher rates of imprisonment in state facilities<sup>16</sup> than females in 2012: the rate was 1,060 per 100,000 persons for males versus 65 per 100,000 persons for females. Moreover, the imprisonment rate for Black males was substantially higher than the rate for males or females of any other racial/ethnic subgroup. For example, the 2012 imprisonment rate for Black males (3,102 per 100,000) was more than twice the rate for Hispanic males (1,165 per 100,000), nearly 7 times the rate for White males (446 per 100,000), and more than 26 times the rate for Black females (118 per 100,000). In 2012, Black males made up 41 percent of all imprisoned young adults ages 18–24 (see <u>My Brother's Keeper Data</u>).



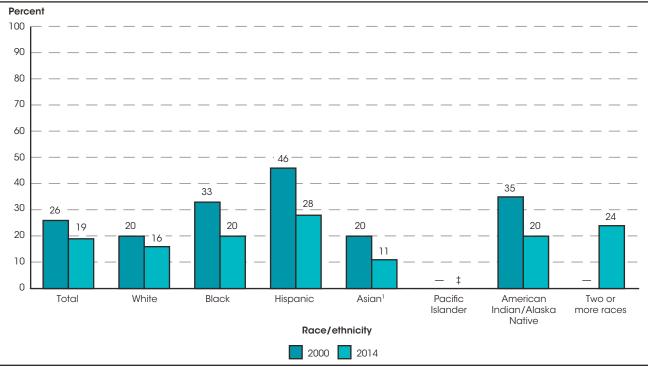


! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater. NOTE: Data are based on sample surveys of the civilian noninstitutional population. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, 2014. Retrieved May 2015, from http://mbk.ed.gov/data/

In terms of educational attainment,<sup>17</sup> a higher percentage of male than female 18- to 24-year-olds (young adults) had not completed high school in 2014; this was true both overall (19 vs. 15 percent) and among Whites (16 vs. 12 percent) and Hispanics (28 vs. 21 percent). There was no measurable difference between males

and females in the other racial/ethnic groups. Among male young adults, a higher percentage of Hispanics (28 percent) than Blacks (20 percent), Whites (16 percent), and Asians (11 percent) had not completed high school. In addition, this percentage was higher for Black males than for White males and Asian males.



# Figure 8. Percentage of male 18- to 24-year-olds who have not completed high school, by race/ethnicity: 2000 and 2014

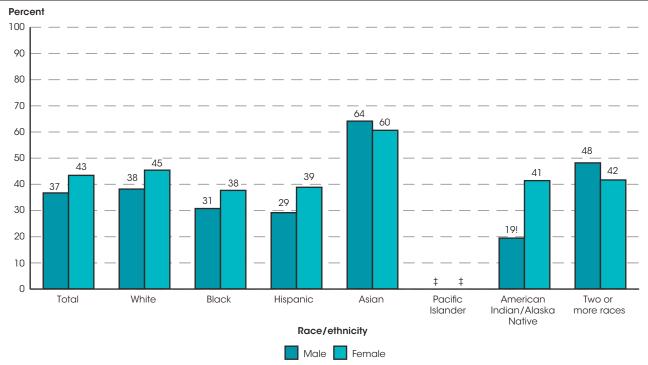
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‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater. <sup>1</sup> Data for 2000 include Pacific Islanders.

NOTE: Data are based on sample surveys of the civilian noninstitutional population. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, 2014. Retrieved May 2015, from <a href="http://mbk.ed.gov/data/">http://mbk.ed.gov/data/</a>.

From 2000 to 2014, the percentage of male young adults who had not completed high school decreased in most racial/ethnic groups: White (20 vs. 16 percent), Black (33 vs. 20 percent), Hispanic (46 vs. 28 percent), and

Asian (20 vs. 11 percent). The decreases for Blacks and Hispanics were among the largest observed for male young adults of any racial/ethnic group for which data were available.





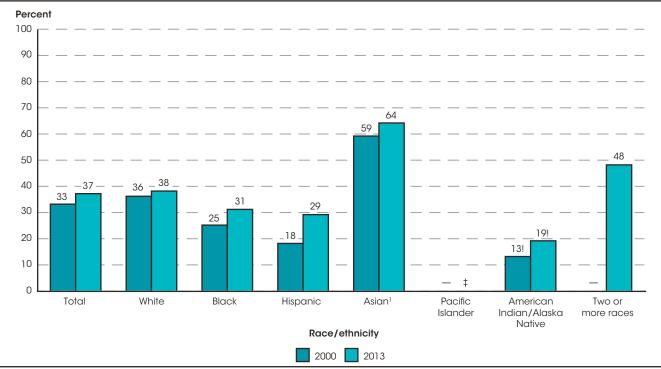
Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater. NOTE: Data are based on sample surveys of the civilian noninstitutional population. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, 2013. Retrieved May 2015, from <a href="http://mbk.ed.gov/data/">http://mbk.ed.gov/data/</a>.

People with higher levels of education tend to have better economic outcomes than their peers with lower levels of education.<sup>18</sup> For example, in 2014, the employment rate for persons ages 25–64 with a bachelor's or higher degree was 82 percent, compared with a rate of 73 percent for those with some college education but no degree and a rate of 55 percent for those with no high school credential (see *Digest of Education Statistics 2014*, table 501.50). Differences in progress toward achieving these higher education levels were noted among young adults in 2013. Among persons ages 18–24, a higher percentage of females

than males were enrolled in a 2- or 4-year college in 2013, both overall (43 vs. 37 percent) and among Whites, Blacks, Hispanics, and American Indians/Alaska Natives. Among male young adults, a higher percentage of Asians (64 percent) were enrolled in college than their peers who were of Two or more races (48 percent), White (38 percent), Black (31 percent), Hispanic (29 percent), and American Indian/Alaska Native (19 percent). This percentage was also higher for males who were of Two or more races and White males than for Black, Hispanic, and American Indian/Alaska Native males.





— Not available.

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

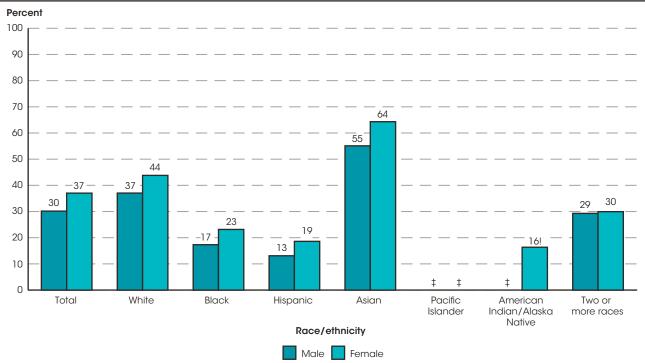
‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

<sup>1</sup> Data for 2000 include Pacific Islanders.

NOTE: Data are based on sample surveys of the civilian noninstitutional population. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, 2013. Retrieved May 2015, from <a href="http://mbk.ed.gov/data/">http://mbk.ed.gov/data/</a>.

From 2000 to 2013, the percentage of male young adults who were enrolled in college increased for Blacks (25 vs. 31 percent) and Hispanics (18 vs. 29 percent).

No measurable differences were observed for male young adults in the other racial/ethnic groups during this period.



# Figure 11. Percentage of 25- to 29-year-olds who have completed a bachelor's or higher degree, by race/ethnicity and sex: 2013

Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent. ‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

NOTE: Data are based on sample surveys of the civilian noninstitutional population. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, 2013. See *Digest of Education Statistics 2014*, table 104.20.

In 2013, the percentage of persons ages 25–29 who had completed a bachelor's or higher degree was also higher for females than for males overall (37 vs. 30 percent) and among Whites, Blacks, Hispanics, and Asians. For males ages 25–29, the percentage who had completed a bachelor's or higher degree was higher for Asians (55 percent) than for Whites (37 percent), those of Two or more races (29 percent), Blacks (17 percent), and Hispanics (13 percent). This percentage was higher for White males and males of Two or more races than for their Hispanic and Black peers; it was also higher for Black males than for Hispanic males.

From 2003 to 2013, the percentage of males ages 25–29 who had completed a bachelor's or higher degree increased for Whites (31 vs. 37 percent) and Hispanics (8 vs. 13 percent). No measurable differences were found during this period for males ages 25–29 who were Black, Asian, American Indian/Alaska Native, or of Two or more races.

#### **Endnotes:**

<sup>1</sup> Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., and Manning, E. (2012). *Higher Education: Gaps in Access and Persistence Study* (NCES 2012-046). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office.

<sup>2</sup> Presidential Memorandum—Creating and Expanding Ladders of Opportunity for Boys and Young Men of Color, <u>http://www.whitehouse.gov/the-press-</u><u>office/2014/02/27/presidential-memorandum-creating-</u><u>and-expanding-ladders-opportunity-boys-</u>, accessed December 2014.

<sup>3</sup> More information can be found at <u>http://mbk.ed.gov/</u><u>data/</u>.

<sup>4</sup> To a large extent, the phrase "boys and young men of color" refers to males who are Black, Hispanic, Native Hawaiian or Pacific Islander, and American Indian or Alaska Native. In most of the reference datasets, data are reported for each of these groups. In a few of the datasets, data are reported for Blacks, Hispanics, and persons of "Other" races and ethnicities. The "Other" group generally includes races and ethnicities such as Asian, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and Two or more races.

<sup>5</sup> Child Trends Databank. (2014). Family structure. Available at <u>http://www.childtrends.org/?indicators=family-</u> <u>structure</u>, accessed January 2015.

<sup>6</sup> U.S. Census Bureau, Historical Poverty Tables—Families. Retrieved February 2015, from <u>https://www.census.gov/</u> <u>hhes/www/poverty/data/historical/families.html</u>. <sup>7</sup> Mulligan, G.M., Hastedt, S., and McCarroll, J.C. (2012). *First-Time Kindergartners in 2010–11: First Findings From the Kindergarten Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11* (*ECLS-K:2011*) (NCES 2012-049). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

<sup>8</sup> *The Condition of Education 2009*: See Early Development of Children and Knowledge and Skills of Young Children.

**Reference tables:** My Brother's Keeper (<u>http://mbk.ed.gov/</u><u>data/</u>); *Digest of Education Statistics 2014*, tables 104.20 and 501.50

**Related indicators:** Postsecondary Attainment: Differences by Socioeconomic Status (Spotlight), Educational Attainment (indicator 1), Employment Rates and Unemployment Rates by Educational Attainment (indicator 4), Children Living in Poverty (indicator 5), Reading Performance (indicator 23), Mathematics Performance (indicator 24) <sup>9</sup> Federal Interagency Forum on Child and Family Statistics. *America's Children: Key National Indicators of Well-Being, 2013.* Washington, DC: U.S. Government Printing Office.

<sup>10</sup> More information can be found at <u>http://nces.ed.gov/</u><u>nationsreportcard/</u>.

<sup>11</sup> The National Assessment of Educational Progress (NAEP) assesses student performance in reading at grades 4, 8, and 12. NAEP reading scores range from 0 to 500.
<sup>12</sup> NAEP mathematics scores range from 0 to 500 for grades 4 and 8. At grade 12, mathematics scores range from 0 to 300, following a revision to the assessment in 2005.

<sup>13</sup> Holman, B. and Ziedenberg, J. (2006). *The Dangers of Detention: The Impact of Incarcerating Youth in Detention and Other Secure Congregate Facilities*, Baltimore, Maryland: Annie E. Casey Foundation.

<sup>14</sup> Solomon, A.L. (2012). In Search of a Job: Criminal Records as Barriers to Employment. *NIJ Journal, 270*: 42–51. <sup>15</sup> This rate is per 100,000 persons ages 12 through the extended age of juvenile court jurisdiction in each state. More information can be found at <u>http://www.ojjdp.gov/ ojstatbb/structure\_process/qa04106.asp</u>. The extended age varies by state, but most set the age limit at 20. Data are based on a 1-day count of youth younger than age 21 held in a juvenile residential placement facility for an offense.

<sup>16</sup> In 2012, admissions to state prisons made up 91 percent of all admissions to prisons (including both federal and state). *Prisoners in 2012: Trends in Admissions and Releases*, 1991–2012, NCJ 243920.

<sup>17</sup> The educational attainment data do not include persons in institutionalized settings, such as prisons and correctional facilities. Therefore, understatement or overstatement of the data for groups with comparably high percentages of people in these populations is possible.

<sup>18</sup> *The Condition of Education 2015*: See Employment Rates and Unemployment Rates by Educational Attainment (<u>http://nces.ed.gov/programs/coe/indicator\_cbc.asp</u>) and Annual Earnings of Young Adults (<u>http://nces.ed.gov/</u> <u>programs/coe/indicator\_cba.asp</u>).

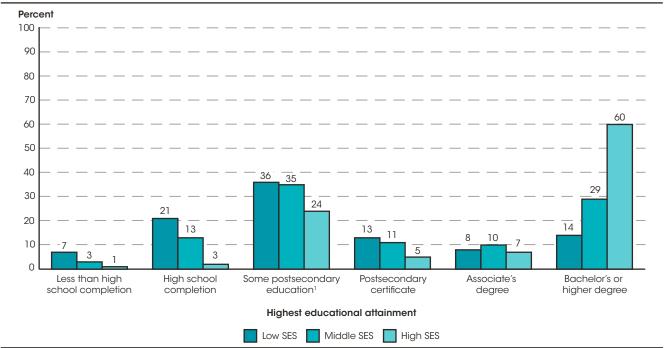
**Glossary:** Educational attainment (Current Population Survey), Poverty, Racial/ethnic group

# Postsecondary Attainment: Differences by Socioeconomic Status

A smaller percentage of students of low socioeconomic status (SES) than students of middle SES attained a bachelor's or higher degree within 8 years of high school completion (14 vs. 29 percent), and percentages for both groups were smaller than the percentage of high-SES students who attained this level of education (60 percent).

Postsecondary education is increasingly seen as an important step for obtaining beneficial long-term occupational and economic outcomes. Lower levels of educational attainment are linked to higher unemployment rates and lower earnings.<sup>1</sup> Although an increasing number of students have enrolled in postsecondary institutions over the last several decades, there are still differences in the characteristics of students who complete various levels of postsecondary education. In particular, students from families with a low socioeconomic status (SES) are less likely than those from families with a higher SES to obtain higher levels of postsecondary education.<sup>2</sup> This spotlight examines differences in students' educational attainment by SES, as well as how other variables may differentially relate to students' educational attainment by SES group (low, middle, and high).

The Education Longitudinal Study of 2002 (ELS:2002) followed a nationally representative cohort of students and surveyed them at certain points during their secondary and postsecondary education. The first wave of data included mathematics and reading assessments and was collected in 2002, when the students were in 10th grade. The students' parents were also surveyed in this wave, and students' SES was constructed from their parents' occupation, highest level of education, and income. A first follow-up wave was collected 2 years later, in 2004, when the majority of the students were in 12th grade. Both the 2002 and 2004 survey waves included self-reported questions about the educational expectations students had and the sources of information they consulted regarding college. Two additional follow-up survey waves were collected, one in 2006 and one in 2012. The 2006 wave assessed the students' current college enrollment status, and the 2012 wave asked students to report on their highest level of educational attainment.



## Figure 1. Percentage distribution of highest level of educational attainment of spring 2002 high school sophomores in 2012, by socioeconomic status (SES)

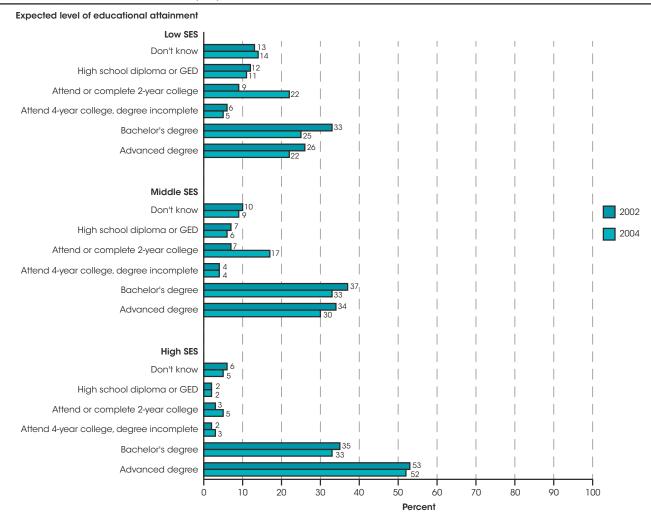
<sup>1</sup> Includes education at any type of postsecondary institution, but with no earned postsecondary credential.

NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. 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. Highest level of educational attainment was self-reported by participants. High school completion includes GEDs. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and Third Followup. See Digest of Education Statistics 2014, table 104.91.

The percentage of 2002 10th graders who had attained different levels of education by 2012 varied by SES. A larger percentage of low-SES students (7 percent) than of middle-SES students (3 percent) had not completed high school by 2012, and both percentages were larger than the percentage of high-SES students (1 percent) who had not completed high school. Similarly, by 2012, a larger percentage of low-SES students (21 percent) than of middle-SES students (13 percent) had completed high school as their highest level of education, and both percentages were larger than the percentage of high-SES students (3 percent) who did so. The percentage of students who attained some postsecondary education by 2012 was not measurably different for low- and middle-SES students (36 and 35 percent, respectively), but both percentages were larger than the percentage of high-SES students who had some postsecondary education (24 percent). This same pattern was evident for the percentage of students whose highest level of education was a postsecondary certificate. A larger percentage of middle-SES students (10 percent) than of low-SES and high-SES students (8 and 7 percent, respectively) completed an associate's degree by 2012. A smaller percentage of low-SES than middle-SES students attained a bachelor's or higher degree by 2012 (14 vs. 29 percent), and the percentages for both groups were smaller than the percentage of high-SES students whose highest level of education was a bachelor's or higher degree (60 percent).

#### Figure 2. Percentage of students' expected levels of educational attainment of spring 2002 high school sophomores, by socioeconomic status (SES): 2002 and 2004



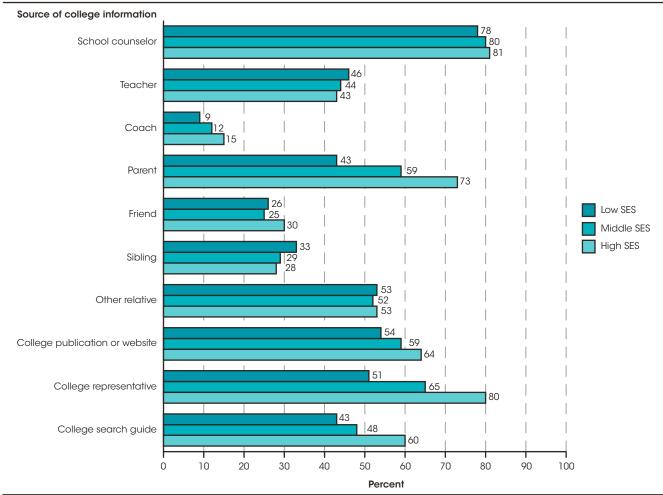
NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Expected levels of educational attainment were measured by students' response to the question, "As things stand now, how far in school do you think you will get?" Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and First Follow-up. See Digest of Education Statistics 2014, table 104.92.

Students' educational expectations have been shown to be related to their eventual educational attainment.<sup>3</sup> Expectations for educational attainment were measured in both 2002 and 2004, when students were in 10th and 12th grade, respectively. In all SES groups, the percentage of students who expected to earn a 2-year degree was higher in 2004 than in 2002. The percentage of students expecting to earn a bachelor's degree was smaller in 2004 than in 2002 for those students from low-SES (25 vs. 33 percent) and middle-SES (33 vs. 37 percent) families, and the same pattern emerged for expectations to earn an advanced degree.

In addition to changes over time within SES groups, there were differences between SES groups in students' educational expectations. These patterns were similar for both years, so only the 2004 expectations are discussed here. In 2004, a larger percentage of low-SES students (11 percent) than of middle-SES students (6 percent) expected their highest level of educational attainment to be a high school credential, and both percentages were larger than the percentage of high-SES students (2 percent) who expected to attain this level of education. Similarly, a larger percentage of low-SES students (22 percent) than of middle-SES students (17 percent) expected they would attend or complete a 2-year college as their highest level of educational attainment, and both percentages were larger than the percentage of high-SES students (5 percent) who expected to do so. Conversely, in 2004, a smaller percentage of low-SES students (25 percent) than of middle- and high-SES students (both 33 percent) expected to earn a bachelor's degree. Also, a smaller percentage of low-SES students (22 percent) than of middle-SES students (30 percent) expected to earn an advanced degree, and these percentages were both smaller than the percentage of high-SES students who expected to earn an advanced degree (52 percent).

## Figure 3. Percentage of spring 2002 high school sophomores who expected to attend a postsecondary institution seeking information about college from various sources in 2004, by socioeconomic status (SES)

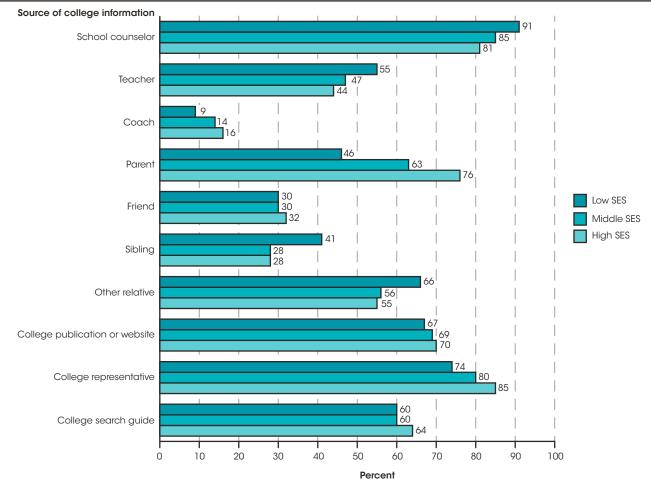


NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle" SES group is the upper quartile. Information seeking was measured by students' responses to the question, "Where have you gone for information about the entrance requirements of various colleges?" Only those students who indicated they planned to attend some postsecondary institution were asked this question. Students with expectations below postsecondary attendance were instructed to skip this question.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and First Follow-up. See Digest of Education Statistics 2014, table 104.93.

Navigating the college application and enrollment process often involves seeking out assistance from others. In 2002 and 2004, students who expected to attend a postsecondary institution were asked what sources they had gone to for information about the entrance requirements of various colleges.<sup>4</sup> Generally, a larger percentage of these students sought information in 2004 than in 2002 across SES groups. In 2004, across all students who intended to pursue postsecondary-level study, a smaller percentage of low-SES students went to their parents for information about college than middle-SES students did (43 vs. 59 percent), and these percentages were both smaller than the percentage of high-SES students who went to their parents for information (73 percent). Similarly, a smaller percentage of low-SES than middle-SES students went to college representatives (51 vs. 65 percent), college publications and websites (54 vs. 59 percent), or college search guides (43 vs. 48 percent) for information. The percentages of low- and middle-SES students who sought information from these three sources were smaller than the percentage of high-SES students who sought information from these three sources (80, 64, and 60 percent, respectively). Conversely, a larger percentage of low-SES students (33 percent) than of middle-SES (29 percent) and high-SES (28 percent) students sought advice from a sibling.

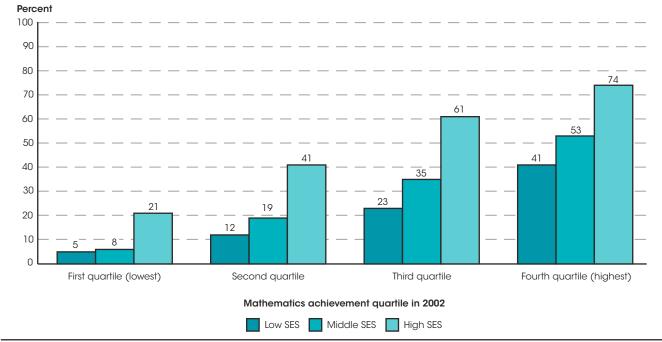




NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Information seeking was measured by students' responses to the question "Where have you gone for information about the entrance requirements of various colleges?"

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year, First Follow-up, and Third Follow-up. See *Digest of Education Statistics 2014*, table 104.93.

Among students who planned postsecondary-level study and who earned a bachelor's or higher degree by 2012, there were also differences in students' informationseeking patterns in 2004 by SES. Similar to the information-seeking for all students who expected to attend a postsecondary institution, a smaller percentage of low-SES students who obtained a bachelor's degree by 2012 had gone to their parents for information about college than their middle-SES peers did (46 vs. 63 percent). The percentage of low-SES and middle-SES students who obtained a bachelor's degree by 2012 and who went to their parents for information were both smaller than the percentage of high-SES students who did so (76 percent). However, for students who earned a bachelor's degree, a larger percentage of low-SES students (91 percent) than of middle-SES students (85 percent) went to their school counselors for information, and both percentages were larger than the percentage of high-SES students (81 percent) who sought information from their school counselor. Similarly, a larger percentage of low-SES students who earned a bachelor's degree than of middle- and high-SES students who earned a bachelor's went to their teacher, their sibling, or another relative for information about college.



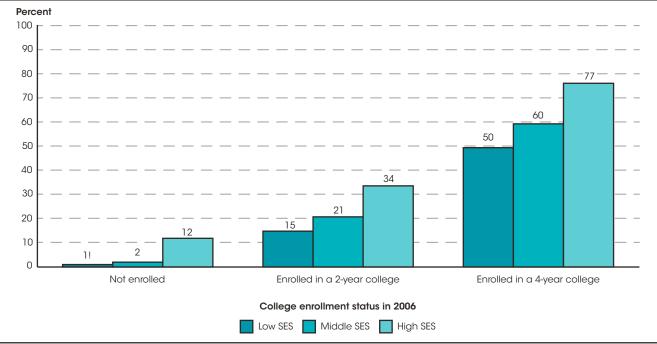
## Figure 5. Percentage of spring 2002 high school sophomores who earned a bachelor's degree or higher by 2012, by socioeconomic status (SES) and mathematics achievement quartile in 2002

NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. 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. Mathematics achievement quartiles reflect students' scores on assessments conducted in 2002.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and Third Followup. See Digest of Education Statistics 2014, table 104.91.

Academic skills are also necessary for college completion, and performance on the standardized assessments, administered during the first wave of data collection in 2002, are one way to examine students' aptitudes. In general, a smaller percentage of low-SES students performed in the highest quartile of mathematics achievement (10 percent) while in high school compared to middle-SES students (23 percent), and both percentages were smaller than the percentage of high-SES students (48 percent) who scored in the highest quartile. However, even when performance on standardized assessments was similar, smaller percentages of high-performing low- and middle-SES students than of high-performing high-SES students had completed a bachelor's degree within 10 years. For example, a smaller percentage of low-SES than middle-SES students who scored in the highest quartile in mathematics achievement had successfully completed a bachelor's degree 10 years

later (41 vs. 53 percent), and both percentages were smaller than the percentage of high-SES students who did so (74 percent). Additionally, a smaller percentage of low-SES than middle-SES students who scored in the third quartile in mathematics went on to complete a bachelor's degree by 2012 (23 vs. 35 percent), and these two percentages were both smaller than the percentage of high-SES students who did so (61 percent). Only 5 percent of low-SES students who scored in the lowest quartile on the mathematics assessment in 2002 went on to complete a bachelor's degree by 2012. This percentage was smaller than the percentage of middle-SES students who scored in the lowest quartile and completed a bachelor's degree (8 percent), and both percentages were smaller than the percentage of high-SES students who did so (21 percent). Similar patterns were observed for students' reading achievement.



## Figure 6. Percentage of spring 2002 high school sophomores who earned a bachelor's degree or higher by 2012, by socioeconomic status (SES) and 2006 college enrollment status

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. 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. Enrollment in 2006 was based on postsecondary transcript data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year, Second Follow-up, and Third Follow-up. See *Digest of Education Statistics 2014*, table 104.92.

In regard to students' eventual degree attainment, it is also important to consider in what type of postsecondary institution students are enrolled and how soon after high school they enrolled in college. While smaller percentages of low- and middle-SES students than high-SES students completed a bachelor's or higher degree by 2012 overall, this pattern was even more pronounced for students who were not enrolled in a 4-year college in 2006, which was 2 years after high school completion for most students. For example, the percentages of low- and middle-SES students not enrolled in any postsecondary institution in 2006 who went on to complete a bachelor's or higher degree by 2012 (2 percent or less) were smaller than the percentage

**Endnotes:** 

<sup>1</sup> See Annual Earning of Young Adults (<u>http://nces.ed.gov/programs/coe/indicator\_cba.asp</u>) and Employment Rates and Unemployment Rates by Educational Attainment (<u>http://nces.ed.gov/programs/coe/indicator\_cbc.asp</u>)
<sup>2</sup> Long, B.T. (2007). The Contributions of Economics to the Study of College Access and Success. *Teachers College Record*, *109*(10): 2367–2443.

**Reference tables:** *Digest of Education Statistics 2014*, tables 104.91, 104.92, and 104.93

**Related indicators:** Educational Attainment (indicator 1), Annual Earnings of Young Adults (indicator 3), Characteristics of Postsecondary Students (indicator 32)

For more information, see the Reader's Guide and the Guide to Sources.

of high-SES students (12 percent) who were not enrolled in 2006 and went on to complete a bachelor's or higher degree by 2012. In addition, a smaller percentage of low-SES than middle-SES students who were enrolled in a 2-year college in 2006 went on to complete a bachelor's degree by 2012 (15 vs. 21 percent), and both percentages were smaller than the percentage of high-SES students who did so (34 percent). Even for those students who were enrolled in a 4-year college in 2006, a smaller percentage of low-SES than middle-SES students went on to complete a bachelor's or higher degree by 2012 (50 vs. 60 percent), and both percentages were smaller than the percentage of high-SES students who did so (77 percent).

<sup>3</sup> Mello, Z.R. (2008). Gender Variation in Developmental Trajectories of Educational and Occupational Expectations and Attainment From Adolescence to Adulthood. *Developmental Psychology*, 44(4): 1069–1080.

<sup>4</sup> Only those students who indicated they planned to attend some postsecondary institution were asked this question. Students with expectations below postsecondary attendance were instructed to skip this question.

**Glossary:** Educational attainment

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The indicators in this chapter of *The Condition of Education* report on educational attainment and economic outcomes for the United States as a whole. The level of education attained by an individual has implications for his or her median earnings and other labor outcomes, such as unemployment. Comparisons at the national level to other industrialized nations provide insight into our global competitiveness. In addition, this chapter contains indicators on key demographic characteristics, such as poverty.

This chapter's indicators, as well as additional indicators on population characteristics, are available at *The Condition of Education* website: <u>http://nces.ed.gov/programs/coe</u>.



# Chapter 1

# **Population Characteristics**

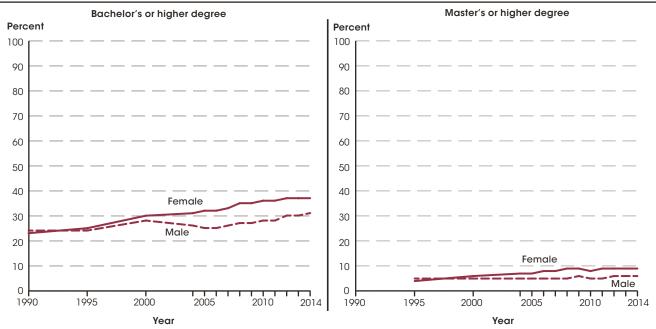
## Attainment

	Educational Attainment International Educational Attainment		
Economic Outcomes			
Indicator 3.	Annual Earnings of Young Adults	42	
Indicator 4.	Employment Rates and Unemployment Rates by Educational Attainment	46	
Demographics			
Indicator 5.	Children Living in Poverty	50	

In 2014, some 91 percent of 25- to 29-year-olds had received at least a high school diploma or its equivalent. Between 1990 and 2014, the size of the White-Black gap in attainment of a high school diploma or its equivalent narrowed from 8 to 4 percentage points, and the size of the White-Hispanic gap narrowed from 32 to 21 percentage points.

*Educational attainment* refers to the highest level of education completed (e.g., a high school diploma or equivalency certificate, a bachelor's degree, or a master's degree). Between 1990 and 2014, educational attainment rates among 25- to 29-year-olds increased. The percentage who had received at least a high school diploma or its equivalent increased from 86 to 91 percent, with most of the change (4 percentage points) occurring between 2004 and 2014. The percentage who had completed a bachelor's or higher degree increased from 23 percent in 1990 to 34 percent in 2014; and the percentage who had completed a master's or higher degree increased from 5 percent in 1995 to 8 percent in 2014.

Figure 1. Percentage of 25- to 29-year-olds who completed bachelor's or higher and master's or higher degrees, by sex: Selected years, 1990–2014

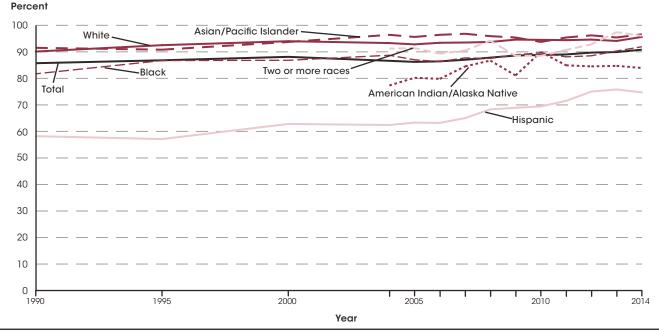


NOTE: Prior to 1995, data on attainment of a master's or higher degree were not available.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years, 1990–2014. See *Digest of Education Statistics 2014*, table 104.20.

Female attainment rates have been generally higher than male attainment rates at each education level since 2000. More specifically, in 1990 the percentages of male and female 25- to 29-year-olds who had completed a bachelor's degree or higher were not measurably different, but in 2014 the percentage of females (37 percent) attaining this level of education was 6 points higher than the percentage of males doing so (31 percent). Similarly, in 1995 the percentages of males and females who had completed a master's degree or higher were not measurably different, but in 2014 some 9 percent of females had completed a master's degree or higher, compared with 6 percent of males.





NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2004, separate data on American Indians/Alaska Natives and persons of Two or more races were not available.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years, 1990–2014. See *Digest of Education Statistics 2014*, table 104.20.

Between 1990 and 2014, the percentage of 25- to 29-year-olds who completed at least a high school diploma or its equivalent increased for Whites (from 90 to 96 percent), Blacks (from 82 to 92 percent), Hispanics (from 58 to 75 percent), and Asians/Pacific Islanders (from 92 to 97 percent). For Hispanics, most of the change over this period (i.e., 12 percentage points out of the total 17 percentage point change) occurred in the last 10 years. Between 1990 and 2014, the percentage of Whites who had attained at least a high school diploma or its equivalent remained higher than that of Blacks and Hispanics. However, the size of the White-Black attainment gap at this education level narrowed from 8 to 4 percentage points, and the size of the White-Hispanic gap narrowed from 32 to 21 percentage points.

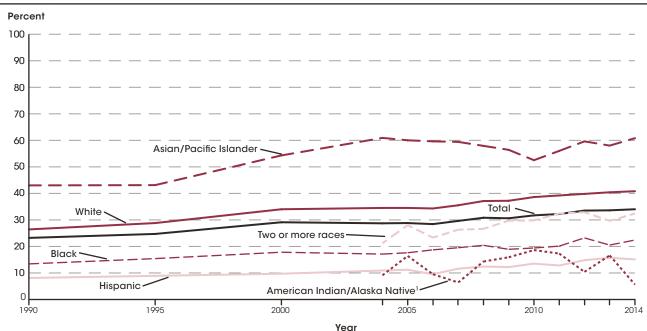


Figure 3. Percentage of 25- to 29-year-olds who completed a bachelor's or higher degree, by race/ethnicity: Selected years, 1990–2014

<sup>1</sup> Interpret data for 2004, 2006, 2007, and 2014 with caution. The coefficients of variation (CVs) for these estimates are between 30 and 50 percent. NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2004, separate data on American Indians/Alaska Natives and persons of Two or more races were not available.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years, 1990–2014. See *Digest of Education Statistics 2014*, table 104.20.

From 1990 to 2014, the percentage of 25- to 29-year-olds who had attained a bachelor's or higher degree increased for Whites (from 26 to 41 percent), Blacks (from 13 to 22 percent), Hispanics (from 8 to 15 percent), and Asians/Pacific Islanders (from 43 to 61 percent). Most of the increase for Hispanics over this period (4 percentage points) occurred in the most recent decade. Over the period from 1990 to 2014, the gap between Whites and Blacks in the rate of attaining a bachelor's or higher degree widened from 13 to 18 percentage points, and the gap between Whites and Hispanics in attaining this education level widened from 18 to 26 percentage points.

**Reference tables:** *Digest of Education Statistics 2014*, table 104.20

**Related indicators:** International Educational Attainment (indicator 2), Annual Earnings of Young Adults (indicator 3), Trends in Employment Rates by Educational Attainment [*The Condition of Education 2013 Spotlight*] From 1995 to 2014, the percentage of 25- to 29-year-olds who had attained a master's or higher degree increased for Whites (from 5 to 9 percent), Blacks (from 2 to 4 percent), Hispanics (from 1 to 3 percent), and Asians/Pacific Islanders (from 11 to 18 percent). The gap between Whites and Hispanics in the attainment of a master's or higher degree was wider in 2014 (6 percentage points) than in 1995 (4 percentage points); however, the gap between Whites and Blacks in 2014 was not measurably different from that in 1995.

**Glossary:** Educational attainment (Current Population Survey)

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# Indicator 2 Section: Attainment

The percentage of 25- to 64-year-olds who had earned a bachelor's or higher degree was higher in 2012 than in 2001 in the United States (33 vs. 28 percent) and across OECD countries (24 vs. 15 percent).

In 2012, some 26 out of 32 countries belonging to the Organization for Economic Cooperation and Development (OECD)<sup>1</sup> reported that 70 percent or more of their adult populations (ages 25 to 64) had completed high school.<sup>2</sup> The OECD is an organization of 34 countries whose purpose is to promote trade and economic growth. Among OECD countries, the percentages of high school completers ranged from under 40 percent in Turkey, Mexico, and Portugal to over 90 percent in the Slovak Republic and the Czech Republic. Additionally, 21 out of 34 OECD countries reported that 20 percent or more of their adult populations had completed a bachelor's or higher degree. Among OECD countries, the percentages of bachelor's degree completers ranged from 15 percent or less in Chile, Austria, and Slovenia to more than 30 percent in the United Kingdom, Iceland, the Netherlands, Israel, the United States, and Norway.

### Table 1.Percentage of the population that had completed high school in Organization for Economic Cooperation and<br/>Development (OECD) countries, by age group: 2012

	25 to 34	55 to 64	
OECD country	years old	years old	Difference
OECD average	83	65	17 🔺
Korea, Republic of	98	48	51 🔺
Portugal	58	20	38 🔺
Greece	83	50	33 🔺
Ireland	86	55	31 🔺
Italy	72	42	29 🔺
Spain	64	35	29 🔺
Belgium	82	56	26 🔺
Turkey	46	21	25 🔺
France	83	59	24 🔺
Australia	87	64	23 🔺
Netherlands	83	61	22 🔺
Mexico	46	25	21 🔺
Slovenia	94	74	20 🔺
Luxembourg	86	69	18 🔺
New Zealand	80	64	16 🔺
Finland	90	74	16 🔺
United Kingdom	85	69	16 🔺
Austria	89	74	15 🔺
Iceland	75	61	14 🔺
Poland	94	81	13 🔺
Israel	90	77	13 🔺
Hungary	88	75	13 🔺
Sweden	91	79	11 🔺
Denmark	82	71	11 🔺
Slovak Republic	94	86	8 🔺
Canada	92	84	8 🔺
Switzerland	89	82	8 🔺
Czech Republic	94	87	7 🔺
Germany	87	84	2 🔺
Norway	82	82	0 🗇
United States	89	90	-1 🗇
Estonia	86	88	-2 🗇
Chile	—	_	
Japan	_	—	

▲ The percentage of 25- to 34-year-olds who had completed high school is higher than the percentage of 55- to 64-year-olds who had completed high school. ♦ The percentages of 25- to 34-year-olds and 55- to 64-year-olds who had completed high school are not significantly different.

— Not available.
NOTE: Educational attainment data in this table refer to degrees classified by the OECD as International Standard Classification of Education (ISCED) level 3 for high school. The OECD average refers to the mean of the data values for all reporting OECD countries, to which each country reporting data contributes equally. Calculations based on unrounded data.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance, 2014. See Digest of Education Statistics 2014, table 603.10.

For more information, see the Reader's Guide and the Guide to Sources.

**Chapter:** 1/Population Characteristics Section: Attainment

In most OECD countries, higher percentages of the youngest adult age group (ages 25 to 34) than of the oldest adult age group (ages 55 to 64) had completed high school in 2012. Across these countries, the average percentage of those completing high school was higher for 25- to 34-year-olds (83 percent) than for 55- to 64-yearolds (65 percent). In only three countries, Norway, the United States, and Estonia, did the youngest and oldest

age groups have high school completion percentages that were not measurably different. In each of these countries, the high school completion rates for both of these age groups were above 80 percent. Six other countries also had 80 percent or more of 55- to 64-year-olds who had completed high school: Poland, Switzerland, Canada, Germany, the Slovak Republic, and the Czech Republic.

Table 2.	Percentage of the population with a bachelor's or higher degree in Organization for Economic Cooperation
	and Development (OECD) countries, by age group: 2012

	25 to 34	55 to 64	
OECD country	years old	years old	Difference
OECD average	30	17	13 🔺
Korea, Republic of	40	11	29 🔺
Poland	41	13	28 🔺
Finland	39	15	24 🔺
Luxembourg	36	17	19 🔺
Ireland	33	15	19 🔺
United Kingdom	40	22	18 🔺
Norway	44	27	18 🔺
Portugal	28	11	17 🔺
Japan	35	19	16 🔺
Iceland	36	20	15 🔺
Czech Republic	28	13	15 🔺
Sweden	34	19	15 🔺
Netherlands	40	25	15 🔺
New Zealand	33	18	15 🔺
France	27	13	14 🔺
Australia	37	23	14 🔺
Hungary	29	15	14 🔺
Slovenia	22	8	14 🔺
Slovak Republic	26	12	13 🔺
Belgium	25	12	13 🔺
Switzerland	32	19	12 🔺
Spain	27	15	12 🔺
Denmark	35	24	11 🔺
Mexico	23	12	11 🔺
Italy	22	11	11 🔺
Turkey	21	10	11 🔺
Austria	18	8	10 🔺
Canada	32	22	9 🔺
Chile	16	9	7 🔺
Greece	21	15	6 🔺
Germany	19	15	4 🔺
Estonia	27	23	3 🗇
United States	34	31	3 🔺
Israel	33	30	2 🔺

▲ The percentage of 25- to 34-year-olds with a bachelor's or higher degree is higher than the percentage of 55- to 64-year-olds with a bachelor's or higher degree.

The percentages of 25- to 34-year-olds and 55- to 64-year-olds with a bachelor's or higher degree are not significantly different.

NOTE: Educational attainment data in this table refer to degrees classified by the OECD as International Standard Classification of Education (ISCED) level 5A or 6 for bachelor's or higher degrees. The OECD average refers to the mean of the data values for all reporting OECD countries, to which each country reporting data contributes equally. Calculations based on unrounded data.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance, 2014. See Digest of Education Statistics 2014, table 603.20

The same general pattern of higher percentages of the youngest age groups attaining higher levels of education In all OECD countries, except Estonia, a significantly higher percentage of 25- to 34-year-olds than of 55- to 64-year-olds had a bachelor's or higher degree in 2012. On average, 30 percent of 25- to 34-year-olds had a bachelor's

or higher degree in 2012, compared with 17 percent of 55-to 64-year-olds. In the United States, 34 percent of 25-to 34-year-olds and 31 percent of 55- to 64-year-olds had a bachelor's or higher degree. The United States and Israel had the highest percentages of 55- to 64-year-olds with a bachelor's or higher degree in 2012.

### **Chapter:** 1/Population Characteristics **Section:** Attainment

#### Table 3. Percentage of the population 25 to 64 years old that had completed high school in Organization for Economic Cooperation and Development (OECD) countries: 2001 and 2012

OECD country 2001 2012 Difference			
OECD average	64	76	12
Poland	46	90	44
Luxembourg	53	78	26
Portugal	20	38	18
Australia	59	76	18
Greece	51	68	17
Ireland	58	75	17 🔺
Mexico	22	37	16
United Kingdom <sup>1</sup>	63	78	15 🔺
Spain	40	55	15 🔺
Korea, Republic of	68	82	14 🔺
Iceland	57	71	14 🔺
Italy	43	57	14 🔺
Belgium <sup>2</sup>	59	72	13 🔺
Hungary	70	82	12 🔺
Finland	74	85	11 🔺
Turkey	24	34	10 🔺
France <sup>1</sup>	64	73	9 🔺
Netherlands <sup>1,2</sup>	65	73	8 🔺
Austria <sup>2</sup>	76	83	7 🔺
Canada	82	89	7 🔺
Sweden	81	88	7 🔺
Slovak Republic	85	92	7 🔺
Czech Republic	86	92	6 🔺
Germany	83	86	4 🔺
United States	88	89	2 🔺
Switzerland	87	86	-] 🔻
New Zealand	76	74	-2 🔻
Denmark	80	78	-2 🔻
Norway <sup>2</sup>	85	82	-3 🔻
Japan	83	_	
Estonia	—	90	
Slovenia	—	85	
Israel	—	85	
Chile	_	_	

 $\blacktriangle$  The 2012 percentage is higher than the 2001 percentage.

▼ The 2012 percentage is lower than the 2001 percentage.

- Not available.

<sup>1</sup> Data in 2001 column include some short secondary (ISCED 3C) programs.

<sup>2</sup> Data from 2000 reported for 2001.

NOTE: Educational attainment data in this table refer to degrees classified as International Standard Classification of Education (ISCED) level 3. ISCED level 3 corresponds to high school completion in the United States. ISCED 3C short programs do not correspond to high school completion; these short programs are excluded from this table except where noted. The OECD average refers to the mean of the data values for all reporting OECD countries, to which each country reporting data contributes equally. Calculations based on unrounded data.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance, 2002 and 2014. See Digest of Education Statistics 2014, table 603.10.

The percentage of 25- to 64-year-olds who had completed a high school education was higher in 2012 than in 2001 in each OECD country, with the exceptions of Switzerland, New Zealand, Denmark, and Norway, where high school completion rates in 2012 were between 1 and 3 percentage points lower than they were in 2001.<sup>3</sup> The OECD average percentage of the adult population completing a high school education increased by 12 percentage points, from 64 percent in 2001 to 76 percent in 2012. The percentage of adults in the United States who had completed high school increased from 88 to 89 percent during this period.

The OECD percentage of 25- to 34-year-olds with a high school education was 9 percentage points higher in 2012 than in 2001, while the percentage of U.S. young adults was 1 percentage point higher.

### **Chapter:** 1/Population Characteristics **Section:** Attainment

#### Table 4. Percentage of the population 25 to 64 years old with a bachelor's or higher degree in Organization for Economic Cooperation and Development (OECD) countries: 2001 and 2012

	<b>1 2012</b> 5 24	
	5 24	
Luxemboura 1		8 🔺
Lancinbourg	1 26	15 🔺
United Kingdom 1	8 31	13 🔺
Poland <sup>1</sup> 1	2 25	13 🔺
Iceland 1	9 31	12 🔺
Portugal <sup>2</sup>	7 19	12 🔺
Finland 1	5 26	11 🔺
New Zealand 1	4 25	11 🔺
Korea, Republic of 1	7 28	11 🔺
Ireland 1	4 25	11 🔺
Netherlands 2		
Australia 1	9 30	11 🔺
	6 26	
Sweden 1	7 27	10 🔺
/	8 36	9 🔺
Czech Republic <sup>1</sup> 1	1 19	-
Denmark 2	2 29	8 🔺
	0 28	7 🔺
	0 18	
Hungary <sup>3</sup> 1	4 21	7 🔺
	9 26	
	2 19	-
rainto j	9 15	
Austria	7 13	
	7 23	
	3 18	
Greece 1	2 18	5 🔺
- /	0 15	-
United States 2	8 33	4 🔺
	3 17	-
	3 17	• =
Chile <sup>4</sup>	9 12	
Israel -	- 33	
Estonia -	- 25	
Slovenia -	- 15	

▲ The 2012 percentage is higher than the 2001 percentage.

— Not available.

<sup>1</sup> Data include vocational degrees.

<sup>2</sup> Data for 2012 include vocational degrees.
 <sup>3</sup> Data for 2001 include vocational degrees.

<sup>4</sup> Data from 2000 reported for 2001. Data from 2011 reported for 2012.

NOTE: Educational attainment data in this table refer to degrees classified by the OECD as International Standard Classification of Education (ISCED) level 5A or 6 for bachelor's or higher degrees. The OECD average refers to the mean of the data values for all reporting OECD countries, to which each country reporting data contributes equally. Calculations based on unrounded data.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance, 2002 and 2014. See Digest of Education Statistics 2014, table 603.30.

All countries with data reported that the percentages of 25- to 64-year-olds who had completed a bachelor's or higher degree were higher in 2012 than they were in 2001. The OECD average percentage of the adult population with a bachelor's or higher degree increased by 8 percentage points between 2001 and 2012, from 15 to 24 percent. During the same period, the percentage of U.S. adults with a bachelor's or higher degree increased from 28 to 33 percent.

For 25- to 34-year-olds, the OECD average percentage with a bachelor's or higher degree rose from 18 percent in 2001 to 30 percent in 2012, an increase of 12 percentage

points. The comparable percentage for young adults in the United States increased by 4 percentage points, from 30 to 34 percent. As a result of the relatively larger increases in bachelor's or higher degree attainment among young adult populations in several other OECD countries, the gap in attainment at this level of education between the U.S. and the OECD average percentages decreased between 2001 and 2012. In 2001, the rate of attainment of a bachelor's or higher degree among 25- to 34-year-olds in the United States was 12 percentage points higher than the OECD average; by 2012, this difference had decreased to 4 percentage points.

	Section: Attainment
Endnotes: <sup>1</sup> In 2012, Chile and Japan did not report data on high school completion rates. <sup>2</sup> Attainment data in this indicator refer to comparable levels of degrees, as classified by the International Standard Classification of Education (ISCED).	<sup>3</sup> In 2001, Estonia, Slovenia, Israel, and Chile did not report data on high school completion rates. In 2012, Chile and Japan did not report data on high school completion rates.
Reference tables: Digest of Education Statistics 2014, tables 603.10, 603.20, and 603.30 Related indicators: Educational Attainment (indicator 1), Education Expenditures by Country (indicator 22), International Assessments (indicator 26), Trends in	<b>Glossary:</b> Bachelor's degree, Educational attainment, High school completer, International Standard Classification of Education (ISCED), Organization for Economic Cooperation and Development (OECD)

Chapter: 1/Population Characteristics

Employment Rates by Educational Attainment [The Condition

of Education 2013 Spotlight]

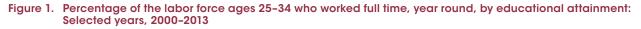
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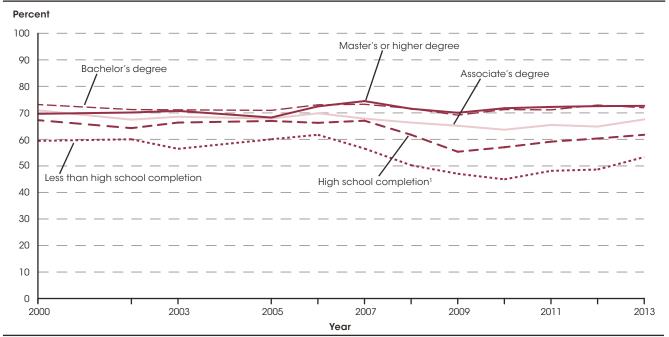
# Indicator 3 Section: Section: Annual Earnings of Young Adults

In 2013, young adults with a bachelor's degree earned more than twice as much as those without a high school credential (\$48,500 vs. \$23,900) and 62 percent more than young adult high school completers (\$48,500 vs. \$30,000).

This indicator examines the annual earnings of young adults ages 25–34. Many people in this age group have recently completed their education and may be entering the workforce or transitioning from part-time to full-time work. In 2013, some 65 percent of young adults ages 25–34 who were in the labor force worked full time, year round (i.e., worked 35 or more hours per week for 50 or

more weeks per year). The percentage of young adults working full time, year round was generally higher for those with higher levels of educational attainment. For example, 72 percent of young adults with a bachelor's degree worked full time, year round in 2013, compared with 62 percent of young adult high school completers (those with a high school diploma or its equivalent).





<sup>1</sup> Includes equivalency credentials, such as the General Educational Development (GED) credential.

NOTE: Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years 2001–2014; and previously unpublished tabulations. See *Digest of Education Statistics 2014*, table 502.30.

Changes over time in the percentage of young adults in the labor force who worked full time, year round varied by level of educational attainment. From 2000 to 2013, the percentage of young adults without a high school credential (i.e., without a high school diploma or its equivalent) who worked full time, year round decreased from 59 to 53 percent, and the corresponding percentage of high school completers decreased from 67 to 62 percent. However, during the same period the percentages of young adults with an associate's degree, bachelor's degree, or master's degree or higher who worked full time, year round did not change measurably. Between the most recent years of 2012 and 2013, the percentages of young adults working full time, year round did not change measurably for most levels of educational attainment. The exception was the percentage of young adults without a high school credential who worked full time, year round, which was higher in 2013 (53 percent) than in 2012 (49 percent).

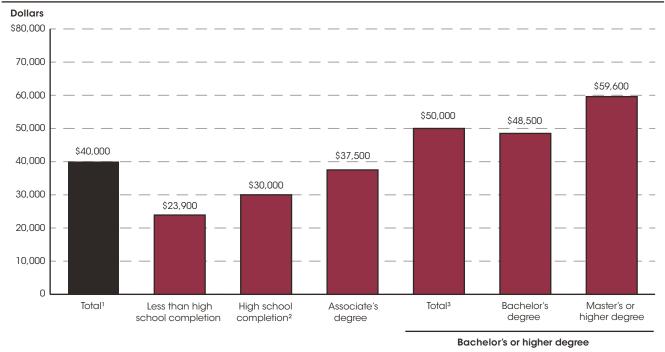


Figure 2. Median annual earnings of full-time year-round workers ages 25-34, by educational attainment: 2013

Educational attainment

<sup>1</sup> Represents median annual earnings of all full-time year-round workers ages 25–34.

<sup>2</sup> Includes equivalency credentials, such as the General Educational Development (GED) credential.

<sup>3</sup> Represents median annual earnings of full-time year-round workers ages 25–34 with a bachelor's or higher degree.

NOTE: Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," 2014. See Digest of Education Statistics 2014, table 502.30.

For young adults ages 25–34 who worked full time, year round, higher educational attainment was associated with higher median earnings; this pattern was consistent for 2000, 2003, and 2005 through 2013. For example, in 2013 median earnings for young adults with a bachelor's degree were \$48,500, compared with \$23,900 for those without a high school credential, \$30,000 for those with a high school credential, and \$37,500 for those with an associate's degree. In other words, young adults with a bachelor's degree earned more than twice as much as those without a high school credential (103 percent more), 62 percent more than young adult high school completers, and 29 percent more than associate's degree holders. Additionally, in 2013 median earnings for young adults with a master's or higher degree were \$59,600, some 23 percent more than median earnings for young adults with a bachelor's degree. This pattern of higher earnings associated with higher levels of educational attainment also held for both males and females and across racial/ ethnic groups (White, Black, Hispanic, and Asian).

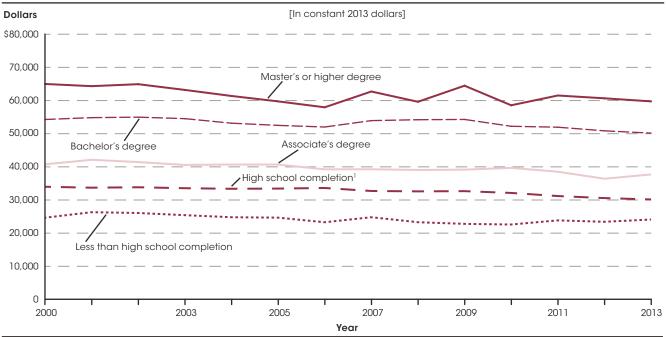


Figure 3. Median annual earnings of full-time year-round workers ages 25-34, by educational attainment: 2000-2013

<sup>1</sup> Includes equivalency credentials, such as the General Educational Development (GED) credential.

NOTE: Earnings are presented in constant dollars, based on the Consumer Price Index (CPI), to eliminate inflationary factors and to allow for direct comparison across years. *Full-time year-round workers* are those who worked 35 or more hours per week for 50 or more weeks per year. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," 2001–2014; and previously unpublished tabulations. See *Digest of Education Statistics 2014*, table 502.30.

Median earnings (in constant 2013 dollars) of young adults declined from 2000 to 2013 for high school completers, those with a bachelor's degree, and those with a master's or higher degree. During this period, the median earnings of young adult high school completers declined from \$33,800 to \$30,000 (an 11 percent decrease), the median earnings of young adults with a bachelor's degree declined from \$54,000 to \$48,500 (a 10 percent decrease), and the median earnings of young adults with a master's or higher degree declined from \$64,800 to \$59,600 (an 8 percent decrease). In general, median earnings for young adults did not change measurably between 2012 and 2013.

Gaps in median earnings (in constant 2013 dollars) among those with varying levels of educational attainment

exhibited different patterns of change over time. The difference in median earnings between those with a bachelor's degree and those without a high school credential narrowed between 2000 and 2013. In 2000, median earnings for young adults with a bachelor's degree were \$29,500 greater than median earnings for those without a high school credential; in 2013, this earnings differential was \$24,600. In addition, median earnings for high school completers were \$9,300 greater than median earnings for those without a high school credential in 2000, compared with the corresponding difference of \$6,100 in 2013. Differences in median earnings between those with a bachelor's degree and high school completers, and between those with a bachelor's degree and those with a master's or higher degree did not change measurably during the same period.

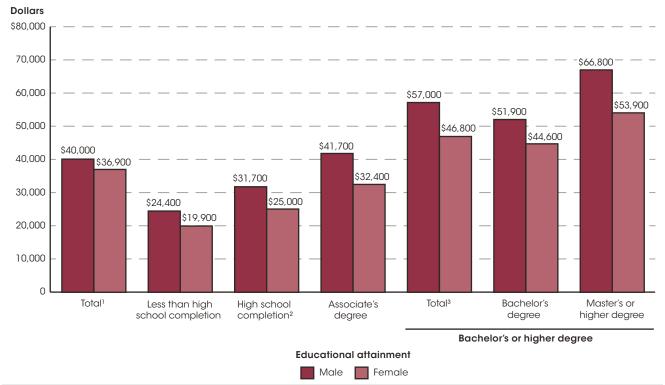


Figure 4. Median annual earnings of full-time year-round workers ages 25–34, by educational attainment and sex: 2013

<sup>1</sup> Represents median annual earnings of all full-time year-round workers ages 25–34.

<sup>2</sup> Includes equivalency credentials, such as the General Educational Development (GED) credential.

<sup>3</sup> Represents median annual earnings of full-time year-round workers ages 25–34 with a bachelor's or higher degree.

NOTE: Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," 2014. See Digest of Education Statistics 2014, table 502.30.

In 2013, median earnings for young adult males were higher than median earnings for young adult females at every level of educational attainment. For example, in 2013 young adult males with a bachelor's degree earned \$51,900, while their female counterparts earned \$44,600. In the same year, median earnings for White young adults exceeded the corresponding medians for Black and Hispanic young adults among those who did not complete high school, high school completers, and those with a bachelor's or higher degree. For instance, median earnings

**Reference tables:** *Digest of Education Statistics 2014*, table 502.30

**Related indicators:** Employment Rates and Unemployment Rates by Educational Attainment (indicator 4)

in 2013 for young adults with a bachelor's or higher degree were \$50,000 for Whites, \$45,800 for Hispanics, and \$44,600 for Blacks. Among those with a bachelor's degree and those with a master's or higher degree, Asian young adults had higher median earnings than their peers in other racial/ethnic groups. For example, median earnings in 2013 for young adults with at least a master's degree were \$74,600 for Asians, \$58,800 for Whites, \$54,500 for Blacks, and \$49,500 for Hispanics.

**Glossary:** Bachelor's degree, Constant dollars, Consumer Price Index (CPI), Educational attainment (Current Population Survey), High school completer, Master's degree

#### **Indicator 4**

### Employment Rates and Unemployment Rates by Educational Attainment

The percentage of the adult population who were employed was higher in 2014 than at the end of the recent recession in 2010, but lower than before the recession began in 2008.

This indicator examines recent trends in two measures of labor market conditions—the employment to population ratio (also referred to as the employment rate) and the unemployment rate—by age group and educational attainment level. The employment to population ratio and the unemployment rate are distinct, although related. For each age group, the *employment to population* ratio is the number of persons in that age group who are employed as a percentage of the civilian population in that age group. The *unemployment rate* is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. (Note that the civilian labor force consists of all civilians who are employed or seeking employment.) Trends in the unemployment rate reflect net changes in the relative number of people who are looking for work, while the employment rate reflects whether the economy is generating jobs relative to population growth in a specific age group.

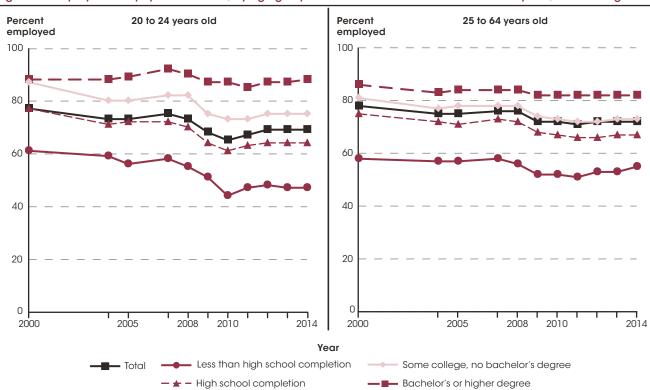


Figure 1. Employment to population ratios, by age group and educational attainment: Selected years, 2000 through 2014

NOTE: For each age group, the employment to population ratio, or employment rate, is the number of persons in that age group who are employed as a percentage of the civilian population in that age group. Data for 20- to 24-year-olds exclude persons enrolled in school. High school completion includes equivalency credentials, such as the General Educational Development (GED) credential. The data for the "Some college, no bachelor's degree as well as those with an associate's degree.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), selected years, 2000 through 2014. See *Digest of Education Statistics 2014*, table 501.50.

During the period from 2008 to 2010, the U.S. economy experienced a recession.<sup>1</sup> For young adults ages 20 to 24, the employment rate was lower in 2008, when the recession began, than it was in 2000 (73.4 vs. 77.4 percent). The employment rate was even

lower in 2010 (65.5 percent), after the end of the recession, than it was in 2008. While the employment rate for young adults was higher in 2014 (69.4 percent) than in 2010, the 2014 rate was still lower than the rate in 2008 or 2000.

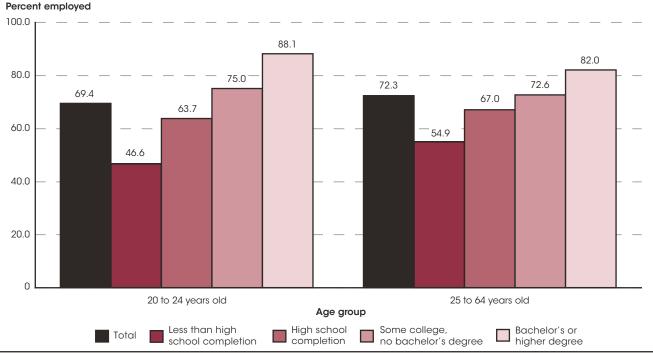
For more information, see the Reader's Guide and the Guide to Sources.

The trend over time of the employment rate for adults ages 25 to 64 was similar to that for young adults ages 20 to 24. The rate for 25- to 64-year-olds was lower in 2010 (71.5 percent) than it was in either 2008 or 2000 (75.5 and 77.7 percent, respectively). The rate in 2014 (72.3 percent) was higher than it was in 2010

### **Chapter:** 1/Population Characteristics **Section:** Economic Outcomes

but lower than it was in 2008 or 2000. In addition, the employment rates in both 2014 and 2010, at each level of educational attainment for both age groups, were generally lower than the rate in 2008, when the recession began.





NOTE: For each age group, the employment to population ratio, or employment rate, is the number of persons in that age group who are employed as a percentage of the civilian population in that age group. Data for 20- to 24-year-olds exclude persons enrolled in school. The data for the "Some college, no bachelor's degree" category includes persons with no bachelor's degree as well as those with an associate's degree. High school completion includes equivalency credentials, such as the General Educational Development (CEE) credential.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), 2014. See *Digest of Education Statistics 2014*, table 501.50.

Generally, the employment rate was higher for those with higher levels of educational attainment. For example, in 2014, the employment rate for young adults ages 20 to 24 with a bachelor's degree or higher was higher than the rate for young adults with some college (88.1 vs. 75.0 percent). The employment rate for young adults with some college was higher than the rate for those who had completed high school (63.7 percent), which was, in turn, higher than the employment rate for those young adults who had not finished high school (46.6 percent). This pattern of employment rates being higher for those with higher levels of educational attainment was also seen for those 25 to 64 years old and for men as well as women in both age groups.

In addition to the employment rate being higher for those with higher levels of educational attainment, employment rates were generally higher for males than females at each level of educational attainment in 2014. The overall employment rate for young males 20 to 24 years old was higher than the rate for young females 20 to 24 years old (72.4 vs. 66.3 percent). It was also higher for young males with some college than for young females with the same level of educational attainment (78.6 vs. 71.6 percent). Similarly, the employment rate for young males who had completed high school was greater than the rate for young females who had completed high school (66.6 vs. 60.2 percent) and it was higher for young males who had not completed high school than for their female peers (58.3 vs. 30.5 percent). As with the younger cohort, the overall employment rate for males 25 to 64 years old was higher than the rate for females 25 to 64 years old (78.2 vs. 66.6 percent). This pattern held for older adults at each level of educational attainment, including those with a bachelor's degree or higher, which was not the case for young adults.

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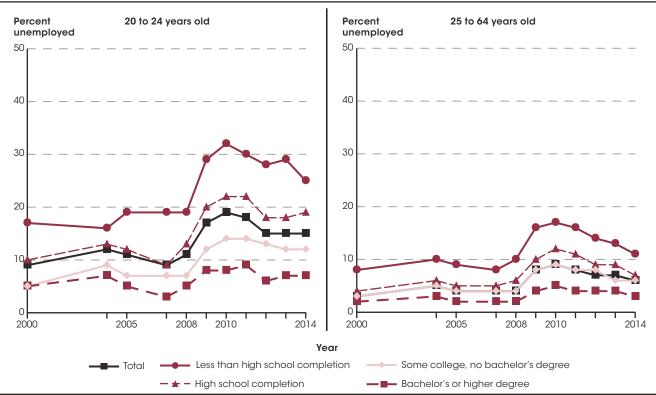


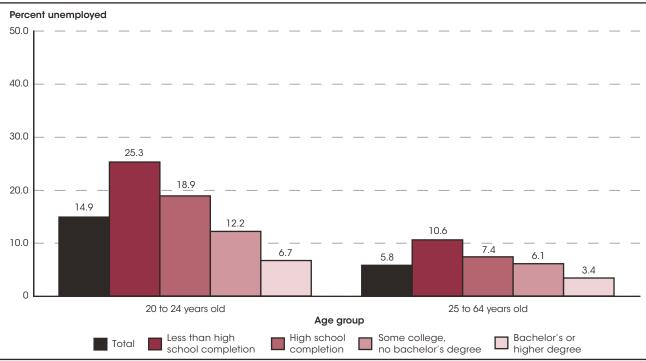
Figure 3. Unemployment rates, by age group and educational attainment: Selected years, 2000 through 2014

NOTE: The unemployment rate is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The civilian labor force consists of all civilians who are employed or seeking employment. Data for 20- to 24-year-olds exclude persons enrolled in school. The data for the "Some college, no bachelor's degree" category includes persons with no bachelor's degree as well as those with an associate's degree. High school completion includes equivalency credentials, such as the General Educational Development (GED) credential. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), selected years, 2000 through 2014. See *Digest of Education Statistics 2014*, table 501.80.

For young adults ages 20 to 24, the unemployment rate in 2010 (18.8 percent) was higher than it was in either 2008 or 2000 (10.7 and 9.2 percent, respectively). The unemployment rate for young adults was lower in 2014 (14.9 percent) than it was in 2010, when the recession ended, but higher than in either 2008 or 2000.

The trend over time of the unemployment rate for adults ages 25 to 64 was similar to that for young

adults ages 20 to 24. The unemployment rate was higher in 2010 (9.1 percent) than it was in either 2008 or 2000 (4.4 and 3.3 percent, respectively). The rate in 2014 (5.8 percent) was lower than in 2010 but higher than it had been in either 2008 or 2000. Generally, at each level of educational attainment for both age groups, the unemployment rate in 2014 was lower than the unemployment rate in 2010, but higher than the rates in 2008 and 2000.



#### Figure 4. Unemployment rates, by age group and educational attainment: 2014

NOTE: The unemployment rate is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The civilian labor force consists of all civilians who are employed or seeking employment. Data for 20- to 24-year-olds exclude persons enrolled in school. The data for the "Some college, no bachelor's degree" category includes persons with no bachelor's degree as well as those with an associate's degree. High school completion includes equivalency credentials, such as the General Educational Development (GED) credential. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), 2014. See *Digest of Education Statistics 2014*, table 501.80.

Generally, the unemployment rate was lower for those with higher levels of educational attainment. For example, in 2014, the unemployment rate for young adults 20 to 24 years old with a bachelor's degree or higher was lower than the rate for young adults with some college (6.7 vs. 12.2 percent). The unemployment rate for young adults with some college was lower than the rate for those who had completed high school (18.9 percent), which was lower than the unemployment rate of 25.3 percent for those who had not finished high school. This pattern of unemployment rates being lower for those with higher levels of educational attainment was also seen for those 25 to 64 years old and, generally, for men and for women within both age groups.

#### **Endnotes:**

<sup>1</sup> The National Bureau of Economic Research determined that the recession began in December 2007 and continued through June 2009. See <u>http://www.nber.org/cycles.html</u>.

**Reference tables:** *Digest of Education Statistics 2014*, tables 501.50, 501.60, 501.70, 501.80, 501.85, and 501.90

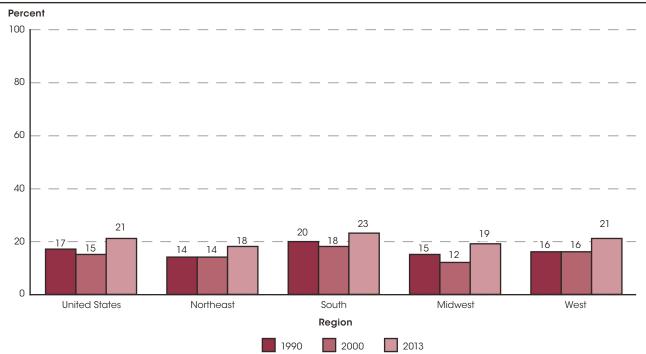
**Related indicators:** Annual Earnings of Young Adults (indicator 3), Trends in Employment Rates by Educational Attainment [*The Condition of Education 2013 Spotlight*] In 2014, the overall unemployment rate for young males 20 to 24 years old was higher than the overall rate for young females 20 to 24 years old (17.0 vs. 12.4 percent). The unemployment rate for young males who had graduated from high school was greater than the rate for young females with the same level of educational attainment (21.1 vs. 15.8 percent). The unemployment rate for males ages 25 to 64 who had not graduated from high school was lower than the rate for females ages 25 to 64 who had not graduated from high school (9.4 vs. 12.7 percent). However, there were no measurable differences between older males and females at the other levels of educational attainment.

**Glossary:** Bachelor's degree, Educational attainment (Current Population Survey), High school completer

In 2013, approximately 21 percent of school-age children were in families living in poverty. The percentage of school-age children living in poverty ranged across the United States from 9 percent in New Hampshire to 33 percent in Mississippi.

In 2013, approximately 10.9 million school-age children 5 to 17 years old were in families living in poverty.<sup>1</sup> Research suggests that living in poverty during early childhood is associated with lower than average academic performance that begins in kindergarten<sup>2</sup> and extends through elementary and high school. Living in poverty during early childhood is associated with lower than average rates of school completion.<sup>3</sup> The percentage of school-age children living in poverty in 2013 (21 percent) was higher than it was two decades earlier in 1990 (17 percent), even though the poverty rate for school-age children was lower in 2000 (15 percent) than in 1990. Between the two most recent survey years, 2012 and 2013, the poverty rate for school-age children did not change measurably.





NOTE: The measure of child poverty includes all children who are related to the householder by birth, marriage, or adoption (except a child who is the spouse of the householder). The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. 1990 data are based on 1989 incomes and family sizes collected in the 1990 census, and 2000 data are based on 1999 incomes and family sizes collected in the 2000 census. Data for both years may differ from Current Population Survey data.

SOURCE: U.S. Department of Commerce, Census Bureau, 1990 Summary Tape File 3 (STF 3), "Median Household Income in 1989" and "Poverty Status in 1989 by Family Type and Age"; Decennial Census, 1990, *Minority Economic Profiles*, unpublished data; Decennial Census, 2000, *Summary Social, Economic, and Housing Characteristics*; Census 2000 Summary File 4 (SF 4), "Poverty Status in 1999 of Related Children Under 18 Years by Family Type and Age"; and American Community Survey (ACS), 2013. See Digest of Education Statistics 2014, table 102.40.

All regions of the United States (Northeast, South, Midwest, and West) had higher poverty rates for school-age children in 2013 than in 1990 or 2000. In 2013, the South had the highest rate of poverty for school-age children (23 percent), followed by the West (21 percent), the Midwest (19 percent), and the Northeast (18 percent). From 1990 to 2000, both the South and the Midwest experienced a decrease in the poverty rate for school-age children (from 20 to 18 percent and from 15 to 12 percent, respectively), while the Northeast and the West did not show measurable changes.

## **Chapter:** 1/Population Characteristics **Section:** Demographics

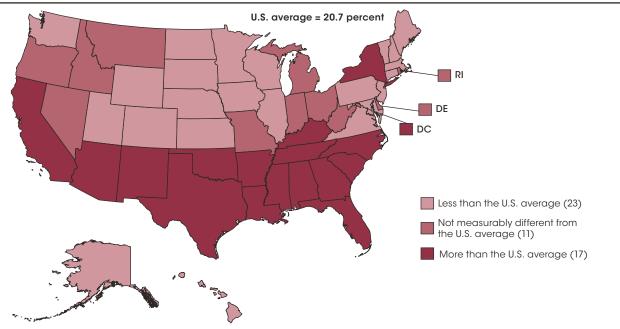


Figure 2. Percentage of 5- to 17-year-olds in families living in poverty, by state: 2013

NOTE: The measure of child poverty includes all children who are related to the householder by birth, marriage, or adoption (except a child who is the spouse of the householder). The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2013. See *Digest of Education Statistics 2014*, table 102.40.

While the national average poverty rate for school-age children was 21 percent in 2013, the poverty rates among the states ranged from 9 percent in New Hampshire to 33 percent in Mississippi. Some 23 states had poverty rates for school-age children that were lower than the national average, 16 states plus the District of Columbia had rates that were higher than the national average, and 11 states had rates that were not measurably different from the national average. Of the 17 jurisdictions (16 states and the District of Columbia) that had poverty rates higher than the national average, 13 were located in the South.

In 2013, some 37 states plus the District of Columbia had higher poverty rates for school-age children than in 1990, while 11 states had poverty rates for school-age children that were not measurably different from those in 1990. In two states (Louisiana and North Dakota), the percentage of school-age children living in poverty was lower in 2013 than in 1990. From 1990 to 2000, the poverty rate for school-age children decreased in 38 states, while it increased in 6 states plus the District of Columbia. In 2013, the poverty rate for school-age children was higher in 43 states than it was in 2000, and it did not change measurably in the remaining 7 states and the District of Columbia during this period.

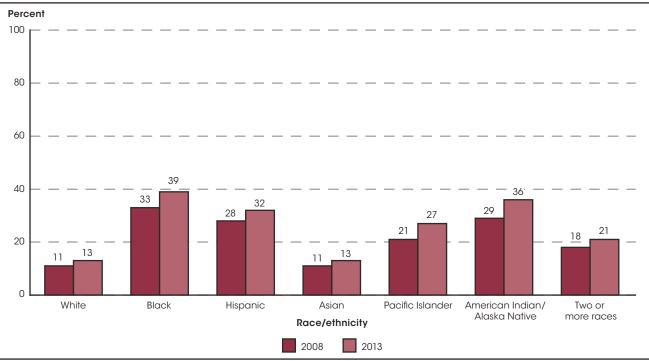


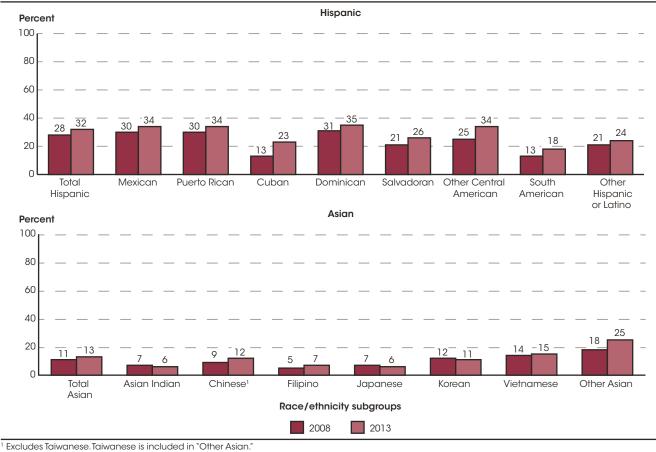
Figure 3. Percentage of children under age 18 living in poverty, by race/ethnicity: 2008 and 2013

NOTE: The measure of child poverty includes all children who are related to the householder by birth, marriage, or adoption (except a child who is the spouse of the householder). The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2008 and 2013. See Digest of Education Statistics 2014, table 102.60.

In 2013, approximately 15.6 million, or 22 percent, of all children under the age of 18 were in families living in poverty; this population includes 10.9 million 5- to 17-year-olds and 4.8 million children under age 5 living in poverty. The percentage of children under age 18 living in poverty varied across racial/ethnic groups. In 2013, the percentage was highest for Black children (39 percent), followed by American Indian/Alaska Native children (36 percent), Hispanic children (32 percent), Pacific Islander children (27 percent), and children of Two or more races (21 percent). The poverty rate was lowest for White and Asian children (13 percent each). The percentage of children under age 18 living in poverty in 2013 was 4 percentage points higher than in 2008 (18 percent). For all racial/ethnic groups, except Pacific Islanders, the percentage of children under age 18 living in poverty in 2013 was higher than in 2008. The increases between 2008 and 2013 ranged from 2 percentage points for both White and Asian children to 7 percentage points for American Indian/Alaska Native children.

## **Chapter:** 1/Population Characteristics **Section:** Demographics



#### Figure 4. Percentage of children under age 18 living in poverty, by selected race/ethnicity subgroups: 2008 and 2013

NOTE: The measure of child poverty includes all children who are related to the householder by birth, marriage, or adoption (except a child who is the spouse of the householder). The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. "Other Central American" includes children from Central American countries other than the ones shown. Similarly, "Other Hispanic or Latino" refers to children from Hispanic or Latino countries other than the ones shown and "Other Asian" refers to children from Asian countries other than the ones shown. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2008 and 2013. See *Digest of Education Statistics 2014*, table 102.60.

Among Hispanics in 2013, the percentage of children under age 18 living in poverty ranged from 18 percent to 35 percent: South American children (18 percent), Cuban children (23 percent), Other Hispanic or Latino children (24 percent), Salvadoran children (26 percent), Puerto Rican children (34 percent), Mexican children (34 percent), Other Central American children (34 percent), and Dominican children (35 percent). Among Asians, the percentage of children living in poverty ranged from 6 percent to 25 percent: Japanese children (6 percent), Asian Indian children (6 percent), Filipino children (7 percent), Korean children (11 percent), Chinese children (12 percent), Vietnamese children (15 percent), and Other Asian children (25 percent). Among children of Two or more races, the percentage living in poverty was lowest for White-Asian children (8 percent), followed by White-American Indian/ Alaska Native children (21 percent), Other children of Two or more races (22 percent), and White-Black children (29 percent).

For most racial/ethnic subgroups, the percentage of children under age 18 living in poverty was higher in 2013 than in 2008. Among Hispanics, the percentage of children living in poverty increased by 4 percentage points for Mexican, Dominican, Puerto Rican, South American, and Other Hispanic or Latino children each, 6 percentage points for Salvadoran children, 9 percentage points for Other Central American children, and 10 percentage points for Cuban children. Among Asians, the percentage of children living in poverty increased during this period by 2 percentage points for Chinese children, 3 percentage points for Filipino children, and 6 percentage points for Other Asian children, but the percentage of children living in poverty was not measurably different for the remaining Asian subgroups: Asian Indian, Japanese, Korean, and Vietnamese. Among children of Two or more races, the percentage of children living in poverty was higher in 2013 than in 2008 for all subgroups: 2 percentage points higher for White-Asian children, 3 percentage points higher for both White-Black children and White-American Indian/Alaska Native children, and 5 percentage points higher for Other children of Two or more races.

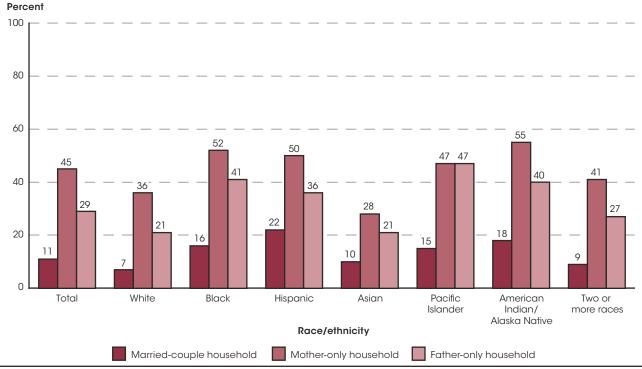


Figure 5. Percentage of children under age 18 living in poverty, by race/ethnicity and family structure: 2013

NOTE: The measure of child poverty includes all children who are related to the householder by birth, marriage, or adoption (except a child who is the spouse of the householder). The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. To determine family structure, children are classified by their parents' marrital status or, if no parents are present in the household, by the marital status of the householder who is related to the children. Mother-only households are those that have only a female householder, and father-only households are those that have only a male householder. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2013. See Digest of Education Statistics 2014, table 102.60.

Among children under age 18 living in poverty in 2013, those living in a mother-only household had the highest rate of poverty (45 percent) and those living in a fatheronly household had the next highest rate (29 percent). Children living in a married-couple household had the lowest rate of poverty at 11 percent. This pattern of married-couple households having the lowest rate of poverty was observed across all racial/ethnic groups. For example, in 2013, among Black children under age 18 the poverty rates were 52 percent for children living in a mother-only household, 41 percent for those living in a father-only household, and 16 percent for those living in a married-couple household. For all family types, the poverty rates for Black, Hispanic, and American Indian/Alaska Native children were generally higher than the national poverty rates in 2013. In contrast, the poverty rates for White and Asian children were generally lower than the national poverty rates. For example, among children living in mother-only households in 2013 the national poverty rate (45 percent) was lower than the rates for Black children (52 percent), Hispanic children (50 percent), and American Indian/ Alaska Native children (55 percent), but higher than the rates for White children (36 percent), Asian children (28 percent), and children of Two or more races (41 percent).

# **Chapter:** 1/Population Characteristics **Section:** Demographics

#### Endnotes:

<sup>1</sup> In this indicator, data on household income and the number of people living in the household are combined with the poverty threshold, published by the Census Bureau, to determine the poverty status of children. A household includes all families in which children are related to the householder by birth or adoption, or through marriage. The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. In 2013, the poverty threshold for a family of four with two related children under 18 years old was \$23,624 (http://www.census.gov/hhes/www/poverty/data/ threshld/thresh13.xls).

**Reference tables:** *Digest of Education Statistics 2014*, tables 102.40 and 102.60

**Related indicators:** Disparities in Educational Outcomes Among Male Youth (Spotlight), Concentration of Public School Students Eligible for Free or Reduced-Price Lunch (indicator 17) <sup>2</sup> Mulligan, G.M., Hastedt, S., and McCarroll, J.C. (2012). *First-Time Kindergartners in 2010–11: First Findings From the Kindergarten Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)* (NCES 2012-049). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
<sup>3</sup> Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., and Manning, E. (2012). Higher *Education: Gaps in Access and Persistence Study* (NCES 2012-046). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Glossary: Poverty, Racial/ethnic group

The indicators in this chapter of *The Condition of Education* describe trends in enrollments across all levels of education. Enrollment is a key indicator of the scope of and access to educational opportunities, and functions as a basic descriptor of American education. Changes in enrollment may impact the demand for educational resources such as qualified teachers, physical facilities, and funding levels, all of which are required to provide high-quality education for our nation's students.

The indicators in this chapter include information on enrollment rates by age group as well as by level of the education system, namely, preprimary, elementary and secondary, undergraduate, graduate and professional, and adult education. Some of the indicators in this chapter provide information about the characteristics of the students who are enrolled in formal education and, in some cases, how enrollment rates of different types of students vary across schools.

This chapter's indicators, as well as additional indicators on participation in education, are available at *The Condition of Education* website: <u>http://nces.ed.gov/programs/coe</u>.



# Chapter 2

# **Participation in Education**

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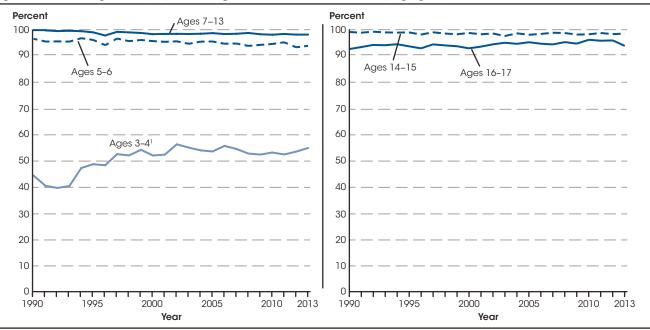
### Indicator 6 Enrollment Trends by Age

**Chapter:** 2/Participation in Education **Section:** All Ages

In 2013, some 94 percent of 5- to 6-year-olds and 98 percent of 7- to 13-year-olds were enrolled in elementary or secondary school. In that same year, 47 percent of 18- to 19-year-olds and 39 percent of 20- to 24-year-olds were enrolled in postsecondary education. Although the total school enrollment rate of most age groups from 3 to 34 did not change measurably between 2012 and 2013, the enrollment rate of 16- to 17-year-olds was 2 percentage points lower in 2013 than in 2012.

Changes in the number of students enrolled in school can stem from fluctuations in population size or shifts in enrollment rates. Enrollment rates may vary in response to changes in state compulsory attendance requirements, changes in the prevalence of homeschooling, changes in perceptions regarding the value of education (particularly at the preschool and college levels), and changes in the amount of time it takes to complete a degree. From 1990 to 2013, school enrollment rates increased for children ages 3–4 and for each age group from 18 to 34; however, enrollment rates decreased for those ages 5–6 and 7–13 during the same period. For most age groups from 3 to 34, total school enrollment rates did not change measurably between 2012 and 2013. The only exception was for children ages 16–17, whose enrollment rate was lower in 2013 (94 percent) than in 2012 (96 percent).

Figure 1. Percentage of the population ages 3-17 enrolled in school, by age group: October 1990-2013



<sup>1</sup> Beginning in 1994, preprimary enrollment data were collected using new procedures. As a result, pre-1994 data may not be comparable to data from 1994 or later.

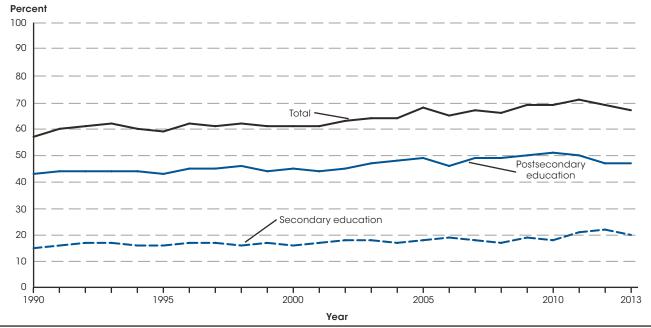
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See Digest of Education Statistics 2014, table 103.20.

Between 1990 and 2013, the enrollment rate for children ages 3–4, who are typically enrolled in nursery school or preschool, increased from 44 to 55 percent, with most of the growth occurring between 1990 and 2000. For children ages 5–6, who are typically enrolled in

kindergarten or first grade, the enrollment rate fluctuated between 94 and 97 percent in the 1990s, and then declined from 96 percent in 2000 to 94 percent in 2013. The enrollment rate for 5- to 6-year-olds did not change measurably between 2012 and 2013. The enrollment rate for 7- to 13-year-olds decreased from nearly 100 percent in 1990 to 98 percent in 2000, but did not measurably change between 2000 and 2013 (98 percent). For 14- to 15-year-olds, there was not a measurable change between 1990 and 2000 (both 99 percent) or between 2000 and 2013 (98 percent). **Chapter:** 2/Participation in Education **Section:** All Ages

Meanwhile, the overall enrollment rate for 16- to 17-yearolds fluctuated between 93 and 94 percent from 1990 to 2000, and between 93 and 96 percent from 2000 to 2013. This age group's enrollment rate was 2 percentage points lower in 2013 (94 percent) than in 2012 (96 percent).





SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See Digest of Education Statistics 2014, table 103.20.

Young adults at ages 18–19 are typically transitioning into either postsecondary education or the workforce. Between 1990 and 2013, the overall enrollment rate (i.e., enrollment at both the secondary level and the postsecondary level) for young adults ages 18–19 increased from 57 to 67 percent. The enrollment rate during this period for these young adults increased from 15 to 20 percent at the secondary level and from 43 to 47 percent at the postsecondary level. Between 2000 and 2013, the overall enrollment rate for those in this age range increased from 61 to 67 percent; the enrollment rate at the secondary level increased from 16 to 20 percent but was not measurably different at the postsecondary level.

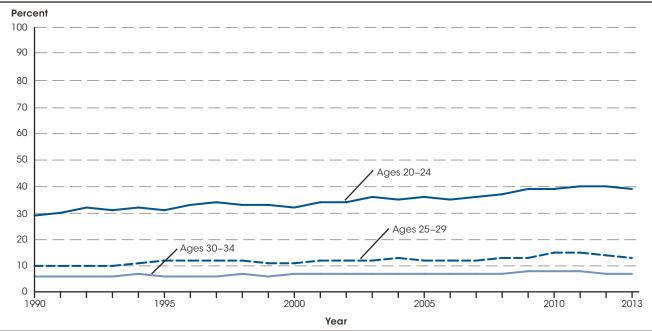


Figure 3. Percentage of the population ages 20-34 enrolled in school, by age group: October 1990-2013

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See Digest of Education Statistics 2014, table 103.20.

Most 20- to 34-year-old students are enrolled in college or graduate school. The enrollment rate for 20- to 24-year-olds increased from 29 to 39 percent between 1990 and 2013. Also, the enrollment rates increased from 10 to 13 percent for 25- to 29-year-olds and from 6 to 7 percent for 30- to 34-year-olds. Between

**Reference tables:** *Digest of Education Statistics 2014*, table 103.20

**Related indicators:** Preprimary Enrollment (indicator 7), Public School Enrollment (indicator 8), Charter School Enrollment (indicator 9), Private School Enrollment (indicator 10), Undergraduate Enrollment (indicator 14), Postbaccalaureate Enrollment (indicator 15) 2000 and 2013, enrollment rates for 20- to 24-year-olds increased from 32 to 39 percent and from 11 to 13 percent for 25- to 29-year-olds. The enrollment rate for 30- to 34-year-olds in 2013 (7 percent) was not measurably different from the rate in 2000 (7 percent), but it was lower than the rate in 2010 (8 percent).

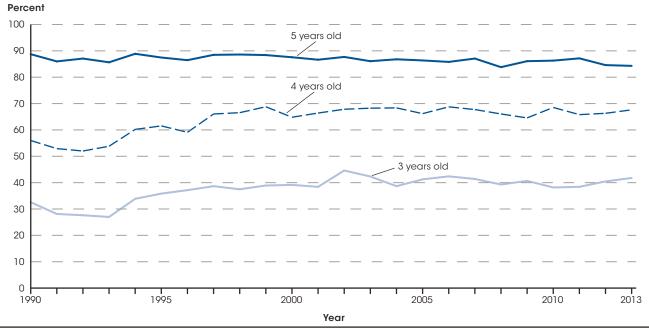
Glossary: College, Secondary school

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The percentage of 3- to 5-year-olds enrolled in preprimary programs increased from 59 to 64 percent between 1990 and 2000, but there has been no measurable increase since then. The percentage of these children who attended full-day programs increased from 39 to 60 percent between 1990 and 2013 overall, although the 2013 full-day enrollment rate was not measurably different from the 2012 rate.

Preprimary programs are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. From 1990 to 2013, the percentage of 3- to 5-year-olds enrolled in preprimary programs increased from 59 to 65 percent, with all of the growth occurring between 1990 and 2000.





NOTE: Preprimary programs are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Beginning in 1994, new procedures were used in the Current Population Survey to collect preprimary enrollment data. As a result, pre-1994 data may not be comparable to data from 1994 or later. Data are based on sample surveys of the civilian noninstitutional population. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2013. See *Digest of Education Statistics 2014*, table 202.10.

The percentages of 3- and 4-year-olds enrolled in preprimary programs in 2013 (42 and 68 percent, respectively) were higher than the percentages enrolled in 1990 (33 and 56 percent, respectively) but not measurably different from the percentages enrolled in 2000 or 2012. In contrast, the percentage of 5-year-olds enrolled in preprimary programs declined from 89 percent in 1990 to 84 percent in 2013. The percentage of 5-year-olds enrolled in preprimary programs in 2013 was not measurably different from the percentage enrolled in 2012 (84 and 85 percent, respectively).

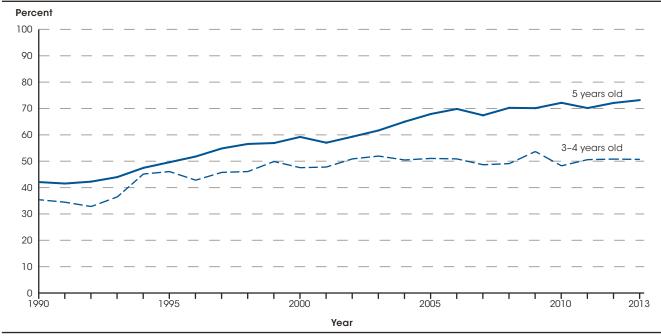
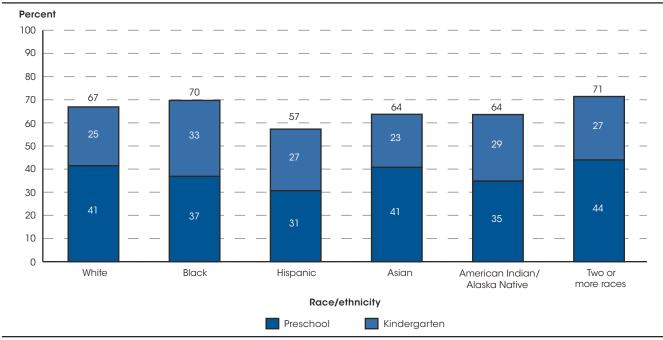


Figure 2. Percentage of 3- to 4-year-old children and 5-year-old children in preprimary programs attending full-day programs: 1990 through 2013

NOTE: *Preprimary programs* are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Beginning in 1994, new procedures were used in the Current Population Survey to collect preprimary enrollment data. As a result, pre-1994 data may not be comparable to data from 1994 or later. Data are based on sample surveys of the civilian noninstitutional population. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2013. See *Digest of Education Statistics 2014*, table 202.10.

The percentage of 3- to 5-year-olds in preprimary programs who attended full-day programs increased from 39 percent in 1990 to 60 percent in 2013. This increase in the full-day enrollment rate was observed for 3- to 4-year-olds as well as 5-year-olds. More recently, the full-day enrollment rate was higher in 2013 (73 percent) than in 2000 (59 percent) for 5-year-olds, but the rate did not change measurably for 3- to 4-year-olds. Enrollment rates in full-day preprimary programs increased more rapidly between 1990 and 2013 for 5-year-old children than for 3- to 4-year-old children. In 1990, the percentage of full-day enrollment for 5-year-olds (42 percent) was 7 percentage points higher than the percentage of full-day enrollment for 3- to 4-year-olds (35 percent). By 2013, the percentage of full-day enrollment for 5-year-olds (73 percent) was 22 percentage points higher than the percentage of full-day enrollment for 3- to 4-year-olds (51 percent).

# **Chapter:** 2/Participation in Education **Section:** Preprimary Education



### Figure 3. Percentage of 3- to 5-year-old children enrolled in preprimary programs, by race/ethnicity and level of program: October 2013

NOTE: *Preprimary programs* are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Race categories exclude persons of Hispanic ethnicity. Data are based on sample surveys of the civilian noninstitutional population. Detail may not sum to totals because of rounding.

SOÚRCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2013. See Digest of Education Statistics 2014, table 202.20.

In 2013, some 38 percent of 3- to 5-year olds were enrolled in preschool programs and 27 percent were enrolled in kindergarten programs. A lower percentage of Hispanic 3- to 5-year-olds (31 percent) were enrolled in preschool programs than of 3- to 5-year-olds who were White (41 percent), Black (37 percent), Asian (41 percent), or Two or more races (44 percent). A higher percentage of Black 3- to 5-year-olds (33 percent) were enrolled in kindergarten than of White (25 percent), Hispanic (27 percent), and Asian (23 percent) 3- to 5-year-olds.

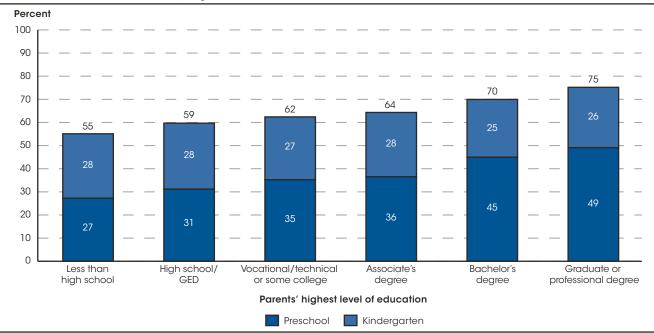


Figure 4. Percentage of 3- to 5-year-old children enrolled in preprimary programs, by parents' highest level of education and level of program: October 2013

NOTE: Preprimary programs are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Parents' highest level of education is defined as the diploma attained by the most educated parent. Data are based on sample surveys of the civilian noninstitutional population.

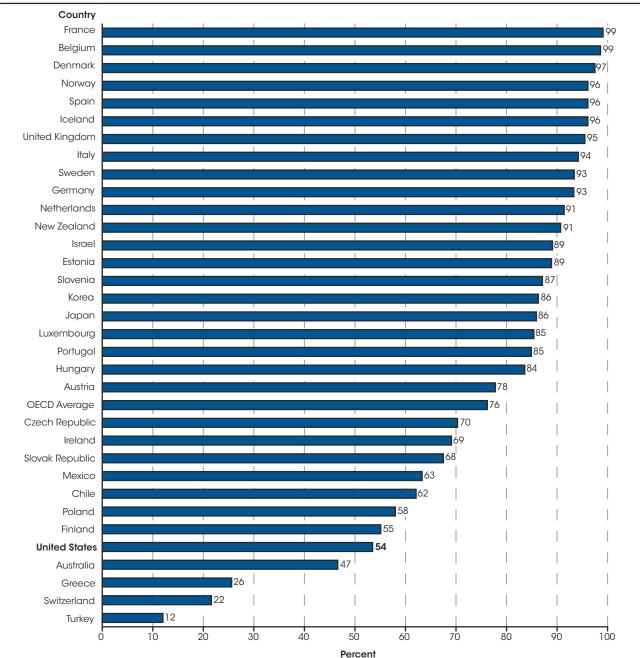
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2013. See Digest of Education Statistics 2014, table 202.20.

Enrollment in preprimary programs varied by parents' highest level of education, defined as the highest level of education attained by the most educated parent in the child's household. In 2013, the overall percentage of 3- to 5-year-olds enrolled in preprimary programs was higher for those children whose parents had a graduate or professional degree (75 percent), as compared to those with a bachelor's degree (70 percent), an associate's degree (64 percent), some college or a vocational degree (62 percent), a high school credential (59 percent). The overall enrollment rate was also higher for those children whose parents had a bachelor's degree than those with all other levels of education, except a graduate or professional degree.

The overall preprimary enrollment differences reflected differences in the percentage of preschool enrollment. The percentage of 3- to 5-year-olds enrolled in preschool programs was higher for those children whose parents had either a graduate or professional degree (49 percent) or a bachelor's degree (45 percent). Preschool enrollment was lower in households where the parents' highest level of education was an associate's degree (36 percent), some college or a vocational degree (35 percent), a high school credential (31 percent), or less than a high school credential (27 percent). The percentage of 3- to 5-year-olds enrolled in kindergarten programs was not measurably different across all levels of parents' education.

The percentage of 3- to 5-year-olds enrolled in preprimary programs who attended full-day or part-day programs also varied by parents' highest level of education. In 2013, enrollment in full-day preprimary programs was higher for those children whose parents had a high school credential (67 percent) as compared to the full-day enrollment rates for children whose parents' highest level of education was a graduate or professional degree (59 percent), a bachelor's degree (57 percent), an associate's degree (58 percent), or less than a high school credential (59 percent). Conversely, the percentage of 3- to 5-year-olds enrolled in part-day preprimary programs was lower in households where the parents' highest level of education was a high school credential (33 percent) as compared to a graduate or professional degree (41 percent), a bachelor's degree (43 percent), an associate's degree (42 percent), or less than a high school credential (41 percent).

**Chapter:** 2/Participation in Education **Section:** Preprimary Education



#### Figure 5. Percentage of 3- to 4-year-old children enrolled in preschool education, by country: 2012

NOTE: Enrollment rates should be interpreted with care. For each country, this figure shows the number of persons who are enrolled in that country as a percentage of that country's total population in the 3- and 4-year-old age group. However, some of a country's population may be enrolled in a different country, and some persons enrolled in the country may be residents of a different country. Enrollment rates may be underestimated for countries such as Luxembourg that are net exporters of students and may be overestimated for countries that are net importers. 'OECD Average' refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance 2014. See Digest of Education Statistics 2014, table 601.35.

In 2012, some 54 percent of 3- and 4-year-olds were enrolled in preschool programs in the United States, compared to the average of 76 percent enrollment for the Organization for Economic Cooperation and Development (OECD) countries. Among the 34 OECD countries reporting data that year, the percentage of 3- and 4-year-olds enrolled in preschool education ranged from 12 percent in Turkey to 99 percent in France.

**Reference tables:** *Digest of Education Statistics 2014*, tables 202.10, 202.20, and 601.35

Status: On-Time, Delayed-Entry, and Repeating Kindergartners [*The Condition of Education 2013 Spotlight*] **Glossary:** Nursery school

**Related indicators:** Public School Enrollment (indicator 8), Private School Enrollment (indicator 10), Kindergarten Entry

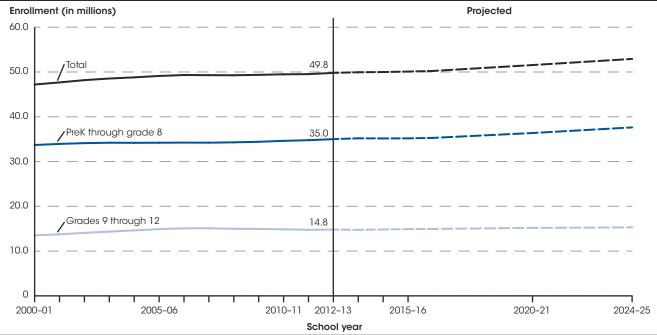
For more information, see the Reader's Guide and the Guide to Sources.

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From school years 2012–13 through 2024–25, overall public elementary and secondary school enrollment is projected to increase by 6 percent (from 49.8 million to 52.9 million students), with changes across states ranging from an increase of 26 percent in Nevada to a decrease of 11 percent in West Virginia.

Public school enrollment changes are largely reflective of demographic changes in the population. This indicator discusses overall changes in public school (including both traditional public school and public charter school) enrollment as well as changes in public school enrollment within grade levels and by state. In school year 2012–13, some 49.8 million students were enrolled in public elementary and secondary schools. Of these students, 70 percent (35.0 million) were in prekindergarten (preK) through grade 8 and 30 percent (14.8 million) were in grades 9 through 12. Following a decline in the 1970s and early 1980s, enrollment began rising in the latter part of the 1980s and continued to increase throughout the 1990s and 2000s. Between 2000–01 and 2012–13, public school enrollment increased by 2.6 million students, reaching a total of 49.8 million students. From 2012–13 to 2024–25 (the last year for which projected data are available), total public school enrollment is projected to increase by 6 percent, to 52.9 million students.





SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 2000–01 through 2012–13; and State Public Elementary and Secondary Enrollment Projection Model, 1980 through 2024. See *Digest of Education Statistics 2014*, tables 203.20, 203.25, and 203.30.

Enrollment trends in preK through grade 8 and grades 9 through 12 have differed over time as successive cohorts of students have moved through the public school system. For example, enrollment in preK through grade 8 decreased throughout the 1970s and early 1980s, while enrollment in grades 9 through 12 generally did not begin to decrease until the late 1970s and continued to decrease

further into the 1980s than enrollment in preK through grade 8 did. Enrollment in preK through grade 8 started to rise in the latter part of the 1980s and continued to rise throughout the 1990s and 2000s. Between 2000–01 and 2012–13, enrollment in preK through grade 8 increased by 1.3 million students, reaching a total of 35.0 million students. Public school enrollment in preK

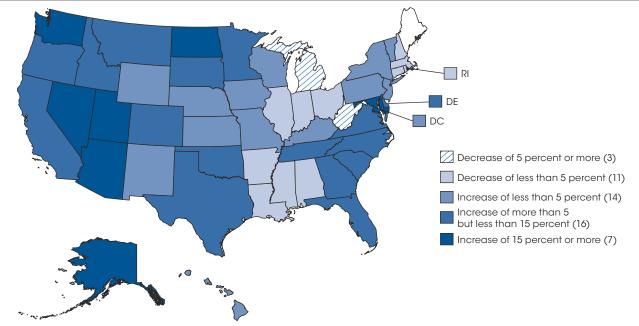
#### For more information, see the Reader's Guide and the Guide to Sources.

through grade 8 is projected to increase to 37.6 million students in 2024–25, an increase of 7 percent over 2012–13. After declining in the 1980s, public school enrollment in grades 9 through 12 began to increase again in 1990–91. Despite a period of decline from 2008–09 through 2011–12, the years from 2000–01 to 2012–13 saw an overall 9 percent increase in enrollment in grades 9 through 12, which resulted in a total of 14.8 million students in 2012–13. Between 2012–13 and 2024–25, enrollment in grades 9 through 12 is projected to increase by 4 percent, to 15.3 million students.

## **Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

Public school enrollment in preK through grade 12 increased in 32 states and the District of Columbia from 2000–01 to 2012–13, with the largest increases occurring in Nevada, Utah, Texas, and Arizona (31, 27, 25, and 24 percent, respectively). During this period, total enrollment declined in the other 18 states, with the largest decreases occurring in Vermont and Maine (12 and 10 percent, respectively).





SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 2012–13; and State Public Elementary and Secondary Enrollment Projection Model, 1980 through 2024. See Digest of Education Statistics 2014, table 203.20.

Changes in total enrollment are also projected to vary across states from 2012–13 to 2024–25. For example, West Virginia is projected to see the largest percentage decrease in total enrollment (11 percent), while Nevada, North Dakota, and Arizona are projected to see the largest percentage increases (26, 23, and 21 percent, respectively). Nevada and Arizona were also among the states with the largest percentage increases from 2000–01 to 2012–13. Changes in public school enrollment are projected to differ by state at the elementary and secondary school levels from 2012–13 to 2024–25. Reflecting the larger national enrollment increase expected at the elementary school level during this period, 37 states and the District

Reference tables: *Digest of Education Statistics 2014*, tables 203.20, 203.25, and 203.30; tables ESE 70 through ESE 89 at <u>http://nces.ed.gov/surveys/AnnualReports/historicaltables.asp</u>. Related indicators: Enrollment Trends by Age (indicator 6), Charter School Enrollment (indicator 9), Private School Enrollment (indicator 10), Characteristics of Traditional Public and Public Charter Schools (indicator 16), Teachers and Pupil/ Teacher Ratios (indicator 19)

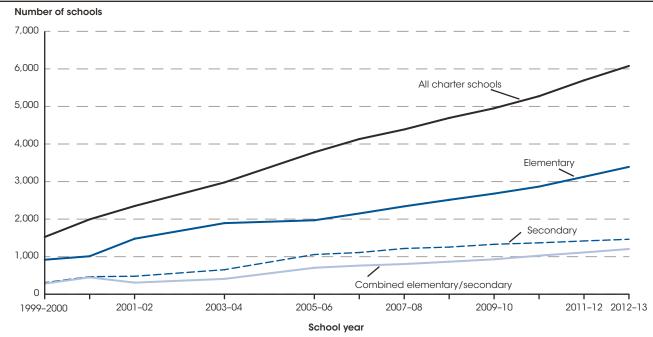
of Columbia are expected to have enrollment increases in preK through grade 8, compared with increases for 33 states and the District of Columbia in grades 9 through 12. In preK through grade 8, enrollment is projected to increase by more than 20 percent in Nevada, Arizona, and Alaska, but it is projected to decrease by more than 10 percent in West Virginia. Enrollment in grades 9 through 12 is expected to increase by more than 20 percent in North Dakota and Utah, but it is projected to decrease by 10 percent or more in New Hampshire, Connecticut, Maine, Rhode Island, and Michigan.

**Glossary:** Elementary school, Prekindergarten, Public school or institution, Secondary school

From school year 1999-2000 to 2012-13, the number of students enrolled in public charter schools increased from 0.3 million to 2.3 million. During this period, the percentage of public school students who attended charter schools increased from 0.7 to 4.6 percent.

A *public charter school* is a publicly funded school that is typically governed by a group or organization under a legislative contract (or charter) with the state or jurisdiction. The charter exempts the school from certain state or local rules and regulations. In return for flexibility and autonomy, the charter school must meet the accountability standards outlined in its charter. A school's charter is reviewed periodically (typically every 3 to 5 years) by the group or jurisdiction that granted it and can be revoked if guidelines on curriculum and management are not followed or if the standards are not met.<sup>1</sup> The first law allowing the establishment of charter schools was passed in Minnesota in 1991.<sup>2</sup> Charter school legislation had been passed in 42 states and the District of Columbia as of school year 2012–13.<sup>3</sup> Charter school legislation has not been passed in the following states: Alabama, Kentucky, Montana, Nebraska, North Dakota, South Dakota, Vermont, and West Virginia. Despite legislative approval in Mississippi and Washington, no charter schools were operational in these states in 2012–13.





NOTE: "Elementary" includes schools beginning with grade 6 or below and with no grade higher than 8. "Secondary" includes schools with no grade lower than 7. "Combined elementary/secondary" includes schools beginning with grade 6 or below and ending with grade 9 or above. Other schools not classified by grade span are included in the "All charter schools" count but are not presented separately in the figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," selected school years, 1999–2000 through 2012–13. See *Digest of Education Statistics 2014*, tables 216.20 and 216.30.

From school year 1999–2000 to 2012–13, the percentage of all public schools that were public charter schools increased from 1.7 to 6.2 percent, and the total number of public charter schools increased from 1,500 to 6,100. During the most recent period from 2011–12 to 2012–13, the percentage of all public schools that were charter schools increased from 5.8 to 6.2 percent, and the total number of public charter schools increased from 5,700 to 6,100. In addition to increasing in number,

charter schools have generally increased in enrollment size over time. For instance, the percentages of charter schools with the largest enrollment sizes (500–999 students and 1,000 or more students) increased from 1999–2000 to 2012–13 (from 11 to 22 percent), and the percentage of charter schools with the smallest enrollment size (under 300 students) decreased from 77 to 54 percent. Similar patterns were observed during the most recent period from 2011–12 to 2012–13.

#### For more information, see the Reader's Guide and the Guide to Sources.

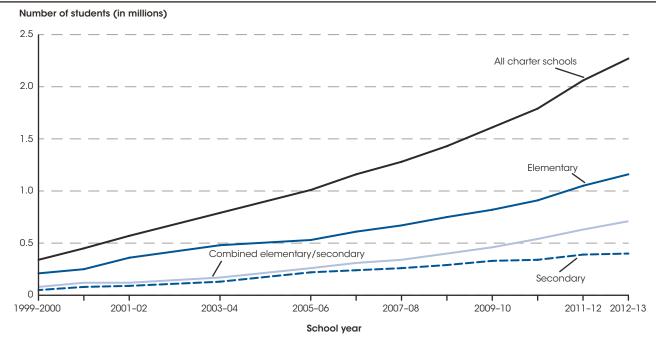
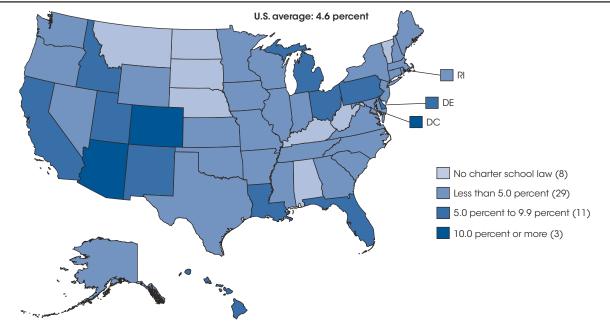


Figure 2. Number of students enrolled in public charter schools, by school level: Selected school years, 1999–2000 through 2012–13

NOTE: "Elementary" includes schools beginning with grade 6 or below and with no grade higher than 8. "Secondary" includes schools with no grade lower than 7. "Combined elementary/secondary" includes schools beginning with grade 6 or below and ending with grade 9 or above. Other schools not classified by grade span are included in the "All charter schools" count but are not presented separately in the figure. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," selected school years, 1999–2000 through 2012–13. See *Digest of Education Statistics 2014*, tables 216.20 and 216.30.

From school year 1999–2000 to 2012–13, the number of students enrolled in public charter schools increased from 0.3 million to 2.3 million. During this period, larger numbers of charter school students were enrolled in elementary schools than in any of the following types of charter schools: secondary, combined, and other types that were not classified by grade span. Since the increase in the number of charter school students (1.9 million)

was larger than the increase in the number of traditional public school students (0.9 million), the percentage of public school students who attended charter schools increased from 0.7 to 4.6 percent during this period. Between school years 2011–12 and 2012–13, the number of students enrolled in public charter schools increased from 2.1 million to 2.3 million.



#### Figure 3. Percentage of all public school students enrolled in public charter schools, by state: School year 2012-13

NOTE: Categorizations are based on unrounded percentages. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2012–13. See *Digest of Education Statistics 2014*, table 216.90.

Among all states in school year 2012–13, California enrolled the largest number of students in charter schools (471,000, representing 8 percent of total public school

students in the state), and the District of Columbia

enrolled the highest percentage of public school

students in charter schools (42 percent, representing 31,600 students). After the District of Columbia, Arizona had the highest percentage (14 percent) of charter school enrollment as a percentage of total public school enrollment.

For more information, see the Reader's Guide and the Guide to Sources.

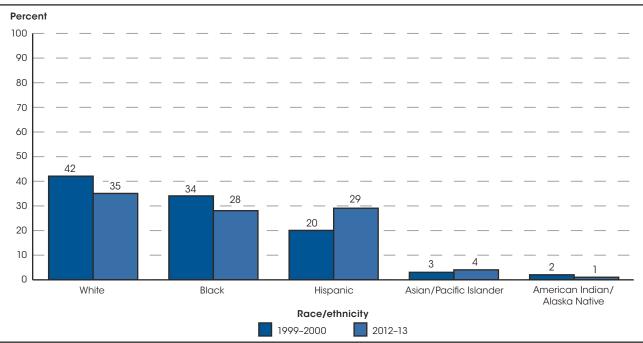


Figure 4. Percentage distribution of public charter school students, by race/ethnicity: School years 1999-2000 and 2012-13

NOTE: Data for the "Two or more races" category were not available prior to 2009–10; therefore, estimates for this category are not presented in the figure and the 2012–13 percentages for all racial/ethnic groups will not sum to 100 percent. In 2012–13, some 3 percent of students were of Two or more races. The 1999–2000 percentages will not sum to 100 percent because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999-2000 and 2012–13. See *Digest of Education Statistics 2014*, table 216.30.

From school year 1999–2000 to 2012–13, charter schools experienced changes in their demographic composition similar to those seen at traditional public schools. The percentage of charter school students who were Hispanic increased (from 20 to 29 percent), as did the percentage who were Asian/Pacific Islander (from 3 to 4 percent). In contrast, the percentage of charter school students who were White decreased from 42 to 35 percent. The percentages who were Black and American Indian/Alaska Native decreased as well (from 34 to 28 percent and from 2 to 1 percent, respectively). Data were collected for charter school students of Two or more races beginning in 2009–10. Students of Two or more races accounted for 3 percent of the charter school population in 2012–13. In school year 2012–13, the percentage of students attending high-poverty schools—schools in which more than 75 percent of students qualify for free or reduced-price lunch (FRPL) under the National School Lunch Program—was higher for charter school students (36 percent) than for traditional public school students (23 percent). In the same year, 20 percent of charter school students and 21 percent of traditional public school students attended low-poverty schools, in which 25 percent or less of students qualify for FRPL.

### **Endnotes:**

<sup>1</sup> Berman, P., Ericson, J., Kamprath, N., Nelson, B., Perry, R., Silverman, D., and Solomon, D. (2000). *The State of Charter Schools 2000*. National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education. Washington, DC.

<sup>2</sup> Adelman, N., Anderson, L., Cotton, L., Donnelly, M., Finnigan, K., and Price, T. (2004). *Evaluation of the Public* 

**Reference tables:** *Digest of Education Statistics 2014*, tables 216.20, 216.30, and 216.90; *Digest of Education Statistics 2013*, table 216.90

**Related indicators:** Characteristics of Traditional Public and Public Charter Schools (indicator 16)

*Charter Schools Program: Final Report.* U.S. Department of Education, Office of the Deputy Secretary. Washington, DC: Policy and Program Studies Service. <sup>3</sup> The Center for Education Reform. (2014). Choice and Charter Schools: Charter School Law. Retrieved January 5, 2015, from <u>www.edreform.com/issues/choice-charter-schools/laws-legislation</u>.

**Glossary:** Charter school, Combined school, Elementary school, Free or reduced-price lunch, National School Lunch Program, Secondary school, Student membership, Traditional public school

For more information, see the Reader's Guide and the Guide to Sources.

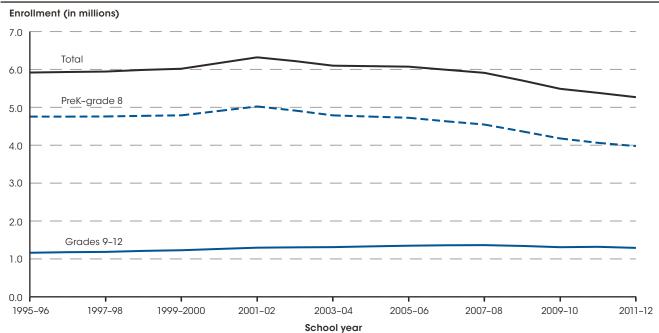
## Indicator 10 Private School Enrollment

Private school enrollment in prekindergarten through grade 12 increased from 5.9 million in 1995–96 to 6.3 million in 2001–02, then decreased to 5.3 million in 2011–12. The percentage of all students in private schools decreased from 12 percent in 1995–96 to 10 percent in 2011–12.

In school year 2011–12, some 5.3 million students were enrolled in private schools, excluding prekindergarten

students who were enrolled in private schools that did not offer at least one grade of kindergarten or higher.

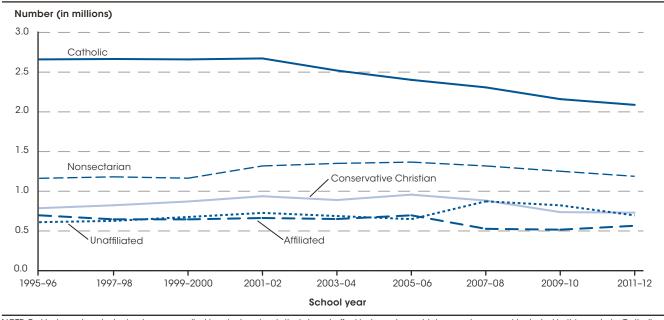
Figure 1. Private school enrollment in prekindergarten (preK) through grade 12, by grade level: School years 1995-96 through 2011-12



SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 1995–96 through 2011–12. See Digest of Education Statistics 2013, table 205.20.

The percentage of all students in private schools decreased from 12 percent in 1995–96 to 10 percent in 2011–12. Private school enrollment in prekindergarten (preK) through grade 12 increased from 5.9 million in 1995–96 to 6.3 million in 2001–02, then decreased to 5.3 million in 2011–12. Similar to overall private school enrollment, private school enrollment in preK through grade 8 increased from 4.8 million in 1995–96 to 5.0 million in 2001–02, then decreased to 4.0 million in 2011–12. However, private school enrollment in grades 9 through 12 increased from 1.2 million in 1995–96 to 1.3 million in 2011–12.

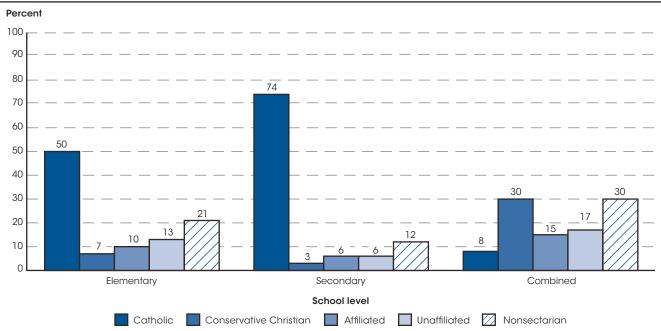
## Figure 2. Number of private school students in prekindergarten through grade 12, by school type: Selected school years, 1995–96 through 2011–12



NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. *Catholic schools* include parochial, diocesan, and private Catholic schools. *Conservative Christian schools* have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. *Affiliated religious schools* have a specific religious orientation or purpose but are not Catholic. *Unaffiliated schools* have a more general religious orientation or purpose but are not catholic or purpose.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), various years, 1995–96 through 2011–12. See Digest of Education Statistics 2013, table 205.20.

The total number of private school students attending Catholic schools decreased from 2.7 million in 1995–96 to 2.1 million in 2011–12 and the share of private school students in Catholic schools declined from 45 percent in 1995–96 to 40 percent in 2011–12. The decrease in the share of private school students attending Catholic schools was due to a decline in the number of students enrolled in Catholic parochial schools (from 1.5 million in 1995–96 to 804,000 in 2011–12). The numbers of students enrolled in conservative Christian and affiliated schools were also lower in 2011–12 (731,000 and 565,000, respectively) than in 1995–96 (787,000 and 697,000, respectively). In contrast, the number of students enrolled in unaffiliated schools was higher in 2011–12 (696,000 students) than in 1995–96 (611,000 students).

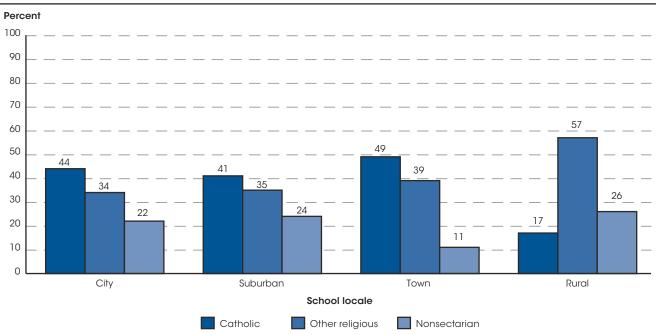


## Figure 3. Percentage distribution of private elementary and secondary school enrollment, by school level and type: 2011-12

NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. *Elementary schools* have grade 6 or lower and no grade higher than 8. *Secondary schools* have no grade lower than 7 and include both junior high schools and senior high schools. *Combined schools* include those that have grades lower than 7 and higher than 8, as well as those that do not classify students by grade level. *Catholic schools* include parochial, diocesan, and private Catholic schools. *Conservative Christian schools* have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. *Affiliated religious schools* have a specific religious orientation or purpose but are not Catholic. *Unaffiliated schools* have a more general religious orientation or purpose but are not classified as conservative Christian or affiliated with a specific religion. *Nonsectarian schools* do not have a religious orientation or purpose. Ungraded students are prorated into preK-8 and 9–12 enrollment totals. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011–12. See Digest of Education Statistics 2013, table 205.30.

In 2011–12, half of all private elementary school students were enrolled in Catholic schools. Additionally, 7 percent were enrolled in conservative Christian schools, 10 percent were enrolled in affiliated religious schools, 13 percent were enrolled in unaffiliated religious schools, and 21 percent were enrolled in nonsectarian, or nonreligious, schools. Similarly, more private secondary school students were enrolled in Catholic schools (74 percent) than in any other school type. In contrast to the large percentage of private school students enrolled in Catholic elementary and secondary schools, Catholic students made up the minority of private school students enrolled in combined schools, at only 8 percent.

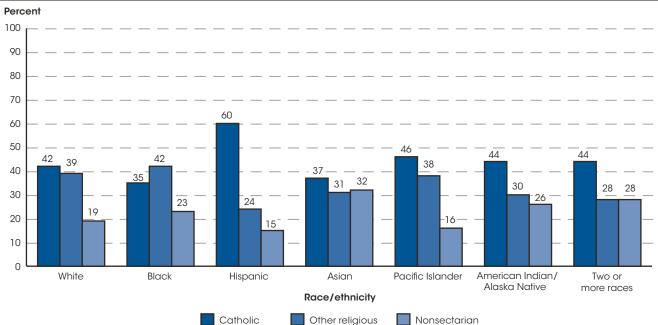


## Figure 4. Percentage distribution of private elementary and secondary school enrollment, by school locale and type: 2011-12

NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. *Catholic schools* include parachial, diocesan, and private Catholic schools. *Other religious schools* include conservative Christian, affiliated, and unaffiliated schools. *Conservative Christian schools* have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. *Affiliated religious schools* have a specific religious orientation or purpose but are not catholic. *Unaffiliated schools* have a more general religious orientation or purpose. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011–12. See Digest of Education Statistics 2013, table 205.30.

In 2011–12, higher percentages of private elementary and secondary school students were enrolled in Catholic schools than in other religious or nonsectarian schools in cities, suburbs, and towns. In towns, for example, 49 percent of private school students attended Catholic schools, while 39 percent attended other religious schools and 11 percent attended nonsectarian schools. In rural areas, however, a lower percentage of private school students (17 percent) attended Catholic schools than attended nonsectarian (26 percent) or other religious schools (57 percent).



# Figure 5. Percentage distribution of private elementary and secondary school enrollment, by race/ethnicity and school type: 2011-12

NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. *Catholic schools* include parochial, diocesan, and private Catholic schools. *Other religious schools* include conservative Christian, affiliated, and unaffiliated schools. *Conservative Christian schools* have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. *Affiliated religious schools* have a specific religious orientation or purpose but are not catholic. *Unaffiliated schools* have a more general religious orientation or purpose but are not classified as conservative Christian or affiliated with a specific religion. *Nonsectarian schools* do not have a religious orientation or purpose. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011–12. See Digest of Education Statistics 2013, table 205.30.

There were differences in private elementary and secondary school attendance by school type within racial/ethnic groups. For all racial/ethnic groups other than Black, higher percentages of private school students attended Catholic schools than other religious schools or nonsectarian schools in 2011–12. For example, 60 percent of Hispanic private school students attended Catholic schools, while 24 percent attended other religious schools and 15 percent attended nonsectarian schools. In contrast, there was a higher percentage of Black private school students attending other religious schools (42 percent) than attending Catholic schools (35 percent). The percentage of Black private school students attending Catholic schools was also higher than the percentage attending nonsectarian schools (23 percent).

**Reference tables:** *Digest of Education Statistics 2013*, tables 205.20 and 205.30; *Digest of Education Statistics 2012*, table 3 **Related indicators:** Public School Enrollment (indicator 8), Teachers and Pupil/Teacher Ratios (indicator 19)

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# **Racial/Ethnic Enrollment in Public Schools**

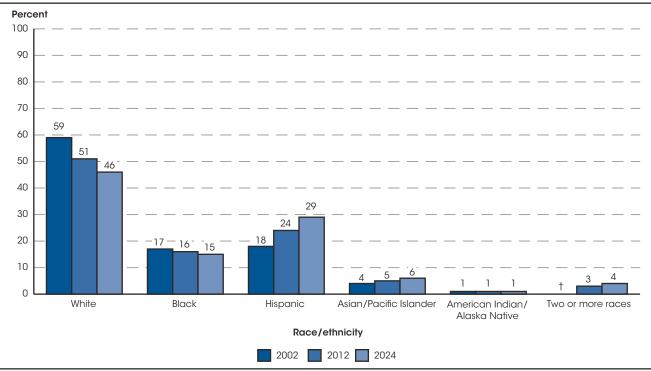
From fall 2002 through fall 2012, the number of White students enrolled in public elementary and secondary schools decreased from 28.6 million to 25.4 million, and their share of public school enrollment decreased from 59 to 51 percent. In contrast, the number of Hispanic students enrolled during this period increased from 8.6 million to 12.1 million students, and their share of public school enrollment increased from 18 to 24 percent.

Overall enrollment in public elementary and secondary schools increased between fall 2002 and fall 2012 from 48.2 million to 49.8 million and is projected to continue increasing to 52.9 million by fall 2024<sup>1</sup> (See <u>Public School</u>

Indicator 11

<u>Enrollment</u>). In addition, racial/ethnic distributions of public school students across the country and within its regions have shifted. These changing distributions may reflect demographic shifts in the population.

Figure 1. Percentage distribution of students enrolled in public elementary and secondary schools, by race/ethnicity: Fall 2002, fall 2012, and fall 2024



† Not applicable.

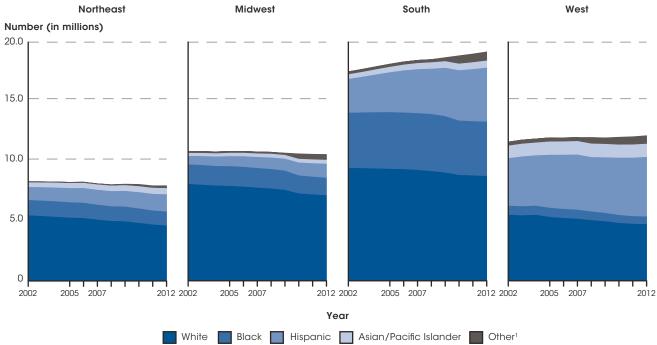
NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2008, separate data on students of Two or more races were not collected. Detail may not sum to totals because of rounding. Data for 2024 are projected.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2002-03 and 2012-13; and National Elementary and Secondary Enrollment Projection Model, 1972 through 2024. See *Digest of Education Statistics 2014*, table 203.50.

From fall 2002 through fall 2012, the number of White students enrolled in public elementary and secondary schools decreased from 28.6 million to 25.4 million, and their share of public school enrollment decreased from 59 to 51 percent. In contrast, the number of Hispanic students enrolled during this period increased from 8.6 million to 12.1 million, and their share of public school enrollment increased from 18 to 24 percent. The number of Black students enrolled decreased during this period from 8.3 million to 7.8 million, and their share of public school enrollment decreased from 17 to 16 percent. Since 2002, the percentage of Hispanic students enrolled in public schools has exceeded the percentage of Black students.

Between fall 2013 and fall 2024, the number of White students enrolled in public schools is projected to continue decreasing from 25.2 million to 24.2 million, and White students' share of enrollment is expected to decline to 46 percent. The percentage of students who are White is projected to be less than 50 percent beginning in 2014 and to continue to decline as the enrollments of Hispanic students and Asian/Pacific Islander students increase. The number of Hispanic public school students is projected to increase from 12.5 million in 2013 to 15.5 million in 2024 and to represent 29 percent of total enrollment in 2024. The number of Asian/Pacific Islander students is projected to increase from 2.6 million to 3.0 million between 2013 and 2024, and their enrollment share in 2024 is projected to increase to 6 percent. Although the number of Black students is projected to fluctuate between 7.7 million and 7.9 million during this period, their enrollment share is projected to decrease from 16 to 15 percent.



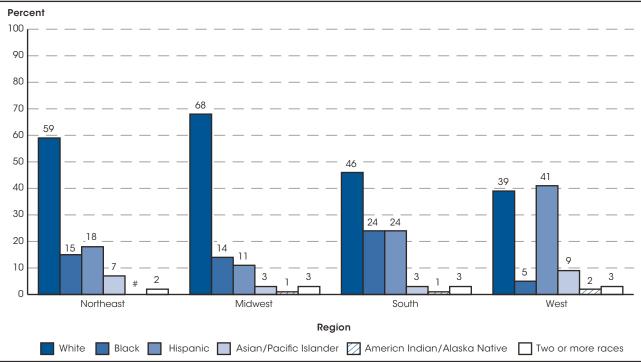


<sup>1</sup> Other includes all students who identified themselves as American Indian/Alaska Native or Two or more races.

NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2008, separate data on students of Two or more races were not collected. In 2008 and 2009, data on students of Two or more races were reported by only a small number of states.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2002–03 through 2012–13. See *Digest of Education Statistics 2014*, table 203.50.

Changes in the racial/ethnic distribution of public school enrollment differed by region. From fall 2002 through fall 2012, the number of White students enrolled and their share of public school enrollment decreased in all regions, with their shares decreasing by 7 percentage points in the Midwest and 8 percentage points each in the Northeast, South, and West. The number of Hispanic students enrolled and their share of public school enrollment increased in all four regions, with their shares increasing by 5 percentage points in the Midwest and Northeast and 7 percentage points in the West and South. From 2002 through 2012, the number of Black students fluctuated in the South but decreased overall in the West, Northeast, and Midwest. The percentage of Black students in public schools decreased in all regions, with their shares decreasing by 1 percentage point each in the Northeast, Midwest, and West and 3 percentage points in the South. The number of Asian/Pacific Islander students fluctuated in the West and increased in the other three regions. Similarly, the percentage of Asian/Pacific Islander students fluctuated in the West but increased by 1 percentage point in the Midwest and South and 2 percentage points in the Northeast.



## Figure 3. Percentage distribution of students enrolled in public elementary and secondary schools, by region and race/ethnicity: Fall 2012

NOTE: Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2012–13. See Digest of Education Statistics 2014, table 203.50.

In fall 2012, the racial/ethnic distribution of public school enrollment differed by region. In most regions, the share of White students was at least 22 percentage points greater than the share of Hispanic students. However, in the West, the difference between the shares of White students and Hispanic students in public school enrollment in 2012 was only 2 percentage points (39 and 41 percent, respectively) following regional shifts in White and Hispanic enrollment. The percentage of Black student enrollment ranged from 5 percent in the West to

24 percent in the South. In the Midwest and Northeast, Black students' share of public school enrollment was 14 and 15 percent, respectively, both of which are within 2 percentage points of Black students' overall U.S. share (16 percent). American Indian/Alaska Native students represented 2 percent or less of student enrollment in each region of the United States. Students of Two or more races made up 2 percent of enrollment in the Northeast and 3 percent of enrollment in the South, Midwest, and West.

### **Endnotes:**

<sup>1</sup> 2024 is the last year for which projected data are available.

**Reference tables:** *Digest of Education Statistics 2014*, table 203.50

Glossary: Public school or institution

Related indicators: Public School Enrollment (indicator 8)

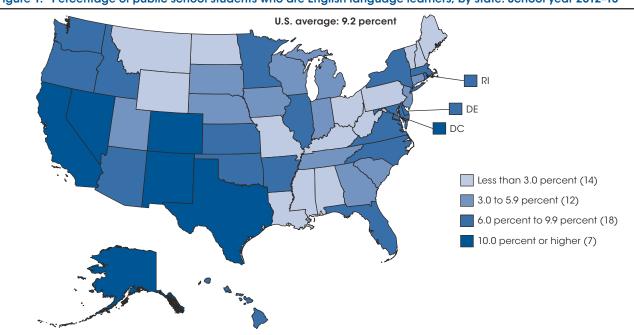
<sup>#</sup> Rounds to zero.

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## Indicator 12 English Language Learners

The percentage of public school students in the United States who were English language learners (ELL) was higher in school year 2012–13 (9.2 percent) than in 2002–03 (8.7 percent) and in 2011–12 (9.1 percent). In 2012–13, five of the six states with the highest percentages of ELL students in their public schools were located in the West.

Students who are English language learners (ELL) participate in appropriate programs of language assistance, such as English as a Second Language, High Intensity Language Training, and bilingual education to help ensure that they attain English proficiency, develop high levels of academic attainment in English, and meet the same academic content and academic achievement standards that all students are expected to meet. Participation in these types of programs can improve students' English language proficiency which, in turn, has been associated with improved educational outcomes.<sup>1</sup> The percentage of public school students in the United States who were English language learners was higher in school year 2012–13 (9.2 percent, or an estimated 4.4 million students) than in 2002–03 (8.7 percent, or an estimated 4.1 million students) and in 2011–12 (9.1 percent, or an estimated 4.4 million students).





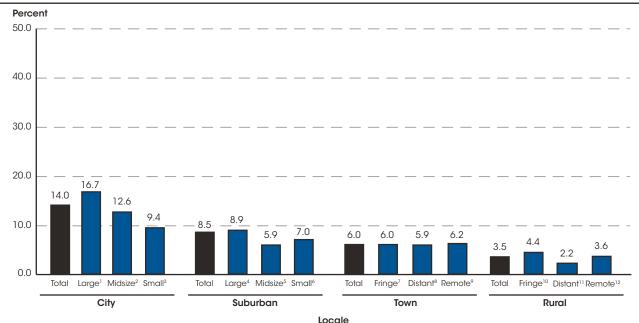
NOTE: Categorization based on unrounded percentages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency Universe Survey," 2012–13. See *Digest of Education Statistics 2014*, table 204.20.

In 2012–13, five of the six states with the highest percentages of ELL students in their public schools were in the West. In the District of Columbia and six states, Alaska, California, Colorado, Nevada, New Mexico, and Texas, 10.0 percent or more of public school students were English language learners, with ELL students constituting 22.8 percent of public school enrollment in California. Eighteen states had percentages of ELL public school enrollment between 6.0 and 9.9 percent. These states were Arizona, Arkansas, Delaware, Florida, Hawaii, Idaho, Illinois, Kansas, Maryland, Massachusetts, Minnesota, New York, North Carolina, Oklahoma, Oregon, Rhode Island, Virginia, and Washington. In 12 states, the percentage of ELL students in public schools was between 3.0 and 5.9 percent; this percentage was less than 3.0 percent in 14 states, with West Virginia having the lowest percentage at 0.7 percent.

The percentage of ELL students in public schools increased between 2002–03 and 2012–13 in all but 11 states, with the largest percentage-point increase occurring in Kansas (4.9 percentage points) and the largest percentage-point decrease occurring in Arizona (9.6 percentage points). Over the two most recent school years, 2011–12 and 2012–13, the percentage of ELL students in public schools decreased in 19 states, with the largest decrease occurring in Hawaii (4.6 percentage points). In contrast, 30 states and the District of Columbia experienced an increase in the percentage of ELL students, but only two states (Illinois and Washington) and the District of Columbia experienced an increase of more than 1.0 percentage point, with the largest increase occurring in the District of Columbia (1.9 percentage points).

Figure 2. Percentage of public school students who are English language learners, by locale: School year 2012-13



<sup>1</sup> Located inside an urbanized area and inside a principal city with a population of at least 250,000.

<sup>2</sup> Located inside an urbanized area and inside a principal city with a population of at least 100,000 but less than 250,000.

<sup>3</sup> Located inside an urbanized area and inside a principal city with a population less than 100,000.

<sup>4</sup> Located inside an urbanized area and outside a principal city with a population of 250,000 or more

<sup>5</sup> Located inside an urbanized area and outside a principal city with a population of at least 100,000 but less than 250,000.

<sup>6</sup> Located inside an urbanized area and outside a principal city with a population less than 100,000.

<sup>7</sup> Located inside an urban cluster that is 10 miles or less from an urbanized area.

<sup>8</sup> Located inside an urban cluster that is more than 10 but less than or equal to 35 miles from an urbanized area

<sup>9</sup> Located inside an urban cluster that is more than 35 miles from an urbanized area.

<sup>10</sup> Located outside any urbanized area or urban cluster but 5 miles or less from an urbanized area or 2.5 miles or less from an urban cluster.

<sup>11</sup> Located outside any urbanized area or urban cluster and more than 5 miles but less than or equal to 25 miles from an urbanized area, or more than 2.5 miles but less than or equal to 10 miles from an urban cluster.

<sup>12</sup> Located outside any urbanized area or urban cluster, more than 25 miles from an urbanized area, and more than 10 miles from an urban cluster. NOTE: Locales are based on an address's proximity to an urbanized area. Data in this figure are based on the locales of school districts rather than the locales of the schools themselves.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency Universe Survey," 2012–13. See Digest of Education Statistics 2014, table 214.40.

In 2012–13, the percentage of students in ELL programs was generally higher for school districts in more urbanized areas than for those in less urbanized areas. For example, ELL students in cities made up an average of 14.0 percent of total public school enrollment, ranging from 9.4 percent in small cities to 16.7 percent in large cities. In suburban areas, ELL students constituted an average of 8.5 percent of public school enrollment, ranging from 5.9 percent in midsize suburban areas to 8.9 percent in large suburban areas. Towns and rural areas are subdivided into fringe, distant, and remote areas according to their proximity to urban centers, with fringe being the closest to an urban center and remote being the farthest from one. In towns, ELL students made up an average of 6.0 percent of public school enrollment, ranging from 5.9 percent in distant areas to 6.2 percent in remote areas. In rural areas, ELL students made up an average of 3.5 percent of public student enrollment, ranging from 2.2 percent in distant areas to 4.4 percent in fringe areas.

### **Endnotes:**

<sup>1</sup> Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., and Manning, E. (2012). *Higher Education: Gaps in Access and Persistence Study* (NCES 2012-046). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

**Reference tables:** *Digest of Education Statistics 2014*, tables 204.20 and 214.40

**Related indicators:** Reading Performance (indicator 23), Mathematics Performance (indicator 24) **Glossary:** English language learner (ELL), Geographic region, Public school or institution

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# Children and Youth With Disabilities

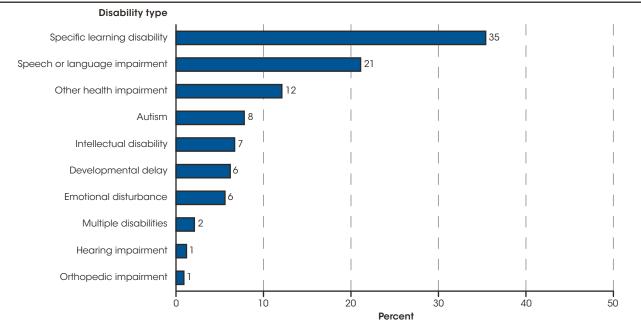
The number of children and youth ages 3–21 receiving special education services was 6.4 million, or about 13 percent of all public school students, in 2012–13. Some 35 percent of students receiving special education services had specific learning disabilities.

Enacted in 1975, the Individuals with Disabilities Education Act (IDEA), formerly known as the Education for All Handicapped Children Act (EAHCA), mandates the provision of a free and appropriate public school education for eligible children and youth ages 3–21. Eligible children and youth are those identified by a team of professionals as having a disability that adversely affects academic performance and as being in need of special education and related services. Data collection activities to monitor compliance with IDEA began in 1976.

From school years 1990–91 through 2004–05, the number of children and youth ages 3–21 who received special

education services increased, as did the percentage of total public school enrollment they constituted: 4.7 million children and youth ages 3–21, or about 11 percent of public school enrollment, received special education services in 1990–91, compared with 6.7 million, or about 14 percent, in 2004–05. Both the number and percentage of children and youth served under IDEA declined from 2004–05 through 2011–12, with some evidence of leveling off in 2012–13. By 2012–13, the number of children and youth receiving services under IDEA had declined to 6.4 million, corresponding to 13 percent of total public school enrollment.

Figure 1. Percentage distribution of children ages 3-21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by disability type: School year 2012-13



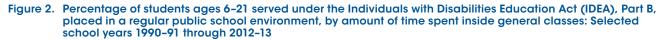
NOTE: Deaf-blindness, traumatic brain injury, and visual impairments are not shown because they each account for less than 0.5 percent of children served under IDEA. Due to categories not shown, detail does not sum to total.

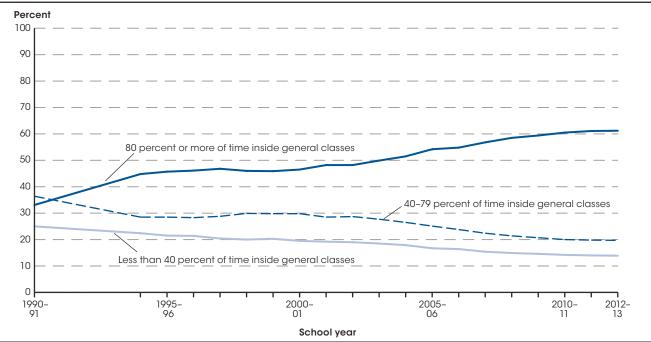
SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved October 3, 2014, from <a href="https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259">https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259</a>. See Digest of Education Statistics 2014, table 204.30.

In school year 2012–13, a higher percentage of children and youth ages 3–21 received special education services under IDEA for specific learning disabilities than for any other type of disability. A specific learning disability is a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. In 2012–13, some 35 percent of all children and youth receiving special education services had specific learning disabilities, 21 percent had speech or language impairments, and 12 percent had other health impairments (including having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart

### For more information, see the Reader's Guide and the Guide to Sources.

condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes). Children and youth with autism, intellectual disabilities, developmental delays, or emotional disturbances each accounted for between 6 and 8 percent of students served under IDEA. Children and youth with multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, traumatic brain injuries, or deaf-blindness each accounted for 2 percent or less of those served under IDEA.



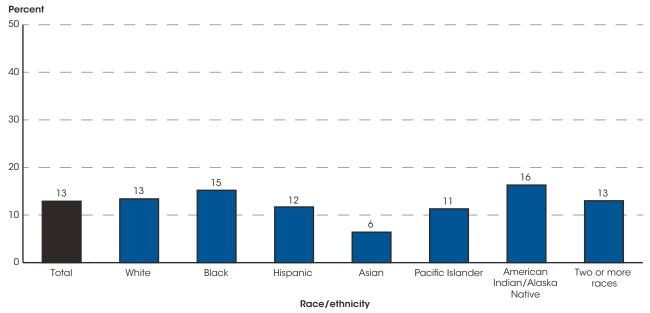


SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved October 3, 2014, from <a href="https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259">https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259</a>. See Digest of Education Statistics 2014, table 204.60.

About 95 percent of school-age children and youth ages 6-21 who were served under IDEA in 2012-13 were enrolled in regular schools. Some 3 percent of children and youth ages 6-21 who were served under IDEA were enrolled in separate schools (public or private) for students with disabilities; 1 percent were placed by their parents in regular private schools; and less than 1 percent each were in separate residential facilities (public or private), homebound or in hospitals, or in correctional facilities. Among all children and youth ages 6–21 who were served under IDEA, the percentage who spent most of the school day (i.e., 80 percent or more of time) in general classes in regular schools increased from 33 percent in 1990-91 to 61 percent in 2012-13. In contrast, during the same period, the percentage of those who spent 40 to 79 percent of the school day in general classes declined

from 36 to 20 percent, and the percentage of those who spent less than 40 percent of time inside general classes also declined from 25 to 14 percent. In 2012–13, the percentage of students served under IDEA who spent most of the school day in general classes was highest for students with speech or language impairments (87 percent). Approximately two-thirds of students with specific learning disabilities (67 percent), students with visual impairments (64 percent), students with other health impairments (64 percent), and students with developmental delays (62 percent) spent most of the school day in general classes. In contrast, 16 percent of students with intellectual disabilities and 13 percent of students with multiple disabilities spent most of the school day in general classes.





NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved October 3, 2014, from <a href="https://inventory.data.gov/dataset/8715a88-bf48-deef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259">https://inventory.data.gov/dataset/8715a88-bf48-deef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259</a>; and National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2012-13. See Digest of Education Statistics 2014, table 204.30 and table 204.50.

In school year 2012–13, the number of children and youth ages 3–21 who were served under IDEA as a percentage of total enrollment in public schools differed by race/ ethnicity. The percentage of children and youth served under IDEA was highest for American Indians/Alaska Natives (16 percent), followed by Blacks (15 percent), Whites (13 percent), children and youth of Two or more races (13 percent), Hispanics (12 percent), Pacific Islanders (11 percent), and Asians (6 percent). In most racial/ethnic groups, the percentage of children and youth receiving services for specific learning disabilities combined with the percentage receiving services for speech or language impairments accounted for over 50 percent of children and youth served under IDEA.

The percentage distribution of children and youth ages 3–21 who received various types of special education

**Reference tables:** *Digest of Education Statistics 2014*, tables 204.30, 204.50, and 204.60

services in 2012–13 differed by race/ethnicity. For example, the percentage of students with disabilities served under IDEA for specific learning disabilities was lower among Asian children (23 percent) than among children overall (35 percent). However, the percentage of students with disabilities who received services under IDEA for autism was higher among Asian children (18 percent) than among children overall (8 percent). Additionally, students who received services for emotional disturbances accounted for 8 percent of Black children served under IDEA, compared with 6 percent of children overall. Among children and youth who received services, the percentages of Pacific Islanders (9 percent), American Indians/Alaska Natives (9 percent), and students of Two or more races (14 percent) who received services for developmental delays under IDEA were higher than the percentage of children overall (6 percent).

**Glossary:** Disability, Individuals with Disabilities Education Act (IDEA), Regular school

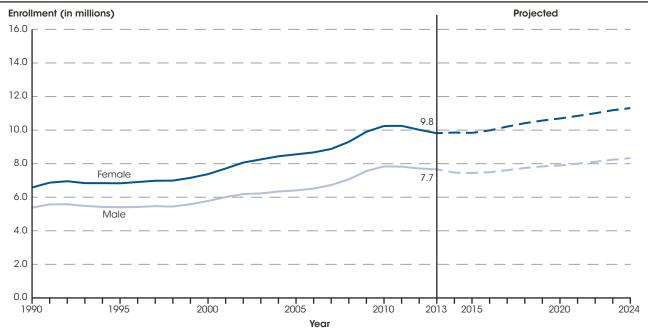
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## Indicator 14 Undergraduate Enrollment

Total undergraduate enrollment in degree-granting postsecondary institutions was 17.5 million students in fall 2013, an increase of 46 percent from 1990, when it was 12.0 million students. By 2024, total undergraduate enrollment is projected to increase to 19.6 million students.

In fall 2013, total undergraduate enrollment in degreegranting postsecondary institutions was 17.5 million students, an increase of 46 percent from 1990, when enrollment was 12.0 million students. While total undergraduate enrollment increased by 37 percent between 2000 and 2010, enrollment in 2013 was 3 percent lower than in 2010. Undergraduate enrollment is projected to increase from 17.5 million to 19.6 million students between 2013 and 2024.

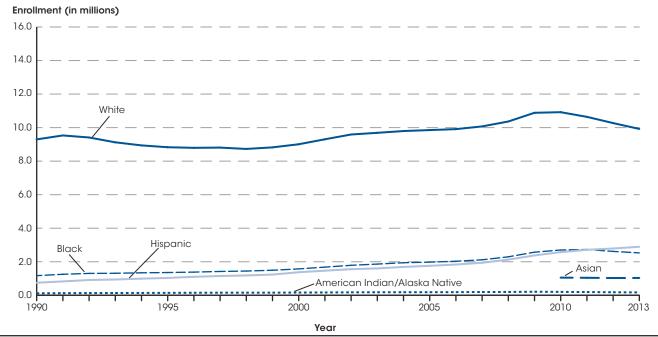




NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2013. 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 Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 303.70.

In fall 2013, female students made up 56 percent of total undergraduate enrollment at 9.8 million and male students made up 44 percent at 7.7 million. Enrollment for both groups increased between 1990 and 2013, but most of the increases occurred between 2000 and 2010, when female enrollment increased by 39 percent and male enrollment increased by 36 percent. However, both female and male enrollments were lower (4 percent and 2 percent, respectively) in 2013 than in 2010. Between 2013 and 2024, female enrollment is projected to increase by 15 percent (from 9.8 million to 11.3 million students), and male enrollment is projected to increase by 9 percent (from 7.7 million to 8.3 million students).





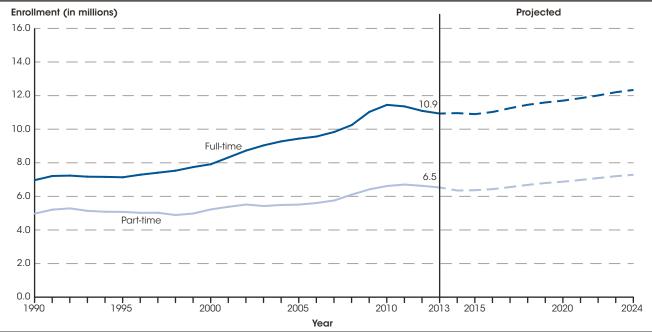
NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2010, separate data on Asians were not available. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Data for 1999 were imputed using alternative procedures. 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 Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 306.10.

Of the 17.5 million undergraduate students in fall 2013, some 9.9 million were White, 2.9 million were Hispanic, 2.5 million were Black, 1.0 million were Asian, 0.1 million were American Indian/Alaska Native, and 0.1 million were Pacific Islander. Between 1990 and 2013, Hispanic enrollment nearly quadrupled (from 0.7 million to 2.9 million students) and Black enrollment

more than doubled (from 1.1 million to 2.5 million students), while White enrollment increased 7 percent (from 9.3 million to 9.9 million students). However, the number of undergraduate students was lower in 2013 than in 2010 for most groups; the exception was Hispanic students, whose enrollment increased by 13 percent during this period.





NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2013. 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 Survey" (IPEDS-EF:90–99); IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 303.70.

In fall 2013, there were 10.9 million full-time and 6.5 million part-time undergraduate students. Enrollment for both full- and part-time students has generally increased since 1990, particularly between 2000 and 2010, when full-time enrollment increased by 45 percent and part-time enrollment increased by 27 percent. Full-time enrollment was 5 percent lower in 2013 than

in 2010, and part-time enrollment was 1 percent lower in 2013 than in 2010. Between 2013 and 2024, however, full-time enrollment is projected to increase by 13 percent (from 10.9 million to 12.3 million students) and parttime enrollment is projected to increase by 12 percent (from 6.5 million to 7.3 million students).

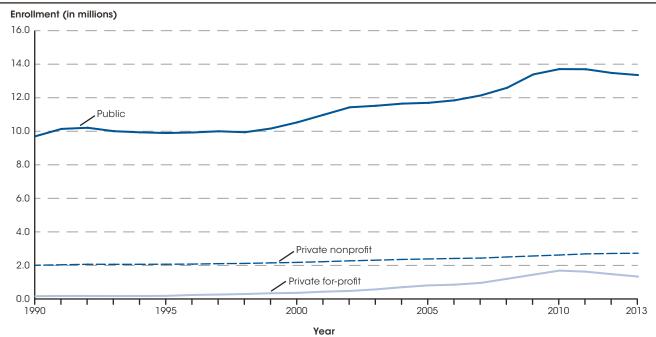


Figure 4. Undergraduate enrollment in degree-granting postsecondary institutions, by control of institution: Fall 1990-2013

NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. 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 Survey" (IPEDS-EF:90-99); and IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 303.70.

The increase in undergraduate enrollment from fall 1990 to fall 2013 occurred at a faster rate at private for-profit institutions (565 percent) than at public institutions (37 percent) and private nonprofit institutions (35 percent), although in 1990 undergraduate enrollment at private for-profit institutions was relatively small, at 0.2 million students, compared with 9.7 million at public institutions. Most of this growth at private for-profit institutions occurred between 2000 and 2010, when enrollment quadrupled (from 0.4 million to 1.7 million

students); in comparison, enrollments increased by 30 percent at public institutions (from 10.5 million to 13.7 million students) and by 20 percent at private nonprofit institutions (from 2.2 million to 2.7 million students) during this period. More recently, the pattern of enrollment at private for-profit institutions has changed. Enrollment at private for-profit institutions in 2013 (1.4 million students) was 21 percent lower than in 2010; enrollment at public institutions (13.3 million students) was 3 percent lower, while enrollment at private nonprofit institutions (2.8 million students) was 4 percent higher.

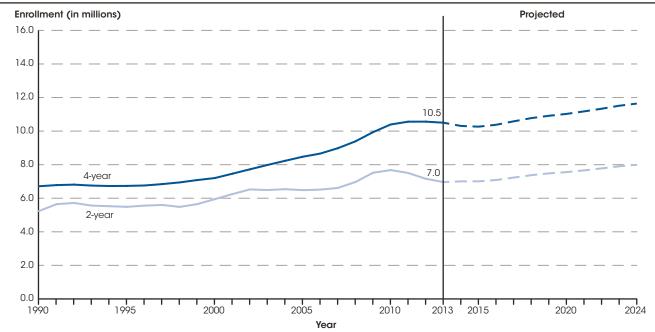


Figure 5. Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by level of institution: Fall 1990-2024

NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2013. 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 Survey" (IPEDS-EF:90–99); IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 303.70.

In fall 2013, the 10.5 million students at 4-year institutions made up 60 percent of undergraduate enrollment; the remaining 40 percent consisted of the 7.0 million students who were enrolled at 2-year institutions. Between 2000 and 2010, private for-profit 4-year institutions had the highest percentage increase in undergraduate enrollment among all types of institutions (514 percent), and private for-profit 2-year institutions had the second largest increase (125 percent). Enrollment increased by 34 percent at public 4-year institutions, by 27 percent at public 2-year institutions, and by 22 percent at private nonprofit 4-year institutions. In contrast, enrollment at private nonprofit 2-year institutions decreased by 44 percent during the same period. At 4-year institutions, enrollments increased by 4 percent between 2010 and 2013 at both public and private nonprofit institutions, while enrollment at private for-profit institutions decreased by 18 percent. Enrollments at 2-year institutions were 28 percent lower at private for-profit institutions, 8 percent lower at public institutions, and 1 percent lower at private nonprofit institutions in 2013 than in 2010. Between 2013 and 2024, enrollment at 2-year institutions is projected to increase by 15 percent, to 8.0 million students, while enrollment at 4-year institutions is projected to increase by 11 percent, to 11.6 million students.

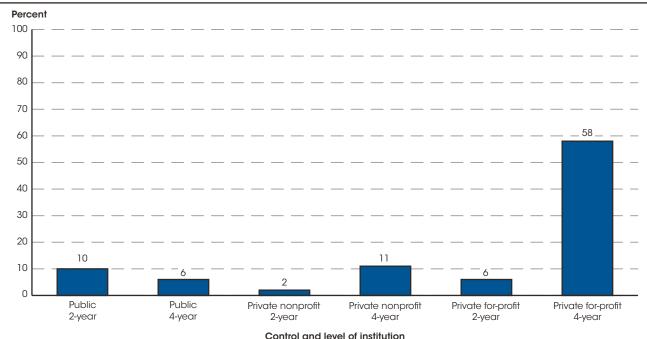


Figure 6. Percentage of undergraduate students at degree-granting postsecondary institutions who participated exclusively in distance education courses, by control and level of institution: Fall 2013

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Distance education uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include the following: Internet; one-way and two-way transmissions through open broadcasts, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communication devices; audio conferencing; and videocassettes, DVDs, and CD-ROMs, only if the videocassettes, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See Digest of Education Statistics 2014, table 311.15.

Distance education<sup>1</sup> courses and programs provide students with flexible learning opportunities. In fall 2013, about 4.6 million undergraduate students participated in distance education, with 2.0 million students (11 percent of total postbaccalaureate enrollment) exclusively taking distance education courses. Of the 2.0 million undergraduate students who exclusively took distance education courses, 1.1 million students (6 percent of total postbaccalaureate enrollment) were enrolled in programs located in the same state in which they resided, and 0.8 million (4 percent of total postbaccalaureate enrollment) were enrolled in a different state. The percentage of undergraduate students participating exclusively in distance education programs differed by institutional control. In fall 2013, a higher percentage of students at private for-profit institutions (46 percent) exclusively took distance education courses than did students at private nonprofit institutions (11 percent) and public institutions (8 percent). In particular, a higher percentage of students at private for-profit 4-year institutions exclusively took distance education courses (58 percent) than did students at any other control and level of institution (percentages at these institutions ranged from 11 percent at private nonprofit 4-year institutions to 2 percent at private nonprofit 2-year institutions).

### **Endnotes:**

<sup>1</sup> Distance education uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include the following: Internet; one-way

**Reference tables:** *Digest of Education Statistics 2014*, tables 303.70, 306.10, and 311.15

**Related indicators:** Enrollment Trends by Age (indicator 6), Postbaccalaureate Enrollment (indicator 15), Characteristics of Postsecondary Institutions (indicator 31), Community Colleges [*The Condition of Education 2008 Special Analysis*] and two-way transmissions through open broadcasts, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communication devices; audio conferencing; and videocassettes, DVDs, and CD-ROMs, only if the videocassettes, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above.

**Glossary:** For-profit institution, Full-time enrollment, Higher education institutions, Nonprofit institution, Part-time enrollment, Private institution, Public school or institution, Undergraduate students

For more information, see the Reader's Guide and the Guide to Sources.

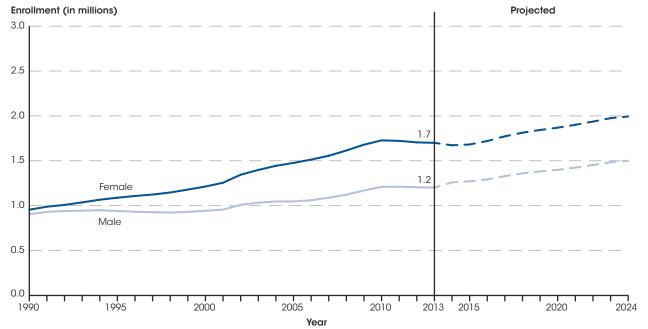
# Postbaccalaureate Enrollment

Indicator 15

Total enrollment in postbaccalaureate degree programs was 2.9 million students in fall 2013. Between 2013 and 2024, postbaccalaureate enrollment is projected to increase by 20 percent, to 3.5 million students.

In fall 2013, some 2.9 million students were enrolled in postbaccalaureate degree programs. Postbaccalaureate degree programs include master's and doctoral programs, as well as programs such as law, medicine, and dentistry. Postbaccalaureate enrollment increased at a faster rate between 2000 and 2010 (36 percent) than between 1990 and 2000 (16 percent). Total enrollment in postbaccalaureate degree programs decreased by 1 percent between 2010 and 2013. Between 2013 and 2024, postbaccalaureate enrollment is projected to increase by 20 percent, to 3.5 million students.

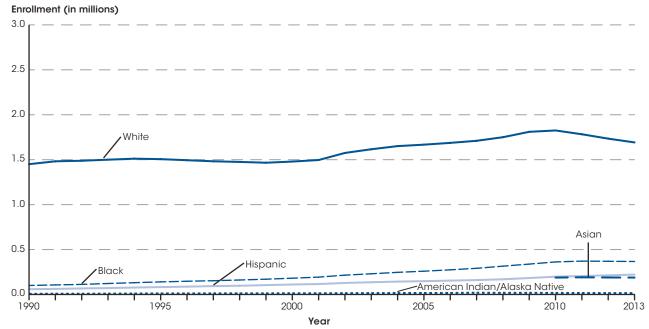




NOTE: Postbaccalaureate degree programs include master's and doctoral programs, as well as programs such as law, medicine, and dentistry. Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degreegranting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2013. 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 Survey' (IPEDS-EF:90–99); IPEDS Spring 2011 through Spring 2014, Enrollment component; and Enrollment in Degree-Granting Institutions Projection Model, 1980 through 2024. See *Digest of Education Statistics 2014*, table 303.80.

In fall 2013, some 1.7 million postbaccalaureate students were female (59 percent) and 1.2 million were male (41 percent). Female enrollment has generally increased at a faster rate than male enrollment since 1990. For example, between 2000 and 2010, female enrollment increased by 42 percent, while male enrollment increased by 28 percent. Between 2010 and 2013, however, postbaccalaureate enrollment decreased by 2 percent for female students and by 1 percent for male students. Male enrollment is projected to increase by 25 percent, from 1.2 million students in 2013 to 1.5 million in 2024, while female enrollment is projected to increase by 17 percent, from 1.7 million to 2.0 million students.



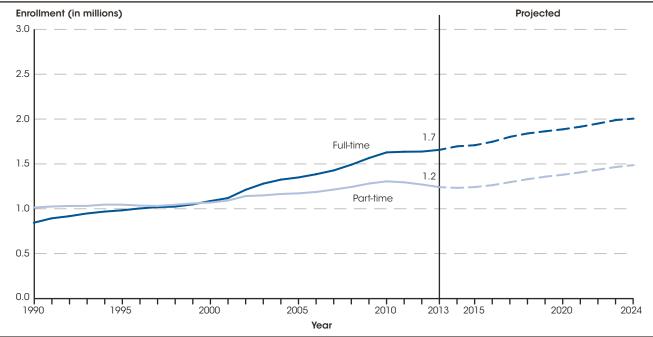


NOTE: Postbaccalaureate degree programs include master's and doctoral programs, as well as programs such as law, medicine, and dentistry. Race categories exclude persons of Hispanic ethnicity. Prior to 2010, separate data on Asians were not available. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Data for 1999 were imputed using alternative procedures. 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 Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 306.10.

Of the 2.9 million postbaccalaureate students enrolled in fall 2013, some 1.7 million were White, 367,000 were Black, 221,000 were Hispanic, 188,000 were Asian, 15,000 were American Indian/Alaska Native, and 7,000 were Pacific Islander. Between 1990 and 2013, both Black and Hispanic enrollments nearly quadrupled, with Black enrollment increasing from 100,000 to 367,000 students and Hispanic enrollment increasing from 58,000 to 221,000 students. American Indian/Alaska Native enrollment more than doubled over this period from 7,000 to 15,000 students, while White enrollment increased by 17 percent, from 1.4 million to 1.7 million students. Most recently, the number of postbaccalaureate students was higher in 2013 than in 2010 for most groups; the exceptions were White and American Indian/Alaska Native students, whose enrollment decreased during this period.

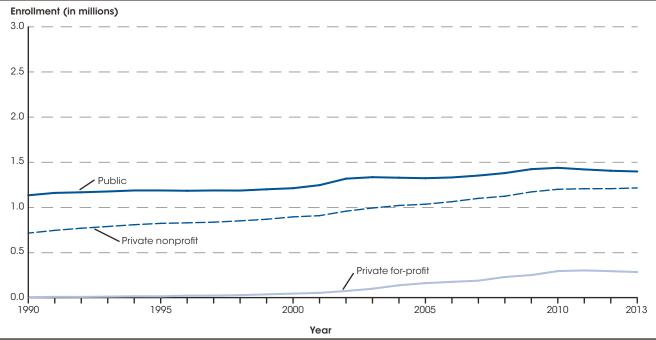
## Figure 3. Actual and projected postbaccalaureate enrollment in degree-granting postsecondary institutions, by attendance status: Fall 1990-2024



NOTE: Postbaccalaureate degree programs include master's and doctoral programs, as well as programs such as law, medicine, and dentistry. Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2013. 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 Survey" (IPEDS-EF:90-99); IPEDS Spring 2011 through Spring 2014, Enrollment component; and Enrollment in Degree-Granting Institutions Projection Model, 1980 through 2024. See *Digest of Education Statistics 2014*, table 303.80.

In fall 2013, there were 1.7 million full-time postbaccalaureate students and 1.2 million part-time students. Since 1990, full-time enrollment has increased at a faster rate (96 percent) than part-time enrollment (22 percent). Between 2000 and 2010, full-time enrollment increased by 50 percent, while part-time enrollment increased by 22 percent. Most recently, full-time enrollment was 2 percent higher in 2013 than in 2010, but part-time enrollment decreased by 5 percent. Between 2013 and 2024, full-time and part-time enrollments are projected to increase at about the same rate (21 and 20 percent, respectively).

#### Figure 4. Postbaccalaureate enrollment in degree-granting postsecondary institutions, by control of institution: Fall 1990-2013



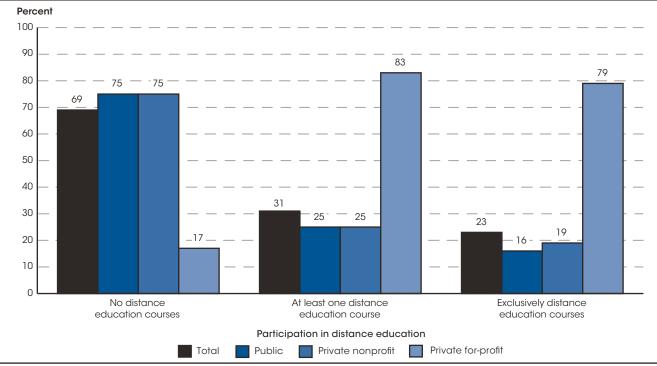
NOTE: Postbaccalaureate degree programs include master's and doctoral programs, as well as programs such as law, medicine, and dentistry. Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. 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 Survey" (IPEDS-EF:90-99); and IPEDS Spring 2001 through Spring 2014, Enrollment component; and Enrollment in Degree-Granting Institutions Projection Model, 1980 through 2024. See *Digest of Education Statistics 2014*, table 303.80.

From fall 1990 to fall 2013, enrollment has grown at a faster rate at private for-profit institutions (an increase of 3,666 percent) than at private nonprofit institutions (an increase of 70 percent) and public institutions (an increase of 23 percent); however, in 1990, the enrollment at private for-profit institutions was relatively small (8,000 students) compared with the enrollments at private nonprofit institutions (0.7 million students) and public institutions (1.1 million students).

Between 2000 and 2010, enrollment at private for-profit institutions increased by 528 percent, while enrollment increased by 34 percent at private nonprofit institutions and by 19 percent at public institutions. More recently, the pattern of growth in postbaccalaureate enrollments at private for-profit and public institutions has changed. Enrollment at private for-profit institutions was 4 percent lower in 2013 than in 2010 and enrollment at public institutions was 3 percent lower, while enrollment at private nonprofit institutions was 1 percent higher.

# **Chapter:** 2/Participation in Education **Section:** Postsecondary Enrollment



## Figure 5. Percentage of postbaccalaureate students enrolled in degree-granting postsecondary institutions, by participation in distance education and control of institution: Fall 2013

NOTE: Postbaccalaureate degree programs include master's and doctoral programs, as well as programs such as law, medicine, and dentistry. Distance education uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include the following: Internet; one-way and two-way transmissions through open broadcasts, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communication devices; audio conferencing; and videocassettes, DVDs, and CD-ROMs, only if the videocassettes, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See Digest of Education Statistics 2014, table 311.15.

Distance education<sup>1</sup> courses and programs provide flexible learning opportunities to postbaccalaureate students. In fall 2013, some 31 percent of total postbaccalaureate enrollment (895,000 students) participated in distance education, with 23 percent of total postbaccalaureate enrollment (677,000 students) exclusively taking distance education courses. Of the students who exclusively took distance education courses, 273,000 students (or 9 percent of total postbaccalaureate enrollment) were enrolled in programs located in the same state in which they resided, and 362,000 students (or 12 percent of total postbaccalaureate enrollment) were enrolled in a different state. The percentage of students participating exclusively in distance education programs differed by institutional control. In fall 2013, the percentage of students who exclusively took distance education courses was higher for those enrolled at private for-profit institutions (79 percent) than for those at private nonprofit (19 percent) and public institutions (16 percent). The percentage of students who did not take any distance education courses was higher for those enrolled at public and private nonprofit institutions (75 percent for each) than for those at private for-profit institutions (17 percent).

### **Endnotes:**

<sup>1</sup> Distance education uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include the following: Internet; one-way and two-way transmissions through open broadcasts,

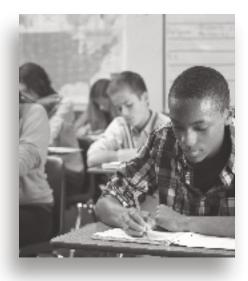
**Reference tables:** *Digest of Education Statistics 2014*, tables 303.80, 306.10, and 311.15

**Related indicators:** Enrollment Trends by Age (indicator 6), Undergraduate Enrollment (indicator 14), Characteristics of Postsecondary Institutions (indicator 31) closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communication devices; audio conferencing; and videocassettes, DVDs, and CD-ROMs, only if the videocassettes, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above.

**Glossary:** For-profit institution, Full-time enrollment, Nonprofit institution, Part-time enrollment, Postbaccalaureate enrollment, Private institution, Public school or institution The indicators in this chapter of *The Condition of Education* measure aspects of elementary and secondary education in the United States. The indicators examine school characteristics and climate; principals, teachers and staff; elementary and secondary financial resources; student assessments; and other measures of the progress students make as they move through the education system, such as graduation rates.

In this chapter, particular attention is given to how various subgroups in the population proceed through school and attain different levels of education, as well as the factors that are associated with their progress along the way. The indicators on student achievement illustrate how students are performing on assessments in reading, mathematics, science, and other academic subject areas. Other indicators describe aspects of the context of learning in elementary and secondary schools.

This chapter's indicators, as well as additional indicators on elementary and secondary education, are available at *The Condition of Education* website: <u>http://nces.ed.gov/programs/coe</u>.



# Chapter 3

# **Elementary and Secondary Education**

## School Characteristics and Climate

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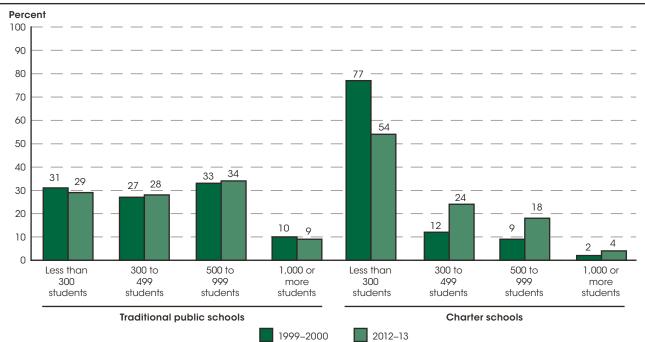
Indicator 16

# Characteristics of Traditional Public and Public Charter Schools

In school year 2012–13, the majority of charter schools (57 percent) were in cities, compared with 25 percent of traditional public schools. In contrast, 11 percent of charter schools were in rural areas, compared with 29 percent of traditional public schools.

In school year 2012–13, there were 98,454 public schools in the United States, including 92,375 traditional public schools and 6,079 charter schools. The total number of schools was greater in 2012–13 than in 1999–2000, when there was a total of 92,012 public schools, with 90,488 traditional public schools and 1,524 charter schools. Over two-thirds of traditional public schools (69 percent) were elementary schools in 2012–13, versus 56 percent of charter schools. By contrast, 20 percent of charter schools in 2012–13 were combined schools, meaning that they began with grade 6 or below and extended to grade 9 or above, compared with 6 percent of traditional public schools.

Figure 1. Percentage distribution of traditional public schools and charter schools, by enrollment size: School years 1999–2000 and 2012–13



NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999–2000 and 2012–13. See Digest of Education Statistics 2014, table 216.30.

In terms of enrollment, charter schools tend to be smaller than traditional public schools. In 2012–13, some 54 percent of charter schools were small (enrollment of fewer than 300 students), compared with 29 percent of traditional public schools. However, the percentage of small charter schools has decreased over time, from 77 percent in 1999–2000 to 54 percent in 2012–13. Over the same period, the percentage of charter schools that were large (1,000 or more students) increased from 2 to 4 percent. In 2012–13, about 9 percent of traditional public schools were large.

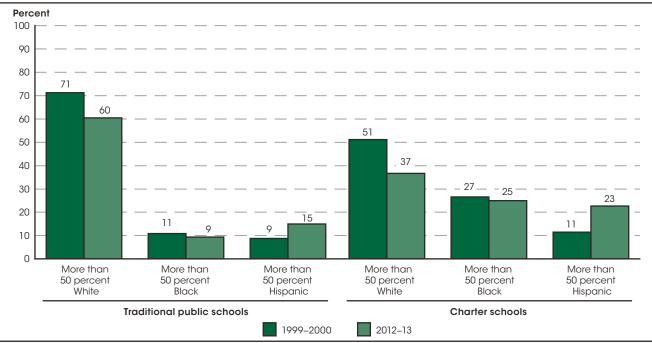


Figure 2. Percentage of traditional public schools and charter schools, by racial/ethnic concentration: School years 1999-2000 and 2012-13

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999-2000 and 2012–13. See Digest of Education Statistics 2014 table 216.30.

In 2012–13, a majority (60 percent) of traditional public schools had enrollments in which more than half of the students were White, while 9 percent had enrollments in which more than half of the students were Black and 15 percent had enrollments in which more than half of the students were Hispanic. In comparison, 37 percent of charter schools had more than 50 percent White enrollment, 25 percent had more than 50 percent Black enrollment, and 23 percent had more than 50 percent Hispanic enrollment. For both traditional public and charter schools, the percentages of schools that had more than 50 percent White enrollment or more than 50 percent Black enrollment were lower in 2012–13 than in 1999–2000, while the percentages of schools that had more than 50 percent Hispanic enrollment were higher in 2012–13 than in 1999–2000. These shifts reflect, in part, changes in student demographics overall. Between 2000 and 2013, the percentage of children ages 5 to 17 who were White decreased from 62 to 53 percent, the percentage who were Black decreased from 15 to 14 percent, and the percentage who were Hispanic increased from 16 to 24 percent.

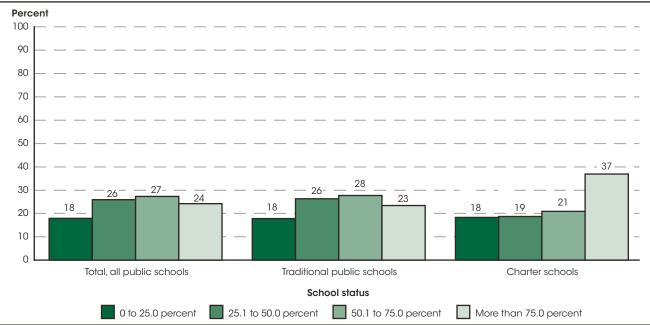
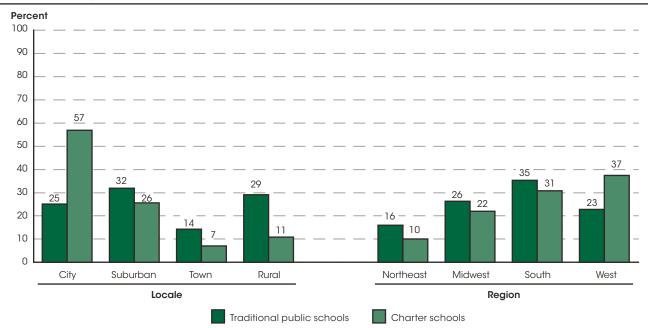


Figure 3. Percentage of traditional public schools and charter schools, by percentage of students eligible for free or reduced-price lunch: School year 2012-13

NOTE: The category "missing/school does not participate" is not included in this figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2012–13. See Digest of Education Statistics 2014, table 216.30.

High-poverty schools, in which more than 75 percent of the students qualify for free or reduced-price lunch under the National School Lunch Program, accounted for 24 percent of all public schools in 2012–13 compared with 12 percent in 1999–2000. In 2012–13, some 23 percent of traditional public schools were high poverty, compared with 37 percent of charter schools.



#### Figure 4. Percentage distribution of traditional public schools and charter schools, by school locale and region: School year 2012-13

NOTE: The category "missing/school does not participate" is not included in this figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2012–13. See Digest of Education Statistics 2014, table 216.30.

In 2012–13, some 29 percent of traditional public schools were in rural areas, compared with 11 percent of charter schools. In contrast, 25 percent of traditional public schools and the majority of charter schools (57 percent) were in cities.

Regionally, the highest percentage of traditional public schools in 2012–13 was in the South (35 percent),

**Reference tables:** *Digest of Education Statistics 2014*, tables 101.20 and 216.30

**Related indicators:** Public School Enrollment (indicator 8), Charter School Enrollment (indicator 9), Racial/Ethnic Enrollment in Public Schools (indicator 11), Concentration of Public School Students Eligible for Free or Reduced-Price Lunch (indicator 17) followed by the Midwest (26 percent), the West (23 percent), and the Northeast (16 percent). Charter schools followed a different pattern. In 2012–13, some 31 percent of charter schools were in the South, 22 percent were in the Midwest, 37 percent were in the West, and 10 percent were in the Northeast.

**Glossary:** Charter school, Combined school, Elementary school, Free or reduced-price lunch, National School Lunch Program, Private school, Secondary school, Traditional public school

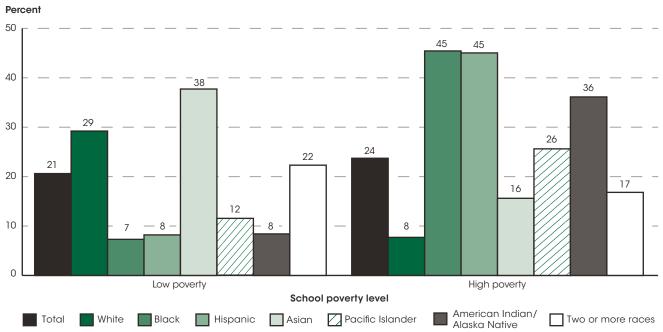
## Indicator 17

## Concentration of Public School Students Eligible for Free or Reduced-Price Lunch

In school year 2012–13, higher percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty public schools than did Pacific Islander students, students of Two or more races, Asian students, and White students (ordered by descending percentages).

The percentage of students eligible for free or reducedprice lunch (FRPL) under the National School Lunch Program provides a proxy measure for the concentration of low-income students within a school. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those from families with incomes that are between 130 percent and 185 percent of the poverty level are eligible for reducedprice meals. In this indicator, public schools (including both traditional and charter) are divided into categories by FRPL eligibility. High-poverty schools are defined as public schools where more than 75.0 percent of the students are eligible for FRPL, and mid-high poverty schools are those schools where 50.1 to 75.0 percent of the students are eligible for FRPL. Low-poverty schools are defined as public schools where 25.0 percent or less of the students are eligible for FRPL, and mid-low poverty schools are those schools where 25.1 to 50.0 percent of the students are eligible for FRPL. In school year 2012–13, some 21 percent of public school students attended low-poverty schools, and 24 percent of public school students attended students attended high-poverty schools.





NOTE: High-poverty schools are defined as public schools where more than 75.0 percent of the students are eligible for free or reduced-price lunch (FRPL), and low-poverty schools are defined as public schools where 25.0 percent or less of the students are eligible for FRPL. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2012–13. See Digest of Education Statistics 2014, table 216.60.

The percentages of students in low-poverty and highpoverty schools varied by race/ethnicity. In school year 2012–13, higher percentages of Asian students (38 percent), White students (29 percent), and students of Two or more races (22 percent) attended low-poverty public schools than did Pacific Islander (12 percent), American Indian/Alaska Native (8 percent), Hispanic (8 percent), and Black (7 percent) students. In contrast, higher percentages of Black (45 percent), Hispanic (45 percent), and American Indian/Alaska Native (36 percent) students attended high-poverty public schools than did Pacific Islander students (26 percent), students of Two or more races (17 percent), Asian students (16 percent), and White students (8 percent).

#### For more information, see the Reader's Guide and the Guide to Sources.

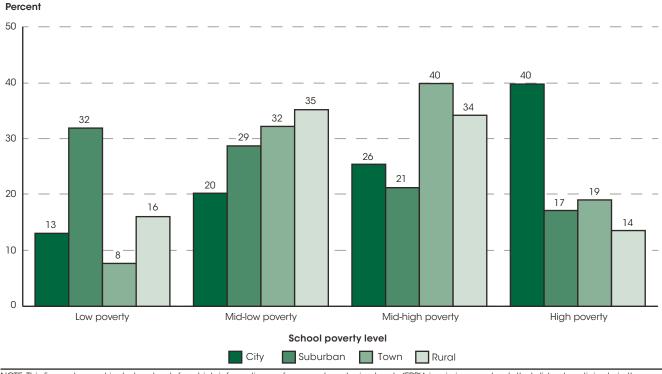


Figure 2. Percentage of public school students, by school poverty level and school locale: School year 2012-13

NOTE: This figure does not include schools for which information on free or reduced-price lunch (FRPL) is missing or schools that did not participate in the National School Lunch Program (NSLP). The NSLP is a federally assisted meal program. To be eligible for free lunch under the program, a student must be from a household with an income at or below 130 percent of the poverty threshold; to be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. High-poverty schools are defined as public schools where more than 75.0 percent of the students are eligible for FRPL, and mid-high poverty schools are those schools where 50.1 to 75.0 percent of the students are eligible for FRPL. Low-poverty schools are defined as public schools where 25.0 percent or less of the students are eligible for FRPL, and mid-high poverty schools are those schools where 50.1 to 75.0 percent of the students are eligible for FRPL. Low-poverty schools are defined as public schools where 25.0 percent or less of the students are eligible for FRPL, and mid-high poverty schools are those schools where 50.1 to 50.0 percent of the students are eligible for FRPL. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2012–13. See Digest of Education Statistics 2014, table 216.60.

The distribution of schools at different poverty concentrations varied by school locale (i.e., city, suburb, town, or rural). In school year 2012–13, some 40 percent of students attending city schools were in a highpoverty school, compared with 14 percent of students attending rural schools, 17 percent of students attending suburban schools, and 19 percent of students attending town schools. In contrast, the percentage of students attending suburban schools who were in a low-poverty school (32 percent) was about four times as large as the

**Reference tables:** *Digest of Education Statistics 2014*, tables 216.30 and 216.60; *Digest of Education Statistics 2013*, table 216.30

Related indicators: Children Living in Poverty (indicator 5)

corresponding percentage of students attending town schools (8 percent). The percentage of students attending suburban schools who were in a low-poverty school was also higher than the percentages of students attending city and rural schools who were in a low-poverty school (13 and 16 percent, respectively). In addition, a majority (65 percent) of students attending city schools were in a high-poverty or mid-high poverty school while a majority (61 percent) of students attending suburban schools were in a low-poverty or mid-low poverty school.

**Glossary:** Free or reduced-price lunch, National School Lunch Program, Public school or institution

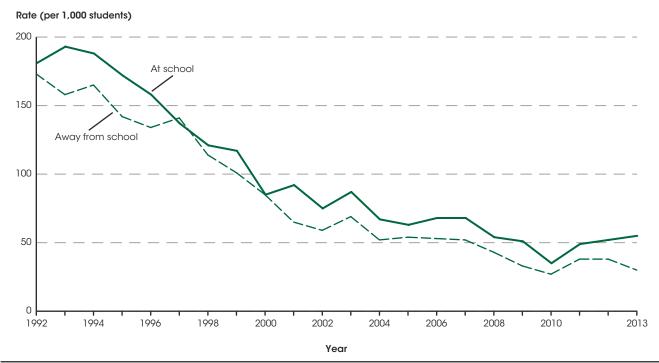
## Indicator 18 Rates of School Crime

Through nearly two decades of decline, the nonfatal victimization rate for 12- to 18-year-old students at school fell from 181 crimes per 1,000 students in 1992 to 55 per 1,000 students in 2013. The nonfatal victimization rate away from school for these students also declined from 173 to 30 crimes per 1,000 students during the same period.

Between 1992 and 2013, the total nonfatal victimization rate for students ages 12–18 declined both at school<sup>1</sup> and away from school. Included in nonfatal victimizations are theft and all violent crime. Violent crime includes serious

violent crime (rape, sexual assault, robbery, and aggravated assault) and simple assault. Victimization rates for theft, violent crime, and for serious violent crime generally declined between 1992 and 2013 as well.



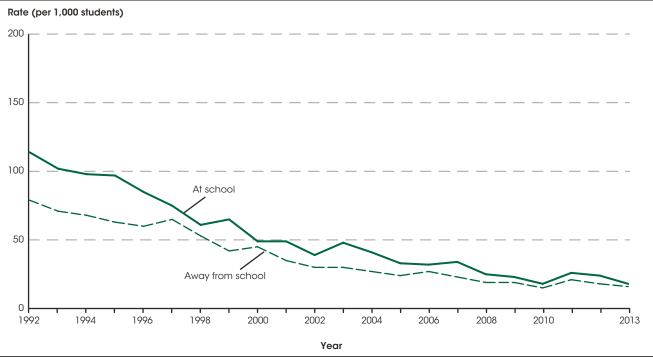


NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "Total victimization" includes theft and violent crimes. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992–2013. See *Digest of Education Statistics* 2014, table 228.20.

In 2013, students ages 12–18 reported more total nonfatal victimizations at school than away from school. Students ages 12–18 experienced 1,420,900 victimizations (theft and violent crime) at school, compared with 778,500 victimizations away from school. These data represent total victimization rates of 55 crimes per 1,000 students at school and 30 per 1,000 students away from school.

From 1992 to 2013, the rate of crime against students at school declined from 181 to 55 crimes per 1,000 students. Away from school, the rate of crime against students also declined, from 173 to 30 crimes per 1,000 students. Between the two most recent survey years, 2012 and 2013, the total victimization rate for students ages 12–18 did not change measurably at or away from school.





NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "Theff" includes purse-snatching, pickpocketing, and all attempted and completed thefts, with the exception of motor vehicle thefts. Theft does not include robbery, which involves the threat or use of force and is classified as a violent crime. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992–2013. See *Digest of Education Statistics 2014*, table 228.20.

Theft declined both at and away from school between 1992 and 2013. During this period, theft rates declined from 114 to 18 thefts per 1,000 students at school and from 79 to 16 thefts per 1,000 students away from school. The difference between theft rates at school and away from school narrowed from 35 more thefts per 1,000 students at school than away from school in 1992 to no measurable difference in the theft rates per 1,000 students at school compared with away from school in 2013. The rate of theft at school was lower in 2013 (18 per 1,000 students) than in 2011 (26 per 1,000 students) and in 2012 (24 per 1,000 students). The theft rate away from school was lower in 2013 (16 per 1,000 students) than in 2011 (21 per 1,000 students).

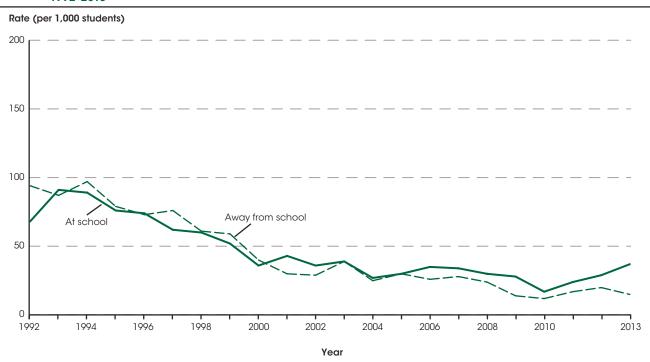


Figure 3. Rate of all nonfatal violent victimizations against students ages 12-18 per 1,000 students, by location: 1992-2013

NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "All violent victimization" includes serious violent crimes and simple assault. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992–2013. See *Digest of Education Statistics* 2014, table 228.20.

Between 1992 and 2013, nonfatal violent victimization rates decreased both at and away from school. During this period, violent crime declined from 68 to 37 violent victimizations per 1,000 students at school and from 94 to 15 violent victimizations per 1,000 students away from school. In 1992, more violent victimizations occurred away from school (94 per 1,000 students) than at school (68 per 1,000 students); by contrast, in 2013 more violent victimizations occurred at school (37 per 1,000 students) than away from school (15 per 1,000 students). The rate of violent victimization against students at school was higher in 2013 than in 2011 (37 vs. 24 per 1,000 students), although the 2013 rate away from school was not measurably different from the rate in 2011 or 2012.

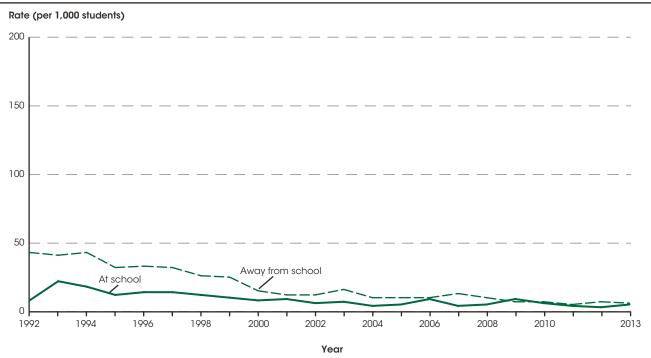
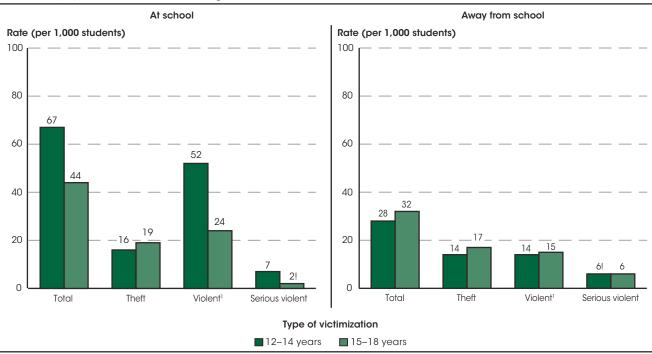


Figure 4. Rate of nonfatal serious violent victimizations against students ages 12-18 per 1,000 students, by location: 1992-2013

NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "Serious violent victimization" includes rape, sexual assault, robbery, and aggravated assault. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992–2013. See *Digest of Education Statistics 2014*, table 228.20.

The nonfatal serious violent victimization rate at school in 2013 was not measurably different from the rate in 1992 (5 serious violent crimes at school per 1,000 students in 2013 compared with 8 per 1,000 students in 1992). The serious violent crime rate away from school decreased from 43 to 6 crimes per 1,000 students between 1992 and 2013. The difference between serious violent crime rates at school and away from school also narrowed over the

past two decades from 35 more serious violent crimes per 1,000 students away from school than at school in 1992 to no measurable difference in the rates of serious violent crimes at school and away from school in 2013. The rates of serious violent victimization at and away from school in 2013 were not measurably different from the rates at and away from school in 2011 or 2012.



## Figure 5. Rate of nonfatal victimizations against students ages 12–18 at and away from school per 1,000 students, by type of victimization and age: 2013

! Interpret with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent. <sup>1</sup> Serious violent victimization is also included in violent victimization.

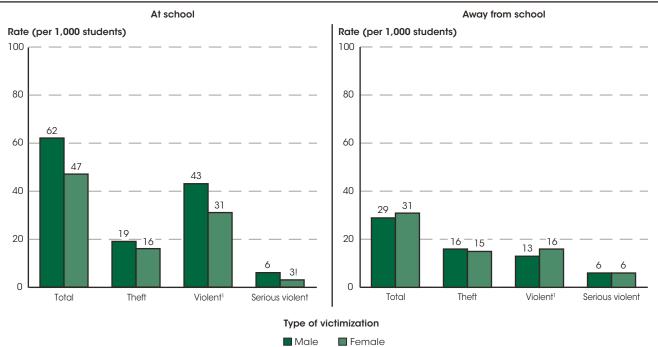
NOTE: "Total victimization" includes theft and violent crimes. "Theff" includes purse-snatching, pickpocketing, and all attempted and completed thefts, with the exception of motor vehicle thefts. "Violent victimization" includes serious violent crimes and simple assault. "Serious violent victimization" includes rape, sexual assault, robbery, and aggravated assault. "At school" includes inside the school building, on school property, or on the way to or from school. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 2013. See Digest of Education Statistics 2014, table 228.25.

Nonfatal victimization rates for students in 2013 varied according to student characteristics. At school, rates of violent victimization and serious violent victimization were higher for younger students (ages 12–14) than for older students (ages 15–18). For example, the rate of violent victimization at school was 52 per 1,000 students

for those ages 12–14, compared with 24 per 1,000 students for those ages 15–18. No measurable differences were found by age group in the rates of theft at school. Away from school, no measurable differences were found by age group in the rates of theft, violent victimization, or serious violent victimization.

## Figure 6. Rate of nonfatal victimizations against students ages 12-18 at and away from school per 1,000 students, by type of victimization and sex: 2013



Interpret with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

<sup>1</sup> Serious violent victimization is also included in violent victimization.

NOTE: "Total victimization" includes theft and violent crimes. "Theff" includes purse-snatching, pickpocketing, and all attempted and completed thefts, with the exception of motor vehicle thefts. "Violent victimization" includes serious violent crimes and simple assault. "Serious violent victimization" includes rape, sexual assault, robbery, and aggravated assault. "At school" includes inside the school building, on school property, or on the way to or from school. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 2013. See Digest of Education Statistics 2014, table 228.25.

Both at school and away from school, the rate of total nonfatal victimization was not measurably different between males and females in 2013. In addition, no measurable differences were detected by sex for theft, violent victimization, or serious violent victimization rates, either at school or away from school.

### **Endnotes:**

<sup>1</sup> At school includes inside the school building, on school property, or on the way to or from school.

**Reference tables:** *Digest of Education Statistics 2014*, tables 228.20 and 228.25

## Indicator 19

## **Teachers and Pupil/Teacher Ratios**

Of the 6.2 million staff members in public elementary and secondary schools in fall 2012, some 3.1 million, or 50 percent, were teachers. The pupil/teacher ratio in public schools decreased over time from 26.9 students per teacher in 1955 to 17.9 in 1985, and then further declined to 15.3 in 2008. In the most recent years, the pupil/teacher ratios in 2010, 2011, and 2012 (all 16.0) were higher than the ratio in 2009 (15.4).

Of the 6.2 million staff members in public elementary and secondary schools in fall 2012, some 3.1 million, or 50 percent, were teachers. In addition, there were 0.7 million instructional aides, such as teachers' assistants, who made up another 12 percent of total staff. The percentages of public school staff have changed little in recent years. For example, between fall 2002 and

fall 2012 the percentage of staff members who were teachers decreased from 51 to 50 percent, while the percentage of staff members who were instructional aides increased from 11 to 12 percent. By comparison, in fall 1969 teachers represented 60 percent of public school staff, and instructional aides represented 2 percent of public school staff.

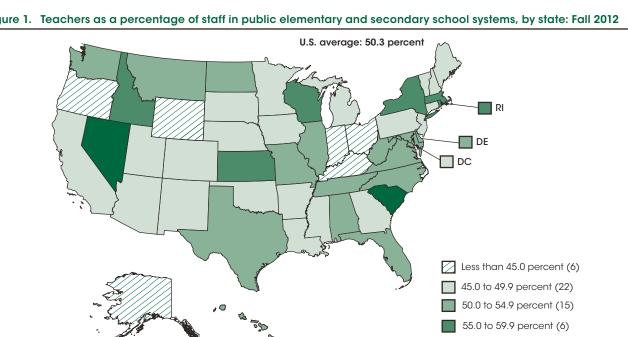


Figure 1. Teachers as a percentage of staff in public elementary and secondary school systems, by state: Fall 2012

NOTE: The U.S. average includes imputations for underreporting and nonreporting states. The calculations of teachers as a percentage of staff for Alabama, Alaska, California, Idaho, Illinois, Montana, Nevada, New Jersey, and West Virginia include imputations for underreporting SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 2012–13. See Digest of Education Statistics 2014, table 213.40

In 36 states and the District of Columbia, between 45 and 55 percent of public school staff members in 2012 were teachers. There were, however, six states where teachers made up less than 45 percent of public school staff (Indiana, Kentucky, Ohio, Oregon, Wyoming,

and Alaska) and eight states where they made up more than 55 percent of public school staff (Idaho, New York, Massachusetts, Kansas, Wisconsin, Rhode Island, Nevada, and South Carolina).

60.0 percent or more (2)

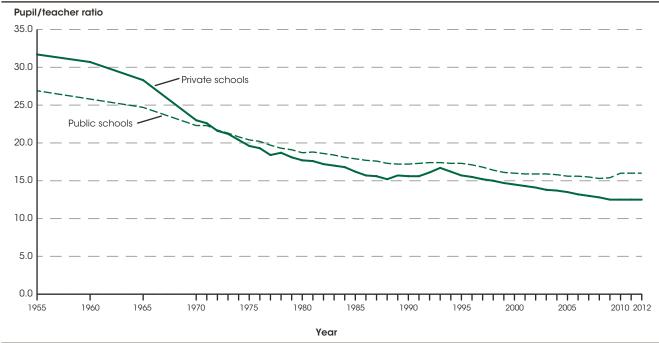


Figure 2. Public and private elementary and secondary school pupil/teacher ratios: Selected years, fall 1955 through fall 2012

NOTE: Data for teachers are expressed in full-time equivalents (FTE). Data for public schools include prekindergarten through grade 12. Data for private schools include prekindergarten through grade 12 in schools offering kindergarten or higher grades. The pupil/teacher ratio includes teachers for students with disabilities and other special teachers. Ratios for public schools reflect totals reported by states and differ from totals reported for schools or school districts. Some data have been revised from previously published figures. Data for private schools are projected for 2012. SOURCE: U.S. Department of Education, National Center for Education Statistics, Statistics of Public Elementary and Secondary Day Schools, 1955-56 through 1980-81; Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 1981-82 through 2012-13; and Private School Universe Survey (PSS), 1989-90 through 2011-12. See Digest of Education Statistics 2014, table 208.20.

The number of students per teacher, or the pupil/ teacher ratio,<sup>1</sup> has been generally decreasing for more than 50 years at both public and private schools. In fall 1955, there were 1.1 million public and 145,000 private elementary and secondary school teachers in the United States. By fall 2012,<sup>2</sup> these numbers had nearly tripled for both public school teachers (to 3.1 million) and private school teachers (to 414,000). However, increases in student enrollment were proportionally smaller over this period: from 31 million to 50 million public school students (a 62 percent increase) and from 4.6 million to 5.2 million private school students (a 13 percent increase). (See also Public School Enrollment and Private School

#### **Endnotes:**

<sup>1</sup> The pupil/teacher ratio measures the number of students per teacher. It reflects teacher workload and the availability of teachers' services to their students. The lower the pupil/ teacher ratio, the higher the availability of teacher services to students. The pupil/teacher ratio is not the same as class size, however. Class size can be described as the number Enrollment.) For public schools, the resulting decline in the pupil/teacher ratio was concentrated in the period between 1955 and 1985. During this period, the public school pupil/teacher ratio fell from 26.9 to 17.9. Over the next 23 years, the public school pupil/teacher ratio declined to 15.3 in 2008. In the most recent years, the pupil/teacher ratios in 2010, 2011, and 2012 (all 16.0) were higher than the ratio in 2009 (15.4). The private school pupil/teacher ratio decreased more steeply than the public school ratio over the period of 1955 to 2012, from 31.7 students per teacher to 12.5. The pupil/teacher ratio has been lower for private schools than for public schools since 1972.

of students a teacher faces during a given period of instruction. The relationship between these two measures of teacher workload is affected by a variety of factors, including the number of classes a teacher is responsible for and the number of classes taken by students. <sup>2</sup> Data for private schools are projected for 2012.

**Reference tables:** *Digest of Education Statistics 2014*, tables 208.20, 213.10, and 213.40

**Related indicators:** Public School Enrollment (indicator 8), Private School Enrollment (indicator 10)

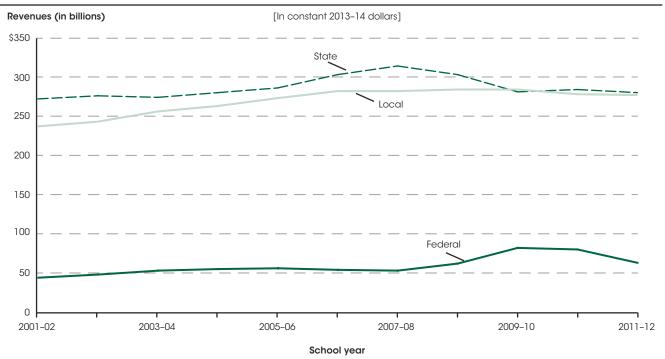
# Indicator 20 Section Public School Revenue Sources

From school years 2001–02 through 2011–12, total elementary and secondary public school revenues increased from \$553 billion to \$620 billion (in constant 2013–14 dollars). During the most recent period from 2010–11 through 2011–12, total revenues for public elementary and secondary schools decreased by about \$22 billion, or more than 3 percent.

From school years 2001–02 through 2011–12, total elementary and secondary public school revenues increased from \$553 billion to \$620 billion (in constant 2013–14 dollars), a 12 percent increase, adjusting for inflation using the Consumer Price Index (CPI). This increase was accompanied by a 4 percent increase in total elementary and secondary public school enrollment, from 48 million students in 2001–02 to 50 million students in 2011–12. Federal revenues increased 89 percent from 2001–02 to 2009–10 (from \$44 billion to \$82 billion), but decreased by 3 percent from 2009–10 to 2010–11

(from \$82 billion to \$80 billion). These revenues then decreased by another 22 percent, to \$63 billion in 2011–12. From 2001–02 through 2011–12, local revenues increased by 17 percent, to \$277 billion in 2011–12. State revenues fluctuated between \$272 billion and \$314 billion during this period, and they were 3 percent higher in 2011–12 than in 2001–02 (\$280 billion vs. \$272 billion). During this period, federal revenues peaked in 2009–10 at \$82 billion, while local revenues peaked in 2008–09 at \$284 billion and state revenues peaked in 2007–08 at \$314 billion.





NOTE: Revenues are in constant 2013-14 dollars, adjusted using the Consumer Price Index (CPI). SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2001-02 through 2011-12. See *Digest of Education Statistics 2014*, table 235.10.

#### For more information, see the Reader's Guide and the Guide to Sources.

The percentage of total revenues for public elementary and secondary education that came from federal sources was 8 percent in school year 2001–02 and 10 percent in 2011–12. Between school years 2001–02 and 2011–12, the percentage coming from local sources fluctuated between 43 and 45 percent, accounting for 45 percent of total revenues in 2011–12. The percentage of total revenues from state sources decreased from 49 percent in school year 2001–02 to a low of 43 percent in school year 2009–10. The percentage of revenues from state sources was higher in 2011–12 (45 percent) than in 2009–10 (43 percent).

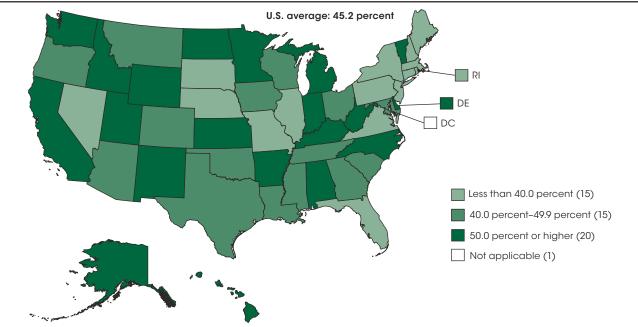
More recently, from school years 2010–11 through 2011–12, total revenues for public elementary and secondary schools decreased by about \$22 billion in constant 2013–14 dollars (3 percent). During this period, federal revenue declined by \$17 billion (22 percent) and state revenue declined by \$3 billion (1 percent). Local revenues declined by \$1.6 billion (1 percent), reflecting a

# **Chapter:** 3/Elementary and Secondary Education **Section:** Finance

\$2.1 billion decrease in revenues from local property taxes, a \$0.7 billion increase in other local public revenues, and a \$0.2 billion decrease in private revenues (consisting of receipts from school lunches, student activities, and other fees from students). Other local public revenues were the only source that increased from 2010–11 through 2011–12.

In school year 2011–12, there were significant variations across the states in the percentages of public school revenues coming from state, local, and federal sources of revenue. In 20 states, at least half of education revenues came from state governments, while in 16 states and the District of Columbia at least half came from local revenues. In the remaining 14 states, no single revenue source made up more than half of education revenues: Arizona, Colorado, Georgia, Iowa, Louisiana, Mississippi, Montana, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

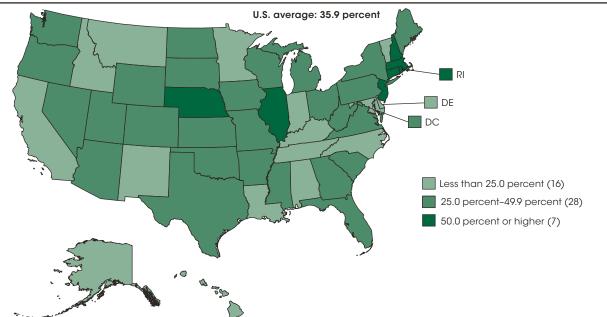
Figure 2. State revenues for public elementary and secondary schools as a percentage of total public school revenues, by state: School year 2011–12



NOTE: All 50 states and the District of Columbia are included in the U.S. average, even though the District of Columbia does not receive any state revenue. The District of Columbia and Hawaii have only one school district each; therefore, neither is comparable to the other states. Categorizations are based on unrounded percentages. Excludes revenues for state education agencies.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2011–12. See Digest of Education Statistics 2014, table 235.20.

In school year 2011–12, the percentages of public school revenues coming from state sources were highest in Vermont and Hawaii (88 and 85 percent, respectively), and lowest in South Dakota and Nebraska (31 percent each). The percentage of revenues coming from federal sources was highest in Mississippi (18 percent), followed by Louisiana and South Dakota (17 percent each); the percentage was lowest in Connecticut and New Jersey (5 percent each), followed by Maryland (6 percent). Among all states, the percentage of revenues coming from local sources was highest in Nebraska and Illinois (60 percent each), and lowest in Vermont and Hawaii (4 and 2 percent, respectively). Most of the revenues for the District of Columbia (90 percent) were from local sources; the remaining 10 percent of revenues were from federal sources.



## Figure 3. Property tax revenues for public elementary and secondary schools as a percentage of total public school revenues, by state: School year 2011-12

NOTE: All 50 states and the District of Columbia are included in the U.S. average. The District of Columbia and Hawaii have only one school district each; therefore, neither is comparable to the other states. Categorizations are based on unrounded percentages. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2011–12. See *Digest of Education Statistics 2014*, table 235.20.

In school year 2011–12, local property taxes constituted 81 percent of total local revenues and 36 percent of total revenues for elementary and secondary schools. The percentages of total revenues from local property taxes differed by state. In 2011–12, New Hampshire and Connecticut had the highest percentage of revenues from property taxes, at 55 percent each. Five other states had percentages of revenues from property taxes of 50 percent or more (in descending order): Illinois, New Jersey,

Rhode Island, Massachusetts, and Nebraska. Vermont and Hawaii<sup>1</sup> had the lowest percentages of revenues from property taxes (0.1 percent and 0 percent, respectively). In 14 other states, property taxes made up less than 25 percent of education revenues (in descending order): Montana, Delaware, California, Maryland, Indiana, Kentucky, North Carolina, Tennessee, Idaho, Minnesota, Louisiana, Alabama, New Mexico, and Alaska.

### **Endnotes:**

<sup>1</sup> Hawaii has only one school district, which receives no funding from property taxes.

**Reference tables:** *Digest of Education Statistics 2014*, tables 235.10 and 235.20; *Digest of Education Statistics 2013*, table 203.20

Related indicators: Public School Expenditures (indicator 21)

**Glossary:** Consumer Price Index (CPI), Elementary school, Property tax, Public school or institution, Revenue, Secondary school This page intentionally left blank.

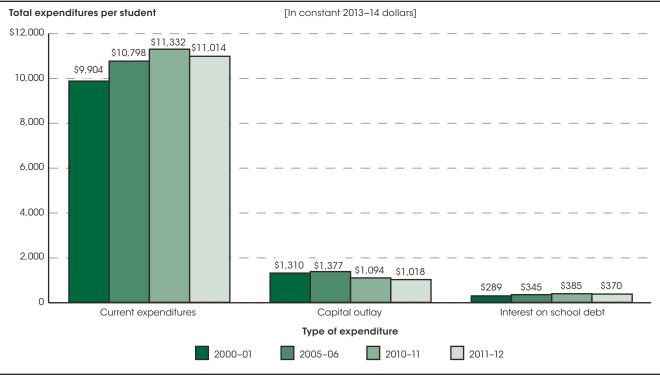
# Indicator 21 Public School Expenditures

From 2000-01 to 2011-12, current expenditures per student in public elementary and secondary schools increased by 11 percent, after adjusting for inflation. Current expenditures per student peaked in 2008-09 at \$11,537 and have decreased each year since then. The amount for 2011-12 (\$11,014) was 3 percent less than the amount for 2010-11 (\$11,332).

Total expenditures for public elementary and secondary schools in the United States amounted to \$621 billion in 2011–12, or \$12,401 per public school student enrolled in the fall (in constant 2013–14 dollars, based on the Consumer Price Index). These expenditures include

\$11,014 per student in current expenditures for operation of schools; \$1,018 for capital outlay (i.e., expenditures for property and for buildings and alterations completed by school district staff or contractors); and \$370 for interest on school debt.





NOTE: Current expenditures, Capital outlay, and Interest on school debt are subcategories of Total expenditures. Capital outlay includes expenditures for property and for buildings and alterations completed by school district staff or contractors. Expenditures are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI).

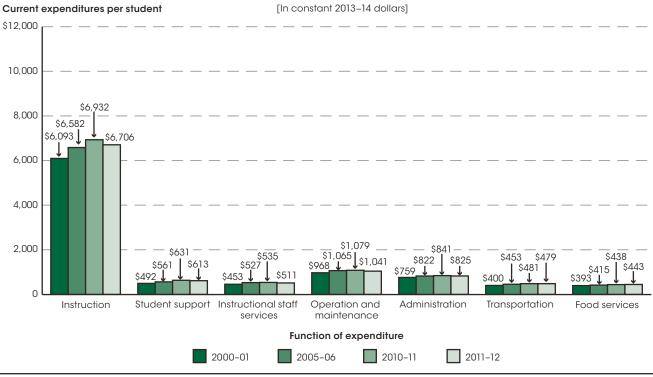
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2000–01, 2005–06, 2010–11, and 2011–12. See Digest of Education Statistics 2014, table 236.60.

From 2000–01 to 2011–12, current expenditures per student enrolled in the fall in public elementary and secondary schools increased by 11 percent (from \$9,904 to \$11,014 in constant 2013–14 dollars). Current expenditures per student peaked in 2008–09 at \$11,537 and have decreased each year since then. The amount for 2011–12 (\$11,014) was 3 percent (\$318) less than the amount for 2010–11 (\$11,332).

Interest payments on school debt per student in fall enrollment increased by 28 percent (from \$289 to \$370 in constant 2013–14 dollars) during the period from 2000–01 to 2011–12. Capital outlay expenditures per student in 2011–12 (\$1,018) were 22 percent lower than the 2000–01 amount (\$1,310) and 7 percent lower than the 2010–11 amount (\$1,094); however, there were some fluctuations during this period.

#### For more information, see the Reader's Guide and the Guide to Sources.

## Figure 2. Current expenditures per student in fall enrollment in public elementary and secondary schools, by function of expenditure: 2000-01, 2005-06, 2010-11, and 2011-12

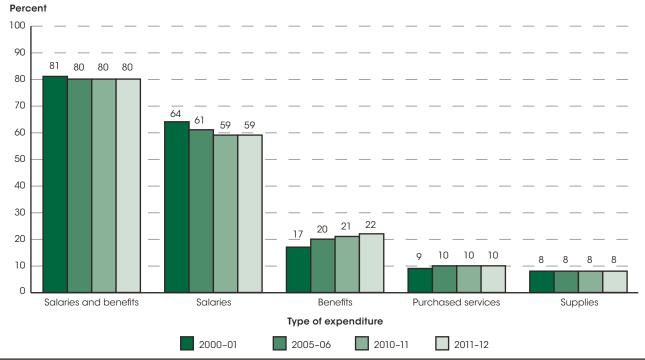


NOTE: Instruction, Student support, Instructional staff services, Operation and maintenance, Administration, Transportation, and Food services are subcategories of Current expenditures. Student support includes expenditures for guidance, health, attendance, and speech pathology services. Instructional staff services include expenditures for curriculum development, staff training, libraries, and media and computer centers. Administration includes both general administration and school administration. Transportation refers to student transportation. Expenditures are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2000–01, 2005–06, 2010–11, and 2011–12. See Digest of Education Statistics 2014, table 236.60.

In addition to being reported by type, expenditures are also reported by function, which describes the activity for which a service or material object is acquired. Per student current expenditures (in constant 2013–14 dollars) increased for most functions between 2000-01 and 2011-12, though expenditures for most functions were lower in 2011–12 than in 2010–11. In 2011–12, instruction—the single largest component of current expenditures-was \$6,706 per student, or about 61 percent of current expenditures. Instruction expenditures include salaries and benefits of teachers and teaching assistants as well as costs for instructional materials and instructional services provided under contract. Between 2000-01 and 2011-12, expenditures per student for instruction increased by 10 percent (from \$6,093 to \$6,706), though they peaked in 2009-10 at \$7,059. Expenditures per pupil for instruction for 2011–12 (\$6,706) were 3 percent

lower than the amount in 2010–11 (\$6,932). Expenditures between 2000-01 and 2011-12 for several other major school functions increased more rapidly. However, with the exception of food services, instructional staff services, and transportation services, all function categories peaked within a year of 2009–10. For example, expenditures per student for student support services, such as guidance and health personnel, increased by 25 percent from 2000-01 to 2011–12 (from \$492 to \$613), but peaked in 2009–10 at \$640. Expenditures per student for instructional staff services, including curriculum development, staff training, libraries, and media and computer centers, increased by 13 percent from 2000-01 to 2011-12 (from \$453 to \$511), but peaked in 2008–09 at \$556. The exception to this trend was food services where expenditures per student in 2011–12 were the highest ever reported (\$443).



## Figure 3. Percentage of current expenditures per student in fall enrollment in public elementary and secondary schools, by type of expenditure: 2000-01, 2005-06, 2010-11, and 2011-12

NOTE: Salaries and benefits, Salaries, Benefits, Purchased services, and Supplies are subcategories of Current expenditures. Purchased services include expenditures for contracts for food, transportation, or janitorial services, or professional development for teachers. Supplies include expenditures for items ranging from books to heating oil. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2000–01, 2005–06, 2010–11, and 2011–12. See Digest of Education Statistics 2014, table 236.60.

Current expenditures for education can also be expressed in terms of the percentage of funds going toward salaries, benefits, purchased services, or supplies. On a national basis in 2011–12, approximately 80 percent of current expenditures were for salaries and benefits for staff. Approximately 10 percent of current expenditures were for purchased services, which include a wide variety of items, such as contracts for food, transportation, or janitorial services, or for professional development for teachers. Generally speaking, this expenditure distribution shifted only slightly from 2000–01 to 2011–12, when expenditures for purchased services increased from 9 to 10 percent. Eight percent of school expenditures in 2011–12 were for supplies, ranging from books to heating oil. The percentages of expenditures for supplies changed less than one percentage point over the period from 2000–01 to 2011–12. There were, however, shifts within the distribution of salaries and benefits for staff, as the proportion of school budgets for staff salaries decreased from 64 percent in 2000–01 to 59 percent in 2011–12, and the proportion of staff benefits increased from 17 to 22 percent during this period.

**Reference tables:** *Digest of Education Statistics 2014*, tables 236.10, 236.55, and 236.60

**Related indicators:** Public School Revenue Sources (indicator 20)

**Glossary:** Consumer Price Index (CPI); Current expenditures (elementary/secondary); Expenditures, total; Public school or institution; Salary

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# **Chapter:** 3/Elementary and Secondary Education **Section:** Finance

## **Education Expenditures by Country**

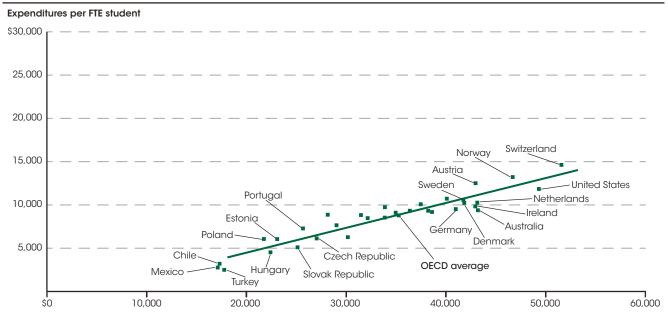
Indicator 22

In 2011, the United States spent \$11,841 per full-time-equivalent (FTE) student on elementary and secondary education, an amount 35 percent higher than the OECD average of \$8,789. At the postsecondary level, U.S. expenditures per FTE student were \$26,021, almost twice as high as the OECD average of \$13,619.

This indicator uses material from the Organization for Economic Cooperation and Development (OECD) report Education at a Glance 2014 to compare countries' expenditures on education using the measures expenditures per full-time-equivalent (FTE) student from both public and private sources and total education expenditures as a percentage of gross domestic product (GDP). The OECD is an organization of 34 countries whose purpose is to promote trade and economic growth. Education expenditures are from public revenue sources (governments) and private revenue sources, and include current and capital expenditures. Private sources include payments from households for school-based expenses such as tuition, transportation fees, book rentals, or food services, as well as public funding via subsidies to households, private fees for education services, or other private spending that goes through the educational institution. The total education expenditures as a percentage of GDP measure allows a comparison of countries' expenditures relative to their ability to finance education. Purchasing power parity (PPP) indexes are used to convert other currencies to U.S. dollars (i.e., absolute terms).

A country's wealth (defined as GDP per capita) is positively associated with expenditures per FTE student on education at the elementary and secondary level as well as at the postsecondary level. In terms of OECD countries that reported expenditures per FTE student in 2011 at both the elementary/secondary level and the postsecondary level, each of the 10 countries with the highest GDP per capita (Switzerland, the United States, Norway, Australia, the Netherlands, Austria, Ireland, Denmark, Sweden, and Germany) had education expenditures per FTE student higher than the OECD average at both the elementary/secondary level and the postsecondary level, and each of the 9 countries with the lowest GDP per capita (Mexico, Chile, Turkey, Poland, Hungary, Estonia, the Slovak Republic, Portugal, and the Czech Republic) had education expenditures per FTE student lower than the OECD average at both the elementary/secondary level and the postsecondary level.

#### Figure 1. Annual expenditures per full-time-equivalent (FTE) student for elementary and secondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2011



GDP per capita, in U.S. dollars

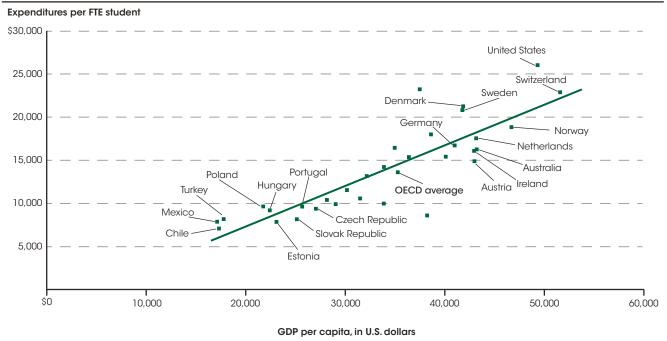
-linear relationship between spending and country wealth for 32 OECD countries reporting data (elementary/secondary): r<sup>2</sup> = .89; slope = 0.29; intercept = -1264. NOTE: Data for Luxembourg are excluded from the figure because of anomalies in that country's GDP per capita data. (Large revenues from international finance institutions in Luxembourg distort the wealth of that country's population.) Data for Greece are excluded because expenditure data are not available for 2008, 2009, 2010, or 2011. Expenditure and GDP data for Canada are for 2010. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary non-higher-education) are included in elementary and secondary education unless otherwise noted. Expenditure data for Canada, France, Italy, Portugal, and the United States do not include postsecondary non-higher-education. SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2014). Education at a Glance

2014. See Digest of Education Statistics 2014, table 605.10.

Expenditures per FTE student varied widely across OECD countries. At the elementary and secondary level, expenditures per FTE student in 2011 included low values such as \$2,501 for Turkey, \$2,765 for Mexico, and \$3,203 for Chile. Switzerland had the highest value of

\$14,623. Expenditures per FTE student at the elementary/ secondary level for the United States were \$11,841, an amount 35 percent higher than the average of \$8,789 for OECD member countries reporting data.

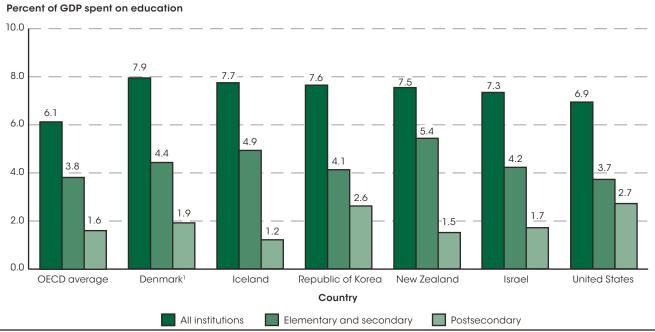
#### Figure 2. Annual expenditures per full-time-equivalent (FTE) student for postsecondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2011



-Linear relationship between spending and country wealth for 32 OECD countries reporting data (postsecondary): r<sup>2</sup> = .73; slope = 0.47; intercept = -2071. NOTE: Data for Luxembourg are excluded because that country does not report expenditure data for postsecondary institutions. Data for Greece are excluded because expenditure data are not available for 2008, 2009, 2010, or 2011. Expenditure and GDP data for Canada are for 2010. SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2014). Education at a Glance 2014. See Digest of Education Statistics 2014, table 605.10.

At the postsecondary level, expenditures per FTE student in 2011 included low values such as \$7,101 for Chile, \$7,868 for Estonia, and \$7,889 for Mexico. The United States had the highest postsecondary level expenditures per FTE student at \$26,021, which were almost twice as high as the OECD average of \$13,619.

# Figure 3. Direct expenditures on education as a percentage of gross domestic product (GDP) for Organization for Economic Cooperation and Development (OECD) countries with the highest percentages, by level of education: 2011



<sup>1</sup>Postsecondary non-higher-education included in both secondary and higher education.

NOTE: Postsecondary non-higher-education is included in elementary and secondary education unless otherwise noted. Expenditure data for the United States does not include postsecondary non-higher-education. All institutions total includes expenditures that could not be reported by level of education. SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2014). Education at a Glance 2014. See Digest of Education Statistics 2014, table 605.20.

Among the OECD countries reporting data in 2011, five countries spent over 7 percent of their GDP on total education expenditures for all institutions combined: Denmark (7.9 percent), Iceland (7.7 percent), the Republic of Korea (7.6 percent), New Zealand (7.5 percent), and Israel (7.3 percent). The United States spent just under 7 percent (6.9 percent) of its GDP on total education expenditures.

In terms of countries' direct expenditures by education level, the percentage of GDP the United States spent on elementary and secondary education (3.7 percent) was slightly lower than the OECD average (3.8 percent). Eleven OECD countries spent less than 3.7 percent of their GDP on elementary/secondary education, 11 countries spent between 3.7 and 4.1 percent, and seven countries spent more than 4.1 percent. New Zealand (5.4 percent) was the OECD country that spent the highest percentage of GDP on elementary/secondary education. At the postsecondary level, spending as a percentage of GDP for the United States (2.7 percent) was higher than the OECD average (1.6 percent) and higher than spending as a percentage of GDP for any other OECD country reporting data. Only two other countries spent more than 2 percent of their GDP on postsecondary education: the Republic of Korea (2.6 percent) and Chile (2.4 percent).

<b>Reference tables:</b> <i>Digest of Education Statistics 2014</i> , tables 605.10 and 605.20	<b>Glossary:</b> Expenditures per pupil, Full-time-equivalent (FTE) enrollment, Gross domestic product (GDP), Organization
<b>Related indicators:</b> International Educational Attainment (indicator 2)	for Economic Cooperation and Development (OECD), Postsecondary education, Purchasing Power Parity (PPP) indexes

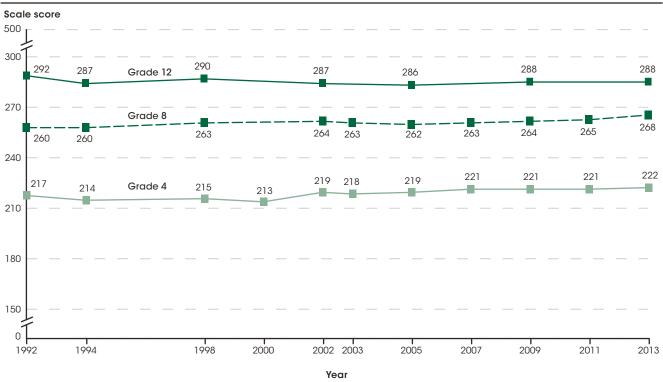
## Indicator 23 Reading Performance

**Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

The average grade 8 reading score was higher in 2013 than in 2011, according to data from the National Assessment of Educational Progress. At grade 4, the average score in 2013 was not measurably different from the score in 2011. Similarly, at grade 12 the average score in 2013 was not measurably different from that in 2009.

The National Assessment of Educational Progress (NAEP) assesses student performance in reading at grades 4, 8, and 12. NAEP reading scores range from 0 to 500 for all grade levels. NAEP achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills,

and *Proficient* indicates demonstrated competency over challenging subject matter. NAEP reading assessments are administered periodically: prior to 2013, the most recent assessment data were collected at grades 4 and 8 in 2011 and at grade 12 in 2009.



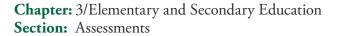


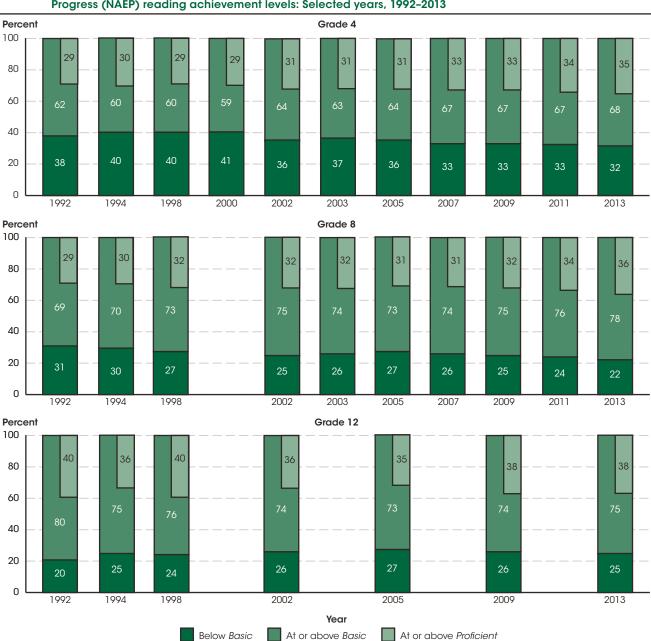
NOTE: Includes public and private schools. The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Assessment was not conducted for grade 8 in 2000 or for grade 12 in 2000, 2003, 2007, and 2011. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 221.10.

In 2013, the average reading score for 4th-grade students (222) was not measurably different from the 2011 score, but it was higher than the scores on assessments between 1992 (217) and 2009 (221). For 8th-grade students, the average reading score in 2013 (268) was more than 2 points higher than in 2011 (265), was 8 points higher

than in 1992 (260), and was higher than the average scores in all previous years. In 2013, the average reading score for 12th-grade students (288) was not measurably different from the score in 2009, but it was 4 points lower than in 1992 (292).







NOTE: Includes public and private schools. Achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, and *Proficient* indicates demonstrated competency over challenging subject matter. Assessment was not conducted for grade 8 in 2000 or for grade 12 in 2000, 2003, 2007, and 2011. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 221.12.

In 2013, the percentage of 4th-grade students performing at or above the *Basic* achievement level (68 percent) was not measurably different from the percentage in 2011 but was higher than the percentage in 1992 (62 percent). A higher percentage of 4th-grade students performed at or above the *Proficient* achievement level in 2013 (35 percent) than in 2011 (34 percent) and 1992 (29 percent). Among 8th-grade students, the percentage performing at or above *Basic* in 2013 (78 percent) was higher than in 2011 (76 percent) and 1992 (69 percent). A higher percentage of 8th-grade students performed at or above *Proficient* in 2013 (36 percent) than in 2011 (34 percent) and 1992 (29 percent). Among 12th-grade students, the percentage performing at or above *Basic* in 2013 (75 percent) was not measurably different from the percentage in 2009, but was lower than the percentage in 1992 (80 percent). The percentage of 12th-graders performing at or above *Proficient* in 2013 (38 percent) was not measurably different from the percentage in 2009 but was lower than the percentage in 2009 but was lower than the percentage in 2009 but was lower than the percentage in 1992 (40 percent).

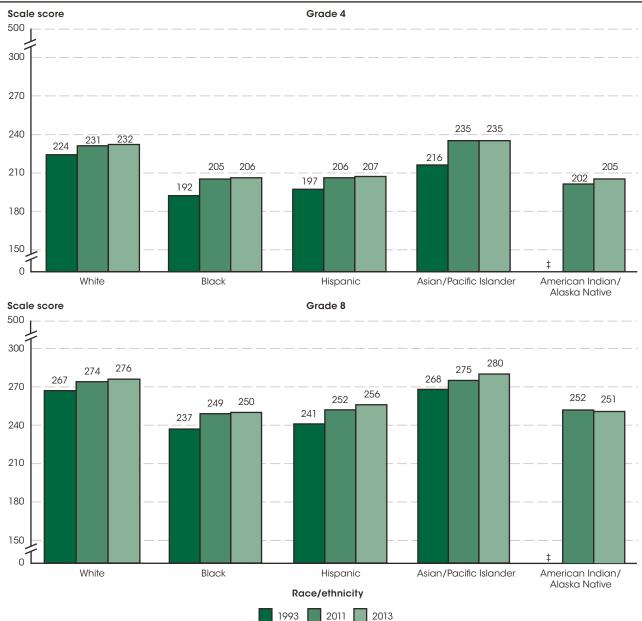


Figure 3. Average reading scale scores of 4th- and 8th-grade students, by race/ethnicity: 1992, 2011, and 2013

‡ Reporting standards not met (too few cases for a reliable estimate).

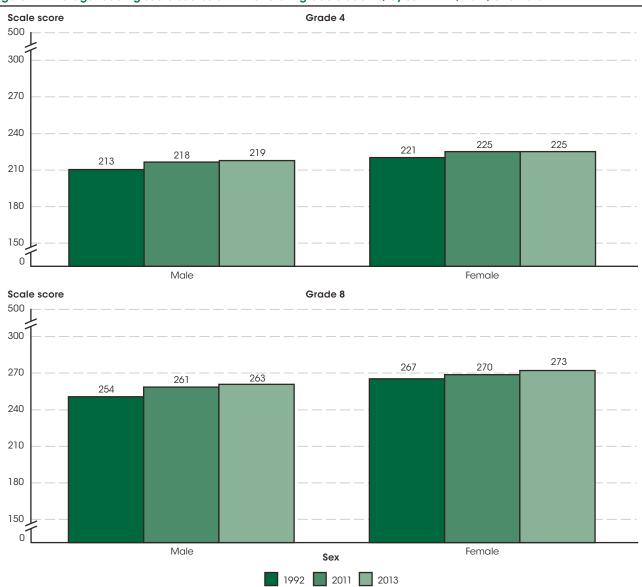
NOTE: Includes public and private schools. The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 2011, and 2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 221.10.

At grade 4, the average reading score for White students was higher in 2013 (232) than in both 2011 (231) and 1992 (224). The 2013 scores for Black (206), Hispanic (207), and Asian/Pacific Islander (235) 4th-graders were not measurably different from the 2011 scores, but the 2013 scores were higher than the 1992 scores. Average reading scores for 8th-grade White (276), Black (250), Hispanic (256), and Asian/Pacific Islander (280) students were higher in 2013 than in 2011 and 1992. In 2013, the scores for American Indian/Alaska Native 4th-graders (205) and 8th-graders (251) were not measurably different from the scores in 2011. Prior to 2011, separate data for Asians, Pacific Islanders, and students of Two or more races were not collected at the school level. At grade 4, the 2013 average reading scores for Asians (237), Pacific Islanders (212), and students of Two or more races (227) were not measurably different from the 2011 scores. At grade 8, Asian students scored higher in 2013 (282) than in 2011 (277); the 2013 scores for Pacific Islanders (259) and students of Two or more races (271) were not measurably different from the 2011 scores. Closing achievement gaps is a goal of both national and state education policies. From 1998 through 2013, the average reading scores for White 4th- and 8th-graders were higher than those of their Black and Hispanic peers. Although the White-Black and White-Hispanic achievement gaps did not change measurably from 2011 **Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

to 2013 for either grade 4 or 8, some of the racial/ethnic achievement gaps have narrowed since the early 1990s. At grade 4, the White-Black gap narrowed from 1992 (32 points) to 2013 (26 points); at grade 8, the White-Hispanic gap narrowed from 1992 (26 points) to 2013 (21 points).

Figure 4. Average reading scale scores of 4th- and 8th-grade students, by sex: 1992, 2011, and 2013



NOTE: Includes public and private schools. The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 2011, and 2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 221.10.

At grade 4, the average reading scores for male (219) and female (225) students in 2013 were not measurably different from those in 2011 but were higher than those in 1992 (213 and 221, respectively). At grade 8, the average reading score for male students in 2013 (263) was higher than in 2011 (261) and 1992 (254). The average score for female students was also higher in 2013 (273) than

in 2011 (270) and 1992 (267). Since 1992, females have scored higher than males at both grades 4 and 8. In 2013, the gender gap was 7 points for 4th-grade students and 10 points for 8th-grade students. The gender gaps for both 4th- and 8th-grade students were not measurably different from the corresponding gaps in 2011 and 1992. Since 1998, NAEP has collected data regarding student English language learner (ELL) status. In 2013 and in all previous assessment years since 1998, the NAEP average reading scale scores for non-ELL 4th- and 8th-graders were higher than the scores for their ELL peers. In 2013, **Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

the achievement gap between non-ELL and ELL students was 38 points at the 4th-grade level and 45 points at the 8th-grade level. The 2013 reading achievement gaps at both grade levels were not measurably different from the gaps in either 2011 or 1998.

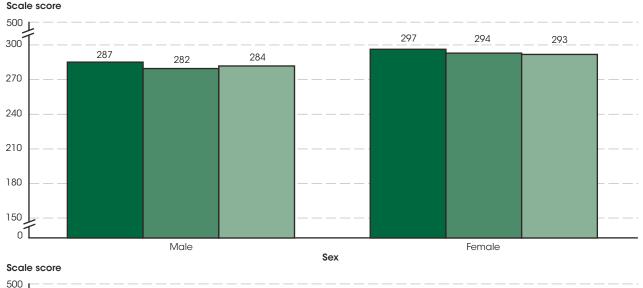
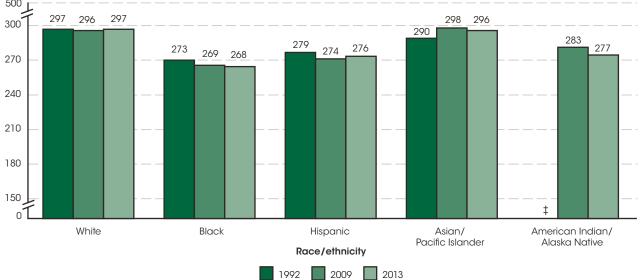


Figure 5. Average reading scale scores of 12th-grade students, by sex and race/ethnicity: 1992, 2009, and 2013



‡ Reporting standards not met (too few cases for a reliable estimate).

NOTE: Includes public and private schools. The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 2009, and 2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 221.10.

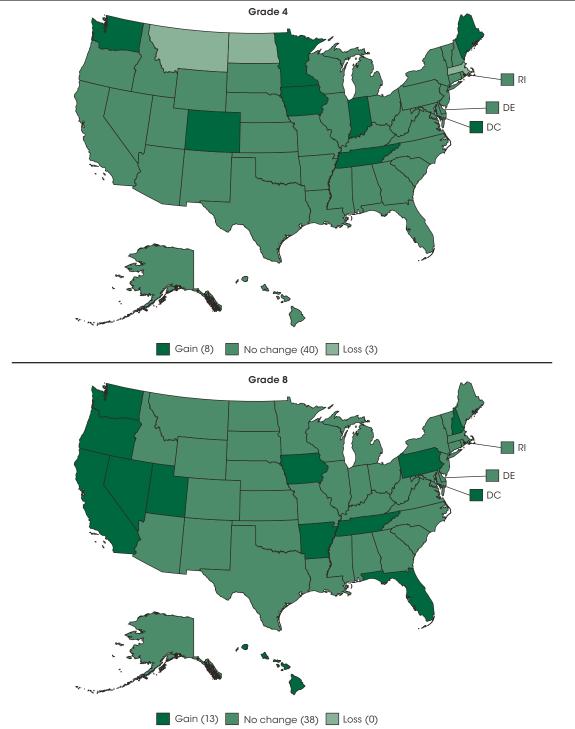
At grade 12, the average reading scale scores did not change measurably from 1992 to 2013 for White, Hispanic, or Asian/Pacific Islander students. For Black students, the 2013 average score (268) was lower than the score in 1992 (273) but was not measurably different from the 2009 score. Similarly, the score for American Indian/ Alaska Native students in 2013 (277) was not measurably different from the score in 2009. In 2013, the reading scores for Asians, Pacific Islanders, and students of Two or more races were 296, 289, and 291, respectively.

Achievement gaps were also evident for 12th-grade students. The White-Black gap was wider in 2013 (30 points) than in 1992 (24 points), while the White-Hispanic gap in 2013 (22 points) was not measurably different from the gap in 1992. The 2013 average scores for male (284) and female (293) 12th-grade students were not measurably different from the scores in 2009 but were lower than the scores in 1992 (287 and 297, respectively). The gender gap at grade 12 in 2013 (10 points) was not measurably different from

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the gap in 2009 or 1992. In 2013, non-ELL 12th-graders scored higher than their ELL peers by 53 points. The achievement gap between non-ELL and ELL students in 2013 was not measurably different from the gap in either 2009 or 1998.





NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. "Gain" is defined as a significant increase from 2011 to 2013, "No Change" is defined as no significant change from 2011 to 2013, and "Loss" is defined as a significant decrease from 2011 to 2013. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 and 2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, tables 221.40 and 221.60.

For more information, see the Reader's Guide and the Guide to Sources.

NAEP results also permit state-level comparisons of the reading abilities of 4th- and 8th-grade students in public schools. While there was no measurable change from 2011 to 2013 in the average score for 4th-grade public school students nationally, average scores were higher in 2013 than in 2011 in Colorado, the District of Columbia, Indiana, Iowa, Maine, Minnesota, Tennessee, and Washington; scores were lower in 2013 than in 2011 in Massachusetts, Montana, and North Dakota.

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At grade 8, although the average reading score for public school students nationally was 2 points higher in 2013 than in 2011, only 12 states (Arkansas, California, Florida, Hawaii, Iowa, Nevada, New Hampshire, Oregon, Pennsylvania, Tennessee, Utah, and Washington) plus the District of Columbia had higher scores in 2013 than in 2011. In the other states, scores did not change measurably from 2011 to 2013.

Jurisdiction	Grade 4	Grade 8
Nation (public)	221	266
Large city	<b>4</b> 212	<b>4</b> 258
Albuquerque	4 207	4 256
Atlanta	<b>4</b> 214	4 255
Austin	221	1 261
Baltimore City	₽ 204	4 252
Boston	4 214	4 257
Charlotte	1 226	• 266
Chicago	₽ 206	4 253
Cleveland	4 190	4 239
Dallas	4 205	4 251
Detroit	4 190	4 239
District of Columbia (DCPS)	4 206	4 245
Fresno	4 196	4 245
Hillsborough County (FL)	<b>1</b> 228	267
Houston	4 208	4 252
Jefferson County (KY)	221	4 261
Los Angeles	4 205	4 250
Miami-Dade	• 223	4 259
Milwaukee	4 199	4 242
New York City	4 216	4 256
Philadelphia	₽ 200	4 249
San Diego	218	4 260

#### Figure 7. Average reading scale scores of 4th- and 8th-grade public school students, by jurisdiction: 2013

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. \*Large city" includes students from all cities in the nation with populations of 250,000 or more, including the participating districts.

and national average score

SOURCE: U.S. Department of Education, National Center for Education Statistics. (2013). The Nation's Report Card: A First Look: 2013 Mathematics and Reading Trial Urban District Assessment (NCES 2014-466), figure 2. See Digest of Education Statistics 2014, table 221.80.

#### For more information, see the Reader's Guide and the Guide to Sources.

NAEP also collects data for Trial Urban Districts at grades 4 and 8. The Trial Urban District Assessment is intended to focus attention on urban education and to measure the educational progress of participating large urban districts. The results of the 21 urban districts are based on the same reading assessment used to report national and state results. This allows each district to compare its performance to the performance of its home state as well as to that of other states and other participating districts.

In 2013, the 4th-grade large city average score (212) was lower than the national average score (221). Additionally, students in 15 urban districts had scores lower than the national average, while 4 had scores that were not measurably different. In contrast, students in two urban districts (Charlotte and Hillsborough County-FL) had scores higher than the national average. Similarly, the 8th-grade large city average score (258) was lower than the national average score (266). None of the urban districts had 8th-grade scale scores higher than the national average. However, students in two urban districts (Charlotte and Hillsborough County-FL) had scores that were not measurably different from the national average.

**Reference tables:** *Digest of Education Statistics 2014*, tables 221.10, 221.12, 221.40, 221.60, and 221.80

**Related indicators:** English Language Learners (indicator 12), Mathematics Performance (indicator 24), Reading and Mathematics Score Trends (indicator 25), International Assessments (indicator 26)

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In 2013, fourth-graders in two urban districts (the District of Columbia and Los Angeles) performed better in reading than 4th-grade students did in 2011. There was a decline in Houston, while students in the other 18 urban districts showed no change. Eighth-graders in five urban districts (Baltimore City, Dallas, the District of Columbia, Fresno, and Los Angeles) improved upon the 2011 performance, while students in all other participating urban districts showed no change.

In terms of proficiency levels, 34 percent of 4th-grade public school students nationwide performed at or above the *Proficient* level in reading. Compared with this national average, two urban districts (Charlotte and Hillsborough County-FL) had more than 34 percent of students performing at or above the *Proficient* level at grade 4. At grade 8, about 34 percent of public school students nationwide performed at or above the *Proficient* level. None of the 21 urban districts had a percentage of students performing at or above the *Proficient* level that was higher than the national average.

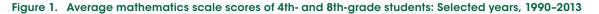
Glossary: Achievement gap, Achievement levels

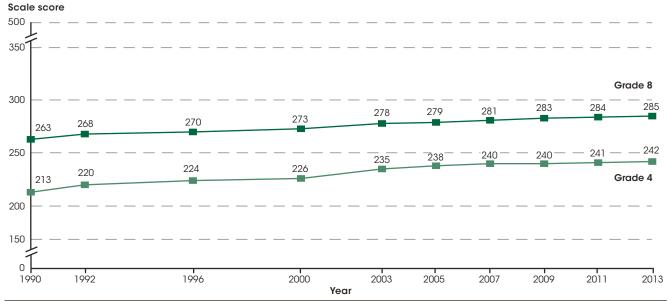
## Indicator 24 Mathematics Performance

The average 4th- and 8th-grade mathematics scores in 2013 were higher than the scores in all previous assessment years, according to data from the National Assessment of Educational Progress. At grade 12, the average mathematics score in 2013 was higher than in 2005 but not measurably different from the score in 2009.

The National Assessment of Educational Progress (NAEP) assesses student performance in mathematics at grades 4, 8, and 12. NAEP mathematics scores range from 0 to 500 for grades 4 and 8. The framework for the 12th-grade mathematics assessment was revised in 2005; as a result, the 2005, 2009, and 2013 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300.

NAEP achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, and *Proficient* indicates demonstrated competency over challenging subject matter. NAEP mathematics assessments are administered periodically: prior to 2013, the most recent mathematics assessment data were collected at grades 4 and 8 in 2011 and at grade 12 in 2009.



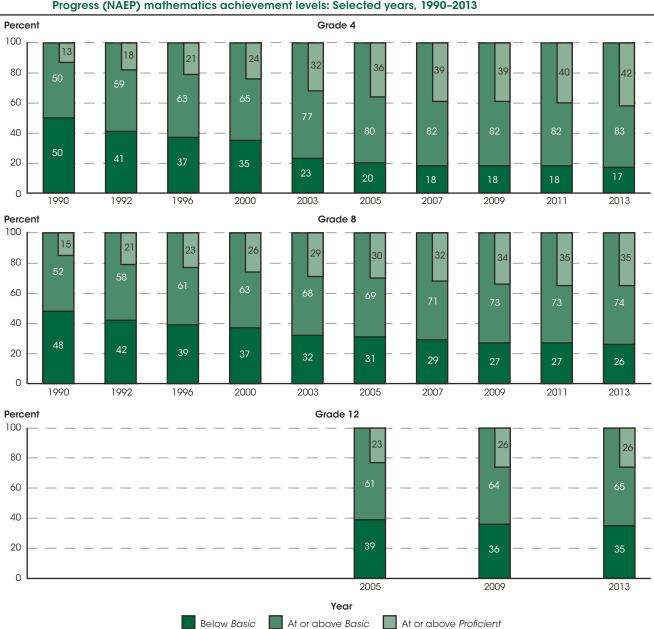


NOTE: Includes public and private schools. At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990 and 1992.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 222.10.

In 2013, the average mathematics scores for 4th- and 8th-grade students were higher than the average scores in all previous assessment years. From 1990 to 2013, the average 4th-grade mathematics score increased by 28 points, from 213 to 242. During that same period, the average 8th-grade score increased by 22 points, from 263 to 285. In 2013, the average mathematics score for 12th-grade students (153) was not measurably different from the score in 2009 but was 3 points higher than in 2005 (150), the first year the revised assessment was administered.

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#### Figure 2. Percentage distribution of 4th-, 8th-, and 12th-grade students across National Assessment of Educational Progress (NAEP) mathematics achievement levels: Selected years, 1990–2013

NOTE: Includes public and private schools. Achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, and *Proficient* indicates demonstrated competency over challenging subject matter. In 2005, there were major changes to the framework and content of the grade 12 assessment and, as a result, scores from 2005 and later assessment years cannot be compared with scores and results from earlier assessment years. Assessment was not conducted for grade 12 in 2007 and 2011. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990 and 1992. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 222.12.

In 2013, some 83 percent of 4th-grade students performed at or above the *Basic* achievement level and 42 percent performed at or above the *Proficient* level in mathematics. While the percentage of students performing at or above the *Basic* level in 2013 was not measurably different from that in 2011, it was higher than the percentage in 1990 (50 percent). A higher percentage of 4th-grade students performed at or above *Proficient* in 2013 than in all previous assessment years. In 2013, some 74 percent of 8th-grade students performed at or above *Basic* and 35 percent performed at or above *Proficient* in mathematics. The percentages of students at or above *Basic* and at or above *Proficient* in 2013 showed no measurable change from 2011, but they were higher than the percentages in all assessment years prior to 2011. The percentage of 12th-grade students performing at or above *Basic* in 2013 (65 percent) was not measurably different from the percentage in 2009 but was 4 percentage points higher than in 2005. The percentage performing at or above *Proficient* (26 percent) was also not measurably different from the percentage in 2009 but was 3 percentage points higher than in 2005.

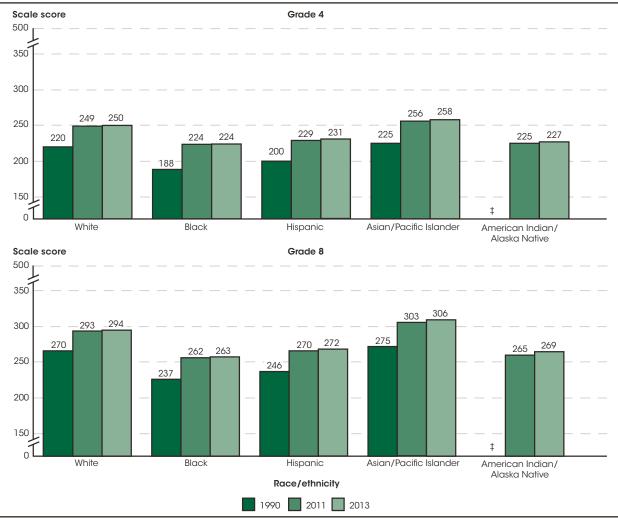


Figure 3. Average mathematics scale scores of 4th- and 8th-grade students, by race/ethnicity: 1990, 2011, and 2013

‡ Reporting standards not met (too few cases for a reliable estimate).

NOTE: Includes public and private schools. At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 2011, and 2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 222.10.

At grade 4, the average mathematics scores in 2013 for White (250) and Hispanic students (231) were higher than the scores in 2011 (249 and 229, respectively). The 2013 scores for Black (224) and Asian/Pacific Islander (258) 4th-graders were not measurably different from the 2011 scores. White, Black, Hispanic, and Asian/Pacific Islander students all had higher average scores in 2013 than in 1990. At grade 8, the average scores in 2013 for Hispanics (272), Asian/Pacific Islanders (306), and American Indian/Alaska Natives (269) were higher than in 2011 (270, 303, and 265, respectively). Prior to 2011, separate data for Asians, Pacific Islanders, and students of Two or more races were not collected at the school level. At grade 4, the average 2013 mathematics scores for Asians (259), Pacific Islanders (236), and students of Two or more races (245) were not measurably different from the scores in 2011. Similarly, at grade 8 the 2013 scores for Asians

(309), Pacific Islanders (275), and students of Two or more races (288) were not measurably different from the scores in 2011.

Closing achievement gaps is a goal of both national and state education policies. In 2013 and in all previous assessment years since 1990, the average mathematics scores for White students at all grade levels have been higher than the scores for Black and Hispanic students. Although the White-Black and White-Hispanic achievement gaps did not change measurably from 2011 to 2013, there was some narrowing of racial/ethnic score gaps compared to the early 1990s. For example, the White-Black achievement gap at grade 4 narrowed from 1990 (32 points) to 2013 (26 points), and the White-Hispanic achievement gap at grade 8 narrowed from 1992 (28 points) to 2013 (22 points).

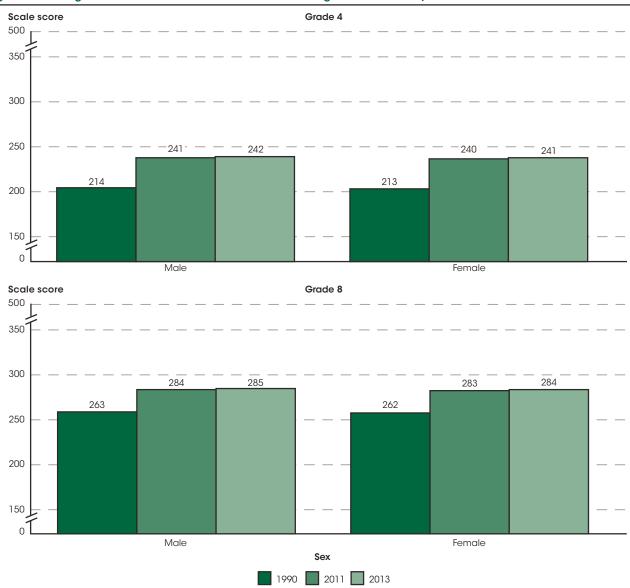


Figure 4. Average mathematics scale scores of 4th- and 8th-grade students, by sex: 1990, 2011, and 2013

NOTE: Includes public and private schools. At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 2011, and 2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 222.10.

The average mathematics score in 2013 for male 4th-grade students (242) was higher than the score in 1990 (214) but not measurably different from that in 2011. For female 4th-grade students, the 2013 score (241) was higher than the scores in both 2011 (240) and 1990 (213). The average mathematics score in 2013 for male 8th-graders (285) was not measurably different from the score in 2011 but was higher than in 1990 (263). For female 8th-graders, the 2013 score (284) was higher than in both 2011 (283) and 1990 (262). In 2013, the mathematics scores for male and female students had an apparent achievement gap of 1 point at both grades 4 and 8. However, the achievement gap was not significant at grade 8. The 2013 gender gaps for grades 4 and 8 were not measurably different from the gaps in 2011 or 1990.

Since 1996, NAEP has collected data regarding student English language learner (ELL) status for grades 4 and 8. In 2013 and in all previous assessment years since 1996, the average mathematics scale scores for non-ELL 4th- and 8th-grade students were higher than their ELL peers' scores. In 2013, the achievement gap between non-ELL and ELL students was 25 points at the 4th-grade level and 41 points at the 8th-grade level. At grade 4, this achievement gap was not measurably different from the gap in any assessment year since 1996. At grade 8, the achievement gap between non-ELL and ELL students in 2013 (41 points) was not measurably different from the achievement gap in 2011, 2009, 2000, or 1996 but was higher than in 2007 (38 points), 2005 (37 points), and 2003 (38 points).

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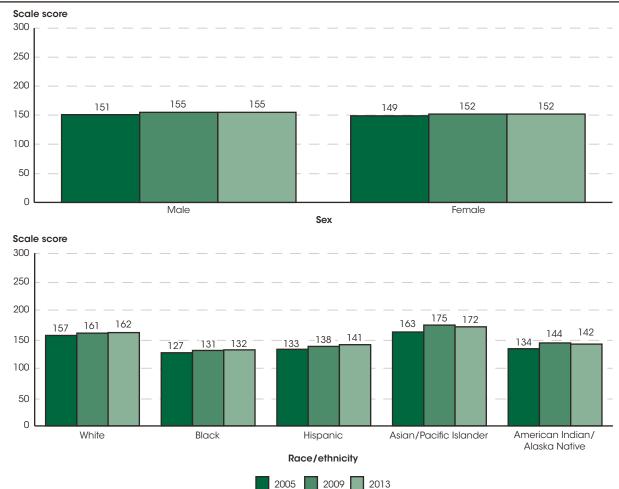


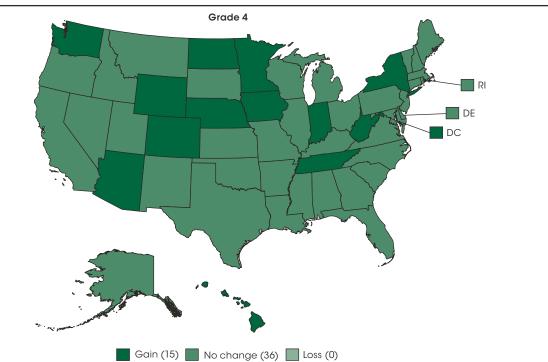
Figure 5. Average mathematics scale scores of 12th-grade students, by sex and race/ethnicity: 2005, 2009, and 2013

NOTE: Includes public and private schools. At grade 12, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 300. Race categories exclude persons of Hispanic ethnicity.

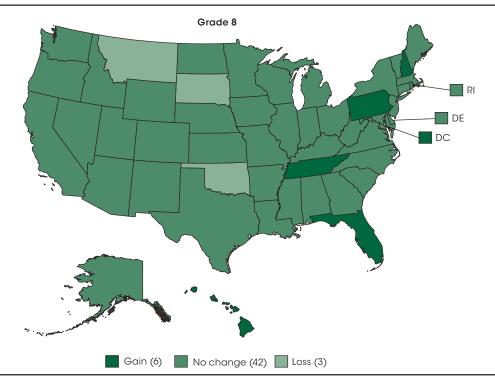
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005, 2009, and 2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, table 222.10.

At grade 12, the average 2013 scale scores for all racial/ ethnic groups were not measurably different from the scores in 2009. However, the average scores for all racial/ ethnic groups were higher in 2013 than in 2005, except the score for American Indian/Alaska Natives, which did not change measurably. For example, the average scores for Asian/Pacific Islander students increased from 163 in 2005 to 172 in 2013. In 2013, the average scores for Asians, Pacific Islanders, and students of Two or more races were 174, 151, and 155, respectively. The mathematics scale scores for White 12th-graders were higher than the scores for their Black and Hispanic peers between 2005 and 2013. There were no measurable changes in racial/ethnic achievement gaps during this period. Average mathematics scores in 2013 for 12th-grade male (155) and female (152) students were not measurably different from those in 2009. Scores in 2013 were higher than those in 2005 for both males and females. In 2005, 2009, and 2013, the gender gap for 12th-grade students has remained at 3 points. The average scores for non-ELL 12th-grade students in 2005, 2009, and 2013 were higher than their ELL peers' scores in these years. The achievement gap between non-ELL and ELL students was 46 points in 2013 and has widened by 15 points since 2005.

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NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. "Gain" is defined as a significant increase from 2011 to 2013, "No Change" is defined as no significant change from 2011 to 2013, and "Loss" is defined as a significant decrease from 2011 to 2013.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 and 2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2014*, tables 222.50 and 222.60. NAEP results also permit state-level comparisons of the mathematics achievement of 4th- and 8th-grade students in public schools. The average mathematics scores for 4th-grade public school students were higher in 2013 than in 2011 in the District of Columbia and 14 states (Arizona, Colorado, Delaware, Hawaii, Indiana, Iowa, Minnesota, Nebraska, New York, North Dakota,

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Tennessee, Washington, West Virginia, and Wyoming); however, scores did not change measurably in any other state during this period. At grade 8, scores were higher in 2013 than in 2011 in the District of Columbia and five states (Florida, Hawaii, New Hampshire, Pennsylvania, and Tennessee); however, scores decreased in three states (Montana, Oklahoma, and South Dakota).

Jurisdiction	Grade 4	Grade 8
Nation (public)	241	284
Large city	<b>4</b> 235	<b>4</b> 276
Albuquerque	4 235	4 274
Atlanta	<b>4</b> 233	<b>4</b> 267
Austin	<b>1</b> 245	285
Baltimore City	4 223	4 260
Boston	<b>4</b> 237	283
Charlotte	<b>1</b> 247	1 289
Chicago	<b>4</b> 231	₽ 269
Cleveland	4 216	4 253
Dallas	<b>4</b> 234	4 275
Detroit	4 204	<b>4</b> 240
District of Columbia (DCPS)	4 229	₽ 260
Fresno	<b>4</b> 220	₽ 260
Hillsborough County (FL)	243	284
Houston	4 236	<b>4</b> 280
Jefferson County (KY)	<b>4</b> 234	<b>4</b> 273
Los Angeles	<b>4</b> 228	₽ 264
Miami-Dade	4 237	4 274
Milwaukee	4 221	4 257
New York City	<b>4</b> 236	₽ 274
Philadelphia	4 223	4 266
San Diego	241	4 277
Higher average score than national average score average score	national b	o significant etween urba nd national o

#### Figure 7. Average mathematics scale scores of 4th- and 8th-grade public school students, by jurisdiction: 2013

NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. "Large city" includes students from all cities in the nation with populations of 250,000 or more, including the participating districts.

SOURCE: U.S. Department of Education, National Center for Education Statistics (2013). The Nation's Report Card: A First Look: 2013 Mathematics and Reading Trial Urban District Assessment (NCES 2014-466), figure 2. See Digest of Education Statistics 2014, table 222.80.

NAEP also collects data for Trial Urban Districts at grades 4 and 8. The Trial Urban District Assessment is intended to focus attention on urban education and to measure the educational progress of participating large urban districts. The results of the 21 urban districts are based on the same mathematics assessment used to report national and state results. This allows each district to compare its performance to the performance of its home state as well as to that of other states and other participating urban districts. In 2013, the 4th-grade large city average score (235) was lower than the national average score (241). Additionally, students in 17 urban districts had scores lower than the national average, while 2 had scores that were not measurably different. In contrast, students in two urban districts (Austin and Charlotte) had scores higher than the national average. Similarly, the 8th-grade large city average score (276) was lower than the national average score (284). Students in 17 urban districts had scores lower than the national average, while 3 had scores that were not measurably different. In contrast, students in Charlotte scored higher than the national average.

In 2013, fourth-graders in four urban districts (Atlanta, Chicago, the District of Columbia, and Los Angeles) performed better in mathematics than 4th-grade students in those cities did in 2011. Students in other participating

**Reference tables:** *Digest of Education Statistics 2014*, tables 222.10, 222.12, 222.50, 222.60, and 222.80

**Related indicators:** English Language Learners (indicator 12), Reading Performance (indicator 23), Reading and Mathematics Score Trends (indicator 25), International Assessments (indicator 26)

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urban districts showed no change. Eighth-graders in three urban districts (Charlotte, the District of Columbia, and Fresno) improved between 2011 and 2013. Students in Detroit saw a decline, while all other participating urban districts showed no change.

In terms of proficiency, 41 percent of 4th-grade public school students nationwide performed at or above the *Proficient* level in mathematics in 2013. Compared with this national average, two urban districts (Austin and Charlotte) had higher percentages of students performing at or above the *Proficient* achievement level. At grade 8, about 34 percent of public school students nationwide performed at or above the *Proficient* level. One urban district (Charlotte) had a percentage of students performing at or above the *Proficient* level that was higher than the national average.

Glossary: Achievement gap, Achievement levels

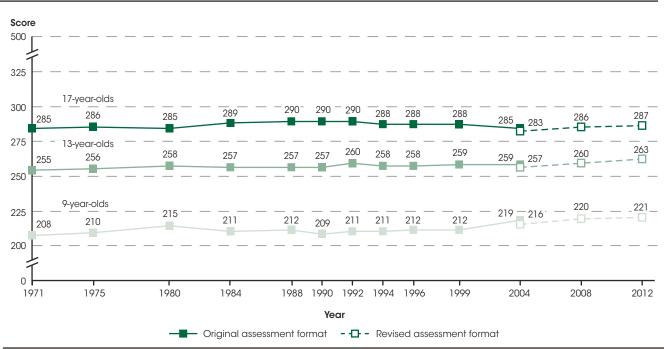
#### Indicator 25

### **Reading and Mathematics Score Trends**

NAEP long-term trend results indicate that the average reading and mathematics achievement of 9- and 13-year-olds improved between the early 1970s and 2012; however, only 13-year-olds made score gains from 2008 to 2012, and they did so in both subject areas. Average reading and mathematics achievement for 17-year-olds did not change significantly between the early 1970s and 2012 or between 2008 and 2012.

Since the 1970s, the long-term trend National Assessment of Educational Progress (NAEP) has collected periodic information on the reading and mathematics achievement of 9-, 13-, and 17-year-olds enrolled in public and private schools. Long-term trend NAEP results may differ from the main NAEP results presented in other National Center for Education Statistics (NCES) publications since the long-term trend assessment measures a consistent body of knowledge and skills over an extended period, while the main NAEP undergoes changes periodically to reflect current curricula and emerging standards.<sup>1</sup>

Figure 1. Average reading scale scores on the long-term trend National Assessment of Educational Progress (NAEP), by age: Selected years, 1971 through 2012



NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 221.85.

The national trend in reading achievement shows improvement at ages 9 and 13, but not at age 17, between the early 1970s and 2012. The average scores for 9- and 13-year-olds in 2012 were higher than those in 1971 (13 and 8 points higher, respectively), but the average score for 17-year-olds in 2012 (287) was not measurably different from the score in 1971. For 9-year-olds, the average score did not change measurably between 2012 (221) and 2008, but it was higher in each of these years than in all previous assessment years.<sup>2</sup> Thirteen-year-olds scored higher in 2012 (263) than in all previous assessment years, including 3 points higher than in 2008. The average score for 17-year-olds in 2012 was not measurably different from the score in 2008.

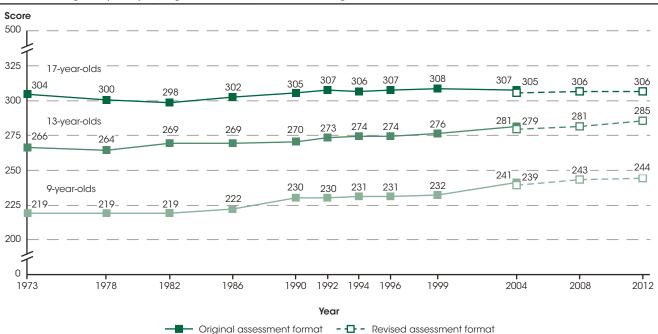


Figure 2. Average mathematics scale scores on the long-term trend National Assessment of Educational Progress (NAEP), by age: Selected years, 1973 through 2012

NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

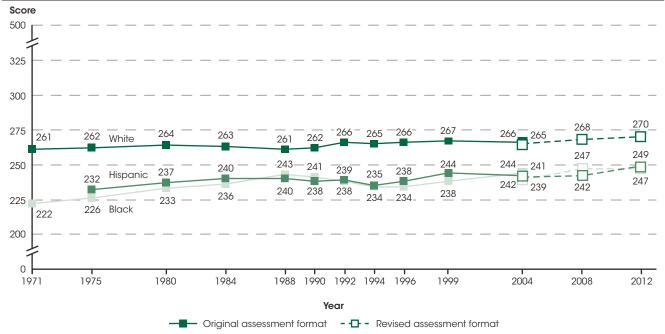
SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 222.85.

The national trend in mathematics achievement shows improvement at ages 9 and 13, but not at age 17, between the early 1970s and 2012. The average scores for 9- and 13-year-olds in 2012 were higher than those in 1973 (25 and 19 points higher, respectively), but the average score for 17-year-olds in 2012 (306) was not measurably different from the score in 1973. For 9-year-olds, the average score did not change measurably between 2012 (244) and 2008, but it was higher in each of these two years than in all previous assessment years.<sup>2</sup> Thirteenyear-olds scored higher in 2012 (285) than in all previous assessment years, including 4 points higher than in 2008. The average score for 17-year-olds in 2012 was not measurably different from the score in 2008.

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Closing achievement gaps is a goal of both national and state education policies. The results from the 2012 NAEP long-term trend assessments show some progress toward meeting that goal. For example, from the 1970s to 2012 the White-Black and White-Hispanic score gaps in reading and mathematics narrowed as a result of Black and Hispanic students making larger gains in achievement during that period than White students.





NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 221.85.

In reading, the White-Black and White-Hispanic reading gaps narrowed from the 1970s to 2012 at ages 9, 13, and 17, even though the average reading score of White students remained 21 or more points higher than the average scores for Black and Hispanic students in 2012. At age 13, Blacks and Hispanics both made larger gains in reading scores from the 1970s to 2012 than did White students, leading to a narrowing of the White-Black and White-Hispanic score gaps in 2012. From 1971 to 2012, White 13-year-olds had a 9-point gain, and Black 13-year-olds had a 24-point gain. Larger gains for Black than for White 13-year-olds during the period narrowed the White-Black gap from 39 points in 1971 to 23 points in 2012. Similarly, Hispanic students at age 13 had a 17-point gain in reading from 1975 to 2012, which narrowed the White-Hispanic gap from 30 points in 1975 to 21 points in 2012. Hispanic 13-year-olds were the only racial/ethnic group to make reading score gains from 2008 to 2012. The White-Hispanic gap for 13-year-olds narrowed 5 points from 2008 to 2012.

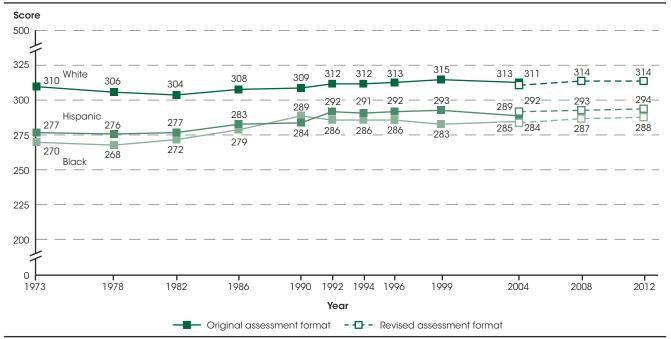


Figure 4. Average mathematics scale scores on the long-term trend National Assessment of Educational Progress (NAEP) for 17-year-olds, by race/ethnicity: Selected years, 1973 through 2012

NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 222.85.

In mathematics, the White-Black gap narrowed from the 1970s to 2012 at ages 9, 13, and 17, even though the average mathematics score of White students remained 25 or more points higher than the average score for Black students in 2012. The White-Hispanic mathematics gap also narrowed from 1973 to 2012 at ages 13 and 17, but it did not change significantly at age 9. For example, average mathematics scores for 17-year-olds increased 4 points for White students, 18 points for Black students, and 17 points for Hispanic students from 1973 to 2012. As a result, both the White-Black score gap and the White-Hispanic score gap for 17-year-olds narrowed 14 points during this period. For 17-year-old students, the White-Black score gap narrowed from 40 points in 1973 to 26 points in 2012, and the White-Hispanic score gap narrowed from 33 to 19 points over the same period. There were no significant changes, however, from 2008 to 2012 in the White-Black or White-Hispanic score gaps for 17-year-olds.

#### **Endnotes:**

<sup>1</sup> Several administrative changes, including the addition of allowing accommodations for students with disabilities and for English language learners, were initiated in the 2004 long-term trend assessment and have been carried forward in more recent data collections. Despite these changes to the assessment, the trend analysis is still valid. <sup>2</sup> Except in 2004 for the original unrevised assessment. Scores from the original and revised assessments are not directly comparable, and comparisons should be made with caution.

**Reference tables:** *Digest of Education Statistics 2013*, tables 221.85 and 222.85

Glossary: Achievement gap

**Related indicators:** Reading Performance (indicator 23), Mathematics Performance (indicator 24) Among 15-year-old students, 29 education systems had higher average scores than the United States in mathematics literacy, 22 had higher average scores in science literacy, and 19 had higher average scores in reading literacy, according to the 2012 Program for International Student Assessment (PISA).

The Program for International Student Assessment (PISA), coordinated by the Organization for Economic Cooperation and Development (OECD), has measured the performance of 15-year-old students in mathematics, science, and reading literacy every 3 years since 2000. In 2012, PISA was administered in 65 countries and education systems, including all 34 member countries of the OECD. In addition to participating in the U.S. national sample, three states—Connecticut, Florida, and Massachusetts—opted to participate as individual education systems and had separate samples of public schools and public-school students included in PISA to obtain state-level results. PISA 2012 results are reported by average scale score (from 0 to 1,000) as well as by the percentage of students reaching particular proficiency levels. Proficiency results are presented in terms of the percentages of students reaching proficiency level 5 or above (i.e., percentages of top performers) and the percentages of students performing below proficiency level 2 (i.e., percentages of low performers).

For more information, see the Reader's Guide and the Guide to Sources.

### Table 1. Average scores of 15-year-old students on the Program for International Student Assessment (PISA) mathematics literacy scale, by education system: 2012

Education system	Average score	Education system	Average score
OECD average	494 🕚	OECD average	494 🕚
Shanghai-CHN	613 🔕	Lithuania	479
Singapore	573 🗅	Sweden	478
Hong Kong-CHN	561 🔕	Hungary	477
Chinese Taipei-CHN	560 🗅	Croatia	471 🐨
Korea, Republic of	554 🗅	Israel	466 🐨
Macao-CHN	538 🗅	Greece	453 🐨
Japan	536 🗅	Serbia, Republic of	449 🐨
Liechtenstein	535 🗅	Turkey	448 🐨
Switzerland	531 🙆	Romania	445 🕥
Netherlands	523 🗅	Cyprus	440 🕥
Estonia	521 🗅	Bulgaria	439 🕥
Finland	519 🕚	United Arab Emirates	434 🕥
Canada	518 🕚	Kazakhstan	432 🕥
Poland	518 🗅	Thailand	427 🐨
Belgium	515 🗅	Chile	423 🕥
Germany	514 🕚	Malaysia	421 🕥
Vietnam	511 🕚	Mexico	413 🕥
Austria	506 🕚	Montenegro, Republic of	410 🕥
Australia	504 🕚	Uruguay	409 🕥
Ireland	501 🕚	Costa Rica	407 🕥
Slovenia	501 🕚	Albania	394 🕥
Denmark	500 🗅	Brazil	391 🐨
New Zealand	500 🕚	Argentina	388 🐨
Czech Republic	499 🕚	Tunisia	388 🐨
France	495 🕚	Jordan	386 🕥
United Kingdom	494 🕚	Colombia	376 🕥
Iceland	493 🕚	Qatar	376 🕥
Latvia	491 🕚	Indonesia	375 🐨
Luxembourg	490 🕚	Peru	368 🕥
Norway	489		
Portugal	487		
Italy	485		
Spain	484	U.S. state education systems	
Russian Federation	482	Massachusetts	514 🕚
Slovak Republic	482	Connecticut	506 🖸
United States	481	Florida	467 🕥

• Average score is higher than U.S. average score.

© Average score is lower than U.S. average score. NOTE: Education systems are ordered by 2012 average score. The Organization for Economic Cooperation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. All average scores reported as higher or lower than the U.S. average score are different at the .05 level of statistical significance. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.60.

In 2012, average scores in mathematics literacy ranged from 368 in Peru to 613 in Shanghai-CHN. The U.S. average mathematics score (481) was lower than the average for all OECD countries (494). Twenty-nine education systems and two U.S. states had higher average mathematics scores than the U.S. average score and nine had scores not measurably different from the U.S. score. The 29 education systems with scores higher than the U.S. average score were Shanghai-CHN, Singapore, Hong Kong-CHN, Chinese Taipei-CHN, the Republic of Korea, Macao-CHN, Japan, Liechtenstein, Switzerland, the Netherlands, Estonia, Finland, Canada, Poland, Belgium, Germany, Vietnam, Austria, Australia, Ireland, Slovenia, Denmark, New Zealand, the Czech Republic, France, the United Kingdom, Iceland, Latvia, and Luxembourg. Within the United States, Massachusetts (514) and Connecticut (506) had scores higher than the U.S. average.

In addition to scoring above the U.S. average, Massachusetts scored above the OECD average. Connecticut scored above the U.S. national average, but its score was not measurably different from the OECD average. Florida's average score (467) was below the U.S. national average.

ducation system OECD average Shanghai-CHN Singapore	23*	and above	Education system	level 2		a	nd ab	oove
Shanghai-CHN	23	13*	OECD average	23*		-		13*
Ũ	4*	55*	Sweden	27				8
	8*	40*	Spain	24				8
Chinese Taipei-CHN	13*	37*	Latvia	20*				8
Hong Kong-CHN	9*	34*	Russian Federation	24				8
Korea, Republic of	9*	31*	Croatia	30*				7
Liechtenstein	14*	25*	Turkey	42*				6*
Macao-CHN	11*	24*	, Serbia, Republic of	39*				5*
Japan	11*	24*	Bulgaria	44*				4*
Switzerland	12*	21*	Greece	36*				4*
Belgium	19*	20*	Cyprus	42*				4*
Netherlands	15*	19*	United Arab Emirates	46*				3*
Germany	18*	17*	Romania	41*				3*
Poland	14*	17*	Thailand	50*				3*
Canada	14*	16*	Qatar	70*				2*
Finland	12*	15*	Chile	52*				2*
New Zealand	23*	15*	Uruguay	56*				] *
Australia	20*	15*	Malaysia	52*				1*
Estonia	11*	15*	Montenegro, Republic of	57*				1*
Austria	19*	14*	Kazakhstan	45*				1!*
Slovenia	20*	14*	Albania	61*				1*
Vietnam	14*	13*	Tunisia	68*				1!*
France	22*	13*	Brazil	67*				1*
Czech Republic	21*	13*	Mexico	55*				] *
United Kingdom	22	12*	Peru	75*				1!*
Luxembourg	24	11*	Costa Rica	60*				1!*
Iceland	21*	11*	Jordan	69*				‡
Slovak Republic	27	11	Columbia	74*				#!*
Ireland	17*	11*	Indonesia	76*				‡
Portugal	25	11	Argentina	66*				#!*
Denmark	17*	10		0 20	40	60	80	100
Italy	25	10		0 20	Perc		00	100
Norway	22*	9				••••		
Israel	34*	9	U.S. state education system	าร				
Hungary	28	9	Massachusetts	18*				19*
United States	26	9	Connecticut	21*				16*
Lithuania	26	8	Florida	30				6*
	0 20 40	60 80 100 rcent		0 20	40 <b>Perc</b>	60	80	100

#### Figure 1. Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) mathematics literacy scale, by selected proficiency level and education system: 2012

Below level 2 Levels 5 and above

# Rounds to zero.

Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

p < 0.5 (Significantly different from the U.S. percentage at the .05 level of statistical significance. NOTE: Education systems are ordered by 2012 percentages of 15-year-olds at levels 5 and above. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into mathematics proficiency levels according to their scores. Exact cut scores are as follows: below level 1 (a score less than or equal to 357.77); level 1 (a score greater than 357.77 and less than or equal to 482.38); level 3 (a score greater than 482.38 and less than or equal to 544.68); level 4 (a score greater than 544.68) and less than or equal to 606.99); level 5 (a score greater than 606.99 and less than or equal to 669.30); and level 6 (a score greater than 669.30). Scores are reported on a scale from 0 to 1,000. The Organization for Economic Cooperation and Development (OECD) average is the average of the national percentages of the OECD member countries, with each country weighted equally. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.60.

PISA reports mathematics literacy in terms of six proficiency levels, with level 1 being the lowest and level 6 being the highest. Students scoring at proficiency levels 5 and above are considered to be top performers since they have demonstrated advanced mathematical thinking and reasoning skills required to solve problems of greater complexity. The percentage of top performers in the United States was lower than the average of the OECD countries' percentages of top performers (9 vs.

13 percent). Percentages of top performers ranged from near 0 percent in Colombia and Argentina to 55 percent in Shanghai-CHN. Twenty-seven education systems and two U.S. states had higher percentages of top performers in mathematics literacy than the United States. Massachusetts and Connecticut both had higher percentages of top performers (19 and 16 percent, respectively) than the United States (9 percent), while Florida had a lower percentage (6 percent).

#### For more information, see the Reader's Guide and the Guide to Sources.

A higher percentage (26 percent) of 15-year-olds in the United States scored below proficiency level 2 in mathematics literacy than the average of the OECD countries' percentages (23 percent). Percentages of low performers ranged from 4 percent in Shanghai-CHN to 76 percent in Indonesia. Twenty-nine education systems and two U.S. states had lower percentages of

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low performers than the United States in mathematics literacy. The U.S. percentage of low performers was higher than the percentages for both Massachusetts (18 percent) and Connecticut (21 percent). The percentage of low performers in Florida (30 percent) was not measurably different from the U.S. percentage.

Table 2.	Average scores of 15-year-old students on the Program for International Student Assessment (PISA) science
	literacy scale, by education system: 2012

Education system	Average score	Education system	Average score
OECD average	501	OECD average	501
Shanghai-CHN	580 🕚	Russian Federation	486 🕥
Hong Kong-CHN	555 🗅	Sweden	485 🕥
Singapore	551 🗅	Iceland	478 🖲
Japan	547 🕚	Slovak Republic	471 🔍
Finland	545 🕚	Israel	470 🔍
Estonia	541 🕚	Greece	467 🕥
Korea, Republic of	538 🕚	Turkey	463 🕥
Vietnam	528 🗅	United Arab Emirates	448 🕥
Poland	526 🗅	Bulgaria	446 🕥
Canada	525 🗅	Chile	445 🕥
Liechtenstein	525 🗅	Serbia, Republic of	445 🕥
Germany	524 🗅	Thailand	444 🕥
Chinese Taipei-CHN	523 🗅	Romania	439 🖲
Netherlands	522 🗅	Cyprus	438 🕥
Ireland	522 🕚	Costa Rica	429 🕥
Australia	521 🗅	Kazakhstan	425 🕥
Macao-CHN	521 🗅	Malaysia	420 🔍
New Zealand	516 🕚	Uruguay	416 🖲
Switzerland	515 🗅	Mexico	415 🔍
Slovenia	514 🕚	Montenegro, Republic of	410 🕥
United Kingdom	514 🕚	Jordan	409 🖲
Czech Republic	508 🗅	Argentina	406 🕥
Austria	506	Brazil	405 🕥
Belgium	505	Colombia	399 🕥
Latvia	502	Tunisia	398 🕥
France	499	Albania	397 🕥
Denmark	498	Qatar	384 🕥
United States	497	Indonesia	382 🕥
Spain	496	Peru	373 🕥
Lithuania	496		
Norway	495		
Hungary	494		
Italy	494	U.S. state education systems	; 
Croatia	491	Massachusetts	527 🕚
Luxembourg	491	Connecticut	521 🕚
Portugal	489	Florida	485

 Average score is higher than U.S. average score.
 Average score is lower than U.S. average score.
 NOTE: Education systems are ordered by 2012 average score. The Organization for Economic Cooperation and Development (OECD) average is the average. of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. All average scores reported as higher or lower than the U.S. average score are different at the .05 level of statistical significance. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.70.

In science literacy, average scores ranged from 373 in Peru to 580 in Shanghai-CHN. The U.S. average science score (497) was not measurably different from the OECD average (501). Twenty-two education systems and 2 U.S. states had higher average science scores than the United States, and 13 systems and 1 U.S. state had scores that were not measurably different. The 22 education systems with higher scores than the U.S. average score

were Shanghai-CHN, Hong Kong-CHN, Singapore, Japan, Finland, Estonia, the Republic of Korea, Vietnam, Poland, Canada, Liechtenstein, Germany, Chinese Taipei-CHN, the Netherlands, Ireland, Australia, Macao-CHN, New Zealand, Switzerland, Slovenia, the United Kingdom, and the Czech Republic. Within the United States, Massachusetts and Connecticut scored above the U.S. average.

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In addition to scoring above the U.S. national average, Massachusetts (527) and Connecticut (521) also scored above the OECD average. Florida (485) had an average score not measurably different from the U.S. average and lower than the OECD average.

Figure 2.	Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA)
	science literacy scale, by selected proficiency level and education system: 2012

Education system	Below level 2	Levels 5 and above	Education system	Below level 2	a	Levels 5 Ind above
OECD average	18	8	OECD average	18		8
Shanghai-CHN	3*	27*	Spain	16		5*
Singapore	10*	23*	Croatia	17		5*
Japan	8*	18*	Portugal	19		5*
Finland	8*	17*	Latvia	12*		4*
Hong Kong-CHN	6*	17*	Russian Federation	19		4*
Australia	14*	14*	Bulgaria	37*		3*
New Zealand	16	13*	United Arab Emirates	35*		3*
Estonia	5*	13*	Greece	26*		2*
Germany	12*	12*	Cyprus	38*		2*
Netherlands	13*	12*	Turkey	26*		2*
Korea, Republic of	7*	12*	Serbia, Republic of	35*		2*
Canada	10*	11*	Qatar	63*		1*
United Kingdom	15	11*	Uruguay	47*		1*
Poland	9*	11*	Chile	34*		1*
Ireland	11*	11*	Thailand	34*		1*
Liechtenstein	10*	10	Romania	37*		1!*
Slovenia	13*	10*	Albania	53*		#!*
Switzerland	13*	9	Montenegro, Republic of	51*		#!*
Belgium	18	9	Malaysia	46*		#!*
Chinese Taipei-CHN	10*	8	Brazil	54*		#!*
Luxembourg	22*	8	Jordan	50*		‡
Vietnam	7*	8	Argentina	51*		#!*
France	19	8	Costa Rica	39*		#!*
Austria	16	8	Kazakhstan	42*		#!*
Czech Republic	14*	8	Mexico	47*		#!*
Norway	20	8	Colombia	56*		‡
United States	18	7	Tunisia	55*		‡
Denmark	17	7	Indonesia	67*		‡
Macao-CHN	9*	7	Peru	68*		‡
Sweden	22*	6		0 20	40 60	80 100
Italy	19	6			Percent	
Hungary	18	6				
Israel	29*	6	U.S. state education system	าร		
Iceland	24*	5*	Massachusetts	11 *		14*
Lithuania	16	5*	Connecticut	13*		13*
Slovak Republic	27*	5	Florida	21		5
	0 20	40 60 80 100		0 20	40 60	80 100
		Percent			Percent	

Below level 2

Levels 5 and above

# Rounds to zero.

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

p < .05. Significantly different from the U.S. percentage at the .05 level of statistical significance.

NOTE: Education systems are ordered by 2012 percentages of 15-year-olds at levels 5 and above. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into science proficiency levels according to their scores. Exact cut scores are as follows: below level 1 (a score less than or equal to 334.94); level 1 (a score greater than 334.94 and less than or equal to 409.54); level 2 (a score greater than 409.54 and less than or equal to 484.14); level 3 (a score greater than 484.14 and less than or equal to 558.73); level 4 (a score greater than 409.54). and less than or equal to 633.33); level 5 (a score greater than 633.33 and less than or equal to 707.93); and level 6 (a score greater than 707.93). Scores are reported on a scale from 0 to 1,000. The Organization for Economic Cooperation and Development (OECD) average is the average of the national percentages of the OECD member countries, with each country weighted equally. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only. SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of

Education Statistics 2013, table 602.70.

#### For more information, see the Reader's Guide and the Guide to Sources.

Similar to PISA's reporting of mathematics literacy, PISA also reports science literacy by six proficiency levels, with level 1 being the lowest and level 6 being the highest. Students performing at levels 5 and 6 can apply scientific knowledge in a variety of complex life situations. The percentage of U.S. top performers on the science literacy scale (7 percent) was not measurably different from the average of the OECD countries' percentages of top performers (8 percent). Percentages of top performers ranged from near 0 percent in eight education systems to 27 percent in Shanghai-CHN. Sixteen education systems and two U.S. states had percentages of top performers higher than the United States in science literacy. Massachusetts and Connecticut both had higher percentages of top performers (14 and 13 percent,

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respectively) than the United States, while Florida had a percentage that was not measurably different (5 percent).

The percentage of U.S. students who scored below proficiency level 2 in science literacy was not measurably different from the average of the OECD countries' percentages (both 18 percent). Percentages of low performers ranged from 3 percent in Shanghai-CHN to 68 percent in Peru. Twenty-one education systems and two U.S. states, Massachusetts and Connecticut (11 and 13 percent, respectively), had lower percentages of low performers than the United States in science literacy. The percentage of low performers for Florida (21 percent) was not measurably different from the percentage for the United States.

Table 3.	Average scores of 15-year-old students on the Program for International Student Assessment (PISA) reading
	literacy scale, by education system: 2012

Education system	Average score	Education system	Average score	
OECD average	496	OECD average	496	
Shanghai-CHN	570 🕚	Iceland	483 🕥	
Hong Kong-CHN	545 🗅	Slovenia	481 🕥	
Singapore	542 🗅	Lithuania	477 🕥	
Japan	538 🗅	Greece	477 🕥	
Korea, Republic of	536 🕚	Turkey	475 🕥	
Finland	524 🗅	Russian Federation	475 🕥	
Ireland	523 🗅	Slovak Republic	463 🔍	
Chinese Taipei-CHN	523 🗅	Cyprus	449 🕥	
Canada	523 🗅	Serbia, Republic of	446 🕥	
Poland	518 🕚	United Arab Emirates	442 🕥	
Estonia	516 🕚	Chile	441 🔍	
Liechtenstein	516 🕚	Thailand	441 🔍	
New Zealand	512 🕚	Costa Rica	441 🔍	
Australia	512 🕚	Romania	438 🔍	
Netherlands	511 🕚	Bulgaria	436 🔍	
Switzerland	509 🕚	Mexico	424 🔍	
Macao-CHN	509 🕚	Montenegro, Republic of	422 🕥	
Belgium	509 🕚	Uruguay	411 🕥	
Vietnam	508	Brazil	410 🔍	
Germany	508 🕚	Tunisia	404 🔍	
France	505	Colombia	403 🔍	
Norway	504	Jordan	399 🕥	
United Kingdom	499	Malaysia	398 🔍	
United States	498	Indonesia	396 🔍	
Denmark	496	Argentina	396 🕥	
Czech Republic	493	Albania	394 🕥	
Italy	490	Kazakhstan	393 🕥	
Austria	490	Qatar	388 🔍	
Latvia	489 🕥	Peru	384 🕥	
Hungary	488			
Spain	488 🔍			
Luxembourg	488 🔍			
Portugal	488	U.S. state education systems		
Israel	486	Massachusetts	527 🕚	
Croatia	485 🕥	Connecticut	521 🛆	
Sweden	483 🕥	Florida	492	

• Average score is higher than U.S. average score.

• Average score is lower than U.S. average score.

NOTE: Education systems are ordered by 2012 average score. The Organization for Economic Cooperation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. All average scores reported as higher or lower than the U.S. average score are different at the .05 level of statistical significance. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.50.

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In reading literacy, average scores ranged from 384 in Peru to 570 in Shanghai-CHN. The U.S. average score (498) was not measurably different from the OECD average (496). Nineteen education systems and 2 U.S. states had higher average reading scores and 11 education systems and 1 U.S. state had scores that were not measurably different. The 19 education systems with higher average scores than the United States in reading literacy were Shanghai-CHN, Hong Kong-CHN, Singapore, Japan, the Republic of Korea, Finland, Ireland, Chinese Taipei-CHN, Canada, Poland, Estonia, Liechtenstein, New Zealand, Australia, the Netherlands, Switzerland, Macao-CHN, Belgium, and Germany. Within the United States, Massachusetts and Connecticut, scored above the US. average.

Figure 3.	Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA)
	reading literacy scale, by selected proficiency level and education system: 2012

Education system	Below level 2	Lev and a	vels 5 bove	Education system	Below level 2		Levels and abov	
OECD average	18		8	OECD average	18		8	
Shanghai-CHN	3*		25*	Russian Federation	22*		5	*
Singapore	10*		21*	Vietnam	9*		5	*
Japan	10*		18*	Croatia	19		4	
Hong Kong-CHN	7*		17*	Slovak Republic	28*		4	*
Korea, Republic of	8*		14*	Turkey	22*		4	*
New Zealand	16		14*	Bulgaria	39*		4	*
Finland	11*		13*	Latvia	17		4	*
France	19		13*	Cyprus	33*		4	*
Canada	11*		13*	Lithuania	21*		3	
Chinese Taipei-CHN	11*		12*	Serbia, Republic of	33*		2	*
Belgium	16		12*	United Arab Emirates	36*		2	
Australia	14		12*	Qatar	57*		2	
Ireland	10*		11*	Romania	37*		2	*
Liechtenstein	12		11	Albania	52*		1	*
Norway	16		10*	Montenegro, Republic of	43*		1	*
Poland	11*		10	Uruguay	47*		1	*
Netherlands	14		10	Thailand	33*		1	*
Israel	24*		10	Chile	33*		1	
Switzerland	14*		9	Costa Rica	32*		1!	*
Germany			9	Argentina	54*		1	*
Luxembourg	22*		9	Brazil	49*		1	*
United Kingdom	17		9	Peru	60*		#!	
Estonia	9*		8	Mexico	41*		#	_
United States	17		8	Colombia	51*		#!	*
Sweden	23*		8	Tunisia	49*		‡	
Macao-CHN	11*		7	Jordan	51*		‡	
Italy	20*		7	Malaysia	53*		‡	
Czech Republic	17		6*	Indonesia	55*		‡	
Iceland	21*		6*	Kazakhstan	57*		‡	
Portugal	19		6*		0 20	40 60	80 1	00
Hungary	20		6*			Percent		
Spain	18		6*					
Austria	19		6*	U.S. state education system				
Denmark	15		5*	Massachusetts	11*		16	
Greece	23*		5*	Connecticut	13		15	
Slovenia	21*		5*	Florida	17		6	*
	0 20	40 60 80	100		0 20	40 60	80 1	00
		Percent				Percent		

Below level 2

Levels 5 and above

# Rounds to zero.

Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.
\* p < .05. Significantly different from the U.S. percentage at the .05 level of statistical significance.</p>

NOTE: Education systems are ordered by 2012 percentages of 15-year-olds at levels 5 and above. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into reading proficiency levels according to their scores. Exact cut scores are as follows: below level 1b (a score less than or equal to 262.04): level 1b (a score greater than 262.04 and less than or equal to 334.75); level 1a (a score greater than 334.75 and less than or equal to 552.98); level 4 (a score greater than 552.98 and less than or equal to 480.18); level 3 (a score greater than 625.61); level 5 (a score greater than 625.61); level 5 (a score greater than 625.61) and less than or equal to 562.08); level 4 (a score greater than 552.98 and less than or equal to 625.61); level 5 (a score greater than 625.61 and less than or equal to 562.08); level 4 (a score greater than 698.32). Scores are reported on a scale from 0 to 1,000. The Organization for Economic Cooperation and Development (OECD) average is the average of the national percentages of the OECD member countries, with each country weighted equally. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only. SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See *Digest of Education Statistics 2013*, table 602.50.

#### For more information, see the Reader's Guide and the Guide to Sources.

In reading, Massachusetts (527) and Connecticut (521) scored above both the U.S. national average and the OECD average. Florida had an average reading score (492) that was not measurably different from either the U.S. average or the OECD average.

PISA reports reading literacy by seven proficiency levels, with level 1b being the lowest and level 6 being the highest. At levels 5 and 6, students have mastered sophisticated reading skills required to interpret and evaluate deeply embedded or abstract text. The percentage of U.S. top performers on the reading literacy scale was not measurably different from the average of the OECD countries' percentages of top performers (both 8 percent). Percentages of top performers ranged from near 0 percent in three education systems to 25 percent in Shanghai-CHN. Fourteen education systems and two U.S. states had percentages of top performers higher than the United States in reading literacy. Massachusetts and Connecticut both had higher percentages of top performers (16 and 15 percent, respectively) than the United States, while Florida had a lower percentage (6 percent).

The percentage of U.S. students who were low performers in reading literacy was not measurably different from the average of the OECD countries' percentages of low performers (17 and 18 percent, respectively). Percentages of low performers ranged from 3 percent in Shanghai-CHN to 60 percent in Peru. Fourteen education systems and one U.S. state had lower percentages of low performers than the United States in reading literacy. Massachusetts had a lower percentage (11 percent) than the United States, while Connecticut and Florida both

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had percentages that were not measurably different (13 and 17 percent, respectively).

The United States also participates in the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). Both assessments are coordinated by the TIMSS & PIRLS International Study Center at Boston College, under the auspices of the International Association for the Evaluation of Educational Achievement (IEA), an international organization of national research institutions and governmental research agencies. TIMSS assesses mathematics and science knowledge and skills at grades 4 and 8, and PIRLS assesses reading literacy at grade 4.

In 2011, there were 57 education systems that had TIMSS mathematics and science data at grade 4 and 56 education systems that had these data at grade 8. Education systems include countries (complete, independent, and political entities) and other benchmarking education systems (portions of a country, nation, kingdom, or emirate, or other non-national entities). These benchmarking systems are able to participate in TIMSS even though they may not be members of the IEA. Participating allows them the opportunity to assess their students' achievement and to view their curricula in an international context. In addition to participating in the U.S. national sample, several U.S. states participated individually and are included as education systems. At the 4th-grade level, two U.S. states (Florida and North Carolina) participated; at the 8th-grade level, nine U.S. states (Alabama, California, Colorado, Connecticut, Florida, Indiana, Massachusetts, Minnesota, and North Carolina) participated.

Table 4.	Average TIMSS mathematics	s assessment scale scores of 4	4th-grade students,	by education system: 2011

Grade 4		Grade 4		
Education system	Average sco	re	Education system	Average score
TIMSS scale average	500		TIMSS scale average	500
Singapore <sup>1</sup>	606	0	New Zealand	486 🔇
Korea, Republic of	605	0	Spain	482 🔇
Hong Kong-CHN <sup>1</sup>	602	0	Romania	482 🔇
Chinese Taipei-CHN	591	0	Poland	481 🔇
Japan	585	0	Turkey	469 🔇
Northern Ireland-GBR <sup>2</sup>	562	0	Azerbaijan <sup>1,5</sup>	463 🔇
Belgium (Flemish)-BEL	549	0	Chile	462 🔇
Finland	545		Thailand	458 🔇
England-GBR	542		Armenia	452 🔇
Russian Federation	542		Georgia <sup>3,5</sup>	450 🔇
United States <sup>1</sup>	541		Bahrain	436 🔇
Netherlands <sup>2</sup>	540		United Arab Emirates	434 🔇
Denmark <sup>1</sup>	537		Iran, Islamic Republic of	431 🔇
Lithuania <sup>1,3</sup>	534	$\bigcirc$	Qatar <sup>1</sup>	413 🔇
Portugal	532	$\bigcirc$	Saudi Arabia	410 🕥
Germany	528	$\bigcirc$	Oman⁴	385 🔘
Ireland	527	$\bigcirc$	Tunisia <sup>6</sup>	359 🔇
Serbia, Republic of <sup>1</sup>	516	$\bigcirc$	Kuwait <sup>3,7</sup>	342 🔇
Australia	516	$\bigcirc$	Morocco <sup>7</sup>	335 🔇
Hungary	515 (	$\bigcirc$	Yemen <sup>7</sup>	248 🔇
Slovenia	513 (	$\bigcirc$		
Czech Republic	511 0	$\bigcirc$		
Austria	508	$\bigcirc$	Benchmarking education sy	rstems
Italy	508	$\bigcirc$	North Carolina-USA <sup>1,3</sup>	554 🧉
Slovak Republic	507	$\bigcirc$	Florida-USA <sup>3,8</sup>	545
Sweden	504	$\bigcirc$	Quebec-CAN	533 🔇
Kazakhstan <sup>1</sup>	501	$\bigcirc$	Ontario-CAN	518 🤇
Malta	496	$\bigcirc$	Alberta-CAN <sup>1</sup>	507 🔇
Norway <sup>4</sup>	495		Dubai-UAE	468 🔇
Croatia <sup>1</sup>	490		Abu Dhabi-UAE	417 🕥

• Average score is lower than U.S. average score.

<sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>2</sup> Met guidelines for sample participation rates only after replacement schools were included.

<sup>3</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>4</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.
 <sup>5</sup> Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.
 <sup>6</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>2</sup> The TINSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

<sup>8</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). *Highlights from TIMSS 2011: Mathematics and Science Achievement of U.S. Fourth- and Eighth-Grade Students in an International Context* (NCES 2013-009), table 3, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See *Digest of Education Statistics 2013*, table 602.20.

At grade 4, the U.S. average mathematics score (541) in 2011 was higher than the TIMSS scale average (500). The United States was among the top 15 education systems in mathematics (8 education systems had higher average scores, and 6 had scores that were not measurably different), and the United States scored higher, on average, than 42 education systems. Seven education systems with average mathematics scores above the U.S. score were Belgium (Flemish)-BEL, Chinese Taipei-CHN, Hong Kong-CHN, Japan, Northern Ireland-GBR, the Republic of Korea, and Singapore. Among the U.S. states that participated at grade 4, both North Carolina and Florida had average mathematics scores above the TIMSS scale average. North Carolina score was higher than the U.S. national average; however, Florida's score was not measurably different from the U.S. national average in mathematics.

Table 5.	Average TIMSS science a	ssessment scale scores	of 4th-grade students	, by education system: 2011

Grade 4		Grade 4		
Education system	Average score	Education system	Average score	
TIMSS scale average	500	TIMSS scale average	500	
Korea, Republic of	587 🕚	New Zealand	497 🕥	
Singapore <sup>1</sup>	583 🔕	Kazakhstan <sup>1</sup>	495 🕥	
Finland	570 🕚	Norway <sup>4</sup>	494 🕥	
Japan	559 🗅	Chile	480 🕥	
Russian Federation	552 🗅	Thailand	472 🕥	
Chinese Taipei-CHN	552 🕚	Turkey	463 🕥	
United States <sup>1</sup>	544	Georgia <sup>3,5</sup>	455 🕥	
Czech Republic	536 🕥	Iran, Islamic Republic of	453 🕥	
Hong Kong-CHN <sup>1</sup>	535 🕥	Bahrain	449 🕥	
Hungary	534 🕥	Malta	446 🕥	
Sweden	533 🕥	Azerbaijan <sup>1,5</sup>	438 🕥	
Slovak Republic	532 🕥	Saudi Arabia	429 🕥	
Austria	532 🕥	United Arab Emirates	428 🕥	
Netherlands <sup>2</sup>	531 🕥	Armenia	416 🕥	
England-GBR	529 🕥	Qatar <sup>1</sup>	394 🕥	
Denmark <sup>1</sup>	528 🕥	Oman	377 🕥	
Germany	528 🕥	Kuwait <sup>3,6</sup>	347 🕥	
Italy	524 🕥	Tunisia <sup>6</sup>	346 🕥	
Portugal	522 🕥	Morocco <sup>7</sup>	264 🕥	
Slovenia	520 🕥	Yemen <sup>7</sup>	209 🕥	
Northern Ireland-GBR <sup>2</sup>	517 🕥			
Ireland	516 🕥			
Croatia <sup>1</sup>	516 🕥	Benchmarking education s	ystems	
Australia	516 🕥	Florida-USA <sup>3,8</sup>	545	
Serbia, Republic of <sup>1</sup>	516 🕥	Alberta-CAN <sup>1</sup>	541	
Lithuania <sup>1,3</sup>	515 🕥	North Carolina-USA <sup>1,3</sup>	538	
Belgium (Flemish)-BEL	509 🕥	Ontario-CAN	528 🕥	
Romania	505 🕥	Quebec-CAN	516 🕥	
Spain	505 🕥	Dubai-UAE	461 🕥	
Poland	505 🕥	Abu Dhabi-UAE	411 🕥	

• Average score is lower than U.S. average score.

<sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>2</sup> Met guidelines for sample participation rates only after replacement schools were included.

<sup>3</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>4</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

<sup>5</sup> Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. <sup>6</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>7</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

<sup>8</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). Highlights From TIMSS 2011: Mathematics and Science Achievement of U.S. Fourth- and Eighth-Grade Students in an International Context (NCES 2013-009), table 26, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.20.

At grade 4, the U.S. average science score (544) was higher than the TIMSS scale average of 500. The United States was among the top 10 education systems in science (6 education systems had higher average science scores, and 3 had scores that were not measurably different). The United States also scored higher, on average, than 47 education systems in 2011. The six education systems with average science scores above the U.S. score were Chinese Taipei-CHN, Finland, Japan, the Republic of Korea, the Russian Federation, and Singapore. Of the participating education systems within the United States, both Florida and North Carolina-USA scored above the TIMSS scale average, but their science scores were not measurably different from the U.S. national average.

Table 6.	Average TIMSS mathematics	s assessment scale scores	of 8th-grade students,	by education system: 2011

Grade 8		Grade 8	Grade 8		
Education system Average sc		Education system	Average score		
TIMSS scale average	500	TIMSS scale average	500		
Korea, Republic of	613 🕻	Chile	416 🕥		
Singapore <sup>1</sup>	611 🕻	Iran, Islamic Republic of <sup>6</sup>	415 🕥		
Chinese Taipei-CHN	609 🕻	Qatar <sup>6</sup>	410 🕥		
Hong Kong-CHN	586 🕻	Bahrain <sup>6</sup>	409 🕥		
Japan	570 🕻	Jordan <sup>6</sup>	406 🕥		
Russian Federation <sup>1</sup>	539 🕻	Palestinian National Authority	404 🕥		
srael <sup>2</sup>	516	Saudi Arabia <sup>6</sup>	394 🕥		
Finland	514	Indonesia <sup>6</sup>	386 🕥		
United States <sup>1</sup>	509	Syrian Arab Republic <sup>6</sup>	380 🕥		
England-GBR <sup>3</sup>	507	Morocco <sup>7</sup>	371 🕥		
Hungary	505	Oman <sup>6</sup>	366 🕥		
Australia	505	Ghana <sup>7</sup>	331 🕥		
Slovenia	505				
Lithuania <sup>4</sup>	502				
taly	498 🕥				
New Zealand	488 🕥	Benchmarking education sys	stems		
(azakhstan	487 🕥	Massachusetts-USA <sup>1,4</sup>	561 🕚		
Sweden	484 🕥	Minnesota-USA <sup>4</sup>	545 🕚		
Jkraine	479 🕥	North Carolina-USA <sup>2,4</sup>	537 🕚		
Norway	475 🕥	Quebec-CAN	532 🕚		
Armenia	467 🕥	) Indiana-USA <sup>1,4</sup>	522 🕚		
Romania	458 🕥	Colorado-USA <sup>4</sup>	518		
Jnited Arab Emirates	456 🕥	Connecticut-USA <sup>1,4</sup>	518		
Turkey	452 🕥	) Florida-USA <sup>1,4</sup>	513		
ebanon	449 🕥	Ontario-CAN <sup>1</sup>	512		
Valaysia	440 💽	Alberta-CAN <sup>1</sup>	505		
Georgia <sup>4,5</sup>	431 🕥	California-USA <sup>1,4</sup>	493 🕥		
Thailand	427 🕥	) Dubai-UAE	478 🕥		
Macedonia, Republic of <sup>6</sup>	426 🕥	) Alabama-USA <sup>4</sup>	466 🕥		
<b>F</b> unisia	425 🕥	) Abu Dhabi-UAE	449 🕥		

• Average score is lower than U.S. average score.

<sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>2</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

<sup>3</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.
<sup>4</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>5</sup> Exclusion rates for Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.

6 The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>7</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). *Highlights From TIMSS 2011: Mathematics and Science Achievement* of U.S. Fourth- and Eighth-Grade Students in an International Context (NCES 2013-009), table 4, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.30.

At grade 8, the U.S. average mathematics score (509) was higher than the TIMSS scale average of 500. The United States was among the top 24 education systems in mathematics in 2011 (11 education systems had higher average scores, and 12 had scores that were not measurably different). In addition, the United States scored higher, on average, than 32 education systems. The 11 education systems with average mathematics scores above the U.S. score were Chinese Taipei-CHN, Hong Kong-CHN, Japan, Quebec-CAN, the Republic of Korea, the Russian Federation, Singapore, and, within the United States, Indiana-USA, Massachusetts, Minnesota-USA, and North Carolina-USA.

In addition to scoring above the U.S. average in 8th-grade mathematics, Indiana-USA, Massachusetts, Minnesota-USA, and North Carolina-USA also scored above the TIMSS scale average. Colorado-USA, Connecticut, and Florida scored above the TIMSS scale average, but their scores were not measurably different from the U.S. national average. California-USA's score was not measurably different from the TIMSS scale average, but it was below the U.S. national average; Alabama-USA scored below both the TIMSS scale average and the U.S. national average in mathematics.

Table 7. Average TIMS	SS science assessment	scale scores of 8th	-grade students,	by education system: 2011
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Grade 8		Grade 8		
Education system	Average score	Education system	Average score	
TIMSS scale average	500	TIMSS scale average	500	
Singapore <sup>1</sup>	590 🕚	Saudi Arabia	436 🕥	
Chinese Taipei-CHN	564 🗅	Malaysia	426 🕥	
Korea, Republic of	560 🗅	Syrian Arab Republic	426 🕥	
Japan	558 🗅	Palestinian National Authority	420 🕥	
Finland	552 🗅	Georgia <sup>4,5</sup>	420 🕥	
Slovenia	543 🕚	Oman	420 🕥	
Russian Federation <sup>1</sup>	542 🕚	Qatar	419 🕥	
Hong Kong-CHN	535 🗅	Macedonia, Republic of	407 🕥	
England-GBR <sup>2</sup>	533	Lebanon	406 🕥	
United States <sup>1</sup>	525	Indonesia	406 🕥	
Hungary	522	Morocco	376 🕥	
Australia	519	Ghana⁴	306 🕥	
srael <sup>3</sup>	516			
Lithuania <sup>4</sup>	514 🕥			
New Zealand	512 🕥			
Sweden	509 🕥	Benchmarking education syst	ems	
Italy	501 🕥	Massachusetts-USA <sup>1,4</sup>	567 🕚	
Ukraine	501 🕥	Minnesota-USA⁴	553 🗅	
Norway	494 🕥	Alberta-CAN <sup>1</sup>	546 🕚	
Kazakhstan	490 🕥	Colorado-USA <sup>4</sup>	542 🕚	
Turkey	483 🕥	Indiana-USA <sup>1,4</sup>	533	
Iran, Islamic Republic of	474 🕥	Connecticut-USA <sup>1,4</sup>	532	
Romania	465 🕥	North Carolina-USA <sup>3,4</sup>	532	
United Arab Emirates	465 🕥	Florida-USA <sup>1,4</sup>	530	
Chile	461 🕥	Ontario-CAN <sup>1</sup>	521	
Bahrain	452 🕥	Quebec-CAN	520	
Thailand	451 🕥	California-USA <sup>1,4</sup>	499 🕥	
Jordan	449 🕥	Alabama-USA <sup>4</sup>	485 🕥	
Tunisia	439 🕥	Dubai-UAE	485 🕥	
Armenia	437 🕥	Abu Dhabi-UAE	461 🕥	

• Average score is lower than U.S. average score.

<sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>2</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

<sup>3</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

<sup>4</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>5</sup> Exclusion rates for Georgia are slightly underestimated as some conflict zone's were not covered and no official statistics were available.
<sup>6</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

Achievement in bolick for estimation exceeds is percent, indugin in sites indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). *Highlights From TIMSS 2011: Mathematics and Science Achievement* of U.S. Fourth- and Eighth-Grade Students in an International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.30.

At grade 8, the U.S. average science score (525) was higher than the TIMSS scale average of 500. The United States was among the top 23 education systems in science in 2011 (12 education systems had higher average scores, and 10 had scores that were not measurably different). The United States scored higher, on average, than 33 education systems. The 12 education systems with average science scores above the U.S. score were Alberta-CAN, Chinese Taipei-CHN, Finland, Hong Kong-CHN, Japan, the Republic of Korea, the Russian Federation, Singapore, Slovenia, and, within the United States, Colorado-USA, Massachusetts, and Minnesota-USA. Aside from scoring above the U.S. average in 8th-grade science, Colorado-USA, Massachusetts, and Minnesota-USA also scored above the TIMSS scale average of 500. Connecticut, Florida, Indiana-USA, and North Carolina-USA scored above the TIMSS scale average, but their scores were not measurably different from the U.S. national average. California-USA's score was not measurably different from the TIMSS scale average, but it was below the U.S. national average; Alabama-USA scored below both the TIMSS scale average and the U.S. national average in science.

### Figure 4. Number of instructional hours per year for 4th-grade students, by country or education system and subject: 2011

Country or education system					
International average	162 85	650	897		
Armenia <sup>1</sup>	139 54	658	851		
Australia <sup>1</sup>	230 65	713		1,008	
Austria	146 96	566	808		
Azerbaijan <sup>2,3</sup>	130 61	613	804		
Bahrain <sup>1</sup>	131 85	748	1	964	
Belgium (Flemish)-BEL <sup>1,4</sup>	224	786		1,010	
Chile <sup>1</sup>	231 161		836		1,228
Chinese Taipei-CHN <sup>1</sup>	133 90	766		989	
Croatia <sup>2</sup>	134 95	547	776		
Czech Republic	163 60	559	782		
Denmark <sup>1,2</sup>	124 62	677	863		
England-GBR <sup>1</sup>	188 76	706		970	
Finland	139 98	542	779		
Georgia <sup>1,3,5</sup>	148 110	490	748		
Germany <sup>1</sup>	163 75	625	863		
Hong Kong-CHN <sup>1,2</sup>	158 88	813		1,059	
Hungary	148 72	540	760		
Iran, Islamic Republic of	146 106		27		
Ireland	150 63	641	854		
Italy <sup>1</sup>	214 78	793		1,085	
Japan	150 91	650	891		
Kazakhstan <sup>2</sup>	140 57	582	779		
Korea, Republic of	121 92	576	789		
Kuwait <sup>1,5</sup>	120 85	723	928	3	
Lithuania <sup>25</sup>	133 60	456 649	/2		
Malta <sup>1</sup>	183 39	<u> </u>	891		
Morocco	174 44	822		1,040	
Netherlands <sup>1,6</sup>	195 42	837		1,074	
New Zealand <sup>1</sup>	168 52	705	925		
Northern Ireland-GBR <sup>1,6</sup>	232 72	666		970	
Norway <sup>7</sup>	157 55	605	817	//0	
Oman <sup>1</sup>	170 120	709	017	999	
Poland <sup>1</sup>	157 64	543	764		
Portugal	250 16		94	10	
Qatar <sup>2</sup>	185 135	748	7-	1,068	
Romania	148 56	592	796	1,000	
Russian Federation <sup>1</sup>	104 49	507 660	//0		
Saudi Arabia <sup>1</sup>	147 82	748		977	
Serbia, Republic of <sup>2</sup>	153 72	553	778	] 47 7	
Singapore <sup>2</sup>	208 96	708	//0	1,012	
Slovak Republic	147 101	532	780	1,012	
Slovak Republic	169 101	414 684	700		
			004		
Spain' Sweden	167 145 138 75	<u> </u>	884		
Thailand	167 109	92			1,201
Tunisia	175 93	695		963	1,201
Turkey	126 94	680	900	903	
United Arab Emirates <sup>1</sup>	154 108	763	700	1,025	
				1,025	
United States <sup>1,2</sup> Yemen <sup>1</sup>	206 <u>105</u> 135 91	<u> </u>	831	1,078	
	130 91	005	031		
Benchmarking education systems	150 110	770		1,033	
Abu Dhabi-UAE <sup>1</sup>	150 110				
Alberta-CAN <sup>1,2</sup>	169 130			1,006	
Dubai-UAE <sup>1</sup> Florida-USA <sup>1,5,7</sup>	158         99           217         113	736		993	
		743		1,073	2
North Carolina-USA <sup>1,2,5</sup>	221 94			1,11	د
Ontario-CAN <sup>1</sup>	201 92	676		969	
Quebec-CAN	229 50	637	916		<b></b>
Ō	100 200 300	400 500 600 700	800 900 1	,000 1,100 1	,200 1,300
		Number of instruct	ional hours		
		Math Scien		er <sup>8</sup>	

See notes on next page.

For more information, see the Reader's Guide and the Guide to Sources.

<sup>1</sup> Data for number of math, science, and/or total instructional hours are available for at least 50 percent but less than 85 percent of students.

<sup>2</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>3</sup> Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. <sup>4</sup> Data for instructional hours in science are not available. Other instructional hours calculated by subtracting instruction hours in mathematics from total instructional hours.

<sup>5</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>6</sup> Met guidelines for sample participation rates only after replacement schools were included.

<sup>7</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.
 <sup>8</sup> Other instructional hours calculated by adding instructional hours in mathematics to instructional hours in science and then subtracting from total instructional hours.

NOTE: Italics indicate participants identified and counted in this report as an education system and not as a separate country. Instructional times shown in this table are actual or implemented times (as opposed to intended times prescribed by the curriculum). Principals reported total instructional hours per day and school days per year. Total instructional hours per year were calculated by multiplying the number of school days per year by the number of school days per year. Intendicated by dividing weekly instructional hours by the number of school days per week and then multiplying by the number of school days per year. Intendicated by dividing weekly instructional hours by the number of school days per week and then multiplying by the number of school days per year. Intendional average instructional hours includes only education systems that are members of the Intendional Association for the Evaluation of EVA. Achievement (IAE), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only.

SOURCE: Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). *TIMSS 2011 International Results in Mathematics*, exhibit 8.6, and Martin, M.O., Mullis, I.V.S., Foy, P., and Stanco, G.M. (2012). *TIMSS 2011 International Results in Science*, exhibit 8.6. See Digest of Education Statistics 2013, table 602.20.

In addition to assessing achievement in mathematics and science, TIMSS collects information from principals on the total number of annual instructional hours in school. TIMSS also collects information from teachers on the number of annual instructional hours spent on mathematics and science instruction at grades 4 and 8. In 2011, education systems (excluding the benchmarking participants) participating in TIMSS at grade 4 spent an average of 897 total hours on instructional time, of which an average of 162 hours (18 percent) were spent on mathematics instruction and 85 hours (9 percent) were spent on science instruction. In 2011, the average number of total instructional hours (1,078 hours) spent in the United States at grade 4 was higher than the international average (897 hours). The average numbers of instructional hours spent on grade 4 mathematics instruction (206 hours) and science instruction (105 hours) in the United States were also higher than the international averages (162 and 85 hours, respectively).

### Figure 5. Number of instructional hours per year for 8th-grade students, by country or education system and subject: 2011

2011						
Country or education system						
International average	138	158	735		1,031	
Armenia	143	240	596		979	
Australia <sup>1</sup>	143	131	765		1,039	
Bahrain <sup>1</sup>	142	130	747		1,019	
Chile <sup>1</sup>	193	134	91	8		1,245
Chinese Taipei-CHN	166	157	830		1,	153
England-GBR <sup>1,2</sup>	116	102	774		992	
Finland <sup>1</sup>	105	190	639	934		
Georgia <sup>1,3,4</sup>	123	198	512	833		
Ghana <sup>1</sup>	165	148	840			153
Hong Kong-CHN <sup>1</sup>	138	103	785		1,026	
Hungary	119	236	481	836		
Indonesia <sup>1</sup>	173	190		1,131		1,4
Iran, Islamic Republic of	124	120	750		994	
Israel <sup>1,5</sup>	165	132	811		1,108	3
Italy	155	73	857		1,085	
Japan	108	128	780		1,016	
Jordan	130	134	777		1,041	
Kazakhstan	117	244	559	920	_	
Korea, Republic of	137	126	743		]1,006	
Lebanon <sup>1,6</sup>	178		850		1,028	
Lithuania <sup>1,3</sup>	132	251	515	898	_	
Macedonia, Republic of <sup>1</sup>	122	334	567		1,023	_
Malaysia <sup>1</sup>	123	126	949			1,198
Morocco <sup>1</sup>	148	144		011		1,303
New Zealand <sup>1</sup>	141	130	688	95	9	
Norway	125	101	654	880		
Oman <sup>1</sup>	161	161	722		1,044	
Palestinian National Authority <sup>1</sup>	134	107	677	918		
Qatar <sup>1</sup>	162	131	761		1,054	
Romania	145	281	558		984	
Russian Federation <sup>7</sup>	142	208	532	882		
Saudi Arabia <sup>1</sup>	134	124	792		1,050	
Singapore <sup>7</sup>	138	115	853	_	1,106	
Slovenia	121	251	426	798		
Sweden		94	778		969	
Syrian Arab Republic <sup>1</sup>	118	150	543	811		]1 070
Thailand <sup>1</sup>	129	119	1,022			1,270
Tunisia	131	64	1,104			1,299
Turkey	117	99	673	889		
Ukraine	132	239	530	901		
United Arab Emirates <sup>1</sup>	157	115	774		1,046	
United States <sup>1,7,8</sup>	157	139	818		1,114	ł
enchmarking education systems	150		/			
Abu Dhabi-UAE <sup>1</sup>	158		776		1,045	<b>27</b>
Alabama-USA <sup>1,3</sup>	166	167	730		1,13	35
Alberta-CAN <sup>1,7</sup> California-USA <sup>1,3,6,7</sup>	156 172	140	868		1,031 1,040	
		120				140
Colorado-USA <sup>1,3</sup>	173	138	837		],1	48
Connecticut-USA <sup>1,3,7</sup>	144	139			1,071	
Dubai-UAE <sup>1</sup>	155 144	120	975			0
Florida-USA <sup>1,3,6,7</sup>		100			1,11	
Indiana-USA <sup>1,3,7</sup>	149	132	852		1,13	33
Massachusetts-USA <sup>1,3,7</sup>	154	156	777		1,087	
Minnesota-USA <sup>1,3</sup>	142	140	761		1,043	150
North Carolina-USA <sup>1,3,5,6</sup>	185		974	1		,159
Ontario-CAN <sup>1,7</sup>	181	96	694	9	/1	
Quebec-CAN <sup>1</sup>	147	102	664	913		· · · · · · · · · · · · · · · · · · ·
1	0 100	200 300 400	500 600 700 8	00 900 1,0	0 1,100 1,2	00 1,300 1,400 1,500
			Number of inst	ructional hours		
			Math Scie	ence 🔲	Other <sup>9</sup>	

See notes on next page.

For more information, see the Reader's Guide and the Guide to Sources.

<sup>1</sup> Data for number of math and/or science instructional hours are available for at least 50 percent but less than 85 percent of students.

<sup>2</sup> Nearly satisfied guidelines for sample participation rate after replacement schools were included

<sup>3</sup> Target Population does not include all of the International Target Population defined by TIMSS.

- <sup>4</sup> Exclusion rates for Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. <sup>5</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.
- <sup>6</sup> Data for instructional hours in science were not available. Other instructional hours calculated by subtracting instruction hours in mathematics from total
- instructional hours.

<sup>7</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>8</sup> Data for science are for 2007 and are from TIMSS 2007 International Results in Science. Met guidelines for sample participation rates only after substitute schools were included. Data for number of math instructional hours are available for at least 50 percent but less than 70 percent of students.

schools were included. Data for number of math instructional hours are available for at least 50 percent but less than 70 percent of students. <sup>o</sup> Other instructional hours calculated by adding instructional hours in mathematics to instructional hours in science and then subtracting from total instructional hours.

NOTE: Instructional times shown in this table are actual or implemented times (as opposed to intended times prescribed by the curriculum). Principals reported total instructional hours per day and school days per year. Total instructional hours per year were calculated by multiplying the number of school days per year by the number of instructional hours per day. Teachers reported instructional hours per week in mathematics and science. Instructional hours per year in mathematics and science were calculated by dividing weekly instructional hours by the number of school days per year. International average instructional hours includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IAE), which develops and implements TIMSS at the international evel. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Multis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). *TIMSS 2011 International Results in Science*, exhibit 8.7. See *Digest of Education Statistics 2013*, table 602.30.

At grade 8, education systems (excluding the

benchmarking participants) participating in TIMSS spent an average of 1,031 total annual hours on instructional time in 2011, of which 138 hours (13 percent) were spent on mathematics instruction and 158 hours (15 percent) were spent on science instruction. Similar to the findings at grade 4, the United States' average number of total instructional hours at grade 8 (1,114 hours) was higher than the international average (1,031 hours). The average hours spent on grade 8 mathematics instruction (157 hours) in the United States was also higher than the international average (138 hours).

#### Average PIRLS reading literacy assessment scale scores of 4th-grade students, by education system: 2011 Table 8.

Education system	Overall reading average scale score	Education system	Overall reading average scale score
PIRLS scale average	500	PIRLS scale average	500
Hong Kong-CHN <sup>1</sup>	571 🔿	France	520 🕥
Russian Federation	568 🛇	Spain	513 🕥
Finland	568 🕚	Norway <sup>5</sup>	507 🕥
Singapore <sup>2</sup>	567 🕚	Belgium (French)-BEL <sup>2,3</sup>	506 🕥
Northern Ireland-GBR <sup>3</sup>	558	Romania	502 🕥
United States <sup>2</sup>	556	Georgia <sup>4,6</sup>	488 🕥
Denmark <sup>2</sup>	554	Malta	477 🕥
Croatia <sup>2</sup>	553	Trinidad and Tobago	471 🕥
Chinese Taipei-CHN	553	Azerbaijan <sup>2,6</sup>	462 🕥
Ireland	552	Iran, Islamic Republic of	457 🕥
England-GBR <sup>3</sup>	552	Colombia	448 🕥
Canada <sup>2</sup>	548 🕥	United Arab Emirates	439 🕥
Netherlands <sup>3</sup>	546 🛡	Saudi Arabia	430 🕥
Czech Republic	545 🕥	Indonesia	428 🕥
Sweden	542 🕥	Qatar <sup>2</sup>	425 🕥
Italy	541 🕥	Oman <sup>7</sup>	391 🕥
Germany	541 🛡	Morocco <sup>8</sup>	310 🕥
Israel <sup>1</sup>	541 🕥		
Portugal	541 🕥		
Hungary	539 🕥	Benchmarking education sys	stems
Slovak Republic	535 🕥	Florida-USA <sup>1,4</sup>	569 🛇
Bulgaria	532 🕥	Ontario-CAN <sup>2</sup>	552
New Zealand	531 🕥	Alberta-CAN <sup>2</sup>	548 🕥
Slovenia	530 🕥	Quebec-CAN	538 🕥
Austria	529 🕥	Andalusia-ESP	515 🕥
Lithuania <sup>2,4</sup>	528 🕥	Dubai-UAE	476 🕥
Australia	527 🕥	Maltese-MLT	457 🕥
Poland	526 🛡	Abu Dhabi-UAE	424 🗑

• Average score is higher than U.S. average score.

Average score is lower than U.S. average score.

<sup>1</sup> National Defined Population covers less than 90 percent of National Target Population defined by PIRLS.
 <sup>2</sup> National Defined Population covers 90 percent to 95 percent of National Target Population defined by PIRLS.

<sup>3</sup> Met guidelines for sample participation rates only after replacement schools were included.

<sup>4</sup> National Target Population does not include all of the International Target Population defined by PIRLS.

<sup>5</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

• Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.

<sup>7</sup> The PIRLS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>8</sup> The PIRLS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. The Progress in International Reading Literacy Study (PIRLS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The PIRLS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements PIRLS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Thompson, S., Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). *Highlights From PIRLS 2011: Reading Achievement of U.S. Fourth-Grade Students in an International Context* (NCES 2013-010), table 3, data from the International Association of the Evaluation of Educational Achievement of U.S. Depresent (IEA).

Achievement (IEA), Progress in International Reading Liferacy Study (PIRLS), 2011. See Digest of Education Statistics 2013, table 602.10.

In 2011, there were 53 education systems that had PIRLS reading literacy data at grade 4. These 53 education systems included both countries and other benchmarking education systems. In addition to participating in the U.S. national sample, Florida participated individually and was included as an education system. In 2011, the U.S. average 4th-grade reading literacy score (556) was higher than the PIRLS scale average (500). The United States was among the top 13 education systems in reading literacy (5 education systems had higher average scores, and 7 had scores that were not measurably different).

The United States scored higher, on average, than 40 education systems.

The five education systems with average reading scores above the U.S. score were Finland, Hong Kong-CHN, the Russian Federation, Singapore, and, within the United States, Florida. Additionally, Florida's average score (569) was higher than the PIRLS scale average. No education system scored higher than Florida, although four had scores that were not measurably different. Forty-eight education systems scored lower than Florida.

**Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

**Reference tables:** *Digest of Education Statistics 2013*, tables 602.10, 602.20, 602.30, 602.50, 602.60, and 602.70

**Related indicators:** Educational Attainment (indicator 1), International Educational Attainment (indicator 2), U.S. Student and Adult Performance on International Assessments of Educational Achievement [*The Condition of Education* 2006 Special Analysis], U.S. Performance Across International Assessments of Student Achievement [*The Condition of Education 2009 Special Analysis*]

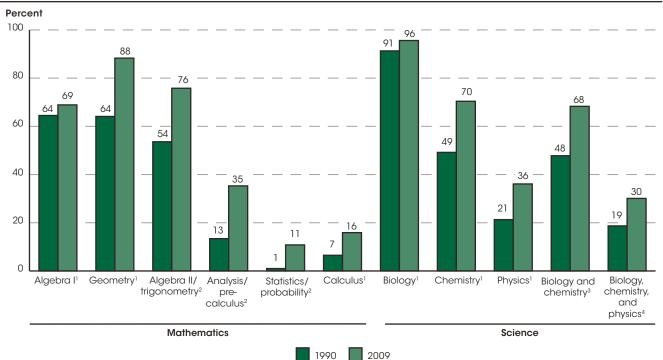
### Indicator 27 **High School Coursetaking**

The percentages of high school graduates who had taken mathematics courses in algebra I, geometry, algebra II/trigonometry, analysis/precalculus, statistics/ probability, and calculus increased from 1990 to 2009. The percentages of high school graduates who had taken science courses in chemistry and physics also increased between 1990 and 2009.

In addition to administering student assessments, the National Assessment of Educational Progress (NAEP) periodically collects data on the transcripts of high school graduates. The transcript survey gathers information about the types of courses that graduates from regular and honors programs take, how many credits they earn,

their grade point averages, and the relationship between coursetaking patterns and achievement. The transcript data include information only about the coursework that graduates completed while they were enrolled in grades 9 through 12.





<sup>1</sup> Percentages are for students who earned at least one Carnegie credit

<sup>2</sup> Percentages are for students who earned at least one-half of a Carnegie credit

<sup>3</sup> Percentages are for students who earned at least one Carnegie credit each in biology and chemistry

<sup>4</sup> Percentages are for students who earned at least one Carnegie credit each in biology, chemistry, and physics. NOTE: For a transcript to be included in the analyses, the graduate had to receive either a standard or honors diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study (HSTS), 1990 and 2009. See Digest of Education Statistics 2012, table 225.40.

The percentages of high school graduates who had completed mathematics courses in algebra I, geometry, algebra II/trigonometry, analysis/precalculus, statistics/ probability, and calculus increased between 1990 and 2009. For example, the percentage of graduates who had completed calculus increased from 7 percent to 16 percent between 1990 and 2009. Similarly, the percentage of graduates who had completed algebra II/trigonometry increased from 54 percent to 76 percent.

Between 1990 and 2009, the percentages of high school graduates who had taken various mathematics courses generally increased across subgroups. For example, the percentage of Hispanic graduates completing calculus increased from 4 percent in 1990 to 9 percent in 2009. Also, the percentage of Hispanic graduates completing algebra II/trigonometry increased from 40 percent to 71 percent. Similarly, the percentage of Black graduates completing calculus during this period increased from 3 to 6 percent, and the percentage completing algebra II/ trigonometry increased from 44 to 71 percent. Although there were increases in mathematics coursetaking across racial/ethnic groups during this period, gaps between groups remained in terms of the percentages of graduates completing courses. For example, in 2009 higher percentages of Asian/Pacific Islander (42 percent) and White graduates (18 percent) had taken calculus than had their Black (6 percent) and Hispanic peers (9 percent). In 2009, there was no measurable difference between the percentages of males and females who had taken calculus (16 percent each). However, the percentage of females who had taken algebra II/trigonometry (78 percent) was higher than that of male graduates (74 percent).

The percentages of high school graduates who had taken science courses in chemistry and physics also increased between 1990 and 2009. The percentage of graduates who had taken chemistry increased from 49 to 70 percent, and the percentage of graduates who had completed physics courses increased from 21 to 36 percent. The percentage of graduates who earned at least one credit in biology, chemistry, and physics increased from 19 percent in 1990 to 30 percent in 2009.

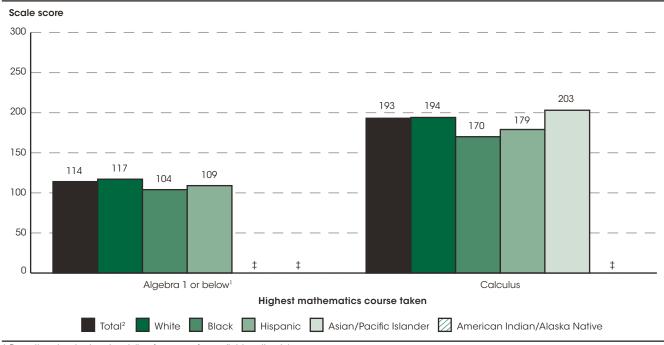
The general increases in science coursetaking in biology, chemistry, and physics between 1990 and 2009 were reflected by increases for students of most racial/ethnic

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groups. For instance, the percentage of Hispanic graduates who had completed a chemistry course increased from 38 to 66 percent, and the percentage of Hispanic graduates who had completed at least one credit in biology, chemistry, and physics increased from 10 to 23 percent. Similarly, the percentage of Black graduates who had completed a chemistry course increased from 40 to 65 percent, and the percentage of Black graduates who had completed at least one credit in biology, chemistry, and physics increased from 12 to 22 percent. Although there were increases in coursetaking among student groups from 1990 to 2009, gaps between different subgroups in coursetaking remained. In 2009, a higher percentage of Asian (54 percent) and White (31 percent) graduates had completed the combination of biology, chemistry, and physics courses than had their Black and Hispanic peers (22 percent and 23 percent, respectively). A higher percentage of males (39 percent) than of females (33 percent) had completed a physics class in 2009; however, a higher percentage of females (73 percent) than of males (67 percent) had taken chemistry.

A higher percentage of 2009 graduates from private schools (85 percent) had taken courses in algebra II/ trigonometry than had graduates from traditional public schools (75 percent), and a higher percentage of graduates from private schools (23 percent) had taken courses in calculus than had graduates from public schools (15 percent). Also, a higher percentage of private high school graduates (44 percent) had taken at least one credit in biology, chemistry, and physics than had graduates from traditional public schools (29 percent). A higher percentage of graduates from city (32 percent) and suburban (39 percent) schools had taken courses in biology, chemistry, and physics than had graduates from schools in towns (19 percent) or rural areas (20 percent).





Reporting standards not met (too few cases for a reliable estimate).
 Includes basic math, general math, applied math, pre-algebra, and algebra I.

Includes other racial/ethnic groups not shown separately and cases that were missing information on race/ethnicity and/or sex of student.

NOTE: The scale of the NAEP mathematics assessment for grade 12 ranges from 0 to 300. For a transcript to be included in the analyses, the graduate had to receive either a standard or honors diploma. Race categories exclude persons of Hispanic ethnicity. Reporting standards were not met for American Indian/ Alaska Native estimates; therefore, data for this racial group are not shown in the figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment; and High School Transcript Study (HSTS), 2009. See *Digest of Education Statistics 2012*, table 222.40.

In 2009, higher average scale scores on the National Assessment of Educational Progress (NAEP) 12th-grade mathematics assessment were associated with higher levels of high school mathematics coursetaking. For example, graduates who had taken only algebra I or below had an average scale score of 114 (on a scale of 0–300), whereas graduates who had taken calculus had an average scale score of 193. In addition, among those students who had completed specific mathematics courses, there were differences across demographic subgroups. For graduates who had taken calculus, the average scale score was higher for males than for females (197 vs. 190). Average scale scores were also higher for students who had taken calculus who were Asian/Pacific Islander (203) and White (194) than for their Hispanic (179) and Black (170) peers. Among students who had taken calculus, the average scale score for those who had attended low-poverty schools (schools in which 0 to 25 percent of students receive, or are eligible to receive, free or reduced-price lunch under the National School Lunch Program) was 199, compared with a score of 163 for their peers at high-poverty schools (schools in which 75 to 100 percent of students receive, or are eligible to receive, free or reduced-price lunch).

**Reference tables:** *Digest of Education Statistics 2013*, tables 222.40 and 225.40

**Related indicators:** A Closer Look at High School Students in the United States Over the Last 20 Years [*The Condition of Education 2012 Special Analysis*] **Glossary:** Free or reduced-price lunch, Private school, Public school or institution

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#### Indicator 28

### **Public High School Graduation Rates**

In school year 2011–12, some 3.1 million public high school students, or 81 percent, graduated on time with a regular diploma. Among all public high school students, Asian/Pacific Islander students had the highest graduation rate (93 percent), followed by Whites (85 percent), Hispanics (76 percent), and American Indians/ Alaska Natives and Blacks (68 percent each).

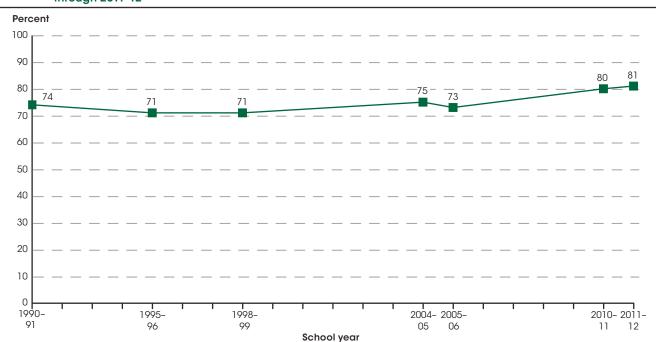


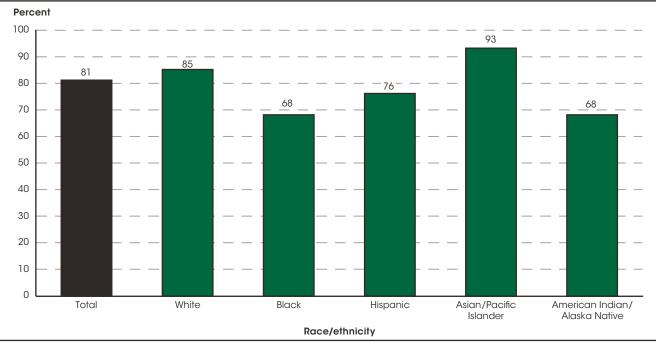
Figure 1. Averaged Freshman Graduation Rate (AFGR) for public high school students: School years 1990-91 through 2011-12

NOTE: The AFGR provides an estimate of the percentage of high school students who graduate within 4 years of first starting 9th grade. The rate uses aggregate student enrollment data to estimate the size of an incoming freshman class and counts of the number of diplomas awarded 4 years later. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 1990–91 through 2009–10; "State Dropout and Completion Data File," 2005–06 through 2011–12; Public School Graduates and Dropouts From the Common Core of Data, 2007–08 and 2008–09. See Digest of Education Statistics 2013, table 219.10.

This indicator examines the percentage of public high school students who graduate on time with a regular diploma. The indicator uses the *Averaged Freshman Graduation Rate* (AFGR), which is the number of high school diplomas awarded expressed as a percentage of the estimated freshman class 4 years earlier. In school year 2011–12, the AFGR was 81 percent, and some 3.1 million public high school students graduated on time with a

regular diploma. The overall AFGR was higher for the graduating class of 2011–12 than it was for the class of 1990–91 (74 percent). However, from 1990–91 to 1995–96 the graduation rate decreased from 74 to 71 percent. During the period from 1998–99 to 2004–05, the rate steadily increased from 71 to 75 percent. After dropping to 73 percent in 2005–06, the graduation rate increased 8 percentage points to 81 percent in 2011–12.

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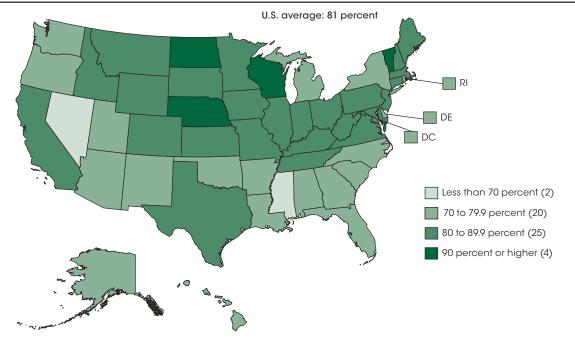
#### Figure 2. Averaged Freshman Graduation Rate (AFGR) for public high school students, by race/ethnicity: School year 2011–12

NOTE: The AFGR provides an estimate of the percentage of high school students who graduate within 4 years of first starting 9th grade. The rate uses aggregate student enrollment data to estimate the size of an incoming freshman class and counts of the number of diplomas awarded 4 years later. Race categories exclude persons of Hispanic ethnicity. Includes only graduates whose race/ethnicity was reported. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Graduation Rate Data File," School Year 2011–12, Preliminary Version 1a. See CCD table at <a href="http://nces.ed.gov/ccd/tables/AFGR0812.asp">http://nces.ed.gov/ccd/tables/AFGR0812.asp</a>.

The AFGR varied by race/ethnicity in 2011–12. Asian/ Pacific Islander students had the highest graduation rate (93 percent), followed by Whites (85 percent), Hispanics (76 percent), and American Indians/Alaska Natives and Blacks (68 percent each).

#### Figure 3. Averaged Freshman Graduation Rate (AFGR) for public high school students, by state: School year 2011-12



NOTE: The AFGR provides an estimate of the percentage of high school students who graduate within 4 years of first starting 9th grade. The rate uses aggregate student enrollment data to estimate the size of an incoming freshman class and counts of the number of diplomas awarded 4 years later. Data were imputed for Texas in 2011–12. Some data have been revised from previously published figures. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Graduation Rate Data File," School Year 2011–12, Preliminary Version 1a. See CCD table at <a href="http://nces.ed.gov/pubs2014/2014391/tables/table\_04.asp">http://nces.ed.gov/pubs2014/2014391/tables/table\_04.asp</a>.

In school year 2011–12, the AFGR varied by more than 30 percentage points across the states. Nebraska and Vermont had the highest graduation rate, each at 93 percent. Two other states (North Dakota and Wisconsin) also had graduation rates of 90 percent or higher. In contrast, Nevada had the lowest graduation rate, at 60 percent, followed by Mississippi with an AFGR of 68 percent.

**Reference tables:** *Digest of Education Statistics 2013*, table 219.10; and CCD Tables (<u>http://nces.ed.gov/ccd/tables/</u>AFGR0812.asp)

**Related indicators:** Educational Attainment (indicator 1), Status Dropout Rates (indicator 29) Glossary: High school diploma, Public school or institution

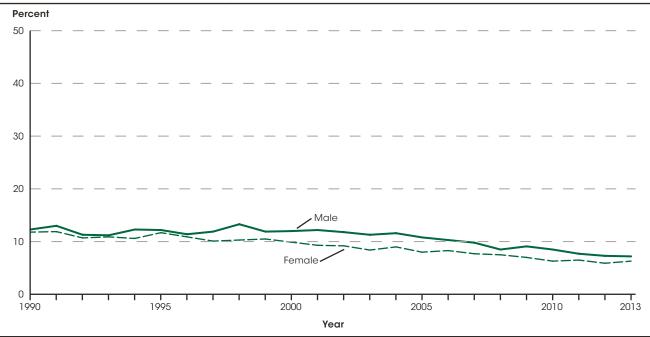
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# Indicator 29 Status Dropout Rates

The status dropout rate decreased from 12 percent in 1990 to 7 percent in 2013, with most of the decline occurring since 2000. From 1990 to 2013, the Hispanic status dropout rate declined from 32 percent to 12 percent, while Black and White status dropout rates decreased by 6 and 4 percentage points, respectively. Nevertheless, the Hispanic status dropout rate in 2013 (12 percent) remained higher than the White (5 percent) and Black (7 percent) status dropout rates.

The *status dropout rate* represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate).<sup>1</sup> This rate is different from graduation rate measures that reflect the percentage of students earning a regular diploma within 4 years of entering high school. Status dropouts are no longer attending school (public or private) and do not have a high school level of educational attainment. Based on data from the Current Population Survey, the status dropout rate decreased from 12 percent in 1990 to 7 percent in 2013, with most of the decline occurring after 2000 (when it was 11 percent). However, there was no measurable difference between the 2012 rate and the 2013 rate.

Figure 1. Status dropout rates of 16- through 24-year-olds, by sex: 1990 through 2013



NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2013. See *Digest of Education Statistics 2014*, table 219.70.

Between 1990 and 2013, the male status dropout rate declined from 12 to 7 percent, with nearly the entire decline occurring after 2000 (when it was still 12 percent). For females, the rate declined from 12 percent in 1990 to 10 percent in 2000, and then decreased further to 6 percent in 2013. From 1997 through 2012, the status dropout rate was higher for males than for females, but in 2013 the rate for males was not measurably different from the rate for females.

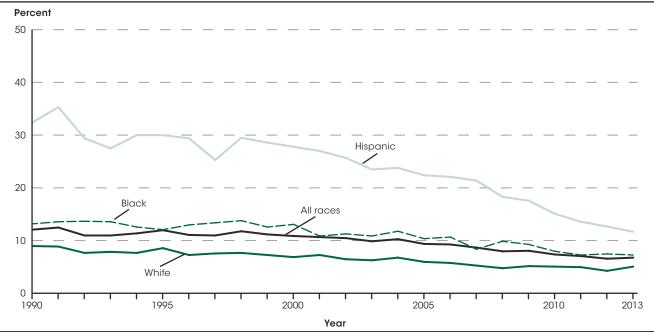


Figure 2. Status dropout rates of 16- through 24-year-olds, by race/ethnicity: 1990 through 2013

NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. Data for all races include other racial/ethnic categories not separately shown. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2013. See *Digest of Education Statistics 2014*, table 219.70.

In each year from 1990 to 2013, the status dropout rate was lower for Whites than for Blacks, and the rates for both Whites and Blacks were lower than the rate for Hispanics. During this period, the rate for Whites declined from 9 to 5 percent; the rate for Blacks declined from 13 to 7 percent; and the rate for Hispanics declined from 32 to 12 percent. As a result, the gap between Whites and Hispanics narrowed from 23 percentage points in 1990 to 7 percentage points in 2013. Most of the gap was narrowed between 2000 and 2013, during which the White-Hispanic gap declined from 21 percent to 7 percent. The rates for both Whites and Blacks declined from 1990 to 2013, but the gap between the rates in 1990 did not measurably differ from the gap between the rates in 2013. However, the White-Black gap of 2 percentage points in 2013 (when rates were 5 and 7 percent, respectively) was smaller than the White-Black gap of 6 percentage points in 2000 (when rates were 7 and 13 percent, respectively).

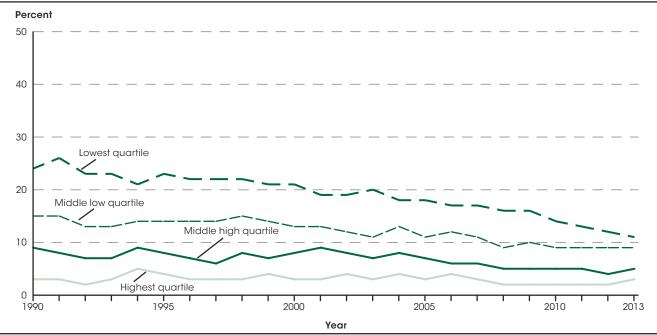


Figure 3. Status dropout rates of 16- through 24-year-olds, by income level: 1990 through 2013

NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). The "lowest" quartile represents the bottom 25 percent of family incomes. The "middle low" quartile represents families between the 25th percentile and the median (50th percentile). The "indel high" quartile represents families between the median (50th percentile). The "highest" quartile represents the top 25 percent of all family incomes. Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2013. See Digest of Education Statistics 2014, table 219.75.

The status dropout rate also declined for young adults in low- and middle-income family groups between 1990 and 2013. Status dropout rates declined from 24 to 11 percent for those in families with the lowest incomes (the bottom 25 percent of all family incomes), from 15 to 9 percent for those in "middle low" income families (families with incomes between the 25th percentile and the median), and from 9 to 5 percent for those in "middle high" income families (families with incomes between the median and the 75th percentile). For those in the highest income families (the top 25 percent of all family incomes), there was no measurable difference between the 1990 and 2013 status dropout rates (3 percent in both years). During this period, the status dropout rates for those in the highest income families were consistently lower than the rates for those in all other income groups. Conversely, the rates for those in the lowest income families were consistently higher than the rates for those in the "middle high" and "middle low" income families, with the exception of 2013 when the rates between those in the lowest income families and those in the "middle low" income families were not measurably different. While differences between those in the lowest income families and highest income families have remained, the gap in the status dropout rate between these two groups narrowed from 21 percentage points in 1990 to 8 percentage points in 2013.

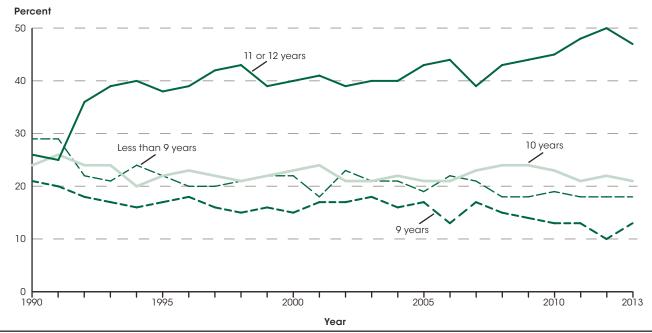


Figure 4. Percentage distribution of status dropouts, by years of school completed: 1990 through 2013

NOTE: "Status dropouts" are 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2013. See *Digest of Education Statistics 2014*, table 219.75.

The decline in the overall status dropout rate coincided with a shift in the distribution of years of school completed by status dropouts from 1990 to 2013, as fewer status dropouts completed less than 9 years of schooling while more completed 11–12 years of schooling. The percentage of status dropouts with less than 9 years of schooling decreased from 29 percent in 1990 to 18 percent in 2013. Conversely, the percentage of status dropouts who had completed 11–12 years of schooling but did not receive a diploma or GED certificate increased from 26 percent in 1990 to 47 percent in 2013.

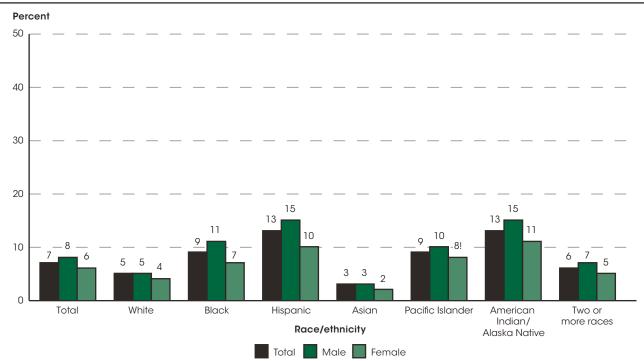
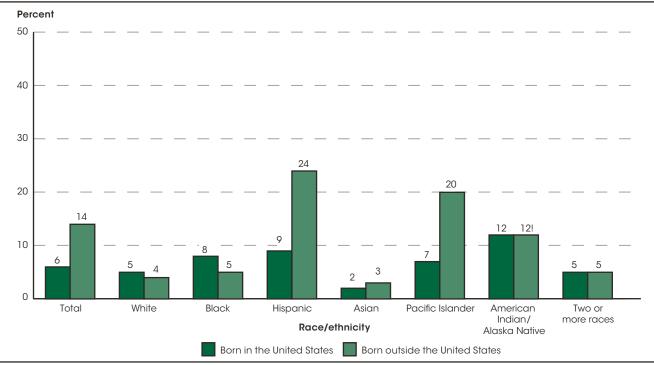


Figure 5. Status dropout rates of 16- through 24-year-olds, by race/ethnicity and sex: 2012

Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent. NOTE: This figure uses a different data source than figure 2; therefore, estimates are not directly comparable to the 2012 estimates in figure 2. Noninstitutionalized group quarters include college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless. Among those counted in noninstitutionalized group quarters in the American Community Survey (ACS), only the residents of military barracks are not included in the civilian noninstitutionalized population in the Current Population Survey. The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2012. See *Digest of Education Statistics 2014*, table 219.80.

Based on data from the American Community Survey, which includes those living in households as well as noninstitutional<sup>2</sup> living quarters, the status dropout rate in 2012 was lower for Asians (3 percent) and Whites (5 percent) than for those of Two or more races (6 percent), Blacks (9 percent), Pacific Islanders (9 percent), American Indians/Alaska Natives (13 percent), and Hispanics (13 percent). In 2012, the male status dropout rate (8 percent) was higher than the female rate (6 percent). This pattern of higher male status dropout rates was consistent across all racial/ethnic groups except for Asians and Pacific Islanders. Hispanics (5 percentage points), American Indians/Alaska Natives (4 percentage points), and Blacks (4 percentage points) had the largest observed male-female dropout rate gaps. The dropout rates for those living in households and noninstitutionalized group quarters (7 percent) was lower than for those living in institutionalized group quarters (35 percent), such as prisons and residential health facilities.



### Figure 6. Status dropout rates of 16- through 24-year-olds in the household and noninstitutionalized group quarters population, by race/ethnicity and nativity: 2012

Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent. NOTE: This figure uses a different data source than figure 2; therefore, estimates are not directly comparable to the 2012 estimates in figure 2. United States refers to the 50 states, the District of Columbia, Puerto Rico, American Samoa, Guam, the U.S. Virgin Islands, and the Northern Marianas. The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enclled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Noninstitutionalized group quarters include college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless. Among those counted in noninstitutionalized group quarters in the American Community Survey (ACS), only the residents of military barracks are not included in the civilian noninstitutionalized population in the Current Population Survey. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2012. See *Digest of Education Statistics 2014*, table 219.80.

Differences in status dropout rates between U.S. and foreign-born 16- to 24-year-olds living in households and noninstitutionalized group quarters vary by race/ethnicity. In 2012, Hispanics, Asians, and Pacific Islanders born in the United States had lower status dropout rates than did their counterparts born outside of the United States, whereas U.S.-born Whites and Blacks had higher status dropout rates than did their foreign-born counterparts. Among all racial/ethnic groups, the largest differences in status dropout rates by nativity are observed for Hispanics (16 percent points) and Pacific Islanders (14 percentage points). Native-born Hispanics and Pacific Islanders had status dropout rates of 9 and 7 percent, respectively, and foreign-born Hispanics and Pacific Islanders had rates of 24 and 20 percent, respectively.

#### **Endnotes:**

<sup>1</sup> In this indicator, status dropout rates are estimated using both the Current Population Survey (CPS) and the American Community Survey (ACS). CPS data have been collected annually for decades, allowing for the analysis of detailed long term trends, or changes over time, for the civilian, noninstitutionalized population. ACS data from 2006 to 2012 cover individuals living in group quarters, including those in institutionalized and noninstitutionalized settings, and can provide detail on smaller demographic groups. <sup>2</sup> Noninstitutional group quarters include college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless.

**Reference tables:** *Digest of Education Statistics 2014*, tables 219.70, 219.75, and 219.80

**Related indicators:** Educational Attainment (indicator 1), Public High School Graduation Rates (indicator 28) **Glossary:** Dropout, GED certificate, High school diploma, High school equivalency certificate

For more information, see the Reader's Guide and the Guide to Sources.

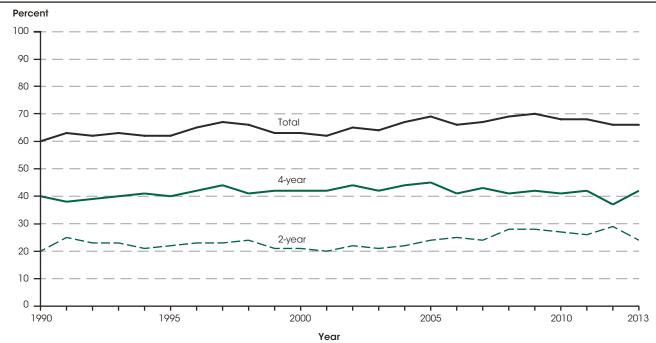
#### Indicator 30

### Immediate College Enrollment Rate

The immediate college enrollment rate increased from 60 percent in 1990 to 66 percent in 2013; however, this rate has decreased in recent years—down from 70 percent in 2009. In 2013, the immediate college enrollment rate for high school completers from high-income families (80 percent) was 31 percentage points higher than the rate for those from low-income families (49 percent). The 2013 gap between high school completers from high- and low-income families did not measurably differ from the corresponding gap in 1990 (30 percentage points).

Of the 3.0 million high school completers in 2013, some 2.0 million, or 66 percent, enrolled in college the following fall. This rate, known as the *immediate college enrollment rate*, is defined as the annual percentage of high school completers (including GED recipients) who enroll in 2- or 4-year colleges in the fall immediately after completing high school. The immediate college enrollment rate increased from 60 percent in 1990 to 66 percent in 2013; however, this rate has decreased in recent years—down from 70 percent in 2009. The rate did not change measurably between 2012 (66 percent) and 2013.

Figure 1. Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by level of institution: 1990-2013



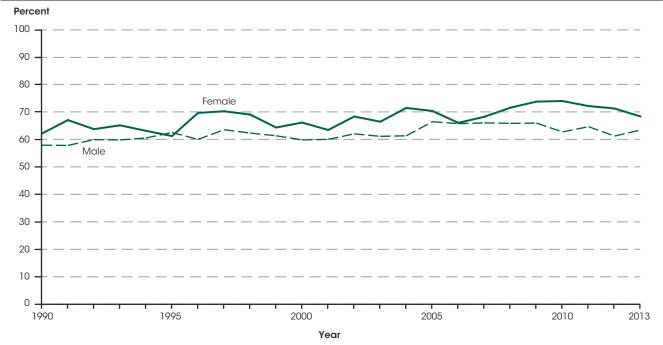
NOTE: High school completers include GED recipients

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See Digest of Education Statistics 2014, table 302.10.

In each year between 1990 and 2013, the immediate college enrollment rate at 4-year colleges was higher than that at 2-year colleges. For example, in 2013, the immediate college enrollment rate at 4-year colleges was 42 percent, compared with 24 percent at 2-year colleges. The immediate college enrollment rate of high school completers at 2-year colleges in 2013 (24 percent) did not differ significantly from the corresponding rate in 1990 (20 percent). The rate fluctuated between 20 and 25 percent in the 1990s, increased from 21 percent in 2000 to 29 percent in 2012, and then decreased 5 percentage points between 2012 and 2013. At 4-year colleges, the immediate college enrollment rate in 2013 (42 percent) was not measurably different from the rate in 1990 or 2000 (40 and 42 percent, respectively), nor was the rate in 2013 measurably different from that in 2012 (37 percent).

#### For more information, see the Reader's Guide and the Guide to Sources.



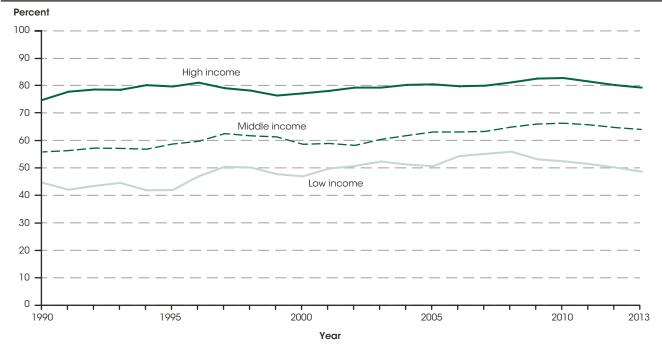


NOTE: High school completers include GED recipients.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See Digest of Education Statistics 2014, table 302.10.

The immediate college enrollment rate for male high school completers in 1990 (58 percent) was not measurably different from the corresponding rate in 2013 (64 percent), while the rate for female high school completers increased from 62 to 68 percent during this time. In 2013, there was no significant difference between male and female immediate college enrollment rates.



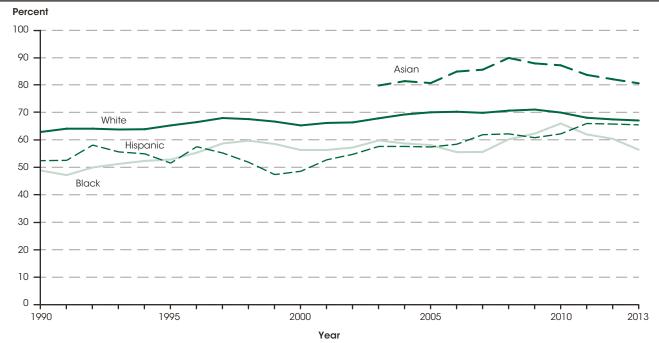


NOTE: Due to some short-term data fluctuations associated with small sample sizes, percentages for income groups were calculated based on 3-year moving averages, except in 2013, when estimates were calculated based on 2-year moving averages. High school completers include GED recipients. Low income refers to the bottom 20 percent of all family incomes, high income refers to the top 20 percent of all family incomes refers to the 60 percent in between.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See Digest of Education Statistics 2014, table 302.30.

In each year from 1990 to 2013, the immediate college enrollment rate for high school completers from highincome families was higher than the rates for their peers from low- and middle-income families.<sup>1</sup> In 2013, the immediate college enrollment rate for high school completers from high-income families (80 percent) was 31 percentage points higher than the rate for those from low-income families (49 percent) and 15 percentage points higher than the rate for those from middle-income families (64 percent). The gap between the immediate college enrollment rates of high school completers from high- and low-income families in 2013 (31 percentage points) did not measurably differ from the corresponding gap in 1990 (30 percentage points). Similarly, the gap between the immediate college enrollment rates of high school completers from high- and middleincome families in 2013 (15 percentage points) was not measurably different from the corresponding gap in 1990 (19 percentage points).





NOTE: Due to some short-term data fluctuations associated with small sample sizes, percentages for racial/ethnic groups were calculated based on 3-year moving averages, except in 2013, when estimates were calculated based on 2-year moving averages. For Asian data, the moving average for 2003 reflects an average of 2003 and 2004. High school completers include GED recipients. Separate data on Asian high school completers have been collected since 2003. From 2003 onward, White, Black, and Asian data exclude persons identifying themselves as Two or more races. Prior to 2003, each respondent could select only a single race category, and the "Two or more races" category was not reported. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990–2013. See *Digest of Education Statistics 2014*, table 302.20.

In 2013, the immediate college enrollment rate for high school completers who were White (67 percent) was higher than the rate for those who were Black (57 percent), but not measurably different from the rate for those who were Hispanic (66 percent).<sup>1</sup> The immediate college enrollment rate for Asians (81 percent) was higher than the rates for Whites, Blacks, and Hispanics in 2013 and in each year since 2003, when the collection of separate data on Asian high school completers began. The rate for Whites was higher than that for Blacks every year since 1990 except 2010, when there were no measurable differences

#### **Endnotes:**

<sup>1</sup> Due to some short-term data fluctuations associated with small sample sizes, estimates for the income groups and racial/ethnic groups were calculated based on 3-year moving averages, except in 2013, when estimates were calculated based on 2-year moving averages.

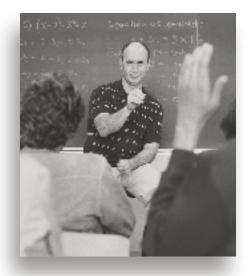
**Reference tables:** *Digest of Education Statistics 2014*, tables 302.10, 302.20, and 302.30

**Related indicators:** Undergraduate Enrollment (indicator 14), Public High School Graduation Rates (indicator 28), Status Dropout Rates (indicator 29) between their rates. Additionally, the immediate college enrollment rate for Whites was higher than that for Hispanics from 1994 through 2010. Between 1990 and 2013, the immediate college enrollment rate increased for White (from 63 to 67 percent) and Hispanic (from 52 to 66 percent) high school completers. The rate for Black high school completers in 2013 was not measurably different from the rate in 1990, and the rate for Asian high school completers did not change measurably between 2003 and 2013.

**Glossary:** Educational attainment (Current Population Survey), High school completer The indicators in this chapter of *The Condition of Education* examine features of postsecondary education, many of which parallel those presented in the previous chapter on elementary and secondary education. The indicators describe characteristics of postsecondary students, postsecondary programs and courses of study, finance and resources, and postsecondary completions.

Postsecondary education is characterized by diversity both in the types of institutions and in the characteristics of students. Postsecondary institutions vary by the types of degrees awarded, control (public or private), and whether they are operated on a nonprofit or for-profit basis. In addition, postsecondary institutions have distinctly different missions and provide students with a wide range of learning environments.

This chapter's indicators, as well as additional indicators on postsecondary education, are available at *The Condition of Education* website: <u>http://nces.ed.gov/programs/coe</u>.



# Chapter 4

# **Postsecondary Education**

#### **Characteristics of Postsecondary Students**

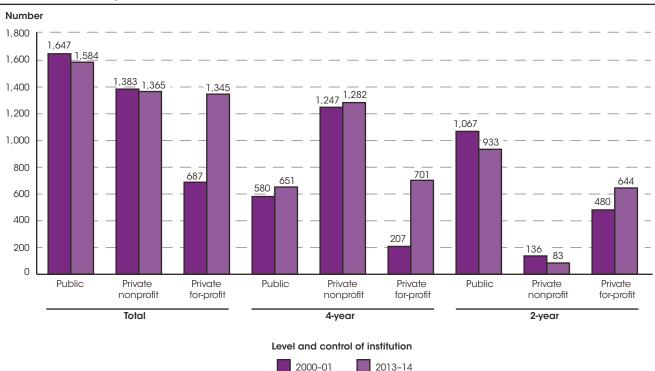
Indicator 31. Characteristics of Degree-Granting Postsecondary Institutions Indicator 32. Characteristics of Postsecondary Students	
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**Indicator 31** 

### Characteristics of Degree-Granting Postsecondary Institutions

In 2013–14, some 29 percent of 4-year institutions had open admissions policies, 26 percent accepted three-quarters or more of their applicants, 32 percent accepted from one-half to less than three-quarters of their applicants, and 13 percent accepted less than one-half of their applicants.





NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2000 and Fall 2013, Institutional Characteristics component. See *Digest of Education Statistics 2014*, table 305.30.

In 2013–14, there were 4,294 degree-granting institutions with first-year undergraduates, including 2,634 4-year institutions offering programs at the bachelor's or higher degree level and 1,660 2-year institutions offering associate's degrees. These institutions may be governed by publicly appointed or elected officials, with major support from public funds (public control), or by privately elected or appointed officials, with major support from private sources (private control). Private institutions may be

operated on a nonprofit or for-profit basis. All institutions in this analysis enroll first-year undergraduates in degreegranting programs. The number of private nonprofit institutions in 2013–14 (1,365) was 1 percent lower than in 2000–01 (1,383), and the number of public institutions in 2013–14 (1,584) was 4 percent lower than in 2000–01 (1,647). In contrast, the number of private for-profit institutions nearly doubled (from 687 to 1,345) between 2000–01 and 2013–14.

#### **Chapter:** 4/Postsecondary Education **Section:** Characteristics of Postsecondary Students

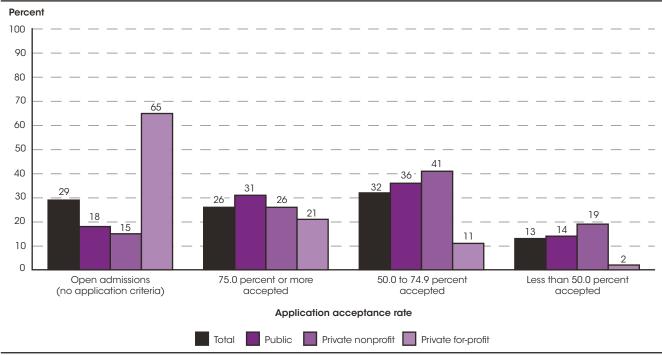


Figure 2. Percentage distribution of 4-year degree-granting institutions with first-year undergraduates, by application acceptance rate and control of institution: Academic year 2013-14

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2013, Institutional Characteristics component. See *Digest of Education Statistics 2014*, table 305.40.

In 2013–14, approximately 29 percent of 4-year institutions with first-year undergraduates had open admissions policies (accepted all applicants). A higher percentage of private for-profit 4-year institutions (65 percent) than private nonprofit (15 percent) and public (18 percent) 4-year institutions had open

admissions policies in 2013–14. Among 4-year institutions, 26 percent accepted three-quarters or more of their applicants, 32 percent accepted from one-half to less than three-quarters of their applicants, and 13 percent accepted less than one-half of their applicants.

#### **Chapter:** 4/Postsecondary Education **Section:** Characteristics of Postsecondary Students

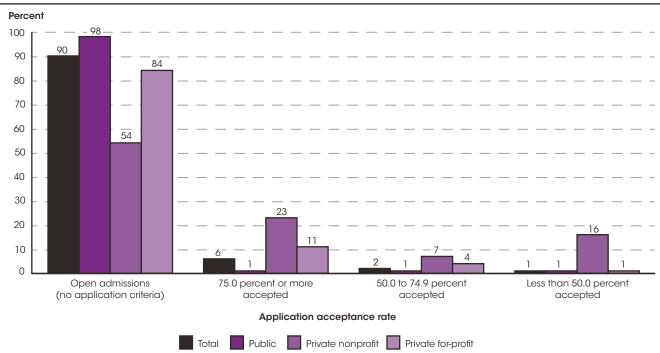


Figure 3. Percentage distribution of 2-year degree-granting institutions with first-year undergraduates, by application acceptance rate and control of institution: Academic year 2013-14

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2013, Institutional Characteristics component. See *Digest of Education Statistics 2014*, table 305.40.

In 2013–14, some 90 percent of 2-year institutions had open admissions. Almost all public 2-year institutions had open admissions (98 percent), while 84 percent of private for-profit 2-year and 54 percent of private nonprofit 2-year institutions had open admissions. Among 2-year institutions, 6 percent accepted three-quarters or more of their applicants, 2 percent accepted from one-half to less than three-quarters of applicants, and 1 percent accepted less than one-half of their applicants.

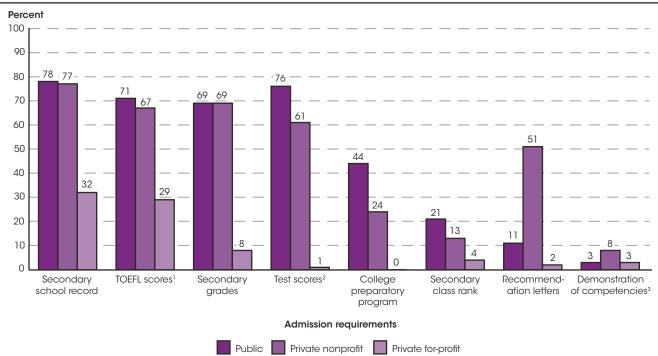


Figure 4. Percentage of 4-year degree-granting institutions with first-year undergraduates, by admission requirements and control of institution: Academic year 2013-14

<sup>1</sup> Test of English as a Foreign Language.

<sup>2</sup> Includes SAT, ACT, or other admission tests.

<sup>3</sup> Formal demonstration of competencies (e.g., portfolios, certificates of mastery, assessment instruments).

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any prist-time degree/certificate-seeking undergraduates. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2013, Institutional Characteristics component. See Digest of Education Statistics 2014, table 305.30.

In 2013–14, some 71 percent of 4-year and 9 percent of 2-year institutions had admission requirements for applicants. Admission requirements include the submission of information, such as secondary school administrative records, Test of English as a Foreign Language (TOEFL) scores, secondary school grades, admission test (such as the SAT or ACT) scores, recommendations, and college preparatory program information. Among 4-year institutions, the percentages of public and private nonprofit institutions that required secondary school records for admission (78 and 77 percent, respectively) were more than twice the percentage of private for-profit institutions requiring them (32 percent). The percentages of 4-year public and private nonprofit institutions that required TOEFL scores (71 and 67 percent, respectively) were more than twice the percentage of 4-year private for-profit institutions requiring them (29 percent). Some 69 percent of public 4-year institutions and 69 percent of private nonprofit 4-year institutions required secondary grades, more than 8 times the percentage of private for-profit 4-year institutions requiring them (8 percent). Among 4-year institutions, some 76 percent of public institutions required admission tests such as the SAT or ACT, compared with 61 percent of private nonprofit and 1 percent of private for-profit institutions.

<b>Reference tables:</b> <i>Digest of Education Statistics 2014</i> , tables	
305.30 and 305.40	

**Related indicators:** Undergraduate Enrollment (indicator 14), Postbaccalaureate Enrollment (indicator 15), Postsecondary Revenues by Source (indicator 37), Expenses of Postsecondary Institutions (indicator 38), Characteristics of Postsecondary Faculty (indicator 39), Community Colleges [*The Condition of Education 2008 Special Analysis*] **Glossary:** Degree-granting institutions, For-profit institution, Nonprofit institution

### **Characteristics of Postsecondary Students**

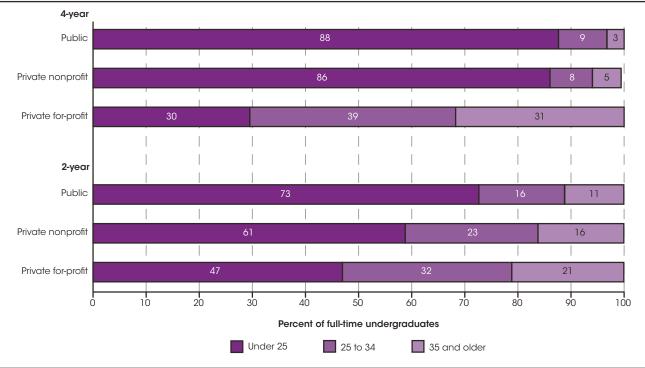
Some 10.5 million undergraduate students attended 4-year institutions in fall 2013, while 7.0 million attended 2-year institutions. At 4-year institutions in fall 2013, some 77 percent of undergraduate students attended full time, compared with 41 percent at 2-year institutions.

In fall 2013, there were 17.5 million undergraduate students and 2.9 million postbaccalaureate (graduate) students attending degree-granting postsecondary institutions in the United States. Undergraduate students can attend 4-year institutions that primarily award bachelor's or higher degrees, or they can attend 2-year institutions that award associate's degrees and certificates and offer courses that may be creditable toward a bachelor's degree to be earned at a 4-year institution.

Indicator 32

Some 10.5 million undergraduate students (60 percent of the total) attended 4-year institutions, while 7.0 million (40 percent of the total) attended 2-year institutions. Of the undergraduate students at 4-year institutions, 8.1 million, or 77 percent, attended full time. Of the undergraduate students at 2-year institutions, 2.8 million (41 percent) were full-time students and 4.1 million (59 percent) were part-time students.





NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students.

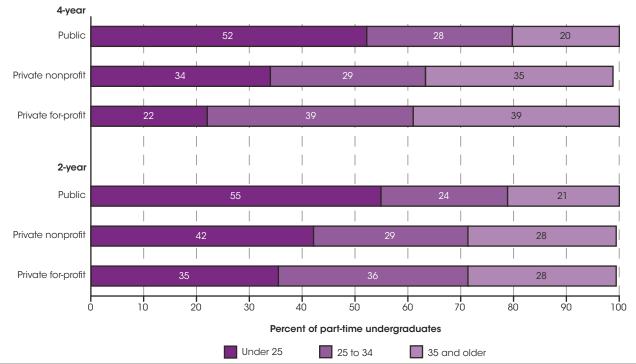
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, table 303.50.

In 2013, a higher percentage of full-time undergraduate students at public and private nonprofit 4-year institutions were young adults (i.e., under the age of 25) than at comparable 2-year institutions. At public and private nonprofit 4-year institutions, most of the full-time undergraduates (88 and 86 percent, respectively) were young adults. At private for-profit 4-year institutions, however, just 30 percent of full-time students were young adults (39 percent were ages 25–34, and 31 percent were age 35 and older).

Chapter: 4/Postsecondary Education Section: Characteristics of Postsecondary Students

Of full-time undergraduate students enrolled at 2-year institutions in 2013, young adults accounted for 73 percent at public institutions, 61 percent at private nonprofit institutions, and 47 percent at private for-profit institutions. At public institutions, 16 percent of full-time students were ages 25–34, and 11 percent were age 35 and older; at private nonprofit institutions, 23 percent were ages 25–34, and 16 percent were age 35 and older; and at private for-profit institutions, 32 percent were ages 25–34, and 21 percent were age 35 and older.





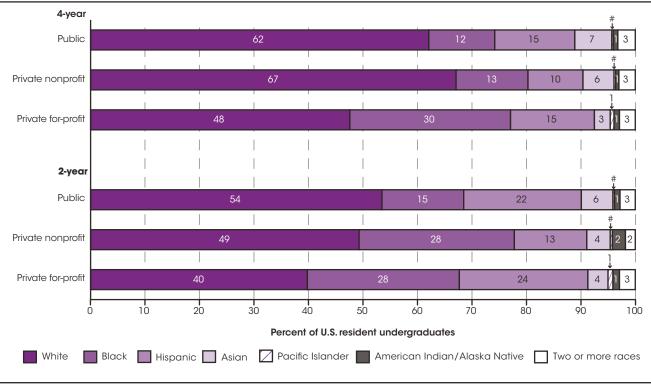
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See Digest of Education Statistics 2014, table 303.50.

In contrast to the pattern among full-time students, a lower percentage of part-time undergraduates at public and private nonprofit 4-year institutions were young adults than at comparable 2-year institutions. Young adults made up 52 percent of part-time undergraduates at 4-year public institutions, 34 percent at private nonprofit institutions, and 22 percent at private for-profit institutions. Those ages 25–34 and those age 35 and older accounted for less than half of the part-time enrollment at public 4-year institutions (28 and 20 percent, respectively), nearly two-thirds of the part-time enrollment at private nonprofit 4-year institutions (29 and 35 percent, respectively), and over three-quarters of the part-time enrollment at private for-profit 4-year institutions (39 percent each).

Of part-time students enrolled at public 2-year institutions in 2013, some 55 percent were young adults, 24 percent were ages 25–34, and 21 percent were age 35 and older. At private nonprofit 2-year institutions, 42 percent of part-time students were young adults, 29 percent were age 25–34, and 28 percent were age 35 and older. At private for-profit 2-year institutions, 35 percent of part-time students were young adults, 36 percent were ages 25–34, and 28 percent were age 35 and older.





# Rounds to zero.

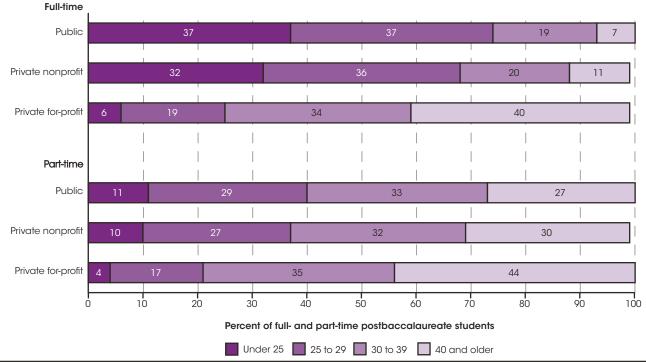
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014,

Enrollment component. See Digest of Education Statistics 2014, table 306.50.

Attendance patterns for undergraduate students at both institutional levels differed by race/ethnicity. Sixty-seven percent of all undergraduate students (full-time and parttime) at private nonprofit 4-year institutions in 2013 were White, which was higher than the percentage of White students at either public 4-year institutions (62 percent) or private for-profit 4-year institutions (48 percent). A higher percentage of the students at private for-profit 4-year institutions were Black (30 percent) than at public 4-year institutions (12 percent) and private nonprofit 4-year institutions (13 percent). A higher percentage of the students at public and private for-profit 4-year institutions were Hispanic (15 percent each) than at private nonprofit 4-year institutions (10 percent). For Asian undergraduate students at 4-year institutions in 2013, the highest percentage attended public institutions (7 percent).

The percentages of both White and Asian undergraduate students at public 2-year institutions (54 and 6 percent, respectively) were higher than the percentages at private nonprofit 2-year institutions (49 and 4 percent, respectively) and at private for-profit 2-year institutions (40 and 4 percent, respectively). In contrast, the percentages of students at private nonprofit and private for-profit 2-year institutions who were Black (28 percent each) were higher than the percentage at public 2-year institutions (15 percent). The percentage of students at private for-profit 2-year institutions who were Hispanic (24 percent) was higher than the percentages at public 2-year institutions (22 percent) and at private nonprofit 2-year institutions (13 percent).





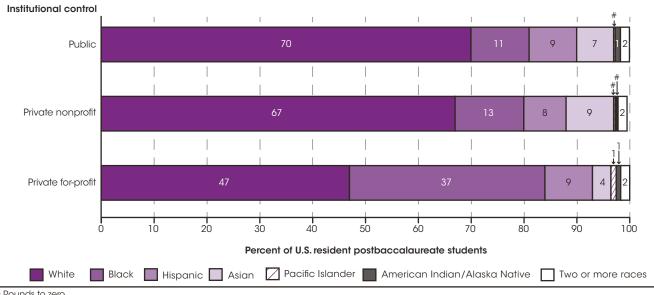
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See Digest of Education Statistics 2014, table 303.50.

In 2013, some 48 percent of graduate students attended public institutions, 42 percent attended private nonprofit institutions, and 10 percent attended private for-profit institutions. In 2013, the majority of full-time graduate students at public institutions were young adults (37 percent) and adults age 25–29 (37 percent); the same was true at private nonprofit institutions (32 percent were young adults and 36 percent were adults age 25–29). In contrast, full-time students at private for-profit institutions were older: 34 percent were age 30–39 and 40 percent were 40 and older. Among part-time graduate students, adults age 30 and older comprised 79 percent of the students at private for-profit institutions, 62 percent at private nonprofit institutions, and 60 percent at public institutions.

#### Chapter: 4/Postsecondary Education Section: Characteristics of Postsecondary Students

#### Figure 5. Percentage distribution of U.S. resident postbaccalaureate enrollment in degree-granting postsecondary institutions, by institutional control and race/ethnicity of student: Fall 2013



# Rounds to zero.

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See Digest of Education Statistics 2014, table 306.50.

Attendance patterns for graduate students also differed by race/ethnicity. At public institutions in 2013, some 70 percent of graduate students were White, compared with 67 percent at private nonprofit institutions and 47 percent at private for-profit institutions. Thirtyseven percent of graduate students at private for-profit institutions were Black, compared with 13 percent at

private nonprofit institutions and 11 percent at public institutions. Hispanics accounted for 9 percent of graduate enrollment at both public and private for-profit institutions and 8 percent at private nonprofit institutions. Asians accounted for 9 percent of graduate enrollment at private nonprofit institutions, 7 percent at public institutions, and 4 percent at private for-profit institutions.

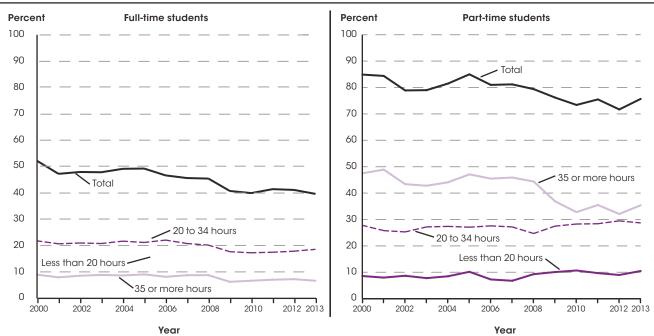


Figure 6. Percentage of 16- to 24-year-old college students who were employed, by attendance status and hours worked per week: October 2000 through October 2013

NOTE: Students were classified as full time if they were taking at least 12 hours of undergraduate classes (or at least 9 hours of graduate classes) during an average school week and as part time if they were taking fewer hours.

SOURČE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2000 through October 2013. See Digest of Education Statistics 2014, table 503.20.

Based on the Current Population Survey, about 40 percent of full-time college students 16 to 24 years old and 76 percent of part-time college students 16 to 24 years old were employed in October 2013. The percentage of students who worked 35 or more hours per week declined from 9 percent in 2000 to 7 percent in 2013 for full-time students and from 47 to 35 percent for part-time students. The percentage of full-time students who worked 20 to 34 hours per week declined from 22 percent in 2000 to 19 percent in 2013, while the percentage of part-time students who worked 20 to 34 hours a week did not measurably change over the same time period. The percentage of full-time students who worked less than 20 hours per week declined from 20 percent in 2000 to 14 percent in 2013, while the percentage of part-time students who worked less than 20 hours a week did not change measurably between 2000 (9 percent) and 2013 (11 percent).

Reference tables: Digest of Education Statistics 2014, tables	Glossary: Degree-granting institutions, Full-time enrollment,
303.50, 303.60, 306.50, and 503.20	Part-time enrollment, Postbaccalaureate enrollment, Private
Related Indicators: Undergraduate Enrollment (indicator 14),	for-profit institution, Private nonprofit institution, Public school
Postbaccalaureate Enrollment (indicator 15), Community	or institution, Undergraduate students
Colleges [The Condition of Education 2008 Special Analysis]	

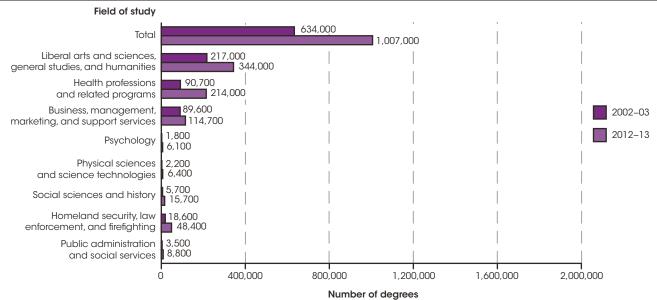
### Indicator 33 Sect Undergraduate Degree Fields

From 2002–03 to 2012–13, the number of associate's degrees awarded increased by 59 percent, from 634,000 to over 1 million, and the number of bachelor's degrees awarded increased by 36 percent, from 1.3 million to 1.8 million.

In academic year 2012–13, over 1 million associate's degrees were awarded by Title IV postsecondary institutions, a decrease of 1 percent from the previous year. Of the associate's degrees awarded in 2012–13, about two-thirds (67 percent) were concentrated in three fields of study: liberal arts and sciences, general studies, and humanities (34 percent); health professions and related programs (21 percent); and business, management,

marketing, and support services (11 percent). These three fields were the largest in 2002–03 and 2011–12 as well. The three fields awarding the next largest percentages of associate's degrees in 2012–13 were homeland security, law enforcement, and firefighting (5 percent); computer and information sciences and support services (4 percent); and engineering technologies and engineering-related fields (3 percent).





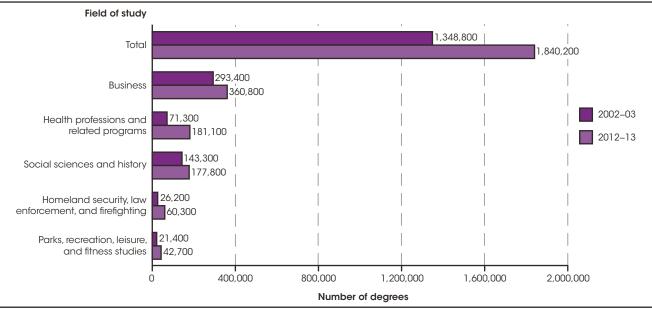
NOTE: The first three fields of study shown were selected because they were the fields in which the largest number of associate's degrees were awarded in 2012–13. The final five fields of study were selected because they were the fields with the largest increases in associate's degrees awarded between 2002–03 and 2012–13. Data are for postsecondary institutions participating in Title IV federal financial aid programs. The new Classification of Instructional Programs was initiated in 2009–10. The estimates for 2002–03 have been reclassified when necessary to make them conform to the new taxonomy. For associate's degrees, "business" includes the business, management, marketing, and related support services field of study. 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 2003 and Fall 2013, Completions component. See *Digest of Education Statistics 2014*, table 321.10.

Between 2002–03 and 2012–13, the number of associate's degrees awarded increased by 373,000 degrees, or 59 percent. Over this time period, the number of associate's degrees awarded in the three largest fields liberal arts and sciences, general studies, and humanities; health professions and related programs; and business management, marketing, and support services—increased by 58 percent, 136 percent, and 28 percent, respectively. Of the 20 largest fields of study in which the most associate's degrees were awarded in 2012–13, the field of psychology had the largest percentage increase over the previous decade (243 percent, from 1,800 to 6,100 degrees). Additionally, the number of associate's degrees awarded more than doubled in the following fields: physical sciences and science technologies increased from 2,200 to 6,400 degrees (190 percent); social sciences and history increased from 5,700 to 15,700 degrees (174 percent); homeland security, law enforcement, and firefighting increased from 18,600 to 48,400 degrees (160 percent); public administration and social services increased from 3,500 to 8,800 degrees (148 percent); and health professions and related programs, mentioned above, increased from 90,700 to 214,000 degrees (136 percent).

For more information, see the Reader's Guide and the Guide to Sources.

#### Figure 2. Number of bachelor's degrees awarded by postsecondary institutions in selected fields of study: Academic years 2002-03 and 2012-13



NOTE: The first three fields of study shown were selected because they were the fields in which the largest number of bachelor's degrees were awarded in 2012–13. The final two fields of study were selected because they were the fields with the largest increases in bachelor's degrees awarded between 2002–03 and 2012–13. Data are for postsecondary institutions participating in Title IV federal financial aid programs. The new Classification of Instructional Programs was initiated in 2009–10. The estimates for 2002–03 have been reclassified when necessary to make them conform to the new taxonomy. For bachelor's degrees, "business," includes the business, management, marketing, and related support services field of study and the personal and culinary services field of study. Some data have been revised from previously published figures.

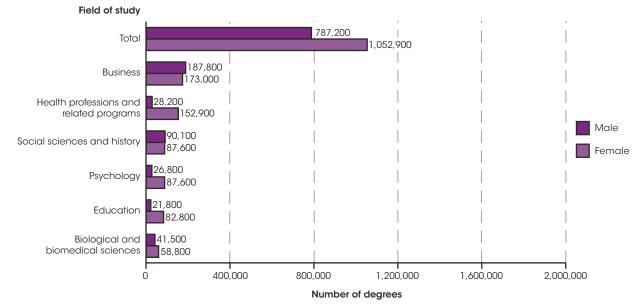
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2003 and Fall 2013, Completions component. See Digest of Education Statistics 2014, table 322.10.

In 2012–13, some 1.8 million bachelor's degrees were awarded by Title IV postsecondary institutions, an increase of 3 percent from 2011–12. The three fields awarding the largest percentages of bachelor's degrees in 2012-13 were: business<sup>1</sup> (20 percent), health professions and related programs (10 percent), and social sciences and history (10 percent). The three fields awarding the next largest percentages of bachelor's degrees in 2012–13 were psychology (6 percent), education (6 percent), and biological and biomedical sciences (5 percent). These six fields awarded the largest percentages of bachelor's degrees in 2011–12 as well. They were also six of the nine fields that awarded the largest percentages of bachelor's degrees in 2002–03 (the other three were visual and performing arts; communication, journalism, and related programs; and engineering).

# **Chapter:** 4/Postsecondary Education **Section:** Programs and Courses

Overall, the number of bachelor's degrees awarded increased by 491,000 degrees from 2002–03 to 2012–13, reflecting an increase of 36 percent. The three largest fields of study—business, health professions and related programs, and social sciences and history—had increases during this period of 23 percent, 154 percent, and 24 percent, respectively. Of the 20 largest fields of study in 2012–13, the largest percentage increases over the previous decade occurred in the following fields: health professions and related programs increased from 71,300 to 181,100 degrees (154 percent); homeland security, law enforcement, and firefighting increased from 26,200 to 60,300 degrees (130 percent); and parks, recreation, leisure, and fitness studies increased from 21,400 to 42,700 degrees (99 percent).





NOTE: The six fields of study shown were selected because they were the fields in which the largest number of bachelor's degrees were awarded in 2012–13. Data are for postsecondary institutions participating in Title IV federal financial aid programs. For bachelor's degrees, "business" includes the business, management, marketing, and related support services field of study and the personal and culinary services field of study. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2013, Completions component. See *Digest of Education Statistics 2014*, tables 322.40 and 322.50.

In 2012–13, about 57 percent of bachelor's degrees, some 1.1 million degrees, were awarded to females. The same percentage of bachelor's degrees was awarded to females in 2011–12 as well. Of the six fields awarding the largest percentages of bachelor's degrees in 2012–13, females were awarded the majority of degrees in the following four fields: health professions and related programs (84 percent of degrees awarded to females), education

(79 percent of degrees awarded to females), psychology (77 percent of degrees awarded to females), and biological and biomedical sciences (59 percent of degrees awarded to females). Males were awarded the majority of degrees in business (52 percent of degrees awarded to males) and social sciences and history (51 percent of degrees awarded to males).

#### **Endnotes:**

<sup>1</sup> For bachelor's degrees, "business" includes the business, management, marketing, and related support services field of study, as well as the personal and culinary services field of study. This differs from associate's degrees, for which "business" does not include the personal and culinary services field of study.

Reference tables: Digest of Education Statistics 2014, tables321.10, 322.10, 322.40, and 322.50InstructionRelated indicators: Annual Earnings of Young Adults(indicator 3), Employment Rates and Unemployment Rates

(indicator 3), Employment Rates and Unemployment Rates by Educational Attainment (indicator 4), Graduate Degree Fields (indicator 34), Degrees Conferred by Public and Private Institutions (indicator 42) **Glossary:** Associate's degree, Bachelor's degree, Classification of Instructional Programs (CIP)

#### For more information, see the Reader's Guide and the Guide to Sources.

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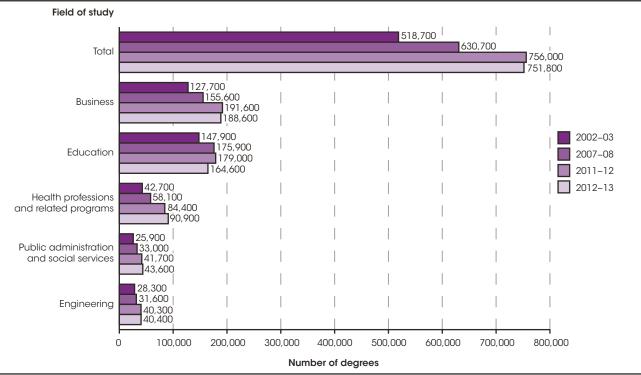
### Indicator 34 Graduate Degree Fields

Between academic years 2002–03 and 2012–13, the number of master's degrees awarded increased by 45 percent, from 519,000 to 752,000, and the number of doctor's degrees awarded increased by 44 percent, from 122,000 to 175,000.

The number of master's degrees awarded by postsecondary institutions decreased by 1 percent between academic years 2011–12 and 2012–13 (from 756,000 to 752,000 degrees). Of the 752,000 master's degrees awarded in 2012–13, nearly half were concentrated in two fields: business (25 percent) and education (22 percent). The three fields awarding the next largest percentages of master's degrees

were health professions and related programs (12 percent), public administration and social services (6 percent), and engineering (5 percent). In addition to being the five largest fields in 2012–13, these same fields awarded the largest percentages of master's degrees in 2002–03 and 2011–12.





NOTE: These five fields were selected because they were the fields in which the largest percentage of master's degrees were awarded in 2012–13. Includes only institutions that participated in Title IV federal financial aid programs. An updated version of the Classification of Instructional Programs was initiated in 2009–10. The estimates for 2002–03 and 2007–08 have been reclassified when necessary to make them conform to the new taxonomy. "Business" includes business, management, marketing, and related support services and personal and culinary services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2003, Fall 2008, Fall 2012, and Fall 2013, Completions component. See *Digest of Education Statistics 2014*, table 323.10.

Between 2002–03 and 2012–13, the number of master's degrees awarded increased by 233,000, reflecting an increase of 45 percent. During this period, the two fields of study awarding the largest percentages of master's degrees in 2012–13, business and education, had increases in degrees awarded of 48 percent and 11 percent, respectively. Between 2011–12 and 2012–13, however, business and education degrees awarded decreased by 2 and 8 percent, respectively. The number of degrees awarded in 2012–13 was higher in each of the 20 largest fields of study than it was a decade earlier. The field of

homeland security, law enforcement, and firefighting exhibited the largest percentage increase in the number of master's degrees awarded between 2002–03 and 2012–13 (from 3,000 to 8,900 degrees, a 200 percent increase). The next largest percentage increase was in the field of parks, recreation, leisure, and fitness studies (from 3,000 to 7,100 degrees, a 140 percent increase). Among these 20 fields, the field of education had the smallest percentage increase in the number of master's degrees between 2002–03 and 2012–13 (from 148,000 to 165,000 degrees, an 11 percent increase).

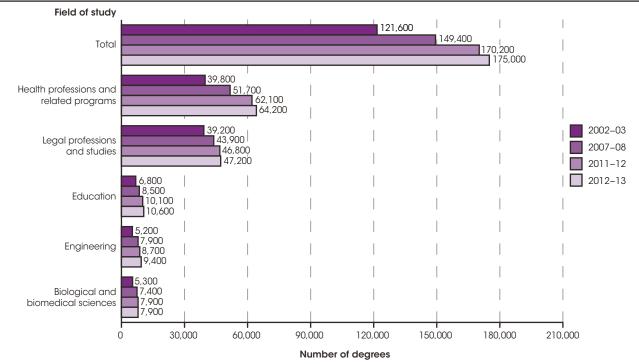
For more information, see the Reader's Guide and the Guide to Sources.

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The number of doctor's degrees awarded by postsecondary institutions increased by 3 percent between 2011–12 and 2012–13 (from 170,000 to 175,000 degrees). The percentages of doctor's degrees awarded in health professions and related programs (37 percent) and legal professions and studies (27 percent) made up almost two-thirds of the 175,000 doctor's degrees awarded

in 2012–13. The three fields awarding the next largest percentages of doctor's degrees in 2012–13 were education (6 percent), engineering (5 percent), and biological and biomedical sciences (5 percent). These were the same five fields in which the largest percentages of doctor's degrees were awarded in 2002–03 and 2011–12.





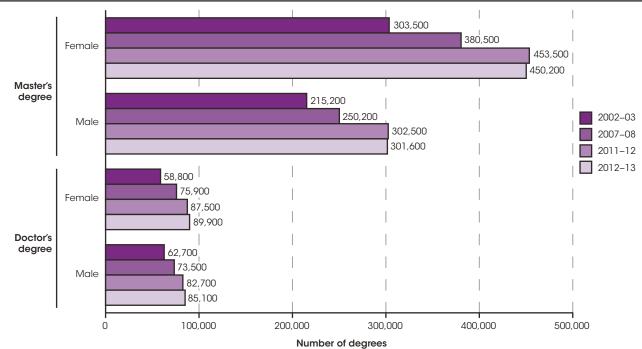
NOTE: These five fields were selected because they were the fields in which the largest percentages of doctor's degrees were awarded in 2012–13. Includes only institutions that participated in Title IV federal financial aid programs. An updated version of the Classification of Instructional Programs was initiated in 2009–10. The estimates for 2002–03 and 2007–08 have been reclassified when necessary to make them conform to the new taxonomy. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2003, Fall 2008, Fall 2012, and Fall 2013, Completions component. See *Digest of Education Statistics 2014*, table 324.10.

Between 2002–03 and 2012–13, the number of doctor's degrees awarded increased from 121,600 to 175,000, reflecting an increase of 44 percent. During this period, the two largest fields of study, health professions and related programs and legal professions and studies, had increases in degrees awarded of 61 percent and 21 percent, respectively. Also, doctor's degree awards were higher in each of the 20 largest fields in 2012–13 than in 2002–03. The field of business had the largest percentage increase in the number of doctor's degrees awarded between 2002–03

and 2012–13 (from 1,300 to 2,800 degrees, a 127 percent increase). The next largest percentage increase was in the field of computer and information sciences (from 800 to 1,800 degrees awarded, a 124 percent increase). Among the largest 20 fields of study, the field of English language and literature/letters had the smallest percentage increase in the number of doctor's degrees awarded between 2002–03 and 2012–13 (from 1,200 to 1,400 degrees, a 10 percent increase).

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NOTE: Includes only institutions that participated in Title IV federal financial aid programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2003, Fall 2008, Fall 2012, and Fall 2013, Completions component. See Digest of Education Statistics 2014, tables 323.20 and 324.20.

Females were awarded more master's degrees than males in 2012–13 (450,000 vs. 302,000 degrees), as well as in 2011–12 and 2002–03. The number of master's degrees awarded to females decreased by 1 percent between academic years 2011–12 and 2012–13 (from 453,000 to 450,000 degrees). The number of master's degrees awarded to males decreased less than one-half of 1 percent between 2011–12 and 2012–13 (from 302,500 to 301,600 degrees). Between 2002–03 and 2012–13, the number of master's degrees awarded to females increased by 147,000, reflecting an increase of 48 percent. Over the same period, the number of master's degrees awarded to males increased by 86,400, reflecting an increase of 40 percent.

Females were awarded more doctor's degrees than males in 2012–13 (89,900 vs. 85,100 degrees), as well as in 2011–12. In contrast, males earned more doctor's degrees than females in 2002–03 (62,700 vs. 58,800 degrees). The numbers of doctor's degrees awarded by postsecondary institutions to females and males both increased by 3 percent between academic years 2011–12 and 2012–13 (from 87,500 to 89,900 degrees for females and from 82,700 to 85,100 degrees for males). Between 2002–03 and 2012–13, the number of doctor's degrees awarded to females increased by 31,100, reflecting an increase of 53 percent. The number of doctor's degrees awarded to males increased by 22,400 over the decade, reflecting an increase of 36 percent.

Reference tables: Digest of Education Statistics 2014, tables	Glossary: Classification of Instructional Programs (CIP),
323.10, 323.20, 324.10, and 324.20	Doctor's degree, Master's degree
Related indicators: Annual Earnings of Young Adults	
(indicator 3), Employment Rates and Unemployment Rates by	
Educational Attainment (indicator 4), Undergraduate Degree	
Fields (indicator 33), Degrees Conferred by Public and Private	

For more information, see the Reader's Guide and the Guide to Sources.

Institutions (indicator 42)

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#### Indicator 35

### **Price of Attending an Undergraduate Institution**

The average net price of attendance (total cost minus grant and scholarship aid) in 2012–13 (in constant 2013–14 dollars) for first-time, full-time students was \$12,890 at public, in-state 4-year institutions, \$24,430 at private nonprofit 4-year institutions, and \$21,740 at private for-profit 4-year institutions.

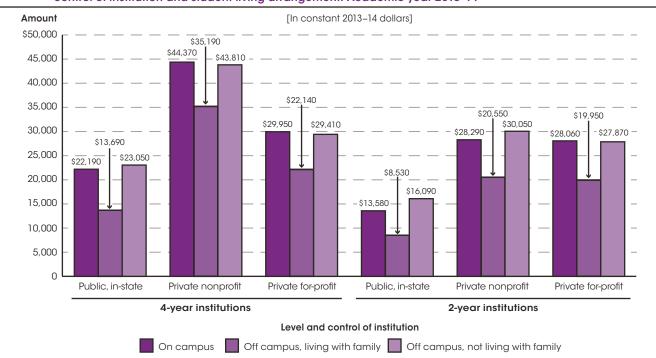


Figure 1. Average total cost of attending degree-granting institutions for first-time, full-time students, by level and control of institution and student living arrangement: Academic year 2013-14

NOTE: The total cost of attending a postsecondary institution is the sum of published tuition and required fees, books and supplies, and the weighted average cost for room, board, and other expenses. Tuition and fees at public institutions are the lower of either in-district or in-state tuition and fees. Excludes students who have already attended another postsecondary institution or who began their studies on a part-time basis. Data illustrating the average total cost of attendance for all students are weighted by the number of students at the institution receiving Title IV aid. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component; and Fall 2013, Institutional Characteristics component. See *Digest of Education Statistics 2014*, table 330.40.

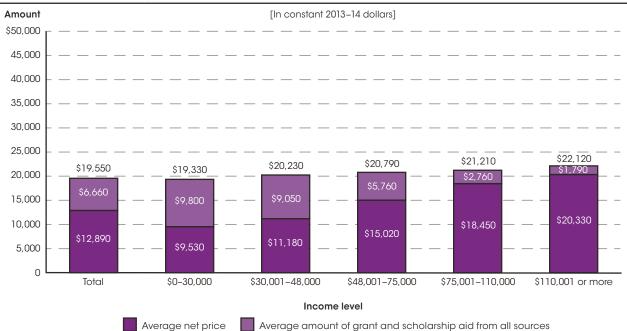
The total cost of attending a postsecondary institution is the sum of published tuition and required fees, books and supplies, and the weighted average cost for room, board, and other expenses. In academic year 2013–14, the total cost of attendance differed by institution level and control, and by student living arrangements. At 4-year institutions, the average total cost of attendance for first-time, full-time students living on campus and paying in-state tuition was \$22,190 at public institutions, \$44,370 at private nonprofit institutions, and \$29,950 at private for-profit institutions. At 2-year institutions, the average total cost of attendance for first-time, full-time

students at public institutions living on campus and paying in-state tuition was \$13,580, and it was \$28,290 at private nonprofit institutions, and \$28,060 at private for-profit institutions. At each institution level and control, the average total cost of attendance was lowest for students living with family. For example, for students paying in-state tuition at public 2-year institutions and living with family, the average total cost of attendance was \$8,530, compared with \$13,580 for students living on campus and \$16,090 for students living off campus but not with family. Many students and their families pay less than the full price of attendance because they receive financial aid to help cover their expenses. The primary types of financial aid are grant and scholarship aid, which do not have to be repaid, and loans, which must be repaid. Grant and scholarship aid may be awarded on the basis of financial need, merit, or both and may include tuition aid from employers. In 2012–13, the average amount of grant and scholarship aid for first-time, full-time students who received Title IV aid was higher for students at private nonprofit institutions than for those at public and private for-profit institutions.<sup>1</sup> For example, students at 4-year private nonprofit institutions received an average of \$18,180, compared with \$6,660 at public institutions and \$5,170 at private for-profit institutions. The 2012-13 average net cost ranged from a low of \$8,510 for students living off campus with their families at public 2-year institutions to a high of \$43,550 for students living on campus at private nonprofit 4-year institutions.

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The net price is the estimate of the actual amount of money that students and their families need to pay in a given year to cover educational expenses. Net price is calculated here as the total cost of attendance minus grant and scholarship aid. Net price provides an indication of what the actual financial burden is upon students and their families. In 2012–13, the average net price for first-time, full-time students who received Title IV aid was lower for students at public institutions than for those at private nonprofit and private for-profit institutions. For example, the average net price of attendance in 2012–13 for first-time, full-time students was \$12,890 at public, in-state 4-year institutions, \$24,430 at private nonprofit 4-year institutions, and \$21,740 at private for-profit 4-year institutions.

Figure 2. Average total price, net price, and grant and scholarship aid for first-time, full-time students paying in-state tuition and receiving aid at public 4-year institutions, by family income level: Academic year 2012-13



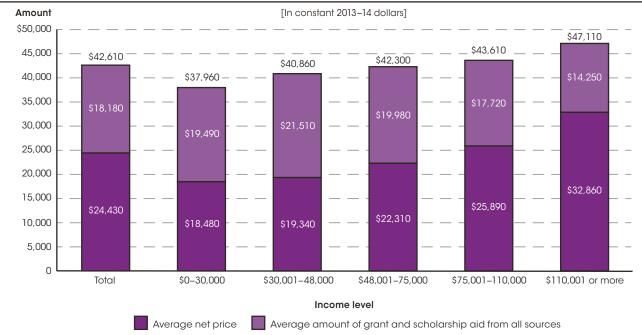
NOTE: Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Includes only first-time, full-time students who paid the in-state or in-district tuition rate and who received Title IV aid. Excludes students who did not receive any Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid; however, the calculation of net price does not take into account student loan aid. Data are weighted by the number of students at the institution receiving Title IV aid. Detail may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See *Digest of Education Statistics 2014*, table 331.30.

The average amount of grant and scholarship aid received and net price paid differed by family income level. In general, the lower the income, the greater the total amount of grant and scholarship aid received. For example, at public 4-year institutions, the average amount of grant and scholarship aid received by firsttime, full-time students paying in-state tuition in 2012–13 was highest for those with incomes of \$30,000 or less (\$9,800 in aid) and lowest for those with incomes of \$110,001 or more (\$1,790 in aid). Accordingly, the lowest average net price (\$9,530) was for those with incomes of \$30,000 or less, and the highest average net price (\$20,330) was for those with incomes of \$110,001 or more.

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NOTE: Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Includes only first-time, full-time students who received Title IV aid. Excludes students who did not receive any Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid; however, the calculation of net price does not take into account student loan aid. Data are weighted by the number of students at the institution receiving Title IV aid. Detail may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See *Digest of Education Statistics 2014*, table 331.30.

As with public 4-year institutions, the pattern of average net price increasing with family income was also observed for private nonprofit 4-year institutions. However, in 2012–13 the average amount of grant and scholarship aid received followed a different pattern. It was highest for those with incomes between \$30,001 and \$48,000 (\$21,510), followed by those with incomes between \$48,001 and \$75,000 (\$19,980), those with incomes of \$30,000 or less (\$19,490), those with incomes between \$75,001 and \$110,000 (\$17,720), and those with incomes of \$110,001 or more (\$14,250).

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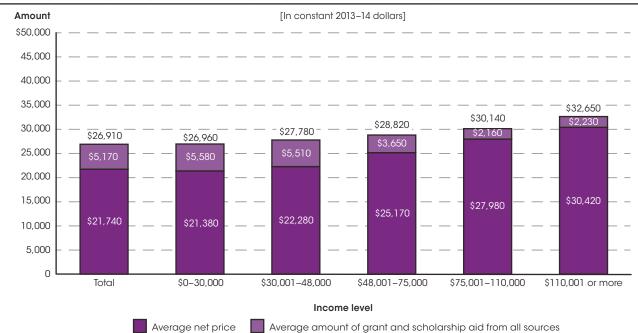


Figure 4. Average total price, net price, and grant and scholarship aid for first-time, full-time students receiving aid at private for-profit 4-year institutions, by family income level: Academic year 2012–13

NOTE: Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Includes only first-time, full-time students who received Title IV aid. Excludes students who did not receive any Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid; however, the calculation of net price does not take into account student loan aid. Data are weighted by the number of students at the institution receiving Title IV aid. Detail may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See Digest of Education Statistics 2014, table 331.30.

At private for-profit 4-year institutions, family income level was also associated with the amount of grant and scholarship aid and with net price. The average amount of grant and scholarship aid received by first-time, full-time students in 2012–13 was highest for those with family incomes of \$30,000 or less (\$5,580), while it was lowest among families with incomes between \$75,001 and \$110,000 (\$2,160) and families with incomes of \$110,001 or more (\$2,230). The lowest average net price was for those with incomes of \$30,000 or less (\$21,380), and the highest average net price was for those with incomes of \$110,001 or more (\$30,420).

In addition to the differences observed for each institution type by family income level, the average amount of grant and scholarship aid received and the average net price of attendance also varied by institution control.

#### At each family income level, the average amount of grant and scholarship aid was highest for students at private nonprofit institutions and generally lowest for students at private for-profit institutions; the average net price was generally highest for students at private for-profit institutions and lowest for students paying in-state tuition at public institutions. For example, the average amount of grant and scholarship aid received by students attending 4-year institutions with family incomes between \$30,001 and \$48,000 was highest at private nonprofit institutions (\$21,510), followed by public, in-state institutions (\$9,050), and private for-profit institutions (\$5,510). The average net price of attending a 4-year private for-profit institution (\$22,280) at this income level was higher than the price of attending a private nonprofit (\$19,340) or a public institution (\$11,180).

#### **Endnotes:**

<sup>1</sup> Average net cost, grant and scholarship aid, and net price amounts are calculated in constant 2013–14 dollars.

**Reference tables:** *Digest of Education Statistics 2014*, tables 330.40 and 331.30

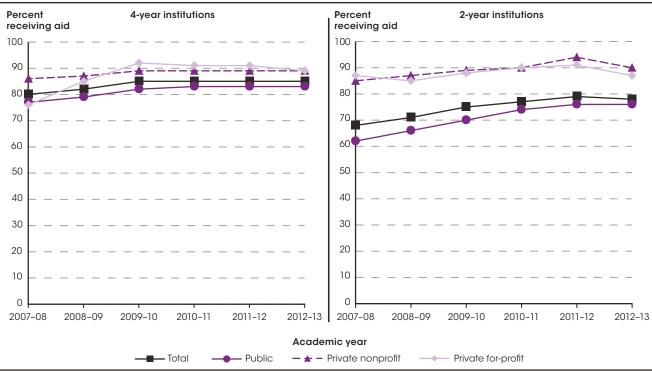
**Related indicators:** Grants and Loan Aid to Undergraduate Students (indicator 36), Student Loan Volume and Default Rates (indicator 40), Financing Postsecondary Education in the United States [*The Condition of Education 2013 Spotlight*] **Glossary:** Financial aid, Private institution, Public school or institution, Tuition and fees

#### Indicator 36

### Grants and Loan Aid to Undergraduate Students

The percentage of first-time, full-time undergraduate students at 4-year degreegranting institutions receiving financial aid increased from 80 percent in 2007–08 to 85 percent in 2012–13.

Grants and loans are the major forms of federal financial aid for degree/certificate-seeking undergraduate students. The largest federal grant program available to undergraduate students is the Pell Grant program. In order to qualify for a Pell Grant, a student must demonstrate financial need. Federal loans, on the other hand, are available to all students. In addition to federal financial aid, there are also grants from state and local governments, institutions, and private sources, as well as private loans. In this indicator, student loans include only loans made directly to students; they do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.





NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Some data have been revised from previously published figures. Student financial aid includes any Federal Work-Study, Ioans to students, or grant or scholarship aid from the federal government, state/local government, the institution, or other sources known to the institution. Student loans include only loans made directly to students; they do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2009

through Spring 2011 and Winter 2011-12 through Winter 2013-14, Student Financial Aid component. See Digest of Education Statistics 2014, table 331.20.

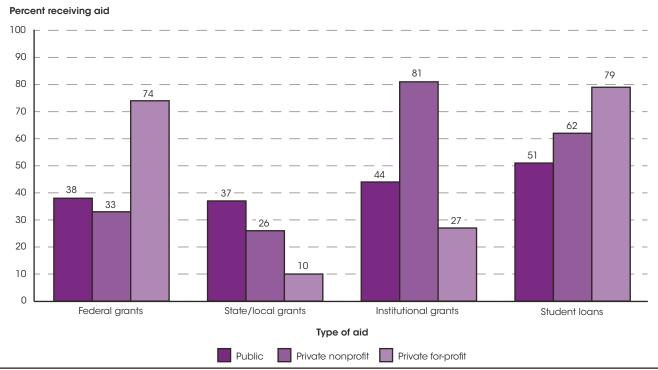
From academic years 2007–08 to 2012–13, the percentage of first-time, full-time degree/certificateseeking undergraduate students at 4-year degree-granting institutions receiving any financial aid increased from 80 to 85 percent. During this time, the percentage of students receiving aid at 4-year private nonprofit institutions increased from 86 to 89 percent, and the percentage of students at 4-year public institutions increased from 77 to 83 percent. The percentage of students receiving aid at 4-year private for-profit institutions was 76 percent in 2007–08 and 89 percent in 2012–13, a difference of 13 percentage points.

For 2-year institutions, the percentage of first-time, fulltime degree/certificate-seeking undergraduate students receiving any financial aid increased from 68 percent in 2007–08 to 78 percent in 2012–13. Showing no significant change, the percentage of students receiving aid at 2-year private for-profit institutions was 87 percent

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in both 2007–08 and 2012–13. The percentage of students receiving aid at 2-year private nonprofit institutions increased from 85 to 90 percent and the percentage of students receiving aid at 2-year public institutions increased from 62 to 76 percent.





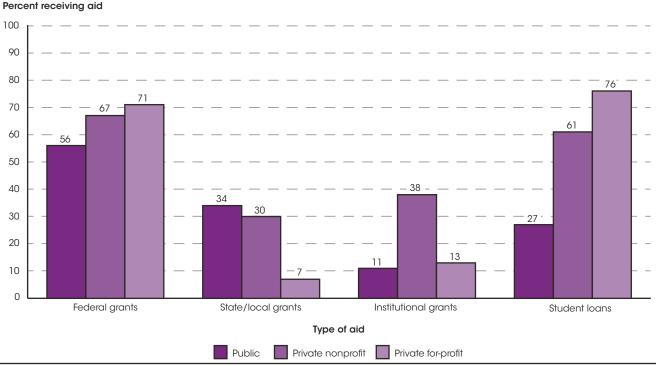
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Student financial aid includes any Federal Work-Study, loans to students, or grant or scholarship aid from the federal government, state/local government, the institution, or other sources known to the institution. Student loans include only loans made directly to students; they do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See Digest of Education Statistics 2014, table 331.20.

In 2012–13, the percentage of first-time, full-time degree/ certificate-seeking undergraduate students receiving federal grants at 4-year institutions was highest at private for-profit institutions (74 percent), compared with lower percentages at public (38 percent) and private nonprofit institutions (33 percent). The percentage of students at 4-year institutions receiving state or local grants was highest at public institutions (37 percent), followed by the percentage at private nonprofit institutions (26 percent) and the percentage at private for-profit institutions (10 percent). The percentage of students receiving institutional grants was highest at 4-year private nonprofit institutions (81 percent), followed by public institutions (44 percent) and private for-profit institutions (27 percent). The percentage of students at 4-year institutions receiving student loan aid was highest at private for-profit institutions (79 percent). In comparison, 62 percent of students at private nonprofit institutions and 51 percent of students at public institutions received student loan aid.

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### Figure 3. Percentage of first-time, full-time undergraduate students receiving financial aid at 2-year degree-granting postsecondary institutions, by type of aid and control of institution: Academic year 2012-13



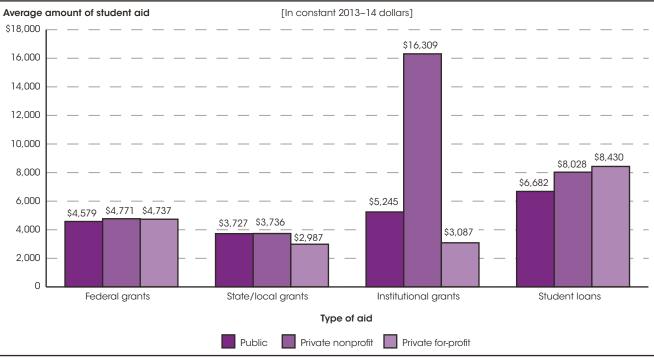
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Student financial aid includes any Federal Work-Study, loans to students, or grant or scholarship aid from the federal government, state/local government, the institution, or other sources known to the institution. Student loans include only loans made directly to students; they do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See Digest of Education Statistics 2014, table 331.20.

For first-time, full-time degree/certificate-seeking undergraduate students at 2-year institutions in 2012–13, the percentage of students receiving federal grants was highest at private for-profit institutions (71 percent), compared with the percentage at private nonprofit institutions (67 percent) and at public institutions (56 percent). A higher percentage of students at 2-year public institutions (34 percent) received state or local grants than students at 2-year private nonprofit institutions (30 percent) or 2-year private for-profit institutions (7 percent). About 38 percent of students at 2-year private nonprofit institutions received institutional grants, compared with 13 percent of students at private for-profit institutions and 11 percent of students at public institutions. The percentage of students at 2-year institutions receiving student loan aid was highest at private for-profit institutions (76 percent), compared with private nonprofit institutions (61 percent) and public institutions (27 percent).

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#### Figure 4. Average amount of student financial aid awarded to first-time, full-time undergraduate students receiving aid at 4-year degree-granting postsecondary institutions, by type of financial aid and control of institution: Academic year 2012-13



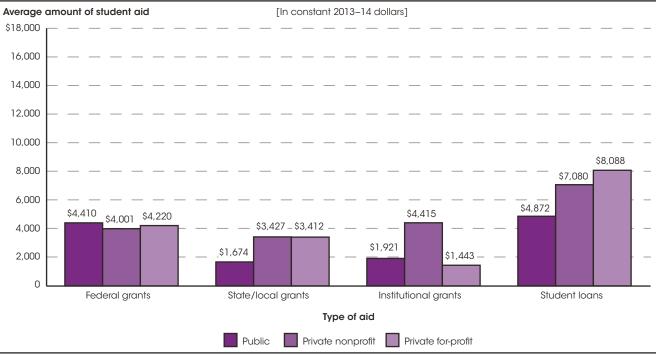
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Grant award amounts are in constant 2013–14 dollars, based on the Consumer Price Index (CPI). Student loans include only loans made directly to students; they do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See *Digest of Education Statistics 2014*, table 331.20.

There were substantial variations in the average amounts of federal, state/local, and institutional grant aid that students received at different types of 4-year institutions in 2012–13 reported in constant 2013–14 dollars. The average federal grant was \$4,771 for first-time, full-time students at private nonprofit institutions, \$4,737 at private for-profit institutions, and \$4,579 at public institutions. The average state or local grant was \$3,736 at private nonprofit institutions, \$3,727 at public institutions, and \$2,987 at private for-profit institutions. There were larger differences in the average institutional grant awards by institution type. The average institutional grant award was higher at private nonprofit institutions (\$16,309) than at public institutions (\$5,245) or private for-profit institutions (\$3,087). The average student loan amount was higher at private for-profit (\$8,430) and private nonprofit (\$8,028) institutions than at public institutions (\$6,682).

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# Figure 5. Average amount of student financial aid awarded to first-time, full-time undergraduate students receiving aid at 2-year degree-granting postsecondary institutions, by type of financial aid and control of institution: Academic year 2012-13



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Grant award amounts are in constant 2013–14 dollars, based on the Consumer Price Index (CPI). Student loans include only loans made directly to students; they do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2013–14, Student Financial Aid component. See *Digest of Education Statistics 2014*, table 331.20.

There were also notable variations in the average amounts of grant aid received by students at different types of 2-year institutions in 2012–13 reported in constant 2013–14 dollars. The average federal grant was \$4,410 for first-time, full-time students at public institutions, \$4,220 for those at private for-profit institutions, and \$4,001 for those at private nonprofit institutions. The average state or local grant award was \$3,427 at 2-year private nonprofit institutions, \$3,412 at private for-profit institutions, and \$1,674 at public institutions. The average institutional grant award was higher at private nonprofit institutions (\$4,415) than at public institutions (\$1,921) or at private for-profit institutions (\$1,443). Similar to 4-year institutions, the average student loan amount at 2-year institutions in 2012–13 was higher at private for-profit (\$8,088) and nonprofit (\$7,080) institutions than at public institutions (\$4,872).

**Reference tables:** *Digest of Education Statistics 2014*, table 331.20

**Related indicators:** Price of Attending an Undergraduate Institution (indicator 35), Student Loan Volume and Default Rates (indicator 40), Financing Postsecondary Education in the United States [*The Condition of Education 2013 Spotlight*] **Glossary:** Financial aid, Higher education institutions, Private institution, Public school or institution, Undergraduate students

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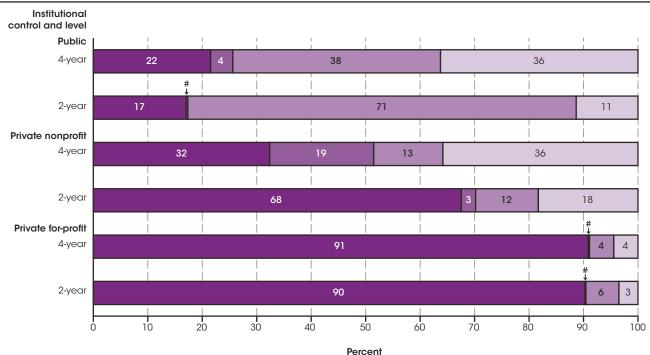
### Indicator 37

## **Postsecondary Revenues by Source**

Between 2007–08 and 2012–13, revenues from tuition and fees per fulltime-equivalent (FTE) student increased by 17 percent at public institutions (from \$5,478 to \$6,415, in constant 2013–14 dollars) and by 7 percent at private nonprofit institutions (from \$18,550 to \$19,866). At private for-profit institutions, revenues from tuition and fees were 7 percent higher in 2012–13 than in 2007–08 (\$16,135 vs. \$15,110).

In academic year 2012–13, total revenues at degreegranting postsecondary institutions, in current dollars, were \$328 billion at public institutions, \$202 billion at private nonprofit institutions, and \$25 billion at private for-profit institutions. At public institutions, the largest percentage of total revenues, some 44 percent, came from government sources (which include federal, state, and local government grants, contracts, and appropriations). At private nonprofit institutions and private for-profit institutions, student tuition and fees constituted the largest percentage of total revenues (32 and 91 percent, respectively). It is important to note that Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and fees and auxiliary enterprise revenues at private nonprofit and private for-profit institutions. Thus, revenue data are not comparable across these categories.

Figure 1. Percentage distribution of total revenues at degree-granting postsecondary institutions, by institutional control, level, and source of funds: 2012-13



# Rounds to zero.

NOTE: Percentages are based on current 2013–14 dollars. Government grants, contracts, and appropriations include revenues from federal, state, and local governments. All other revenue includes gifts, capital or private grants and contracts, auxiliary enterprises, and other revenue. Revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and auxiliary enterprise revenues at private programs. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Finance component. See *Digest of Education Statistics 2014*, tables 333.10, 333.40, and 333.55.

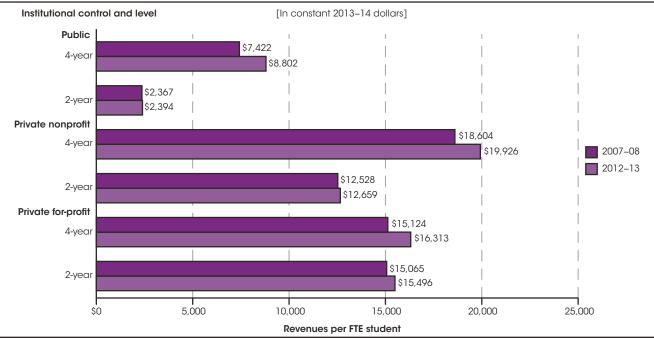
There were general patterns in the primary sources of revenues across institutional levels (i.e., between 2-year and 4-year institutions), but there were notable differences in the percentages from these revenue sources. For example, revenues from government sources were the largest source of revenue at both 4-year and 2-year public institutions (38 and 71 percent, respectively). Revenues from tuition and fees were the largest source

of revenue for both 4-year and 2-year private nonprofit institutions (32 and 68 percent, respectively) and both 4-year and 2-year private for-profit institutions (91 and 90 percent, respectively). Investment returns or investment income varied by institutional control and level. Revenues from these investments accounted for 19 percent of total revenues at 4-year private nonprofit

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institutions in 2012–13, compared with 4 percent of total revenues at 4-year public institutions, and 3 percent at 2-year private nonprofit institutions. Investment income accounted for less than half of 1 percent of total revenues for other types of 4-year and 2-year degree-granting postsecondary institutions.

Figure 2. Revenues from tuition and fees per full-time-equivalent (FTE) student for degree-granting postsecondary institutions, by institutional control and level: 2007-08 and 2012-13



NOTE: Full-time-equivalent (FTE) student includes full-time students plus the full-time equivalent of part-time students. Revenues per FTE student are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI) adjusted to a school-year basis. Revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and auxiliary enterprise revenues at private nonprofit and private for-profit institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2008 and Spring 2013, Enrollment component; and Spring 2009 and Spring 2014, Finance component. See *Digest of Education Statistics 2014*, tables 333.10, 333.40, and 333.55.

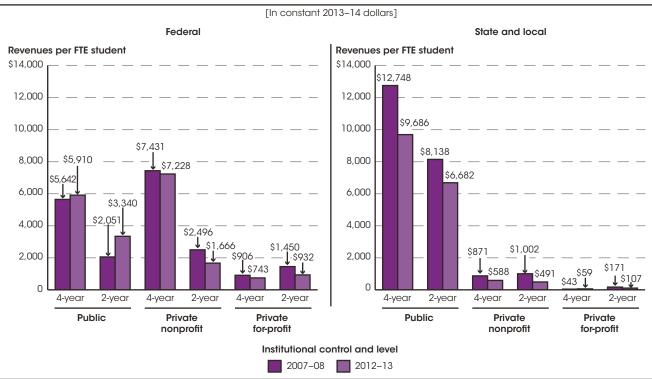
Between 2007–08 and 2012–13, the percentage change in revenues from tuition and fees per full-time-equivalent (FTE) student varied by institutional control and level. Revenues per FTE student are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI). During this period, revenues from tuition and fees per FTE student increased by 17 percent at public institutions (from \$5,478 to \$6,415) and by 7 percent at private nonprofit institutions (from \$18,550 to \$19,866). At private for-profit institutions, revenues from tuition and fees were 7 percent higher in 2012–13 than in 2007-08 (\$16,135 vs. \$15,110). At public institutions, revenues from tuition and fees per FTE student at 4-year institutions were 19 percent higher in 2012-13 than in 2007-08 (\$8,802 vs. \$7,422), and they were 1 percent higher at 2-year institutions (\$2,394 vs. \$2,367). At private nonprofit institutions, revenues from tuition and fees per FTE student were 7 percent higher at 4-year institutions (\$19,926 vs. \$18,604), while revenues were 1 percent higher at 2-year institutions (\$12,659 vs. \$12,528). At private for-profit institutions, revenues from

tuition and fees per FTE student at 4-year institutions were 8 percent higher in 2012–13 than they were in 2007–08 (\$16,313 vs. \$15,124), and they were 3 percent higher at 2-year institutions (\$15,496 vs. \$15,065).

At public institutions, revenues from tuition and fees were 42 percent higher in 2012–13 than in 2007–08, whereas revenues from government sources were 7 percent higher. As a result, the percentage of revenues from tuition and fees was higher in 2012–13 (21 percent) than in 2007–08 (18 percent), and the percentage of revenues from government sources was lower in 2012–13 (44 percent) than in 2007–08 (49 percent).

Revenues per FTE student from all government sources at public institutions decreased by 11 percent from 2007–08 to 2012–13 (from \$15,237 to \$13,520). In 2012–13, revenues per FTE student from all government sources were 6 percent lower than in 2007–08 at private nonprofit institutions (\$7,769 vs. \$8,259) and were 23 percent lower at private for-profit institutions (\$853 vs \$1,107).

# Figure 3. Revenues from government grants, contracts, and appropriations per full-time-equivalent (FTE) student for degree-granting postsecondary institutions, by source of funds and institutional control and level: 2007-08 and 2012-13



NOTE: Full-time-equivalent (FTE) student includes full-time students plus the full-time equivalent of part-time students. Revenues per FTE student are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI) adjusted to a school-year basis. Revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and auxiliary enterprise revenues at private nonprofit and private for-profit institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2008 and Spring 2013, Enrollment component; and Spring 2009 and Spring 2014, Finance component. See *Digest of Education Statistics 2014*, tables 333.10, 333.40, and 333.55.

The percentage change between 2007–08 and 2012–13 in state and local government revenues per FTE student varied by institutional control and level. During this period, revenues per FTE student from state and local sources decreased by 24 percent at 4-year public institutions (from \$12,748 to \$9,686), 18 percent at 2-year public institutions (from \$8,138 to \$6,682), 32 percent at 4-year private nonprofit institutions (from \$871 to \$588), 51 percent at 2-year private nonprofit institutions (from \$1,002 to \$491), and 38 percent at private for-profit 2-year institutions (from \$171 to \$107). State and local revenues per FTE student were 37 percent higher in 2012–13 than in 2007–08 at 4-year private for-profit institutions (\$59 vs. \$43); however, the amounts remained relatively small.

Revenues from federal sources have shown varying patterns of change between 2007–08 and 2012–13 across degree-granting postsecondary institutions. At public institutions, federal revenues per FTE student

were 16 percent higher in 2012–13 than in 2007–08 (\$4,953 vs. \$4,261). Federal funding per FTE student was 5 percent higher in 2012–13 than in 2007–08 at 4-year public institutions (\$5,910 vs. \$5,642) and increased by 63 percent at 2-year public institutions (from \$2,051 to \$3,340). Compared with 2007–08, revenues per FTE student from federal sources in 2012–13 were 3 percent lower at private nonprofit institutions (\$7,387 vs. \$7,182). At 4-year private nonprofit institutions, federal revenues were 3 percent lower in 2012–13 than in 2007–08 (\$7,228 vs. \$7,431); at 2-year private nonprofit institutions, federal revenues were 33 percent lower (\$1,666 vs. \$2,496). Revenues per FTE student from federal sources at private for-profit institutions were 24 percent lower in 2012-13 than in 2007-08 (\$784 vs. \$1,034). At 4-year private for-profit institutions, federal revenues were 18 percent lower in 2012–13 than in 2007–08 (\$743 vs. \$906); at 2-year private for-profit institutions, federal revenues were 36 percent lower (\$932 vs. \$1,450).

**Reference tables:** *Digest of Education Statistics 2014*, tables 333.10, 333.40, and 333.55

**Related indicators:** Expenses of Postsecondary Institutions (indicator 38)

**Glossary:** Consumer Price Index (CPI), Full-time-equivalent (FTE) enrollment, Private for-profit institution, Private institution, Private nonprofit institution, Public school or institution, Revenue, Tuition and fees

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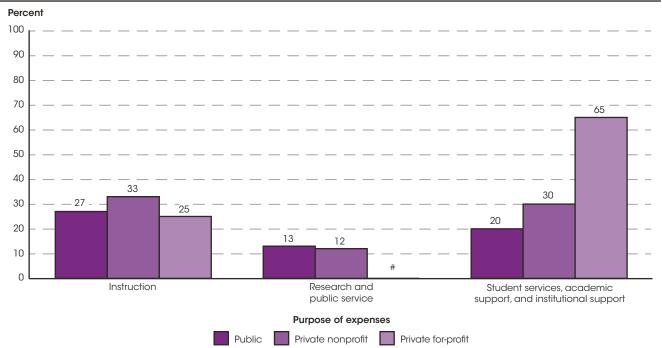
### Indicator 38

## **Expenses of Postsecondary Institutions**

In 2012–13, instruction expenses per full-time-equivalent (FTE) student were \$7,814 (in constant 2013–14 dollars) at public institutions, \$16,432 at private nonprofit institutions, and \$3,893 at private for-profit institutions. Instruction was the largest expense category at public and private nonprofit institutions and the second largest expense category at private for-profit institutions.

In academic year 2012–13, postsecondary institutions spent \$499 billion (in current dollars). Total expenses were \$311 billion at public institutions, \$166 billion at private nonprofit institutions, and \$22 billion at private for-profit institutions. Some data may not be comparable across institutions by control categories because of differences in accounting standards. Comparisons by institutional level (i.e., between 2-year and 4-year institutions) may also be limited because of different institutional missions. Two-year institutions tend to have limited instructional missions focused on student instruction and related activities that do not extend beyond providing a range of career-oriented programs at the certificate and associate degree levels, and preparing students for transfer to 4-year institutions. Four-year institutions tend to have broader instructional missions that may include a range of programs at the undergraduate level, as well as more specialized graduate and professional programs. In addition, research activities, on-campus student housing, teaching hospitals, and auxiliary enterprises can have a substantial impact on the financial structure of 4-year colleges and universities. Expenses are grouped into broad categories, including salaries and wages, research, public service, academic support, student services, institutional support, operation and maintenance of plant, depreciation, scholarships and fellowships, auxiliary enterprises, hospitals, independent operations, interest, and other.





# Rounds to zero.

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Finance component. See *Digest of Education Statistics 2014*, tables 334.10, 334.30, and 334.50.

Instruction, including faculty salaries and benefits, is the largest single expense category at public and private nonprofit postsecondary institutions and the second largest category at private for-profit institutions. At public institutions in 2012–13, some 27 percent of total expenses were spent on instruction, compared with 33 percent at private nonprofit institutions and 25 percent at private for-profit institutions. The largest expense category

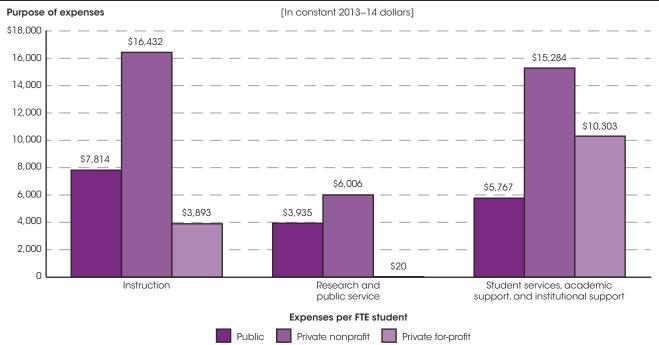
(65 percent) at private for-profit institutions in that year was for the combined expenditures of student services, academic support, and institutional support, which includes expenses associated with admissions, student activities, libraries, and administrative and executive activities. By comparison, student services, academic support, and institutional support made up 20 percent of total expenses at public institutions and 30 percent of total expenses at private nonprofit institutions. Other large categories of expenses at public institutions (i.e., those accounting for 8–11 percent of expenses) included hospitals, research, and institutional support. At private nonprofit institutions, some of the large categories (i.e., those accounting for 8–14 percent of expenses) were institutional support, research, hospitals, auxiliary

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enterprises (i.e., self-supporting operations, such as residence halls), academic support, and student services.

In 2012–13, across all types of postsecondary institutional control, 2-year institutions spent a greater share of their total expenses on instruction than did 4-year institutions. The percentage of total expenses at public institutions for instruction was 35 percent at 2-year institutions, compared with 25 percent at 4-year institutions. At private nonprofit institutions, instruction accounted for 36 percent of total expenses at 2-year institutions and 33 percent at 4-year institutions; at private for-profit institutions, the percentages of total expenses for instruction at 2-year and 4-year institutions were 30 and 23 percent, respectively.

Figure 2. Expenses per full-time-equivalent (FTE) student at degree-granting postsecondary institutions, by purpose of expenses and control of institution: 2012–13



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Full-time-equivalent (FTE) students include full-time students plus the full-time equivalent of part-time students. Expenses per FTE student are reported in constant 2013-14 dollars, based on the Consumer Price Index.

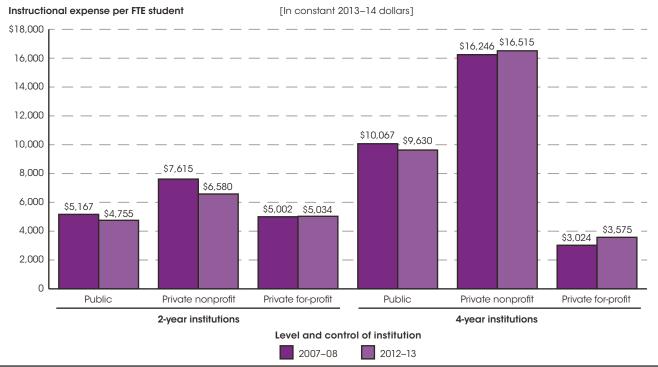
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Enrollment component; and Spring 2014, Finance component. See *Digest of Education Statistics 2014*, tables 334.10, 334.30, and 334.50.

In 2012–13, total expenses per full-time-equivalent (FTE) student were much higher at private nonprofit postsecondary institutions (\$50,145) than at public institutions (\$29,338) and private for-profit institutions (\$15,745). Expenses per FTE student are reported here in constant 2013–14 dollars, based on the Consumer Price Index (CPI). Private nonprofit institutions spent more than twice as much per student on instruction (\$16,432) than did public institutions (\$7,814). Similarly, for the combined expenditures of student services, academic support, and institutional support a total of \$15,284 was spent at private nonprofit institutions versus \$5,767

spent at public institutions. Expenses per FTE student for research and public service, such as expenses for public broadcasting and community services, followed the same pattern, with private nonprofit institutions spending more than public institutions (\$6,006 vs. \$3,935). Expenses per FTE student for instruction were more than twice as high at public institutions as at private for-profit institutions (\$7,814 vs. \$3,893), but expenses per FTE student for student services, academic support, and institutional support were higher at private for-profit institutions (\$10,303) than at public institutions (\$5,767).

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## Figure 3. Expenses per full-time-equivalent (FTE) student for instruction at 2-year and 4-year degree-granting postsecondary institutions, by level and control of institution: 2007–08 and 2012–13



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Full-time-equivalent (FTE) students include full-time students plus the full-time equivalent of part-time students. Expenses per FTE student are reported in constant 2013-14 dollars, based on the Consumer Price Index.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2008 and Spring 2013, Enrollment component; and Spring 2009 and Spring 2014, Finance component. See *Digest of Education Statistics 2014*, tables 334.10, 334.30, and 334.50.

Changes in expenses per FTE student for instruction, after adjusting for inflation, varied between 2007–08 and 2012–13 at the different postsecondary institution types. At public 4-year institutions, instruction expenses per FTE student were 4 percent lower in 2012–13 (\$9,630) than they were in 2007–08 (\$10,067), and at public 2-year institutions, these expenses were 8 percent lower in 2012–13 (\$4,755) than in 2007–08 (\$5,167). At private nonprofit institutions, instruction expenses per FTE

student in 2012–13 were 2 percent higher than they were in 2007–08 for 4-year institutions (\$16,515 vs. \$16,246), but they were 14 percent lower for 2-year institutions (\$6,580 vs. \$7,615). At private for-profit institutions, instruction expenses in 2012–13 were 18 percent higher than they were in 2007–08 for 4-year institutions (\$3,575 vs. \$3,024) and 1 percent higher for 2-year institutions (\$5,034 vs. \$5,002).

<b>Reference tables:</b> <i>Digest of Education Statistics 2014</i> , tables	Glossary: Consumer Price Index (CPI), Full-time-equivalent
334.10, 334.30, and 334.50	(FTE) enrollment, Private institution, Public school or
Related indicators: Postsecondary Revenues by Source	institution, Revenue, Tuition and fees
(indicator 37)	

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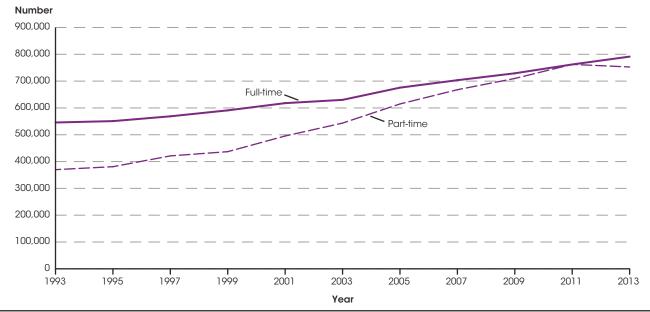
### Indicator 39

## **Characteristics of Postsecondary Faculty**

From fall 1993 to fall 2013, the number of full-time faculty in degree-granting postsecondary institutions increased by 45 percent (from 545,700 to 791,400), while the number of part-time faculty increased by 104 percent (from 369,800 to 752,700). As a result of the faster increase in the number of part-time faculty, the percentage of faculty who were part time increased from 40 to 49 percent during this period.

In fall 2013, there were 1.5 million faculty in degreegranting postsecondary institutions: 51 percent were full-time and 49 percent were part-time. Faculty include professors, associate professors, assistant professors, instructors, lecturers, assisting professors, adjunct professors, and interim professors.





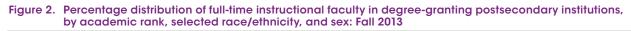
NOTE: Includes faculty members with the title of professor, associate professor, assistant professor, instructor, lecturer, assisting professor, adjunct professor, or interim professor (or the equivalent). Excludes graduate students with titles such as graduate or teaching fellow who assist senior faculty. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Beginning in 2007, data include institutions with fewer than 15 full-time employees; these institutions did not report staff data prior to 2007.

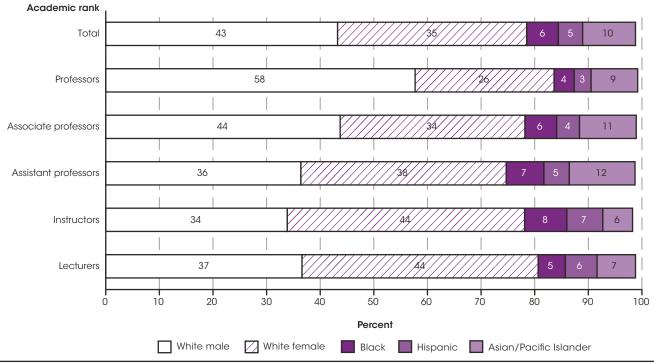
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Staff Survey" (IPEDS-S:93-99); IPEDS Winter 2001-02 through Winter 2011-12, Human Resources component, Fall Staff section; IPEDS Spring 2014, Human Resources component, Fall Staff section; See Digest of Education Statistics 2014, table 315.10.

From fall 1993 to fall 2013, the total number of faculty in degree-granting postsecondary institutions increased by 69 percent. The number of full-time faculty increased by 45 percent (from 545,700 to 791,400) over this time period, compared with an increase of 104 percent (from 369,800 to 752,700) in the number of part-time faculty. As a result of the faster increase in the number of parttime faculty, the percentage of faculty who were part time increased from 40 to 49 percent during this period. Additionally, the percentage of all faculty who were female increased from 39 percent in 1993 to 49 percent in 2013.

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Although the number of faculty increased at institutions of each control type from fall 1993 to fall 2013, the percentage increases in faculty were smaller for public institutions and private nonprofit institutions than for private for-profit institutions. During this period, the number of faculty increased by 49 percent (from 650,400 to 967,700) at public institutions, by 77 percent (from 254,100 to 448,700) at private nonprofit institutions, and by 1,070 percent (from 10,900 to 127,600) at private for-profit institutions. Despite the faster growth in the number of faculty at private for-profit institutions over this period, only 8 percent of all faculty were employed by private for-profit institutions in 2013, while 63 percent were employed by public institutions and 29 percent by private nonprofit institutions.

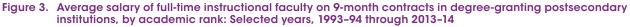


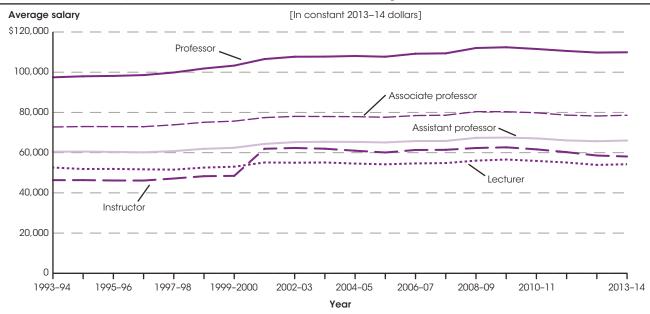


NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Estimates are based on full-time faculty whose race/ethnicity was known. Detail may not sum to 100 percent because data on some racial/ethnic groups are not shown. 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), IPEDS Spring 2014, Human Resources component, Fall Staff section. See *Digest of Education Statistics 2014*, table 315.20.

In fall 2013, of all full-time faculty in degree-granting postsecondary institutions, 79 percent were White (43 percent were White males and 35 percent were White females), 6 percent were Black, 5 percent were Hispanic, and 10 percent were Asian/Pacific Islander.<sup>1</sup> Making up less than 1 percent each were full-time faculty who were American Indian/Alaska Native and of Two or more races. Among full-time professors, 84 percent were White (58 percent were White males and 26 percent were White females), 4 percent were Black, 3 percent were Hispanic, and 9 percent were Asian/Pacific Islander. Making up less than 1 percent each were professors who were American Indian/Alaska Native and of Two or more races.





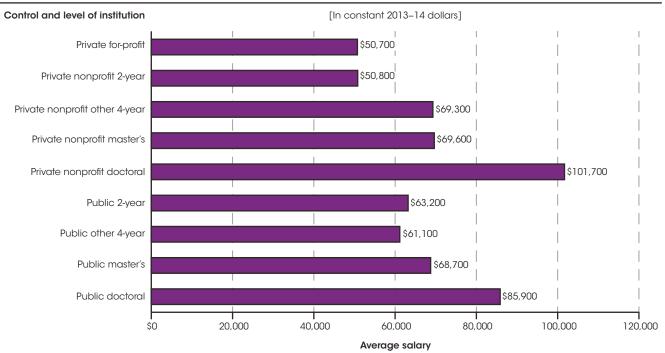
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Data through 1995–96 are for institutions of higher education, while later data are for degree-granting institutions. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Beginning in 2007, data include institutions with fewer than 15 full-time employees; these institutions did not report staff data prior to 2007. Salaries are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI). 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), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA:93–99); and IPEDS Winter 2001–02 through Winter 2011–12, Spring 2013, and Spring 2014, Human Resources component, Salaries section. See *Digest of Education Statistics 2014*, table 316.10.

In academic year 2013–14, the average salary for full-time instructional faculty on 9-month contracts at degreegranting postsecondary institutions was \$78,600; average salaries ranged from \$54,200 for lecturers to \$109,900 for professors. The average salary (adjusted for inflation) for all full-time instructional faculty increased by 9 percent from 1993-94 (\$74,500) to 2009-10 (\$80,900), but decreased by 3 percent from 2009-10 to 2013-14 (\$78,600). A similar pattern was observed for individual academic ranks. The increases between 1993-94 and 2009-10 were 15 percent for professors (from \$97,500 to \$112,400), 10 percent for associate professors (from \$72,800 to \$80,400), 12 percent for assistant professors (from \$60,500 to \$67,500), 35 percent for instructors (from \$46,300 to \$62,700), and 8 percent for lecturers (from \$52,600 to \$56,600). From 2009-10 to 2013-14,

average inflation-adjusted salaries across academic ranks exhibited decreases ranging from 2 to 7 percent.

The average salary for all full-time instructional faculty was higher for males than for females in all years between 1993–94 and 2013–14. In academic year 2013–14, the average salary was \$85,500 for males and \$70,400 for females. Between 1993–94 and 2013–14, the average salary increased by 7 percent for males and by 9 percent for females, after adjusting for inflation. Due to the faster increase in salary for females, the inflation-adjusted salary gap between male and female instructional faculty overall was slightly lower in 2013–14 than in 1993–94 (\$15,200 vs. \$15,300). The male-female gap for professors, however, was higher in 2013–14 than in 1993–94 (\$17,400 vs. \$11,400).

## Figure 4. Average salary of full-time instructional faculty on 9-month contracts in degree-granting postsecondary institutions, by control and level of institution: 2013-14



NOTE: Doctoral institutions include institutions that awarded 20 or more doctor's degrees during the previous academic year. Master's institutions include institutions that awarded 20 or more master's degrees, but less than 20 doctor's degrees, during the previous academic year. Degree-granting postsecondary institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Salaries are reported in constant 2013–14 dollars, based on the Consumer Price Index (CPI).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), IPEDS Spring 2014, Human Resources component, Salaries section. See *Digest of Education Statistics 2014*, table 316.20.

In academic year 2013–14, the average salary for full-time instructional faculty at private nonprofit institutions (\$86,800) was higher than the average salaries for full-time instructional faculty at public (\$75,200) and at private for-profit institutions (\$50,700). Among the specific types of public institutions and private nonprofit institutions, average salaries for instructional faculty were highest at private nonprofit doctoral institutions (\$101,700) and public doctoral institutions (\$85,900). Average salaries were lowest for instructional faculty at private nonprofit 2-year institutions (\$50,800) and public 4-year institutions other than doctoral and master's granting institutions (\$61,100). Inflation-adjusted average salaries for instructional faculty were 1 percent lower in 2013-14 than in 1999-2000 at public institutions and were 7 percent higher at private nonprofit institutions and 24 percent higher at private for-profit institutions.

#### **Endnotes:**

<sup>1</sup> Percentages are based on full-time faculty whose race/ ethnicity was known. The numbers of full-time faculty in degree-granting institutions were large enough to be

**Reference tables:** *Digest of Education Statistics 2014*, tables 315.10, 315.20, 316.10, 316.20, and 316.80

**Related indicators:** Characteristics of Degree-Granting Postsecondary Institutions (indicator 31), Characteristics of Postsecondary Students (indicator 32)

For more information, see the Reader's Guide and the Guide to Sources.

In academic year 2013–14, approximately 49 percent of institutions had tenure systems. The percentage of institutions with tenure systems ranged from 1 percent at private for-profit institutions to almost 100 percent at public doctoral institutions. Of full-time faculty at institutions with tenure systems, 48 percent had tenure in 2013–14, compared with 54 percent in 1999–2000. From 1999–2000 to 2013–14, the percentage of full-time faculty having tenure decreased by 5 percentage points at public institutions, by 4 percentage points at private nonprofit institutions, and by 58 percentage points at private for-profit institutions. At institutions with tenure systems, the percentage of full-time instructional faculty having tenure was generally higher for males than for females. In 2013-14, some 57 percent of males had tenure, compared with 43 percent of females.

reported separately by sex for White faculty but not for faculty of any other racial/ethnic group.

Glossary: Private institution, Public school or institution

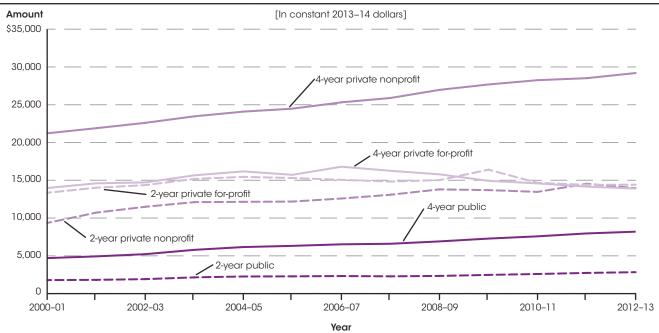
### **Indicator 40**

## **Student Loan Volume and Default Rates**

In 2012–13, the average student loan amount of \$7,000 represented a 39 percent increase over the 2000–01 amount of \$5,100 (in constant 2013–14 dollars). Of the 4.7 million students who entered the repayment phase on their student loans in fiscal year (FY) 2011, some 651,000, or 13.7 percent, defaulted before the end of FY 2013.

Title IV of the Higher Education Act of 1965 authorized several student financial assistance programs—including federal grants, loans, and work study—to help offset the cost of attending a postsecondary institution. The largest federal loan program is the William D. Ford Federal Direct Loan Program; the federal government is the lender for this program. Interest on the loans made under the Direct Loan Program may be subsidized, based on need, while the student is in school. Most loans are payable over 10 years, beginning 6 months after the student does one of the following: graduates, drops below half-time enrollment, or withdraws from the academic program.

Figure 1. Average tuition and fees for full-time students at degree-granting postsecondary institutions, by level and control of institution: 2000-01 through 2012-13

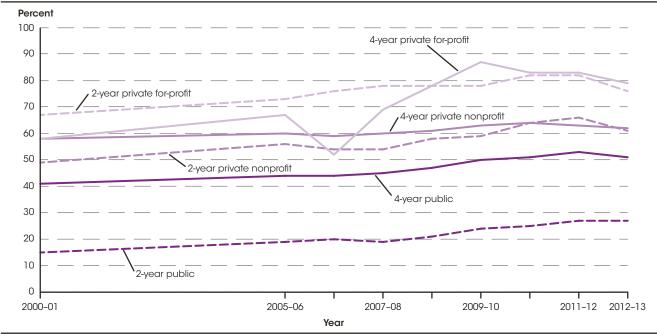


NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Data on tuition and fees for public institutions are for in-state students only. Data for private 2-year colleges must be interpreted with caution because of the low response rate of these institutions. Tuition and fees were weighted by the number of full-time-equivalent undergraduates. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2000 through

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2000 through Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2014*, table 330.10.

Average undergraduate tuition and fees for full-time students across all degree-granting postsecondary institutions in 2012–13 were \$10,800 in constant 2013–14 dollars—a 50 percent increase over the 2000–01 amount (\$7,200). At 4-year institutions, average tuition and fees in 2012–13 were \$14,300—a 45 percent increase over the 2000–01 amount (\$9,900). Among 4-year institutions, tuition and fees at public institutions had the largest percentage increase (74 percent, from \$4,700 to \$8,200) during this period; however, the largest dollar amount increase was at private nonprofit institutions (an \$8,000 increase, from \$21,200 to \$29,200). The tuition at private for-profit 4-year institutions was higher in 2000–01 than in 2012–13 (\$14,000 and \$13,900, respectively). At 2-year institutions, average undergraduate tuition and fees were \$3,400 in 2012–13—a 48 percent increase over the 2000–01 amount (\$2,300). As with 4-year institutions, the largest percentage increase in tuition and fees among 2-year institutions during this period occurred at public institutions (59 percent, from \$1,800 to \$2,800), while the largest dollar amount increase was at private nonprofit institutions (a \$4,600 increase, from \$9,400 to \$14,000). The smallest change in tuition and fees at 2-year institutions occurred at private for-profit institutions (an 8 percent change, from \$13,300 to \$14,400).





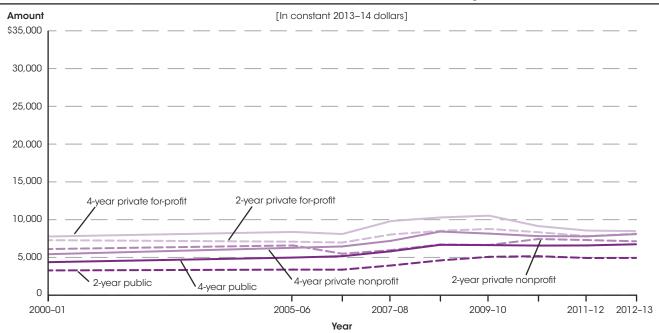
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Some data have been revised from previously published figures. Includes only loans made directly to students; does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2002 through Spring 2011 and Winter 2011-12 through Winter 2013-14, Student Financial Aid component. See *Digest of Education Statistics 2014*, table 331.20.

In 2012–13, some 49 percent of first-time, full-time undergraduate students received student loans. Between 2000–01 and 2012–13, the percentage of students receiving loan aid increased by 9 percentage points (from 40 to 49 percent). During this period, the percentage of students receiving loan aid increased at all institution types, with the largest increase among 4-year institutions occurring at private for-profit institutions (21 percentage points, from 58 to 79 percent). The percentage of undergraduates receiving loans at public and private nonprofit 4-year institutions increased 10 and 4 percentage points, respectively (from 41 to 51 percent at public institutions and from 58 to 62 percent at private nonprofit institutions). The percentage of students at 2-year institutions receiving loans over this period increased from 15 to 27 percent at public institutions, from 49 to 61 percent at private nonprofit institutions, and from 67 to 76 percent at private for-profit institutions.

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### Figure 3. Average loan amounts for first-time, full-time students receiving loan aid at degree-granting postsecondary institutions, by level and control of institution: Selected years, 2000–01 through 2012–13



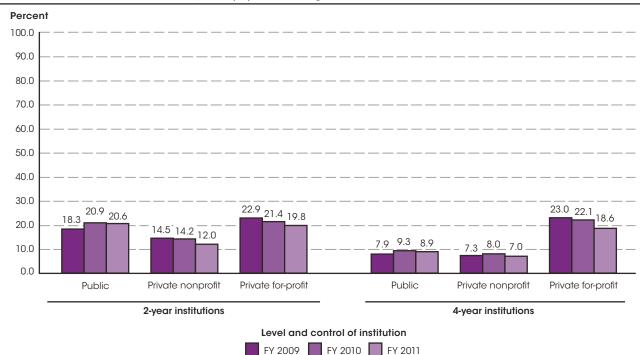
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Some data have been revised from previously published figures. Includes only loans made directly to students; does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2002 through Spring 2011 and Winter 2011-12 through Winter 2013-14, Student Financial Aid component. See Digest of Education Statistics 2014, table 331.20.

Along with the increase in the percentage of students taking out loans for their education, the average amount of money students borrowed also increased. Average annual student loan amounts for first-time, full-time degree/certificate-seeking undergraduate students receiving loan aid increased between 2000-01 and 2012-13, from \$5,100 to \$7,000, after adjusting for inflation (a 39 percent increase). Average loan amounts were higher in 2012–13 than in 2000–01 for all institution types. Among 4-year institutions, the largest percentage increase in the average loan amount was at public institutions (55 percent, from \$4,300 to \$6,700), while the smallest percentage change was at private for-profit institutions (9 percent higher, from \$7,700 to \$8,400). The percentage increase at 4-year private nonprofit institutions was 50 percent (from \$5,400 to \$8,000). Similar to 4-year institutions, the largest percentage increase in average loan amount among 2-year institutions was at public institutions (52 percent, from \$3,200 to \$4,900), while the smallest change was at private for-profit institutions (12 percent higher, from

\$7,200 to \$8,100). The percentage increase at private nonprofit institutions was 17 percent (from \$6,100 to \$7,100). For both 4-year and 2-year institutions, private for-profit institutions had the largest inflation-adjusted average annual student loan amount in 2012–13 (\$8,400 for 4-year institutions and \$8,100 for 2-year institutions).

Approximately 4.7 million students entered the repayment phase of their student loans in fiscal year (FY) 2011, meaning that their student loans became due between October 1, 2010, and September 30, 2011. The 3-year cohort default rate is the percentage of students who entered repayment on their loans in FY 2011 and defaulted prior to the end of the second following fiscal year. Of the 4.7 million students who entered the repayment phase on their student loans in FY 2011, some 651,000, or 13.7 percent, defaulted before the end of FY 2013. For students in the Direct Loan Program or the Federal Family Education Loan (FFEL) Program, default occurs when a payment has not been made for 270 days.



## Figure 4. Three-year student loan cohort default rates at degree-granting postsecondary institutions, by level and control of institution: Fiscal years (FY) 2009 through 2011

NOTE: Default rates were calculated using student counts by institution from the Federal Student Aid Cohort Default Rate Database and the Integrated Postsecondary Education Data System (IPEDS) classification of institutions. The repayment phase is the period when student loans must be repaid and generally begins 6 months after a student leaves an institution. Default a borrower fails to make a payment for 270 days. The 3-year cohort default rate is the percentage of students who entered repayment during a given fiscal year and defaulted within the second following fiscal year. Chorgree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Includes borrowers from foreign and unclassified schools, which account for less than 1 percent of borrowers and are not included elsewhere.

Database; retrieved October 13, 2014, from <a href="http://www2.ed.gov/offices/OSFAP/defaultmanagement/schooltyperates.pdf">http://www2.ed.gov/offices/OSFAP/defaultmanagement/schooltyperates.pdf</a>. See Digest of Education Statistics 2014, table 332.50.

The 3-year default rate for students in the FY 2011 cohort was 11.1 percent at 4-year degree-granting postsecondary institutions and 20.2 percent at 2-year degree-granting postsecondary institutions. The default rate for the FY 2011 cohort was highest at public 2-year institutions (20.6 percent) and lowest at private nonprofit 4-year institutions (7.0 percent).

Across all institutions, the average 3-year default rate for the FY 2011 cohort (13.7 percent) was lower than the rate

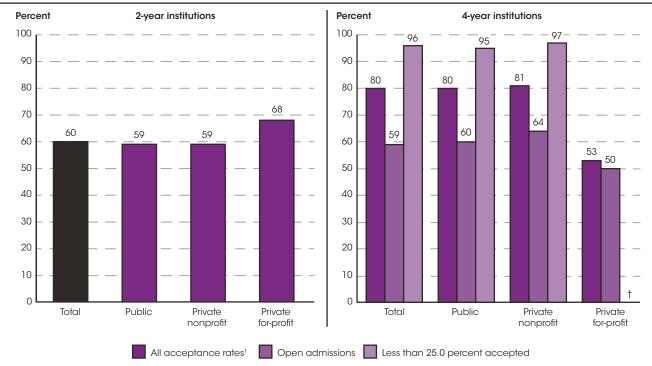
Reference tables: *Digest of Education Statistics 2014*, tables 330.10, 331.20, and 332.50 Related indicators: Price of Attending an Undergraduate Institution (indicator 35), Grants and Loan Aid to Undergraduate Students (indicator 36), Financing Postsecondary Education in the United States [The Condition of Education 2013 Spotlight] for the FY 2010 cohort (14.7 percent) and higher than the rate for the FY 2009 cohort (13.4 percent). The largest percentage point change occurred at private for-profit 4-year institutions, which had a default rate that was 4.4 percentage points lower in FY 2011 than in FY 2009 (18.6 vs. 23.0 percent).

**Glossary:** Default rate, Degree-granting institutions, Postsecondary education

### Indicator 41

## Institutional Retention and Graduation Rates for Undergraduate Students

About 59 percent of students who began seeking a bachelor's degree at a 4-year institution in fall 2007 completed that degree within 6 years. The graduation rate for females (62 percent) was higher than the rate for males (56 percent).





† Not applicable.

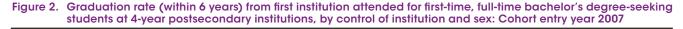
Includes open admissions, all percentages of applicants accepted, and information not available.

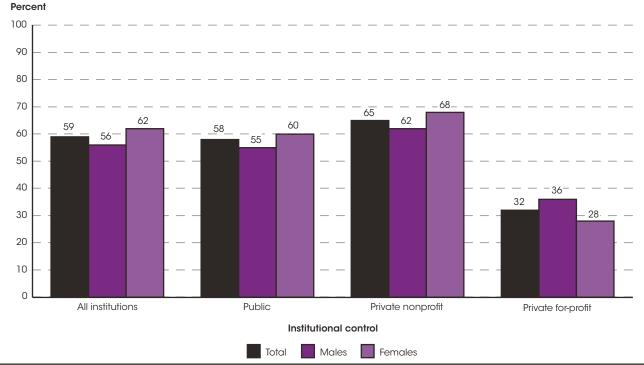
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Retained first-time undergraduates are those who returned to the institutions to continue their studies the following fall.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component; and Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2014*, table 326.30.

In terms of student retention among first-time, fulltime students who enrolled at 4-year degree-granting institutions in 2012, about 80 percent returned the following fall (in 2013). At public 4-year institutions, the overall retention rate was 80 percent, with a range from 60 percent at the least selective institutions (those with open admissions) to 95 percent at the most selective institutions (those that accept less than 25 percent of applicants). Retention rates for first-time students at private nonprofit 4-year institutions followed a similar pattern: the overall retention rate was 81 percent, ranging from 64 percent at the least selective institutions to 97 percent at the most selective. The overall retention rate for first-time students at private for-profit 4-year institutions was 53 percent, with rates varying across institution selectivity levels. At 2-year institutions, the total retention rate for first-time students was 60 percent; it was highest at private for-profit institutions (68 percent), followed by public institutions and private nonprofit institutions (both 59 percent).

The graduation rates in this indicator are calculated to meet requirements of the 1990 Student Right-to-Know Act, which requires postsecondary institutions to report the percentage of students who complete their program within 150 percent of the normal time for completion (within 6 years for students pursuing a bachelor's degree). Students who transfer and complete a degree at another institution are not included as completers in these rates.





NOTE: Data are for 4-year degree-granting postsecondary institutions participating in Title IV federal financial aid programs. Graduation rates refer to students receiving bachelor's degrees from their initial institution of attendance only. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014,

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014 Graduation Rates component. See Digest of Education Statistics 2014, table 326.10.

The 2013 6-year graduation rate for first-time, full-time undergraduate students who began their pursuit of a bachelor's degree at a 4-year degree-granting institution in fall 2007 was 59 percent. That is, 59 percent of first-time, full-time students who began seeking a bachelor's degree at a 4-year institution in fall 2007 completed the degree at that institution by 2013.

Among first-time, full-time undergraduate students who began seeking a bachelor's degree at a 4-year degreegranting institution in fall 2007, the 6-year graduation rate was 58 percent at public institutions, 65 percent at private nonprofit institutions, and 32 percent at private for-profit institutions. The 6-year graduation rate was 56 percent for males and 62 percent for females; it was higher for females than for males at both public (60 vs. 55 percent) and private nonprofit institutions (68 vs. 62 percent). However, at private for-profit institutions males had a higher graduation rate than females (36 vs. 28 percent).

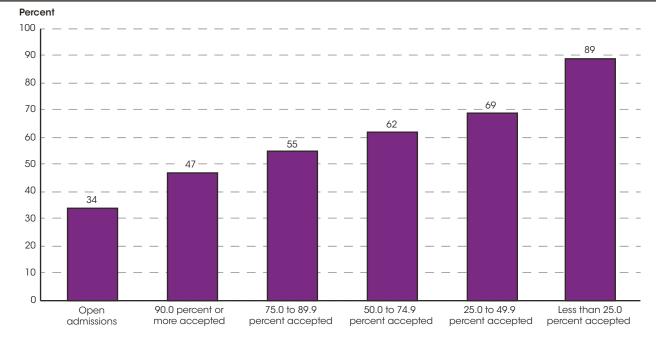


Figure 3. Graduation rate (within 6 years) from first institution attended for first-time, full-time bachelor's degree-seeking students at 4-year postsecondary institutions, by acceptance rate of institution: Cohort entry year 2007

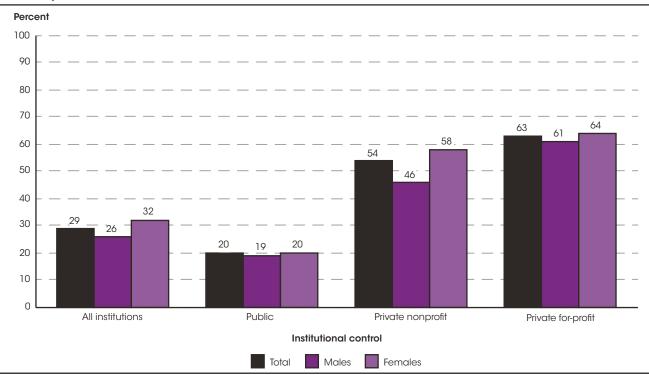
Acceptance rate of institution

NOTE: Data are for 4-year degree-granting postsecondary institutions participating in Title IV federal financial aid programs. Graduation rates refer to students receiving bachelor's degrees from their initial institutions of attendance only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Graduation Rates component. See Digest of Education Statistics 2014, table 326.10.

Six-year graduation rates for first-time, full-time students who began seeking a bachelor's degree in fall 2007 varied according to institutions' level of selectivity. In particular, graduation rates were highest at postsecondary degree-granting institutions that were the most selective (i.e., had the lowest admissions acceptance rates), and graduation rates were lowest at institutions that were the least selective (i.e., had open admissions policies). For example, at 4-year institutions with open admissions policies, 34 percent of students completed a bachelor's degree within 6 years. At 4-year institutions where the acceptance rate was less than 25 percent of applicants, the 6-year graduation rate was 89 percent. Between 2008 and 2013, the overall 6-year graduation rate for first-time, full-time students who began seeking a bachelor's degree at 4-year degree-granting institutions increased by 2 percentage points, from 57 percent (for students who began their studies in 2002 and graduated within 6 years) to 59 percent (for students who began their studies in 2007 and graduated within 6 years). During this period, 6-year graduation rates increased at public institutions (from 55 percent to 58 percent) and private for-profit institutions (from 22 percent to 32 percent), but did not change significantly for private nonprofit institutions (around 65 percent). Also during this period, 6-year graduation rates increased for both males (from 54 percent to 56 percent) and females (from 60 percent to 62 percent).

#### Figure 4. Graduation rate from first institution attended within 150 percent of normal time for first-time, full-time degree/ certificate-seeking students at 2-year postsecondary institutions, by control of institution and sex: Cohort entry year 2010



NOTE: Data are for 2-year degree-granting postsecondary institutions participating in Title IV federal financial aid programs. Graduation rates refer to students receiving associate's degrees or certificates from their initial institutions of attendance only. An example of completing a credential within 150 percent of the normal time required to do so is taking 3 years to complete a 2-year degree. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014,

SOurce: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 201 Graduation Rates component. See Digest of Education Statistics 2014, table 326.20.

At 2-year degree-granting institutions, 29 percent of firsttime, full-time undergraduate students who began their pursuit of a certificate or associate's degree in fall 2010 attained it within 150 percent of the normal time required to do so (an example of completing a credential within 150 percent of the normal time required to do so is taking 3 years to complete a 2-year degree). This graduation rate was 20 percent at public 2-year institutions, 54 percent at private nonprofit 2-year institutions, and 63 percent at private for-profit 2-year institutions. At 2-year institutions overall, as well as at public, private nonprofit, and private for-profit 2-year institutions, the completion rate was higher for females than for males. At private nonprofit 2-year institutions, for example, 58 percent of females versus 46 percent of males completed a certificate or associate's degree within 150 percent of the normal time required.

Reference tables: Digest of Education Statistics 2014, tables	Glossary: Associate's degree, Bachelor's degree, Full-time
326.10, 326.20, and 326.30	enrollment, Higher education institutions, Part-time
Related indicators: Educational Attainment (indicator 1)	enrollment, Private institution, Public school or institution

### Indicator 42

## **Degrees Conferred by Public and Private Institutions**

The number of postsecondary degrees conferred at each degree level increased between 2002-03 and 2012-13. The certificates below the associate's degree level awarded during this period increased by 49 percent, associate's degrees increased by 59 percent, bachelor's degrees increased by 36 percent, master's degrees increased by 45 percent, and doctor's degrees increased by 44 percent.

 Table 1.
 Number of degrees conferred by postsecondary institutions and percentage change, by control of institution and level of degree: Academic years 1992-93, 2002-03, and 2012-13

Level of degree and academic year			Private		
	Total	Public	Total	Nonprofit	For-profit
Sub-associate certificates					
1992–93	_	_	_	_	_
2002–03	646,425	355,727	290,698	36,926	253,772
2012–13	966,084	544,881	421,203	30,682	390,521
Percent change from 1992–93 to 2002–03	†	†	†	†	†
Percent change from 2002–03 to 2012–13	49.5	53.2	44.9	-16.9	53.9
Associate's					
1992-93	514,756	430,321	84,435	47,713	36,722
2002–03	634,016	498,279	135,737	46,183	89,554
2012-13	1,006,961	772,588	234,373	55,617	178,756
Percent change from 1992–93 to 2002–03	23.2	15.8	60.8	-3.2	143.9
Percent change from 2002-03 to 2012-13	58.8	55.1	72.7	20.4	99.6
Bachelor's					
1992-93	1,165,178	785,112	380,066	373,346	6,720
2002–03	1,348,811	875,596	473,215	442,060	31,155
2012-13	1,840,164	1,163,620	676,544	535,736	140,808
Percent change from 1992-93 to 2002-03	15.8	11.5	24.5	18.4	363.6
Percent change from 2002–03 to 2012–13	36.4	32.9	43.0	21.2	352.0
Master's					
1992–93	375,032	213,843	161,189	159,562	1,627
2002–03	518,699	265,643	253,056	238,069	14,987
2012-13	751,751	346,813	404,938	326,984	77,954
Percent change from 1992-93 to 2002-03	38.3	24.2	57.0	49.2	821.1
Percent change from 2002–03 to 2012–13	44.9	30.6	60.0	37.3	420.1
Doctor's <sup>1</sup>					
1992-93	112,072	57,020	55,052	54,399	653
2002–03	121,579	61,611	59,968	58,894	1,074
2012–13	175,038	86,427	88,611	81,539	7,072
Percent change from 1992–93 to 2002–03	8.5	8.1	8.9	8.3	64.5
Percent change from 2002–03 to 2012–13	44.0	40.3	47.8	38.5	558.5

— Not available.

† Not applicable

<sup>1</sup> Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Includes most degrees formerly classified as first-professional, such as M.D., D.D.S., and law degrees.

NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions Survey" (IPEDS-C:93); and Fall 2003 and Fall 2013, Completions component. See *Digest of Education Statistics 2014*, table 318.40.

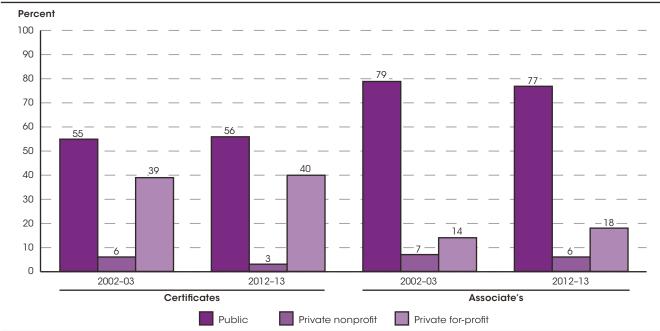
The number of postsecondary degrees conferred at each degree level increased between 2002–03 and 2012–13. The certificates below the associate's degree level awarded during this period increased by 49 percent, associate's degrees increased by 59 percent, bachelor's degrees increased by 36 percent, master's degrees increased by 45 percent, and doctor's degrees increased by 44 percent.

From 2011–12 to 2012–13, institutions conferred more bachelor's and doctor's degrees but fewer certificates, associate's degrees, and master's degrees. The total number of bachelor's and doctor's degrees each increased by 3 percent. In contrast, the number of certificates conferred decreased by 2 percent, and associate's and master's degrees each decreased by 1 percent.

At all degree levels, the percentage increases from 2002–03 to 2012–13 were greater than the percentage increases from 1992–93 to 2002–03.<sup>1</sup> For example, the number of bachelor's degree conferred by institutions increased by 36 percent from 2002–03 to 2012–13, compared to 16 percent from 1992–93 to 2002–03. However, rates of increase differed by institutional control. Public institutions had greater percentage increases across

all levels of degrees from 2002–03 to 2012–13 than from 1992–93 to 2002–03. Private nonprofit institutions had greater percentage increases from 2002–03 to 2012–13 than from 1992–93 to 2002–03 across all levels of degrees except master's degrees. Conversely, private for-profit institutions experienced smaller percentage increases from 2002–03 to 2012–13 than from 1992–93 to 2002–03 across all degrees except doctor's degrees.

Figure 1. Percentage distribution of certificates and associate's degrees conferred by postsecondary institutions, by control of institution: Academic years 2002–03 and 2012–13



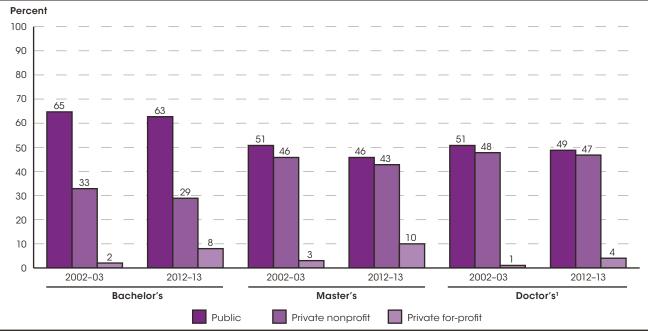
NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2003 and Fall 2013, Completions component. See *Digest of Education Statistics 2014*, table 318.40.

From 2002–03 to 2012–13, the number of certificates awarded by public institutions increased by 53 percent (from 356,000 to 545,000 certificates), and the number awarded by private for-profit institutions increased by 54 percent (from 254,000 to 391,000 certificates). However, the number of certificates awarded by private nonprofit institutions decreased by 17 percent (from 37,000 to 31,000 certificates).

The number of associate's degrees awarded from 2002–03 to 2012–13 increased by 55 percent for public institutions

(from 498,000 to 773,000 degrees), by 20 percent for private nonprofit institutions (from 46,000 to 56,000 degrees), and by 100 percent for private for-profit institutions (from 90,000 to 179,000 degrees). Due to these changes, the share of all associate's degrees conferred by private for-profit institutions increased from 14 percent in 2002–03 to 18 percent in 2012–13, while the share conferred by public and private nonprofit institutions decreased during this time period from 79 to 77 percent and from 7 to 6 percent, respectively.





<sup>1</sup> Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Includes most degrees formerly classified as first-professional, such as M.D., D.D.S., and law degrees.

NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2003 and Fall 2013, Completions component. See *Digest of Education Statistics 2014*, table 318.40.

From 2002–03 to 2012–13, the number of bachelor's degrees awarded by public institutions increased by 33 percent (from 876,000 to 1.2 million degrees), the number awarded by private nonprofit institutions increased by 21 percent (from 442,000 to 536,000 degrees), and the number awarded by private for-profit institutions increased by 352 percent (from 31,000 to 141,000 degrees). As a result, the shares of all bachelor's degrees conferred by public and private nonprofit institutions decreased from 65 to 63 percent and from 33 to 29 percent, respectively, while the share conferred by private for-profit institutions increased from 2 to 8 percent.

The number of master's degrees awarded by public institutions increased by 31 percent (from 266,000 to 347,000 degrees) from 2002–03 to 2012–13, yet the percentage of all master's degrees conferred by these institutions declined from 51 to 46 percent. Similarly, the number of master's degrees conferred by private nonprofit institutions increased by 37 percent (from 238,000 to

#### **Endnotes:**

<sup>1</sup> The number of sub-associate certificates conferred in 1992–93 is not available; therefore, certificates are not included in these comparisons.

**Reference tables:** *Digest of Education Statistics 2014*, table 318.40

**Related indicators:** Undergraduate Degree Fields (indicator 33), Graduate Degree Fields (indicator 34)

327,000 degrees) from 2002–03 to 2012–13, but the percentage of all master's degrees conferred by these institutions decreased (from 46 to 43 percent). In contrast, the number of master's degrees conferred by private for-profit institutions increased by 420 percent (from 15,000 to 78,000 degrees) from 2002–03 to 2012–13, resulting in an increase in these institutions' share of total master's degrees conferred, from 3 to 10 percent.

From 2002–03 to 2012–13, the number of doctor's degrees conferred increased by 40 percent at public institutions (from 61,600 to 86,400 degrees), by 38 percent at private nonprofit institutions (from 58,900 to 81,500 degrees), and by 558 percent at private for-profit institutions (from 1,100 to 7,100 degrees). Public and private nonprofit institutions' shares of all doctor's degrees conferred decreased from 2002–03 to 2012–13 (from 51 to 49 percent and from 48 to 47 percent, respectively), while private for-profit institutions' share increased (from 1 to 4 percent).

**Glossary:** Associate's degree, Bachelor's degree, Doctor's degree, Master's degree, Private institution, Public school or institution

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### **Guide to Sources**

# National Center for Education Statistics (NCES)

### Common Core of Data

The Common Core of Data (CCD) is NCES's primary database on public elementary and secondary education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts containing data designed to be comparable across all states. This database can be used to select samples for other NCES surveys and provide basic information and descriptive statistics on public elementary and secondary schools and schooling in general.

The CCD collects statistical information annually from approximately 100,000 public elementary and secondary schools and approximately 18,000 public school districts (including supervisory unions and regional education service agencies) in the 50 states, the District of Columbia, Department of Defense (DoD) dependents schools, the Bureau of Indian Education, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands. Three categories of information are collected in the CCD survey: general descriptive information on schools and school districts; data on students and staff; and fiscal data. The general descriptive information includes name, address, phone number, and type of locale; the data on students and staff include selected demographic characteristics; and the fiscal data pertain to revenues and current expenditures.

The ED*Facts* data collection system is the primary collection tool for the CCD. NCES works collaboratively with the Department of Education's Performance Information Management Service to develop the CCD collection procedures and data definitions. Coordinators from State Education Agencies (SEAs) submit the CCD data at different levels (school, agency, and state) to the ED*Facts* collection system. Prior to submitting CCD files to ED*Facts*, SEAs must collect and compile information from their respective Local Education Agencies (LEAs) through established administrative records systems within their state or jurisdiction.

Once SEAs have completed their submissions, the CCD survey staff analyzes and verifies the data for quality assurance. Even though the CCD is a universe collection and thus not subject to sampling errors, nonsampling errors can occur. The two potential sources of nonsampling errors are nonresponse and inaccurate reporting. NCES attempts to minimize nonsampling errors through the use of annual training of SEA coordinators, extensive quality reviews, and survey editing procedures. In addition, each year, SEAs are given the opportunity to revise their state-level aggregates from the previous survey cycle. The CCD survey consists of five components: The Public Elementary/Secondary School Universe Survey, the Local Education Agency (School District) Universe Survey, the State Nonfiscal Survey of Public Elementary/Secondary Education, the National Public Education Financial Survey (NPEFS), and the School District Fiscal Data Survey (F-33).

#### Public Elementary/Secondary School Universe Survey

The Public Elementary/Secondary School Universe Survey includes all public schools providing education services to prekindergarten, kindergarten, grade 1–12, and ungraded students. For school year (SY) 2012–13, the survey included records for each public elementary and secondary school in the 50 states, the District of Columbia, Guam, Puerto Rico, the Northern Mariana Islands, the U.S. Virgin Islands, and the Bureau of Indian Education (BIE). The DoD dependents schools (overseas and domestic) and American Samoa did not report data for SY 2012–13.

The Public Elementary/Secondary School Universe Survey includes data for the following variables: NCES school ID number, state school ID number, name of the school, name of the agency that operates the school, mailing address, physical location address, phone number, school type, operational status, locale code, latitude, longitude, county number, county name, full-time-equivalent (FTE) classroom teacher count, low/high grade span offered, congressional district code, school level, students eligible for free lunch, students eligible for reduced-price lunch, total students eligible for free and reduced-price lunch, and student totals and detail (by grade, by race/ethnicity, and by sex). The survey also contains flags indicating whether a school is Title I eligible, schoolwide Title I eligible, a magnet school, a charter school, a shared-time school, or a BIE school, as well as which grades are offered at the school.

### Local Education Agency (School District) Universe

The coverage of the Local Education Agency Universe Survey includes all school districts and administrative units providing education services to prekindergarten, kindergarten, grade 1–12, and ungraded students. The CCD Local Education Agency Universe Survey includes records for the 50 states, the District of Columbia, Puerto Rico, the Bureau of Indian Education, American Samoa, Guam, the Northern Mariana Islands, the U.S. Virgin Islands, and the DoD dependents schools (overseas and domestic).

The Local Education Agency Universe Survey includes the following variables: NCES agency ID number, state agency ID number, agency name, phone number, mailing address, physical location address, agency type code, supervisory union number, American National Standards Institute (ANSI) state and county code, county name, core based statistical area (CBSA) code, metropolitan/ micropolitan code, metropolitan status code, district locale code, congressional district code, operational status code, BIE agency status, low/high grade span offered, agency charter status, number of schools, number of full-time-equivalent (FTE) teachers, number of ungraded students, number of PK–12 students, number of special education/Individualized Education Program (IEP) students, number of English language learner (ELL) students, instructional staff fields, support staff fields, and a flag indicating whether student counts by race/ethnicity were reported by five or seven racial/ethnic categories.

### State Nonfiscal Survey of Public Elementary/ Secondary Education

The State Nonfiscal Survey of Public Elementary/ Secondary Education for the 2012-13 school year provides state-level, aggregate information about students and staff in public elementary and secondary education. It includes data from the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, the Northern Mariana Islands, Guam, and American Samoa. The DoD dependents schools (overseas and domestic) and the Bureau of Indian Education are also included in the survey universe. This survey covers public school student membership by grade, race/ethnicity, and state or jurisdiction and covers number of staff in public schools by category and state or jurisdiction. Beginning with the 2006–07 school year, the number of diploma recipients and other high school completers are no longer included in the State Nonfiscal Survey of Public Elementary/ Secondary Education file. These data are now published in the public-use Common Core of Data State Dropout and Completion Data File.

#### National Public Education Financial Survey

The purpose of the National Public Education Financial Survey (NPEFS) is to provide district, state, and federal policymakers, researchers, and other interested users with descriptive information about revenues and expenditures for public elementary and secondary education. The data collected are useful to (1) chief officers of state education agencies; (2) policymakers in the executive and legislative branches of federal and state governments; (3) education policy and public policy researchers; and (4) the public, journalists, and others.

Data for NPEFS are collected from SEAs in the 50 states, the District of Columbia, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands. The data file is organized by state or jurisdiction and contains revenue data by funding source; expenditure data by function (the activity being supported by the expenditure) and object (the category of expenditure); average daily attendance data; and total student membership data from the CCD State Nonfiscal Survey of Public Elementary/Secondary Education.

#### School District Finance Survey

The purpose of the School District Finance Survey (F-33) is to provide finance data for all local education agencies (LEAs) that provide free public elementary and secondary education in the United States. National and state totals are not included (national- and state-level figures are presented, however, in the National Public Education Financial Survey [NPEFS]).

Both NCES and the Governments Division of the U.S. Census Bureau collect public school system finance data, and they collaborate in their efforts to gather these data. The Census Bureau acts as the primary collection agent and produces two data files: one for distribution and reporting by the Census Bureau and the other for distribution and reporting by NCES.

The FY 11 F-33 data file contains 18,297 records representing the public elementary and secondary education agencies in the 50 states and the District of Columbia. The file includes variables for revenues by source, expenditures by function and object, indebtedness, assets, student membership counts, as well as identification variables.

The F-33 data file for FY 12 contains 18,373 records representing the public elementary and secondary education agencies in the 50 states and the District of Columbia. The file includes the following types of school finance data: revenue and expenditure totals by state and the 100 largest LEAs; revenues for LEAs, by source of funds (federal, state, and local); expenditures by function and object totals by state; current expenditures per pupil by state and the 100 largest LEAs; interest on debt; and capital outlay.

#### Teacher Compensation Survey

The Teacher Compensation Survey (TCS) is a research and development effort designed to assess the feasibility of collecting and publishing teacher-level data from the administrative records residing in state education agencies. Twenty-three (23) states participated in the TCS for school year 2008–09. Participating states provided data on salaries, years of teaching experience, highest degree earned, race/ethnicity, and gender for each public school teacher.

Further information on the nonfiscal CCD data may be obtained from

Patrick Keaton Administrative Data Division Elementary and Secondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>patrick.keaton@ed.gov</u> <u>http://nces.ed.gov/ccd</u> Further information on the fiscal CCD data may be obtained from

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### Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)

The Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011) is providing detailed information on the school achievement and experiences of students throughout their elementary school years. The students participating in the ECLS-K:2011 are being followed longitudinally from the kindergarten year (the 2010–11 school year) through the spring of 2016, when most of them are expected to be in fifth grade. This sample of students is designed to be nationally representative of all students who were enrolled in kindergarten or who were of kindergarten age and being educated in an ungraded classroom or school in the United States in the 2010–11 school year, including those in public and private schools, those who attended full-day and part-day programs, those who were in kindergarten for the first time, and those who were kindergarten repeaters. Students who attended early learning centers or institutions that offered education only through kindergarten are included in the study sample and represented in the cohort.

The ECLS-K:2011 places emphasis on measuring students' experiences within multiple contexts and development in multiple domains. The design of the study includes the collection of information from the students, their parents/guardians, their teachers, and their schools. Information was collected from their before- and afterschool care providers in the kindergarten year.

A nationally representative sample of approximately 18,170 children from about 1,310 schools participated in the base-year administration of the ECLS-K:2011 in the 2010–11 school year. The sample included children who attended both public and private schools and children from different racial/ethnic and socioeconomic backgrounds. Asian/Pacific Islander students were oversampled to ensure that the sample included enough students of this race/ethnicity to make accurate estimates for the group as a whole. Seven data collections have been conducted to date: fall and spring of the children's kindergarten year (the base year), fall 2011 and spring 2012 (the first-grade year), fall 2012 and spring 2013 (the second-grade year), and spring 2014. Additional data

collections are planned for the spring of 2015 and the spring of 2016. Although the study refers to later rounds of data collection by the grade the majority of children are expected to be in (that is, the modal grade for children who were in kindergarten in the 2010–11 school year), children are included in subsequent data collections regardless of their grade level.

A total of approximately 780 of the 1,310 originally sampled schools participated during the base year of the study. This translates to a weighted unit response rate (weighted by the base weight) of 63 percent for the base year. In the base year, the weighted child assessment unit response rate was 87 percent for the fall data collection and 85 percent for the spring collection, and the weighted parent unit response rate was 74 percent for the fall collection and 67 percent for the spring collection,

Fall and spring data collections were also conducted in the 2011–12 school year, when the majority of the children were in the first grade. The fall first-grade data collection was conducted within a 33 percent subsample of the full base-year sample, and the spring first-grade collection was conducted within the full base-year sample. In 2011–12 (the first-grade year), the weighted child assessment unit response rate was 89 percent for the fall data collection and 88 percent for the spring collection, and the weighted parent unit response rate was 87 percent for the fall data collection.

Further information on the ECLS-K:2011 may be obtained from

Gail Mulligan Sample Surveys Division Longitudinal Surveys Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>ecls@ed.gov</u> <u>http://nces.ed.gov/ecls/birth.asp</u>

### Education Longitudinal Study of 2002

The Education Longitudinal Study of 2002 (ELS:2002) is a longitudinal survey that is monitoring the transitions of a national probability sample of 10th-graders in public, Catholic, and other private schools. Survey waves follow both students and high school dropouts and monitor the transition of the cohort to postsecondary education, the labor force, and family formation.

In the base year of the study, of 1,200 eligible contacted schools, 750 participated, for an overall weighted school participation rate of approximately 68 percent (62 percent unweighted). Of 17,600 selected eligible students, 15,400 participated, for an overall weighted student response rate of approximately 87 percent. (School and student weighted response rates reflect use of the base weight [design weight] and do not include nonresponse adjustments.) Information for the study is obtained not just from students and their school records, but also from the students' parents, their teachers, their librarians, and the administrators of their schools.

The first follow-up was conducted in 2004, when most sample members were high school seniors. Base-year students who remained in their base schools were resurveyed and tested in mathematics. Sample freshening was conducted to make the study representative of spring 2004 high school seniors nationwide. Students who were not still at their base schools were all administered a questionnaire.

The second follow-up, conducted in 2006, continued to follow the sample of students into postsecondary education, the workforce, or both. The third follow-up data (2012) were released in January 2014. In addition, postsecondary transcripts were collected in 2013, and it is expected that the resulting data will be made available in mid-2015.

Further information on ELS:2002 may be obtained from

Elise Christopher Sample Surveys Division Longitudinal Surveys Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>elise.christopher@ed.gov</u> <u>http://nces.ed.gov/surveys/els2002</u>

### Integrated Postsecondary Education Data System

The Integrated Postsecondary Education Data System (IPEDS) surveys approximately 7,500 postsecondary institutions, including universities and colleges, as well as institutions offering technical and vocational education beyond the high school level. IPEDS, an annual universe collection that began in 1986, replaced the Higher Education General Information Survey (HEGIS). In order to present data in a timely manner, "provisional" IPEDS data are used. These data have been fully reviewed, edited, and imputed, but do not incorporate data revisions submitted by institutions after the close of data collection.

IPEDS consists of interrelated survey components that provide information on postsecondary institutions, student enrollment, programs offered, degrees and certificates conferred, and both the human and financial resources involved in the provision of institutionally based postsecondary education. Prior to 2000, the IPEDS survey had the following subject-matter components: Graduation Rates; Fall Enrollment; Institutional Characteristics; Completions; Salaries, Tenure, and Fringe Benefits of Full-Time Faculty; Fall Staff; Finance; and Academic Libraries (in 2000, the Academic Libraries component became a survey separate from IPEDS). Since 2000, IPEDS survey components occurring in a particular collection year have been organized into three seasonal collection periods: fall, winter, and spring. The Institutional Characteristics and Completions components first took place during the fall 2000 collection; the Employees by Assigned Position (EAP), Salaries, and Fall Staff components first took place during the winter 2001–02 collection; and the Enrollment, Student Financial Aid, Finance, and Graduation Rates components first took place during the spring 2001 collection. In the winter 2005–06 data collection, the Employees by Assigned Position, Fall Staff, and Salaries components were merged into the Human Resources component. During the 2007-08 collection year, the Enrollment component was broken into two separate components: 12-Month Enrollment (taking place in the fall collection) and Fall Enrollment (taking place in the spring collection). In the 2011–12 IPEDS data collection year, the Student Financial Aid component was moved to the winter data collection to aid in the timing of the net price of attendance calculations displayed on the College Navigator (<u>http://nces.ed.gov/collegenavigator</u>). In the 2012–13 IPEDS data collection year, the Human Resources component was moved to the spring data collection.

Beginning in 2008–09, the first-professional degree category was combined with the doctor's degree category. However, some degrees formerly identified as firstprofessional that take more than two full-time-equivalent academic years to complete, such as those in Theology (M.Div, M.H.L./Rav), are included in the Master's degree category. Doctor's degrees were broken out into three distinct categories: research/scholarship, professional practice, and other doctor's degrees.

IPEDS race/ethnicity data collection also changed in 2008–09. The "Asian" race category is now separate from a "Native Hawaiian or Other Pacific Islander" category. Survey takers also have the option of identifying themselves as being of "Two or more races." To reflect the recognition that "Hispanic" refers to ethnicity, not race, the new Hispanic category reads "Hispanics of any race."

The degree-granting institutions portion of IPEDS is a census of colleges that award associate's or higher degrees and are eligible to participate in Title IV financial aid programs. Prior to 1993, data from technical and vocational institutions were collected through a sample survey. Beginning in 1993, all data are gathered in a census of all postsecondary institutions. The tabulations on "institutional characteristics" from 1993 forward are based on lists of all institutions and are not subject to sampling errors.

The classification of institutions offering college and university education changed as of 1996. Prior to 1996, institutions that had courses leading to an associate's or higher degree or that had courses accepted for credit toward those degrees were considered higher education institutions. Higher education institutions were accredited by an agency or association that was recognized by the U.S. Department of Education or were recognized directly by the Secretary of Education. Data presentations that use only this standard are labeled "higher education." The newer standard includes institutions that award associate's or higher degrees and that are eligible to participate in Title IV federal financial aid programs. Presentations that contain any data according to this standard are labeled "degree-granting" institutions. Time-series data presentations may contain data from both series, and they are labeled accordingly. The impact of this change on data collected in 1996 was not large. For example, data on faculty salaries and benefits were only affected to a very small extent. Also, degrees awarded at the bachelor's level or higher were not heavily affected. The largest impact was on private 2-year college enrollment. In contrast, most of the data on public 4-year colleges were affected to a minimal extent. The impact on enrollment in public 2-year colleges was noticeable in certain states, but was relatively small at the national level. Overall, total enrollment for all institutions was about one-half of 1 percent higher in 1996 for degree-granting institutions than for higher education institutions.

Prior to the establishment of IPEDS in 1986, HEGIS acquired and maintained statistical data on the characteristics and operations of institutions of higher education. Implemented in 1966, HEGIS was an annual universe survey of institutions accredited at the college level by an agency recognized by the Secretary of the U.S. Department of Education. These institutions were listed in NCES's *Education Directory, Colleges and Universities*.

HEGIS surveys collected information on institutional characteristics, faculty salaries, finances, enrollment, and degrees. Since these surveys, like IPEDS, were distributed to all higher education institutions, the data presented are not subject to sampling error. However, they are subject to nonsampling error, the sources of which varied with the survey instrument.

The NCES Taskforce for IPEDS Redesign recognized that there were issues related to the consistency of data definitions as well as the accuracy, reliability, and validity of other quality measures within and across surveys. The IPEDS redesign in 2000 provided institution-specific web-based data forms. While the new system shortened data processing time and provided better data consistency, it did not address the accuracy of the data provided by institutions.

Beginning in 2003–04 with the Prior Year Data Revision System, prior-year data have been available to institutions entering current data. This allows institutions to make changes to their prior-year entries either by adjusting the data or by providing missing data. These revisions allow the evaluation of the data's accuracy by looking at the changes made. NCES conducted a study (NCES 2005-175) of the 2002–03 data that were revised in 2003–04 to determine the accuracy of the imputations, track the institutions that submitted revised data, and analyze the revised data they submitted. When institutions made changes to their data, it was assumed that the revised data were the "true" data. The data were analyzed for the number and type of institutions making changes, the type of changes, the magnitude of the changes, and the impact on published data.

Because NCES imputes missing data, imputation procedures were also addressed by the Redesign Taskforce. For the 2003–04 assessment, differences between revised values and values that were imputed in the original files were compared (i.e., revised value minus imputed value). These differences were then used to provide an assessment of the effectiveness of imputation procedures. The size of the differences also provides an indication of the accuracy of imputation procedures. To assess the overall impact of changes on aggregate IPEDS estimates, published tables for each component were reconstructed using the revised 2002–03 data. These reconstructed tables were then compared to the published tables to determine the magnitude of aggregate bias and the direction of this bias.

The fall 2011 and spring 2012 data collections were entirely web-based. Data were provided by "keyholders," institutional representatives appointed by campus chief executives, who were responsible for ensuring that survey data submitted by the institution were correct and complete. Because Title IV institutions are the primary focus of IPEDS and because these institutions are required to respond to the survey, response rates for Title IV institutions in the fall 2011 IPEDS collection were high. The Institutional Characteristics (IC) component response rate among all Title IV entities was 100.0 percent (all 7,479 Title IV entities responded). In addition, the response rates for the Completions and 12-Month Enrollment components were also 100.0 percent. More details on the accuracy and reliability of IPEDS data can be found in the Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175).

Further information on IPEDS may be obtained from

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#### Fall (12-Month Enrollment)

Data on 12-month enrollment are collected for award levels ranging from postsecondary certificates of less than 1 year to doctoral degrees. The 12-month period during which data are collected is July 1 through June 30. Data are collected by race/ethnicity and gender and include unduplicated headcounts and instructional activity (contact or credit hours). These data are also used to calculate a full-time-equivalent (FTE) enrollment based on instructional activity. FTE enrollment is useful for gauging the size of the educational enterprise at the institution. Prior to the 2007-08 IPEDS data collection, the data collected in the 12-Month Enrollment component were part of the Fall Enrollment component, which is conducted during the spring data collection period. However, to improve the timeliness of the data, a separate 12-Month Enrollment survey component was developed in 2007. These data are now collected in the fall for the previous academic year. Of the 7,387 Title IV entities that were expected to respond to the 12-Month Enrollment component of the fall 2013 data collection, 7,386 responded, for an approximate response rate of 100.0 percent.

Further information on the IPEDS 12-Month Enrollment component may be obtained from

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### Fall (Completions)

This survey was part of the HEGIS series throughout its existence. However, the degree classification taxonomy was revised in 1970–71, 1982–83, 1991–92, and 2002–03. Collection of degree data has been maintained through IPEDS.

The nonresponse rate does not appear to be a significant source of nonsampling error for this survey. The response rate over the years has been high; for the fall 2013 Completions component, it was about 100.0 percent. Because of the high response rate, there was no need to conduct a nonresponse bias analysis. Imputation methods for the fall 2013 Completions component are discussed in *Postsecondary Institutions and Cost of Attendance in 2013– 14; Degrees and Other Awards Conferred, 2012–13; and 12-Month Enrollment, 2012–13* (NCES 2014-066rev).

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) indicated that most Title IV institutions supplying revised data on completions in 2003–04 were able to supply missing data for the prior year. The small differences between imputed data for the prior year and the revised actual data supplied by the institution indicated that the imputed values produced by NCES were acceptable. Further information on the IPEDS Completions component may be obtained from

Andrew Mary Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 andrew.mary@ed.gov http://nces.ed.gov/ipeds

### Fall (Institutional Characteristics)

This survey collects the basic information necessary to classify institutions, including control, level, and types of programs offered, as well as information on tuition, fees, and room and board charges. Beginning in 2000, the survey collected institutional pricing data from institutions with first-time, full-time, degree/certificateseeking undergraduate students. Unduplicated full-year enrollment counts and instructional activity are now collected in the Fall Enrollment survey. Beginning in 2008–09, student financial aid data collected include greater detail. The overall unweighted response rate was 100.0 percent for Title IV degree-granting institutions for 2009 data.

In the fall 2013 data collection, the response rate for the Institutional Characteristics component among all Title IV entities was 100.0 percent: Of the 7,477 Title IV entities expected to respond to this component, all responded. Data from six institutions that responded to the Institutional Characteristics component contained item nonresponse, however; thus, these missing items were imputed. Imputation methods for the fall 2013 Institutional Characteristics component are discussed in the 2013–14 *Integrated Postsecondary Education Data System (IPEDS) Methodology Report* (NCES 2014-067).

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) looked at tuition and price in Title IV institutions. Only 8 percent of institutions in 2002–03 and 2003–04 reported the same data to IPEDS and Thomson Peterson consistently across all selected data items. Differences in wordings or survey items may account for some of these inconsistencies.

Further information on the IPEDS Institutional Characteristics component may be obtained from

Gigi Jones Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 gigi.jones@ed.gov http://nces.ed.gov/ipeds

### Winter (Student Financial Aid)

This component was part of the spring data collection from IPEDS data collection years 2000–01 to 2010–11, but it moved to the winter data collection starting with the 2011–12 IPEDS data collection year. This move will aid in the timing of the net price of attendance calculations displayed on College Navigator (<u>http://nces.</u> ed.gov/collegenavigator).

Financial aid data are collected for undergraduate students. Data are collected regarding federal grants, state and local government grants, institutional grants, and loans. The collected data include the number of students receiving each type of financial assistance and the average amount of aid received by type of aid. Beginning in 2008–09, student financial aid data collected includes greater detail on types of aid offered.

In the winter 2013–14 data collection, the Student Financial Aid component collected data on the number of undergraduate students awarded aid and the amount of aid awarded, with particular emphasis on first-time, full-time degree- and certificate-seeking undergraduate students awarded financial aid for the 2012–13 academic year. Of the 7,082 Title IV institutions expected to respond to the Student Financial Aid component, 7,079 Title IV institutions responded, resulting in a response rate of about 100.0 percent.

Further information on the IPEDS Student Financial Aid component may be obtained from

Gigi Jones Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 gigi.jones@ed.gov http://nces.ed.gov/ipeds

## *Winter (Graduation Rates and Graduation Rates 200 Percent)*

In IPEDS data collection years 2012–13 and earlier, the Graduation Rates and 200 Percent Graduation Rates components were collected during the spring collection. In the IPEDS 2013–14 data collection year, however, the Graduation Rates and 200 Percent Graduation Rates collections were moved to the winter data collection.

The 2013–14 Graduation Rates component collected counts of full-time, first-time degree- and certificateseeking undergraduate students beginning their postsecondary education in the specified cohort year and their completion status as of August 31, 2013 (150 percent of normal program completion time) at the same institution where the students started. Four-year institutions used 2007 as the cohort year, while less-than4-year institutions used 2010 as the cohort year. The response rate for this component was about 100.0 percent.

The 2013–14 200 Percent Graduation Rates component collected counts of full-time, first-time degree- and certificate-seeking undergraduate students beginning their postsecondary education in the specified cohort year and their completion status as of August 31, 2013 (200 percent of normal program completion time) at the same institution where the students started. Four-year institutions used 2005 as the cohort year, while less-than-4-year institutions used 2009 as the cohort year. The response rate for this component was 100.0 percent.

Further information on the IPEDS Graduation Rates and 200 Percent Graduation Rates components may be obtained from

IPEDS Staff Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>http://nces.ed.gov/ipeds/staff/</u>

### Spring (Fall Enrollment)

This survey has been part of the HEGIS and IPEDS series since 1966. Response rates for this survey have been relatively high, generally exceeding 85 percent. Beginning in 2000, with web-based data collection, higher response rates were attained. In the spring 2014 data collection, where the Fall Enrollment component covered fall 2013, the response rate was 99.9 percent. Data collection procedures for the Fall Enrollment component of the spring 2013 data collection are presented in *Enrollment in Postsecondary Institutions, Fall 2013; Financial Statistics, Fiscal Year 2013; and Employees in Postsecondary Institutions, Fall 2013* (NCES 2015-012).

Beginning with the fall 1986 survey and the introduction of IPEDS (see above), the survey was redesigned. The survey allows (in alternating years) for the collection of age and residence data. Beginning in 2000, the survey collected instructional activity and unduplicated headcount data, which are needed to compute a standardized, full-time-equivalent (FTE) enrollment statistic for the entire academic year. As of 2007–08, the timeliness of the instructional activity data has been improved by collecting these data in the fall as part of the 12-Month-Enrollment component instead of in the spring as part of the Fall Enrollment component.

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) showed that public institutions made the majority of changes to enrollment data during the 2004 revision period. The majority of changes were made to unduplicated headcount data, with the net differences between the original data and the revised data at about 1 percent. Part-time students in general and enrollment in private not-for-profit institutions were often underestimated. The fewest changes by institutions were to Classification of Instructional Programs (CIP) code data. (The CIP is a taxonomic coding scheme that contains titles and descriptions of primarily postsecondary instructional programs.)

Further information on the IPEDS Fall Enrollment component may be obtained from

Bao Le Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>bao.le@ed.gov</u> <u>http://nces.ed.gov/ipeds</u>

### Spring (Finance)

This survey was part of the HEGIS series and has been continued under IPEDS. Substantial changes were made in the financial survey instruments in fiscal year (FY) 1976, FY 82, FY 87, FY 97, and FY 02. While these changes were significant, considerable effort has been made to present only comparable information on trends and to note inconsistencies. The FY 76 survey instrument contained numerous revisions to earlier survey forms, which made direct comparisons of line items very difficult. Beginning in FY 82, Pell Grant data were collected in the categories of federal restricted grant and contract revenues and restricted scholarship and fellowship expenditures. Finance tables including data prior to 2000 have been adjusted by subtracting the largely duplicative Pell Grant amounts from the later data to maintain comparability with pre-FY 82 data. The introduction of IPEDS in the FY 87 survey included several important changes to the survey instrument and data processing procedures. Beginning in FY 97, data for private institutions were collected using new financial concepts consistent with Financial Accounting Standards Board (FASB) reporting standards, which provide a more comprehensive view of college finance activities. The data for public institutions continued to be collected using the older survey form. The data for public and private institutions were no longer comparable and, as a result, no longer presented together in analyses. In FY 01, public institutions had the option of either continuing to report using Government Accounting Standards Board (GASB) standards or using the new FASB reporting standards. Beginning in FY 02, public institutions had three options: the original GASB standards, the FASB standards, or the new GASB Statement 35 standards (GASB35). Because of the complexity of the multiple forms used by public institutions, finance data for public institutions for some recent years are not available.

Possible sources of nonsampling error in the financial statistics include nonresponse, imputation, and

misclassification. The unweighted response rate has been about 85 to 90 percent for most of the historic years; however, in more recent years, response rates have been much higher because Title IV institutions are required to respond. The 2002 IPEDS data collection was a fullscale web-based collection, which offered features that improved the quality and timeliness of the data. The ability of IPEDS to tailor online data entry forms for each institution based on characteristics such as institutional control, level of institution, and calendar system, and the institutions' ability to submit their data online, were two such features that improved response.

The response rate for the FY 2013 Finance survey component was 99.9 percent. Data collection procedures for the FY 2013 survey are discussed in *Enrollment in Postsecondary Institutions, Fall 2013; Financial Statistics, Fiscal Year 2013; and Employees in Postsecondary Institutions, Fall 2013: First Look (Provisional Data)* (NCES 2015-012).

Two general methods of imputation were used in HEGIS. If prior-year data were available for a nonresponding institution, they were inflated using the Higher Education Price Index and adjusted according to changes in enrollments. If prior-year data were not available, current data were used from peer institutions selected for location (state or region), control, level, and enrollment size of institution. In most cases, estimates for nonreporting institutions in HEGIS were made using data from peer institutions.

Beginning with FY 87, IPEDS included all postsecondary institutions, but maintained comparability with earlier surveys by allowing 2- and 4-year institutions to be tabulated separately. For FY 87 through FY 91, 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 IPEDS. The vast majority of the data were tabulated from form 1, which was used to collect information from public and private not-for-profit 2- and 4-year colleges. Form 2, a condensed form, was used to gather data for 2-year for-profit 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 degree-granting institution totals.

In IPEDS, the form 2 institutions were not asked to separate appropriations from grants and contracts, nor were they asked to separate state from local sources of funding. For the form 2 institutions, all federal revenues were assumed to be federal grants and contracts, and all 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 expenditure accounts. The form 2 institutions reported instruction and scholarship and fellowship expenditures only. All other educational and general expenditures were allocated to academic support.

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) found that only a small percentage (2.9 percent, or 168) of postsecondary institutions either revised 2002–03 data or submitted data for items they previously left unreported. Though relatively few institutions made changes, the changes made were relatively large—greater than 10 percent of the original data. With a few exceptions, these changes, large as they were, did not greatly affect the aggregate totals.

Further information on the IPEDS Finance component may be obtained from

Bao Le Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>bao.le@ed.gov</u> <u>http://nces.ed.gov/ipeds</u>

### Spring (Human Resources)

The Human Resources component was part of the IPEDS winter data collection from data collection years 2000–01 to 2011–12. For the 2012–13 data collection year, the Human Resources component was moved to the spring 2013 data collection, in order to give institutions more time to prepare their survey responses (the spring and winter collections begin on the same date, but the reporting deadline for the spring collection is several weeks later than the reporting deadline for the winter collection).

### IPEDS Collection Years 2012–13 and Later

In 2012–13, new occupational categories replaced the primary function/occupational activity categories previously used in the IPEDS Human Resources component. This change was required in order to align the IPEDS Human Resources categories with the 2010 Standard Occupational Classification (SOC) system. In tandem with the change in 2012–13 from using primary function/occupational activity categories to using the new occupational categories, the sections making up the IPEDS Human Resources component (which previously had been Employees by Assigned Position [EAP], Fall Staff, and Salaries) were changed to Full-Time Instructional Staff, Full-time Noninstructional Staff, Salaries, Part-Time Staff, and New Hires.

The webpage "Changes to the 2012–13 IPEDS Data Collection and Changes to Occupational Categories for the 2012–13 Human Resources Data Collection" (<u>http://</u> <u>nces.ed.gov/ipeds/surveys/datacollection2012-13.asp</u>) provides information on the redesigned IPEDS Human Resources component. "Resources for Implementing Changes to the IPEDS Human Resources (HR) Survey Component Due to Updated 2010 Standard Occupational Classification (SOC) System" (<u>http://nces.ed.gov/ipeds/</u> <u>resource/soc.asp</u>) is a webpage containing additional information, including notes comparing the new classifications with the old ("Comparison of New IPEDS Occupational Categories with Previous Categories"), a crosswalk from the new IPEDS occupational categories to the 2010 SOC occupational categories ("New IPEDS Occupational Categories and 2010 SOC"), answers to frequently asked questions, and a link to current IPEDS Human Resources survey screens.

In the 2012–13 collection year, the response rate for the (spring 2013) Human Resources component was 99.9 percent. Data collection procedures for this component are presented in *Enrollment in Postsecondary Institutions, Fall 2012; Financial Statistics, Fiscal Year* 2012; Graduation Rates, Selected Cohorts, 2004–09; and Employees in Postsecondary Institutions, Fall 2012: First Look (Provisional Data) (NCES 2013-183). In the 2013–14 collection year, the response rate for the (spring 2014) Human Resources component was also 99.9 percent. Data collection procedures for this component are presented in Enrollment in Postsecondary *Institutions, Fall 2013; Financial Statistics, Fiscal Year* 2013; and Employees in Postsecondary Institutions, Fall 2013: First Look (Provisional Data) (NCES 2015-012).

### IPEDS Collection Years Prior to 2012–13

In collection years before 2001–02, IPEDS conducted a Fall Staff survey and a Salaries survey; in the 2001–02 collection year, the Employees by Assigned Position survey was added to IPEDS. In the 2005–06 collection year, these three surveys became sections of the IPEDS "Human Resources" component.

Data gathered by the Employees by Assigned Position (EAP) section categorized all employees by full- or part-time status, faculty status, and primary function/ occupational activity. Institutions with M.D. or D.O. programs were required to report their medical school employees separately. A response to the EAP was required of all 6,858 Title IV institutions and administrative offices in the United States and other jurisdictions for winter 2008–09, and 6,845, or 99.8 percent unweighted, responded. Of the 6,970 Title IV institutions and administrative offices required to respond to the winter 2009–10 EAP, 6,964, or 99.9 percent, responded. And of the 7,256 Title IV institutions and administrative offices required to respond to the EAP for winter 2010–11, 7,252, or 99.9 percent, responded.

The main functions/occupational activities of the EAP section were primarily instruction, instruction combined with research and/or public service, primarily research, primarily public service, executive/administrative/ managerial, other professionals (support/service), graduate

assistants, technical and paraprofessionals, clerical and secretarial, skilled crafts, and service/maintenance.

All full-time instructional faculty classified in the EAP full-time non-medical school part as either (1) primarily instruction or (2) instruction combined with research and/or public service were included in the Salaries section, unless they were exempt.

The Fall Staff section categorized all staff on the institution's payroll as of November 1 of the collection year by employment status (full time or part time), primary function/occupational activity, gender, and race/ ethnicity. These data elements were collected from degreegranting and non-degree-granting institutions; however, additional data elements were collected from degreegranting institutions and related administrative offices with 15 or more full-time staff. These elements include faculty status, contract length/teaching period, academic rank, salary class intervals, and newly hired full-time permanent staff.

The Fall Staff section, which was required only in odd-numbered reporting years, was not required during the 2008–09 Human Resources data collection. However, of the 6,858 Title IV institutions and administrative offices in the United States and other jurisdictions, 3,295, or 48.0 percent unweighted, did provide data in the Fall Staff section that year. During the 2009–10 Human Resources data collection, when all 6,970 Title IV institutions and administrative offices were required to respond to the Fall Staff section, 6,964, or 99.9 percent, did so. A response to the Fall Staff section of the 2010–11 Human Resources collection was optional, and 3,364 Title IV institutions and administrative offices responded that year (a response rate of 46.3 percent).

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) found that for 2003–04 employee data items, changes were made by 1.2 percent (77) of the institutions that responded. All who made changes made changes that resulted in different employee counts. For both institutional and aggregate differences, the changes had little impact on the original employee count submissions. A large number of institutions reported different staff data to IPEDS and Thomson Peterson; however, the magnitude of the differences was small—usually no more than 17 faculty members for any faculty variable.

The Salaries section collected data for full-time instructional faculty (except those in medical schools in the EAP section, described above) on the institution's payroll as of November 1 of the collection year by contract length/teaching period, gender, and academic rank. The reporting of data by faculty status in the Salaries section was required from 4-year degree-granting institutions and above only. Salary outlays and fringe benefits were also collected for full-time instructional staff on 9/10- and 11/12-month contracts/teaching periods. This section was applicable to degree-granting institutions unless exempt.

Between 1966-67 and 1985-86, 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. Beginning with the surveys for 1987-88, the IPEDS data tabulation procedures included imputations for survey nonrespondents. The unweighted response rate for the 2008-09 Salaries survey section was 99.9 percent. The response rate for the 2009-10 Salaries section was 100.0 percent (4,453 of the 4,455 required institutions responded), and the response rate for 2010-11 was 99.9 percent (4,561 of the 4,565 required institutions responded). Imputation methods for the 2010-11 Salaries survey section are discussed in *Employees in Postsecondary* Institutions, Fall 2010, and Salaries of Full-Time Instructional Staff, 2010–11 (NCES 2012-276).

Although data from this survey are not subject to sampling error, sources of nonsampling error may include computational errors and misclassification in reporting and processing. The electronic reporting system does allow corrections to prior-year reported or missing data, and this should help with these problems. Also, NCES reviews individual institutions' data for internal and longitudinal consistency and contacts institutions to check inconsistent data.

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) found that only 1.3 percent of the responding Title IV institutions in 2003–04 made changes to their salaries data. The differences between the imputed data and the revised data were small and found to have little impact on the published data.

Further information on the Human Resources component may be obtained from

IPEDS Staff Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 http://nces.ed.gov/ncestaff/SurvDet1.asp?surveyID=010

## National Assessment of Educational Progress

The National Assessment of Educational Progress (NAEP) is a series of cross-sectional studies initially implemented in 1969 to assess the educational achievement of U.S. students and monitor changes in those achievements. In the main national NAEP, a nationally representative sample of students is assessed at grades 4, 8, and 12 in various academic subjects.

The assessments are based on frameworks developed by the National Assessment Governing Board (NAGB). Assessment items include both multiple-choice and constructed-response (requiring written answers) items. Results are reported in two ways: by average score and by achievement level. Average scores are reported for the nation, for participating states and jurisdictions, and for subgroups of the population. Percentages of students performing at or above three achievement levels (*Basic*, *Proficient*, and *Advanced*) are also reported for these groups.

From 1990 until 2001, main NAEP was conducted for states and other jurisdictions that chose to participate. In 2002, under the provisions of the No Child Left Behind Act of 2001, all states began to participate in main NAEP and an aggregate of all state samples replaced the separate national sample.

Results are available for the mathematics assessments administered in 2000, 2003, 2005, 2007, 2009, 2011, and 2013; results for the mathematics assessment administered in 2015 will be released in late 2015. In 2005, NAGB called for the development of a new mathematics framework. The revisions made to the mathematics framework for the 2005 assessment were intended to reflect recent curricular emphases and better assess the specific objectives for students at each grade level.

The revised mathematics framework focuses on two dimensions: mathematical content and cognitive demand. By considering these two dimensions for each item in the assessment, the framework ensures that NAEP assesses an appropriate balance of content, as well as a variety of ways of knowing and doing mathematics.

For grades 4 and 8, comparisons over time can be made among the assessments prior to and after the implementation of the 2005 framework. The changes to the grade 12 assessment were too drastic to allow the results to be directly compared with previous years. The changes to the grade 12 assessment included adding more questions on algebra, data analysis, and probability to reflect changes in high school mathematics standards and coursework, as well as the merging of the measurement and geometry content areas. The reporting scale for grade 12 mathematics was changed from 0–500 to 0–300. For more information regarding the 2005 mathematics framework revisions, see <u>http://nces.ed.gov/</u> nationsreportcard/mathematics/frameworkcomparison.asp.

Results are available for the reading assessments administered in 2000, 2002, 2003, 2005, 2007, 2009, 2011, and 2013; results for the reading assessment administered in 2015 will be released in late 2015. In 2009, a new framework was developed for the 4th-, 8th-, and 12th-grade NAEP reading assessments.

Both a content alignment study and a reading trend or bridge study were conducted to determine if the "new"

assessment was comparable to the "old" assessment. Overall, the results of the special analyses suggested that the old and new assessments were similar in terms of their item and scale characteristics and the results they produced for important demographic groups of students. Thus, it was determined that the results of the 2009 reading assessment could still be compared to those from earlier assessment years, thereby maintaining the trend lines first established in 1992. For more information regarding the 2009 reading framework revisions, see <u>http://nces.ed.gov/nationsreportcard/reading/</u> whatmeasure.asp.

In spring 2013, NAEP released results from the NAEP 2012 economics assessment in *The Nation's Report Card: Economics 2012* (NCES 2013-453). First administered in 2006, the NAEP economics assessment measures 12th-graders' understanding of a wide range of topics in three main content areas: market economy, national economy, and international economy. The 2012 assessment is based on a nationally representative sample of nearly 11,000 12th-graders. Comparing results from 2012 with results from 2006 can advance the inquiry of whether our nation's high school seniors are becoming more literate in economics.

In the report *The Nation's Report Card: A First Look—2013 Mathematics and Reading* (NCES 2014-451), NAEP released the results of the 2013 mathematics and reading assessments. Results can also be accessed using the interactive graphics and downloadable data available at the new online Nation's Report Card website (http://nationsreportcard.gov/reading\_math\_2013/#/).

In addition to conducting the main assessments, NAEP also conducts the long-term trend assessments and trial urban district assessments. Long-term trend assessments provide an opportunity to observe educational progress in reading and mathematics of 9-, 13-, and 17-year-olds since the early 1970s. The long-term trend reading assessment measures students' reading comprehension skills using an array of passages that vary by text types and length. The assessment was designed to measure students' ability to locate specific information in the text provided; make inferences across a passage to provide an explanation; and identify the main idea in the text.

The NAEP long-term trend assessment in mathematics measures knowledge of mathematical facts; ability to carry out computations using paper and pencil; knowledge of basic formulas, such as those applied in geometric settings; and ability to apply mathematics to skills of daily life, such as those involving time and money.

*The Nation's Report Card: Trends in Academic Progress* 2012 (NCES 2013-456) provides the results of 12 long-term trend reading assessments dating back to 1971 and 11 long-term trend mathematics assessments dating back to 1973.

The NAEP Trial Urban District Assessment (TUDA) focuses attention on urban education and measures educational progress within participating large urban districts. TUDA mathematics and reading assessments are based on the same mathematics and reading assessments used to report national and state results. TUDA reading results were first reported for 6 urban districts in 2002, and TUDA mathematics results were first reported for 10 urban districts in 2003.

The Nation's Report Card: A First Look—2013 Mathematics and Reading Trial Urban District Assessment (NCES 2014-466) provides the results of the 2013 mathematics and reading TUDA, which measured the reading and mathematics progress of 4th- and 8th-graders from 21 urban school districts. Results from the 2013 mathematics and reading TUDA can also be accessed using the interactive graphics and downloadable data available at the online TUDA website (<u>http://</u> nationsreportcard.gov/reading\_math\_tuda\_2013/#/).

Further information on NAEP may be obtained from

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### National Household Education Surveys Program

The National Household Education Surveys Program (NHES) is a data collection system that is designed to address a wide range of education-related issues. Surveys have been conducted in 1991, 1993, 1995, 1996, 1999, 2001, 2003, 2005, 2007, and 2012. NHES targets specific populations for detailed data collection. It is intended to provide more detailed data on the topics and populations of interest than are collected through supplements to other household surveys.

The topics addressed by NHES:1991 were early childhood education and adult education. About 60,000 households were screened for NHES:1991. In the Early Childhood Education Survey, about 14,000 parents/guardians of 3- to 8-year-olds completed interviews about their children's early educational experiences. Included in this component were participation in nonparental care/ education; care arrangements and school; and family, household, and child characteristics. In the NHES:1991 Adult Education Survey, about 9,800 people 16 years of age and older, identified as having participated in an adult education activity in the previous 12 months, were questioned about their activities. Data were collected on programs and up to four courses, including the subject matter, duration, sponsorship, purpose, and cost. Information on the household and the adult's background and current employment was also collected.

In NHES:1993, nearly 64,000 households were screened. Approximately 11,000 parents of 3- to 7-year-olds completed interviews for the School Readiness Survey. Topics included the developmental characteristics of preschoolers; school adjustment and teacher feedback to parents for kindergartners and primary students; centerbased program participation; early school experiences; home activities with family members; and health status. In the School Safety and Discipline Survey, about 12,700 parents of children in grades 3 to 12 and about 6,500 youth in grades 6 to 12 were interviewed about their school experiences. Topics included the school learning environment, discipline policy, safety at school, victimization, the availability and use of alcohol/drugs, and alcohol/drug education. Peer norms for behavior in school and substance use were also included in this topical component. Extensive family and household background information was collected, as well as characteristics of the school attended by the child.

In NHES:1995, the Early Childhood Program Participation Survey and the Adult Education Survey were similar to those fielded in 1991. In the Early Childhood component, about 14,000 parents of children from birth to third grade were interviewed out of 16,000 sampled, for a completion rate of 90.4 percent. In the Adult Education Survey, about 24,000 adults were sampled and 82.3 percent (20,000) completed the interview.

NHES:1996 covered parent and family involvement in education and civic involvement. Data on homeschooling and school choice also were collected. The 1996 survey screened about 56,000 households. For the Parent and Family Involvement in Education Survey, nearly 21,000 parents of children in grades 3 to 12 were interviewed. For the Civic Involvement Survey, about 8,000 youth in grades 6 to 12, about 9,000 parents, and about 2,000 adults were interviewed. The 1996 survey also addressed public library use. Adults in almost 55,000 households were interviewed to support state-level estimates of household public library use.

NHES:1999 collected end-of-decade estimates of key indicators from the surveys conducted throughout the 1990s. Approximately 60,000 households were screened for a total of about 31,000 interviews with parents of children from birth through grade 12 (including about 6,900 infants, toddlers, and preschoolers) and adults age 16 or older not enrolled in grade 12 or below. Key indicators included participation of children in nonparental care and early childhood programs, school experiences, parent/family involvement in education at home and at school, youth community service activities, plans for future education, and adult participation in educational activities and community service. NHES:2001 included two surveys that were largely repeats of similar surveys included in earlier NHES collections. The Early Childhood Program Participation Survey was similar in content to the Early Childhood Program Participation Survey fielded as part of NHES:1995, and the Adult Education and Lifelong Learning Survey was similar in content to the Adult Education Survey of NHES:1995. The Before- and After-School Programs and Activities Survey, while containing items fielded in earlier NHES collections, had a number of new items that collected information about what school-age children were doing during the time they spent in child care or in other activities, what parents were looking for in care arrangements and activities, and parent evaluations of care arrangements and activities. Parents of approximately 6,700 children from birth through age 6 who were not yet in kindergarten completed Early Childhood Program Participation Survey interviews. Nearly 10,900 adults completed Adult Education and Lifelong Learning Survey interviews, and parents of nearly 9,600 children in kindergarten through grade 8 completed Before- and After-School Programs and Activities Survey interviews.

NHES:2003 included two surveys: the Parent and Family Involvement in Education Survey and the Adult Education for Work-Related Reasons Survey (the first administration). Whereas previous adult education surveys were more general in scope, this survey had a narrower focus on occupation-related adult education programs. It collected in-depth information about training and education in which adults participated specifically for work-related reasons, either to prepare for work or a career or to maintain or improve work-related skills and knowledge they already had. The Parent and Family Involvement Survey expanded on the first survey fielded on this topic in 1996. In 2003, screeners were completed with 32,050 households. About 12,700 of the 16,000 sampled adults completed the Adult Education for Work-Related Reasons Survey, for a weighted response rate of 76 percent. For the Parent and Family Involvement in Education Survey, interviews were completed by the parents of about 12,400 of the 14,900 sampled children in kindergarten through grade 12, yielding a weighted unit response rate of 83 percent.

NHES:2005 included surveys that covered adult education, early childhood program participation, and after-school programs and activities. Data were collected from about 8,900 adults for the Adult Education Survey, from parents of about 7,200 children for the Early Childhood Program Participation Survey, and from parents of nearly 11,700 children for the After-School Programs and Activities Survey. These surveys were substantially similar to the surveys conducted in 2001, with the exceptions that the Adult Education Survey addressed a new topic—informal learning activities for personal interest—and the Early Childhood Program Participation Survey and After-School Programs and Activities Survey did not collect information about beforeschool care for school-age children.

NHES:2007 fielded the Parent and Family Involvement in Education Survey and the School Readiness Survey. These surveys were similar in design and content to surveys included in the 2003 and 1993 collections, respectively. New features added to the Parent and Family Involvement Survey were questions about supplemental education services provided by schools and school districts (including use of and satisfaction with such services), as well as questions that would efficiently identify the school attended by the sampled students. New features added to the School Readiness Survey were questions that collected details about TV programs watched by the sampled children. For the Parent and Family Involvement Survey, interviews were completed with parents of 10,680 sampled children in kindergarten through grade 12, including 10,370 students enrolled in public or private schools and 310 homeschooled children. For the School Readiness Survey, interviews were completed with parents of 2,630 sampled children ages 3 to 6 and not yet in kindergarten. Parents who were interviewed about children in kindergarten through second grade for the Parent and Family Involvement Survey were also asked some questions about these children's school readiness.

The 2007 and earlier administrations of NHES used a random-digit-dial sample of landline phones and computer-assisted telephone interviewing to conduct interviews. However, due to declining response rates for all telephone surveys and the increase in households that only or mostly use a cell phone instead of a landline, the data collection method was changed to an addressbased sample survey for NHES:2012. Because of this change in survey mode, readers should use caution when comparing NHES:2012 estimates to those of prior NHES administrations.

NHES:2012 fielded the Parent and Family Involvement in Education Survey and the Early Childhood Program Participation Survey. The Parent and Family Involvement in Education Survey gathered data on students who were enrolled in kindergarten through grade 12 or who were homeschooled at equivalent grade levels. Survey questions that pertained to students enrolled in kindergarten through grade 12 requested information on various aspects of parent involvement in education (such as help with homework, family activities, and parent involvement at school) and survey questions pertaining to homeschooled students requested information on the student's homeschooling experiences, the sources of the curriculum, and the reasons for homeschooling.

The 2012 Parent and Family Involvement in Education Survey questionnaires were completed for 17,563 (397 homeschooled and 17,166 enrolled) children, for a weighted unit response rate of 78.4 percent. The overall estimated unit response rate (the product of the screener unit response rate of 73.8 percent and the Parent and Family Involvement in Education Survey unit response rate) was 57.8 percent.

The 2012 Early Childhood Program Participation Survey collected data on the early care and education arrangements and early learning of children from birth through the age of 5 who were not yet enrolled in kindergarten. Questionnaires were completed for 7,893 children, for a weighted unit response rate of 78.7 percent. The overall estimated weighted unit response rate (the product of the screener weighted unit response rate of 73.8 percent and the Early Childhood Program Participation Survey unit weighted response rate) was 58.1 percent.

Data for the 2012 NHES Parent and Family Involvement in Education Survey are available in the First Look report, *Parent and Family Involvement in Education*, *From the National Household Education Surveys Program* of 2012 (NCES 2013-028). Data for the 2012 NHES Early Childhood Program Participation Survey are available in the First Look report *Early Childhood Program Participation, From the National Household Education Surveys Program of 2012* (NCES 2013-029).

Further information on NHES may be obtained from

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### National Postsecondary Student Aid Study

The National Postsecondary Student Aid Study (NPSAS) is a comprehensive nationwide study of how students and their families pay for postsecondary education. Data gathered from the study are used to help guide future federal student financial aid policy. The study covers nationally representative samples of undergraduates, graduates, and first-professional students in the 50 states, the District of Columbia, and Puerto Rico, including students attending less-than-2-year institutions, community colleges, 4-year colleges, and universities. Participants include students who do not receive aid and those who do receive financial aid. Since NPSAS identifies nationally representative samples of student subpopulations of interest to policymakers and obtains baseline data for longitudinal study of these subpopulations, data from the study provide the base-year sample for the Beginning Postsecondary Students (BPS) longitudinal study and the Baccalaureate and Beyond (B&B) longitudinal study.

Originally, NPSAS was conducted every 3 years. Beginning with the 1999–2000 study (NPSAS:2000), NPSAS has been conducted every 4 years. NPSAS:08 included a new set of instrument items to obtain baseline measures of the awareness of two new federal grants introduced in 2006: the Academic Competitiveness Grant (ACG) and the National Science and Mathematics Access to Retain Talent (SMART) grant.

The first NPSAS (NPSAS:87) was conducted during the 1986–87 school year. Data were gathered from about 1,100 colleges, universities, and other postsecondary institutions; 60,000 students; and 14,000 parents. These data provided information on the cost of postsecondary education, the distribution of financial aid, and the characteristics of both aided and nonaided students and their families.

For NPSAS:93, information on 77,000 undergraduates and graduate students enrolled during the school year was collected at 1,000 postsecondary institutions. The sample included students who were enrolled at any time between July 1, 1992, and June 30, 1993. About 66,000 students and a subsample of their parents were interviewed by telephone. NPSAS:96 contained information on more than 48,000 undergraduate and graduate students from about 1,000 postsecondary institutions who were enrolled at any time during the 1995–96 school year. NPSAS:2000 included nearly 62,000 students (50,000 undergraduates and almost 12,000 graduate students) from 1,000 postsecondary institutions. NPSAS:04 collected data on about 80,000 undergraduates and 11,000 graduate students from 1,400 postsecondary institutions. For NPSAS:08, about 114,000 undergraduate students and 14,000 graduate students who were enrolled in postsecondary education during the 2007–08 school year were selected from more than 1,730 postsecondary institutions.

NPSAS:12 sampled about 95,000 undergraduates and 16,000 graduate students from approximately 1,500 postsecondary institutions. Public access to the data is available online through PowerStats (<u>http://nces.ed.gov/datalab/</u>). The next cycle of NPSAS is scheduled for the 2015–16 school year.

Further information on NPSAS may be obtained from

Aurora D'Amico Tracy Hunt-White Sample Surveys Division Longitudinal Surveys Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 aurora.damico@ed.gov tracy.hunt-white@ed.gov http://nces.ed.gov/npsas

### Principal Follow-up Survey

The Principal Follow-up Survey (PFS), first conducted in school year 2008–09, is a component of the 2011–12 Schools and Staffing Survey (SASS). The 2012–13 PFS was administered in order to provide attrition rates for principals in K–12 public and private schools. The goal was to assess how many principals in the 2011–12 school year still worked as a principal in the same school in the 2012–13 school year, how many had moved to become a principal in another school, and how many no longer worked as a principal. The PFS sample included all schools whose principals had completed SASS principal questionnaires. Schools that had returned a completed 2011–12 SASS principal questionnaire were mailed the PFS form in March 2013.

Further information on the PFS may be obtained from

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#### Private School Universe Survey

The purposes of the Private School Universe Survey (PSS) data collection activities are (1) to build an accurate and complete list of private schools to serve as a sampling frame for NCES sample surveys of private schools and (2) to report data on the total number of private schools, teachers, and students in the survey universe. Begun in 1989 under the U.S. Census Bureau, the PSS has been conducted every 2 years, and data for the 1989–90, 1991–92, 1993–94, 1995–96, 1997–98, 1999–2000, 2001–02, 2003–04, 2005–06, 2007–08, and 2009–10 school years have been released. A First Look report on the 2011–12 PSS data, *Characteristics of Private Schools in the United States: Results From the 2011–12 Private School Universe Survey* (NCES 2013-316) was published in July 2013.

The PSS produces data similar to that of the CCD for public schools, and can be used for public-private comparisons. The data are useful for a variety of policyand research-relevant issues, such as the growth of religiously affiliated schools, the number of private high school graduates, the length of the school year for various private schools, and the number of private school students and teachers.

The target population for this universe survey is all private schools in the United States that meet the PSS criteria of a private school (i.e., the private school is an institution that provides instruction for any of grades K through 12, has one or more teachers to give instruction, is not administered by a public agency, and is not operated in a private home). The survey universe is composed of schools identified from a variety of sources. The main source is a list frame initially developed for the 1989–90 PSS. The list is updated regularly by matching it with lists provided by nationwide private school associations, state departments of education, and other national guides and sources that list private schools. The other source is an area frame search in approximately 124 geographic areas, conducted by the U.S. Census Bureau.

Of the 40,302 schools included in the 2009–10 sample, 10,229 were found ineligible for the survey. Those not responding numbered 1,856, and those responding numbered 28,217. The unweighted response rate for the 2009–10 PSS survey was 93.8 percent.

Of the 39,325 schools included in the 2011–12 sample, 10,030 cases were considered as out-of-scope (not eligible for the PSS). A total of 26,983 private schools completed a PSS interview (15.8 percent completed online), while 2,312 schools refused to participate, resulting in an unweighted response rate of 92.1 percent.

Further information on the PSS may be obtained from

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### **Projections of Education Statistics**

Since 1964, NCES has published projections of key statistics for elementary and secondary schools and institutions of higher education. The latest report is titled *Projections of Education Statistics to 2022* (NCES 2014-051). The *Projections of Education Statistics* series uses projection models for elementary and secondary enrollment, high school graduates, elementary and secondary teachers, expenditures for public elementary and secondary degree-granting institutions, and postsecondary degrees conferred to develop national and state projections. These models are described more fully in the report's appendix on projection methodology.

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 ranged from 0.3 to 1.3 percent for projections from 1 to 5 years in the future, while those for teachers were less than 3 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.

Further information on *Projections of Education Statistics* may be obtained from

William Hussar Annual Reports and Information National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>william.hussar@ed.gov</u> <u>http://nces.ed.gov/annuals</u>

### Schools and Staffing Survey

The Schools and Staffing Survey (SASS) is a set of related questionnaires that collect descriptive data on the context of public and private elementary and secondary education. Data reported by districts, schools, principals, and teachers provide a variety of statistics on the condition of education in the United States that may be used by policymakers and the general public. The SASS system covers a wide range of topics, including teacher demand, teacher and principal characteristics, teachers' and principals' perceptions of school climate and problems in their schools, teacher and principal compensation, district hiring and retention practices, general conditions in schools, and basic characteristics of the student population.

SASS data are collected through a mail questionnaire with telephone and in-person field follow-up. SASS has been conducted by the Census Bureau for NCES since the first administration of the survey, which was conducted during the 1987–88 school year. Subsequent SASS administrations were conducted in 1990–91, 1993–94, 1999–2000, 2003–04, 2007–08, and 2011–12.

SASS is designed to produce national, regional, and state estimates for public elementary and secondary schools, school districts, principals, teachers, and school library media centers and national and regional estimates for public charter schools, as well as principals, teachers, and school library media centers within these schools. For private schools, the sample supports national, regional, and affiliation estimates for schools, principals, and teachers.

From its inception, SASS has had four core components: school questionnaires, teacher questionnaires, principal questionnaires, and school district (prior to 1999–2000, "teacher demand and shortage") questionnaires. A fifth component, school library media center questionnaires, was introduced in the 1993–94 administration and has been included in every subsequent administration of SASS. School library data were also collected in the 1990–91 administration of the survey through the school and principal questionnaires. School questionnaires used in SASS include the Public and Private School Questionnaires; teacher questionnaires include the Public and Private School Teacher Questionnaires; principal questionnaires include the Public and Private School Principal (or School Administrator) Questionnaires; and school district questionnaires include the School District (or Teacher Demand and Shortage) Questionnaires.

Although the four core questionnaires and the school library media questionnaires have remained relatively stable over the various administrations of SASS, the survey has changed to accommodate emerging issues in elementary and secondary education. Some items have been added, some have been deleted, and some questionnaire items have been reworded.

During the 1990–91 SASS cycle, NCES worked with the Office of Indian Education to add an Indian School Questionnaire to SASS, and it remained a part of SASS through 2007–08. The Indian School Questionnaire explores the same school-level issues that the Public and Private School Questionnaires explore, allowing comparisons among the three types of schools. The 1990–91, 1993–94, 1999–2000, 2003–04, and 2007–08 administrations of SASS obtained data on Bureau of Indian Education (BIE) schools (schools funded or operated by the BIE), but the 2011–12 administration did not obtain BIE data. SASS estimates for all survey years presented in this report exclude BIE schools, and as a result, estimates in this report may differ from those in previously published reports.

School library media center questionnaires were administered in public, private, and BIE schools as part of the 1993-1994 and 1999-2000 SASS. During the 2003-04 administration of SASS, only library media centers in public schools were surveyed, and in 2007-08 only library media centers in public schools and BIE and BIE-funded schools were surveyed. The 2011–12 survey collected data only on school library media centers in traditional public schools and in public charter schools. School library questions focused on facilities, services and policies, staffing, technology, information literacy, collections and expenditures, and media equipment. New or revised topics included access to online licensed databases, resource availability, and additional elements on information literacy. The Student Records and Library Media Specialist/Librarian Questionnaires were administered only in 1993-94.

As part of the 1999–2000 SASS, the Charter School Questionnaire was sent to the universe of charter schools in operation in 1998–99. In 2003–04 and in subsequent administrations of SASS, there was no separate questionnaire for charter schools—charter schools were included in the public school sample instead. Another change in the 2003–04 administration of SASS was a revised data collection procedure using a primary in-person contact within the school intended to reduce the field follow-up phase.

The SASS teacher surveys collect information on the characteristics of teachers, such as their age, race/ethnicity, years of teaching experience, average number of hours per week spent on teaching activities, base salary, average class size, and highest degree earned. These teacher-reported data may be combined with related information on their school's characteristics, such as school type (e.g., public traditional, public charter, Catholic, private other religious, and private nonsectarian), community type, and school enrollment size. The teacher questionnaires also ask for information on teacher opinions regarding the school and teaching environment. In 1993-94, about 53,000 public school teachers and 10,400 private school teachers were sampled. In 1999-2000, about 56,300 public school teachers, 4,400 public charter school teachers, and 10,800 private school teachers were sampled. In 2003–04, about 52,500 public school teachers and 10,000 private school teachers were sampled. In 2007-08, about 48,400 public school teachers and 8,200 private school teachers were sampled. In 2011-12, about 51,100 public school teachers and 7,100 private school teachers were sampled. Weighted overall response rates in 2011-12 were 61.8 percent for public school teachers and 50.1 percent for private school teachers.

The SASS principal surveys focus on such topics as age, race/ethnicity, sex, average annual salary, years of experience, highest degree attained, perceived influence on decisions made at the school, and hours spent per week on all school activities. These data on principals can be placed in the context of other SASS data, such as the type of the principal's school (e.g., public traditional, public charter, Catholic, other religious, or nonsectarian), enrollment, and percentage of students eligible for free or reduced price lunch. In 2003-04, about 10,200 public school principals were sampled, and in 2007-08, about 9,800 public school principals were sampled. In 2011-12, about 11,000 public school principals and 3,000 private school principals were sampled. Weighted response rates in 2011–12 for public school principals and private school principals were 72.7 percent and 64.7 percent, respectively.

The SASS 2011–12 sample of schools was confined to the 50 states and the District of Columbia and excludes the other jurisdictions, the Department of Defense overseas schools, the BIE schools, and schools that do not offer teacher-provided classroom instruction in grades 1–12 or the ungraded equivalent. The SASS 2011–12 sample included 10,250 traditional public schools, 750 public charter schools, and 3,000 private schools.

The public school sample for the 2011–12 SASS was based on an adjusted public school universe file from the 2009–10 Common Core of Data (CCD), a database of all the nation's public school districts and public schools. The private school sample for the 2011–12 SASS was selected from the 2009–10 Private School Universe Survey (PSS), as updated for the 2011–12 PSS. This update collected membership lists from private school associations and religious denominations, as well as private school lists from state education departments. The 2011–12 SASS private school frame was further augmented by the inclusion of additional schools that were identified through the 2009–10 PSS area frame data collection.

Further information on SASS may be obtained from

Kathryn Chandler Sample Surveys Division Cross-Sectional Surveys Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>kathryn.chandler@ed.gov</u> <u>http://nces.ed.gov/surveys/sass</u>

### The Teacher Follow-up Survey

The Teacher Follow-up Survey (TFS) is a follow-up survey of selected elementary and secondary school teachers who participate in the NCES Schools and Staffing Survey (SASS). Its purpose is to determine how many teachers remain at the same school, move to another school, or leave the profession in the year following a SASS administration. It is administered to elementary and secondary teachers in the 50 states and the District of Columbia. The TFS uses two questionnaires, one for teachers who left teaching since the previous SASS administration and another for those who are still teaching either in the same school as last year or in a different school. The objective of the TFS is to focus on the characteristics of each group in order to answer questions about teacher mobility and attrition.

The 2008–09 TFS is different from any previous TFS administration in that it also serves as the second wave of a longitudinal study of first-year teachers. Because of this, the 2008–09 TFS consists of four questionnaires. Two are for respondents who were first-year public school teachers in the 2007–08 SASS and two are for the remainder of the sample.

The 2012–13 TFS sample was made up of teachers who had taken the 2011–12 SASS survey. The 2012–13 TFS sample contained about 5,800 public school teachers and 1,200 private school teachers. The weighted overall response rate using the initial basic weight for private school teachers was notably low (39.7 percent), resulting in a decision to exclude private school teachers from the 2012–13 TFS data files. The weighted overall response rate for public school teachers was 49.9 percent (50.3 percent for current and 45.6 percent for former teachers). Further information about the 2012–13 TFS, including the analysis of unit nonresponse bias, is available in the First Look report *Teacher Attrition and Mobility: Results From the 2012–13 Teacher Follow-up Survey* (NCES 2014-077).

Further information on the TFS may be obtained from

Chelsea Owens Sample Surveys Division Cross-Sectional Surveys Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>chelsea.owens@ed.gov</u> <u>http://nces.ed.gov/surveys/sass/</u>

# Other Department of Education Agencies

### Office of Special Education Programs

Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act

The Individuals with Disabilities Education Act (IDEA) is a law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities.

The Individuals with Disabilities Education Act (IDEA), formerly the Education of the Handicapped Act (EHA), requires the Secretary of Education to transmit to Congress annually a report describing the progress made in serving the nation's children with disabilities. This annual report contains information on children served by public schools under the provisions of Part B of the IDEA and on children served in state-operated programs for persons with disabilities under Chapter I of the Elementary and Secondary Education Act.

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 Programs (OSEP) by the 50 states, the District of Columbia, the BIE schools, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, the U.S. Virgin Islands, the Federated States of Micronesia, Palau, and the Marshall Islands. The child count information is based on the number of children with disabilities receiving special education and related services on December 1 of each year. Count information is available from <u>http://www.ideadata.org</u>.

Since all participants in programs for persons with disabilities are reported to OSEP, the data are not subject to sampling error. However, nonsampling error can arise from a variety of sources. Some states only produce counts of students receiving special education services by disability category because Part B of the EHA requires it. In those states that typically produce counts of students receiving special education services by disability category without regard to EHA requirements, definitions and labeling practices vary.

Further information on this annual report to Congress may be obtained from

Office of Special Education Programs Office of Special Education and Rehabilitative Services U.S. Department of Education 400 Maryland Avenue SW Washington, DC 20202-7100 <u>http://www.ed.gov/about/reports/annual/osep/index.html</u> <u>http://idea.ed.gov/</u> <u>http://www.ideadata.org</u>

## Other Governmental Agencies and Programs

### Bureau of Justice Statistics

# National Crime Victimization Survey (NCVS)

The National Crime Victimization Survey (NCVS), administered for the U.S. Bureau of Justice Statistics (BJS) by the U.S. Census Bureau, is the nation's primary source of information on crime and the victims of crime. Initiated in 1972 and redesigned in 1992, the NCVS collects detailed information on the frequency and nature of the crimes of rape, sexual assault, robbery, aggravated and simple assault, theft, household burglary, and motor vehicle theft experienced by Americans and American households each year. The survey measures both crimes reported to police and crimes not reported to the police.

NCVS estimates presented may differ from those in previous published reports. This is because a small number of victimizations, referred to as series victimizations, are included using a new counting strategy. High-frequency repeat victimizations, or series victimizations, are six or more similar but separate victimizations that occur with such frequency that the victim is unable to recall each individual event or describe each event in detail. As part of ongoing research efforts associated with the redesign of the NCVS, BJS investigated ways to include high-frequency repeat victimizations, or series victimizations, in estimates of criminal victimization. Including series victimizations results in more accurate estimates of victimization. BIS has decided to include series victimizations using the victim's estimates of the number of times the victimizations occurred over the past 6 months, capping the number of victimizations within each series at a maximum of 10. This strategy for counting series victimizations balances the desire to estimate national rates and account for the experiences of persons who have been subjected to repeat victimizations against the

desire to minimize the estimation errors that can occur when repeat victimizations are reported. Including series victimizations in national rates results in rather large increases in the level of violent victimization; however, trends in violence are generally similar regardless of whether series victimizations are included. For more information on the new counting strategy and supporting research, see *Methods for Counting High-Frequency Repeat Victimizations in the National Crime Victimization Survey* at <u>http://bjs.ojp.usdoj.gov/content/pub/pdf/mchfrv.pdf</u>.

Readers should note that in 2003, in accordance with changes to the Office of Management and Budget's standards for the classification of federal data on race and ethnicity, the NCVS item on race/ethnicity was modified. A question on Hispanic origin is now followed by a new question on race. The new question about race allows the respondent to choose more than one race and delineates Asian as a separate category from Native Hawaiian or Other Pacific Islander. An analysis conducted by the Demographic Surveys Division at the U.S. Census Bureau showed that the new race question had very little impact on the aggregate racial distribution of the NCVS respondents, with one exception: There was a 1.6 percentage point decrease in the percentage of respondents who reported themselves as White. Due to changes in race/ethnicity categories, comparisons of race/ ethnicity across years should be made with caution.

There were changes in the sample design and survey methodology in the 2006 NCVS that may have affected survey estimates. Caution should be used when comparing the 2006 estimates to estimates of other years. Data from 2007 onward are comparable to earlier years. Analyses of the 2007 estimates indicate that the program changes made in 2006 had relatively small effects on NCVS estimates. For more information on the 2006 NCVS data, see *Criminal Victimization, 2006*, at http://bjs.ojp.usdoj.gov/content/pub/pdf/cv06.pdf, the technical notes at <u>http://bjs.ojp.usdoj.gov/content/pub/</u> pdf/cv06tn.pdf, and *Criminal Victimization, 2007*, at http://bjs.ojp.usdoj.gov/content/pub/pdf/cv07.pdf.

The number of NCVS-eligible households in the sample in 2013 was about 107,000. Households were selected using a stratified, multistage cluster design. In the first stage, the primary sampling units (PSUs), consisting of counties or groups of counties, were selected. In the second stage, smaller areas, called Enumeration Districts (EDs), were selected from each sampled PSU. Finally, from selected EDs, clusters of four households, called segments, were selected for interview. At each stage, the selection was done proportionate to population size in order to create a self-weighting sample. The final sample was augmented to account for households constructed after the decennial Census. Within each sampled household, the U.S. Census Bureau interviewer attempts to interview all household members age 12 and older to determine whether they had been victimized by the measured crimes during the 6 months preceding the interview.

The first NCVS interview with a housing unit is conducted in person. Subsequent interviews are conducted by telephone, if possible. About 80,000 persons age 12 and older are interviewed each 6 months. Households remain in the sample for 3 years and are interviewed seven times at 6-month intervals. Since the survey's inception, the initial interview at each sample unit has been used only to bound future interviews to establish a time frame to avoid duplication of crimes uncovered in these subsequent interviews. Beginning in 2006, data from the initial interview have been adjusted to account for the effects of bounding and have been included in the survey estimates. After a household has been interviewed its seventh time, it is replaced by a new sample household. In 2013, the household response rate was about 84 percent and the completion rate for persons within households was about 88 percent. Weights were developed to permit estimates for the total U.S. population 12 years and older.

Further information on the NCVS may be obtained from

Rachel E. Morgan Victimization Statistics Branch Bureau of Justice Statistics <u>rachel.morgan@usdoj.gov</u> <u>http://www.bjs.gov/</u>

### **Bureau of Labor Statistics**

## **Consumer Price Indexes**

The Consumer Price Index (CPI) represents changes in prices of all goods and services purchased for consumption by urban households. Indexes are available for two population groups: a CPI for All Urban Consumers (CPI-U) and a CPI for Urban Wage Earners and Clerical Workers (CPI-W). Unless otherwise specified, data are adjusted for inflation using the CPI-U. These values are frequently adjusted to a school-year basis by averaging the July through June figures. Price indexes are available for the United States, the four Census regions, size of city, cross-classifications of regions and size classes, and 26 local areas. The major uses of the CPI include as an economic indicator, as a deflator of other economic series, and as a means of adjusting income.

Also available is the Consumer Price Index research series using current methods (CPI-U-RS), which presents an estimate of the CPI-U from 1978 to the present that incorporates most of the improvements that the Bureau of Labor Statistics has made over that time span into the entire series. The historical price index series of the CPI-U does not reflect these changes, though these changes do make the present and future CPI more accurate. The limitations of the CPI-U-RS include considerable uncertainty surrounding the magnitude of the adjustments and the several improvements in the CPI that have not been incorporated into the CPI-U-RS for various reasons. Nonetheless, the CPI-U-RS can serve as a valuable proxy for researchers needing a historical estimate of inflation using current methods. Further information on consumer price indexes may be obtained from

Bureau of Labor Statistics U.S. Department of Labor 2 Massachusetts Avenue NE Washington, DC 20212 <u>http://www.bls.gov/cpi</u>

### **Employment and Unemployment Surveys**

Statistics on the employment and unemployment status of the population and related data are compiled by the Bureau of Labor Statistics (BLS) using data from the Current Population Survey (CPS) (see below) and other surveys. The Current Population Survey, a monthly household survey conducted by the U.S. Census Bureau for the Bureau of Labor Statistics, provides a comprehensive body of information on the employment and unemployment experience of the nation's population, classified by age, sex, race, and various other characteristics.

Further information on unemployment surveys may be obtained from

Bureau of Labor Statistics U.S. Department of Labor 2 Massachusetts Avenue NE Washington, DC 20212 <u>cpsinfo@bls.gov</u> <u>http://www.bls.gov/bls/employment.htm</u>

### Census Bureau

### American Community Survey (ACS)

The Census Bureau introduced the American Community Survey (ACS) in 1996. Fully implemented in 2005, it provides a large monthly sample of demographic, socioeconomic, and housing data comparable in content to the Long Forms of the Decennial Census up to and including the 2000 long form. Aggregated over time, these data will serve as a replacement for the Long Form of the Decennial Census. The survey includes questions mandated by federal law, federal regulations, and court decisions.

Since 2011, the survey has been mailed to approximately 295,000 addresses in the United States and Puerto Rico each month, or about 3.5 million addresses annually. A larger proportion of addresses in small governmental units (e.g., American Indian reservations, small counties, and towns) also receive the survey. The monthly sample size is designed to approximate the ratio used in the 2000 Census, which requires more intensive distribution in these areas. The ACS covers the U.S. resident population, which includes the entire civilian, noninstitutionalized population; incarcerated persons; institutionalized persons; and the active duty military who are in the

United States. In 2006, the ACS began interviewing residents in group quarter facilities. Institutionalized group quarters include adult and juvenile correctional facilities, nursing facilities, and other health care facilities. Noninstitutionalized group quarters include college and university housing, military barracks, and other noninstitutional facilities such as workers and religious group quarters and temporary shelters for the homeless.

National-level data from the ACS are available from 2000 onward. The ACS produces 1-year estimates for jurisdictions with populations of 65,000 and over, 3-year estimates for jurisdictions with populations of 20,000 or over, and 5-year estimates for jurisdictions with smaller populations.

The 2012 ACS 1-year estimates represented data collected between January 1, 2012, and December 31, 2012; the 2010–12 ACS 3-year estimates represented data collected between January 1, 2010, and December 31, 2012; and the 2008–12 ACS 5-year estimates represented data collected between January 1, 2008, and December 31, 2012. Similarly, the 2013 1-year estimates used data collected between January 1, 2013, and December 31, 2013; the 2013 3-year estimates used data collected between January 1, 2011, and December 31, 2013; and the 2013 5-year estimates used data collected between January 1, 2009, and December 31, 2013.

Further information about the ACS is available at <u>http://www.census.gov/acs/www/</u>.

### **Current Population Survey**

The Current Population Survey (CPS) is a monthly survey of about 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The CPS is the primary source of information of labor force statistics for the U.S. noninstitutionalized population (e.g., excludes military personnel and their families living on bases and inmates of correctional institutions). In addition, supplemental questionnaires are used to provide further information about the U.S. population. Specifically, in October, detailed questions regarding school enrollment and school characteristics are asked. In March, detailed questions regarding income are asked.

The current sample design, introduced in July 2001, includes about 72,000 households. Each month about 58,900 of the 72,000 households are eligible for interview, and of those, 7 to 10 percent are not interviewed because of temporary absence or unavailability. Information is obtained each month from those in the household who are 15 years of age and older, and demographic data are collected for children 0–14 years of age. In addition, supplemental questions regarding school enrollment are asked about eligible household members ages 3 and older. Prior to July 2001, data were collected in the CPS from about 50,000 dwelling units. The samples are initially selected based on the decennial census files and are periodically updated to reflect new housing construction.

A major redesign of the CPS was implemented in January 1994 to improve the quality of the data collected. Survey questions were revised, new questions were added, and computer-assisted interviewing methods were used for the survey data collection. Further information about the redesign is available in *Current Population Survey*, *October 1995: (School Enrollment Supplement) Technical Documentation* at <u>http://www.census.gov/prod/techdoc/</u> cps/cpsoct95.pdf.

Caution should be used when comparing data from 1994 through 2001 with data from 1993 and earlier. Data from 1994 through 2001 reflect 1990 census-based population controls, while data from 1993 and earlier reflect 1980 or earlier census-based population controls. Caution should also be used when comparing data from 1994 through 2001 with data from 2002 onward, as data from 2002 reflect 2000 census-based controls. Changes in population controls generally have relatively little impact on summary measures such as means, medians, and percentage distributions. They can have a significant impact on population counts. For example, use of the 1990 census-based population control resulted in about a 1 percent increase in the civilian noninstitutional population and in the number of families and households. Thus, estimates of levels for data collected in 1994 and later years will differ from those for earlier years by more than what could be attributed to actual changes in the population. These differences could be disproportionately greater for certain subpopulation groups than for the total population.

Beginning in 2003, race/ethnicity questions expanded to include information on people of two or more races. Native Hawaiian/Pacific Islander data are collected separately from Asian data. The questions have also been worded to make it clear that self-reported data on race/ ethnicity should reflect the race/ethnicity with which the responder identifies, rather than what may be written in official documentation.

The estimation procedure employed for 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; methods for deriving standard errors can be found within the CPS technical documentation at <a href="http://www.census.gov/cps/methodology/techdocs.html">http://www.census.gov/cps/methodology/techdocs.html</a>. The CPS data are subject to both nonsampling and sampling errors.

Prior to 2009, standard errors were estimated using the generalized variance function. The generalized variance function is a simple model that expressed the variance as a function of the expected value of a survey estimate.

Beginning with March 2009 CPS data, standard errors were estimated using replicate weight methodology. Those interested in using CPS household-level supplement replicate weights to calculate variances may refer to *Estimating Current Population Survey (CPS) Household-Level Supplement Variances Using Replicate Weights* at <u>http://thedataweb.rm.census.gov/pub/cps/supps/</u> HH-level Use of the Public Use Replicate Weight File.doc.

Further information on CPS may be obtained from

Education and Social Stratification Branch Population Division Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/cps

#### Dropouts

Each October, the Current Population Survey (CPS) includes supplemental questions on the enrollment status of the population ages 3 years and over as part of the monthly basic survey on labor force participation. In addition to gathering the information on school enrollment, with the limitations on accuracy as noted below under "School Enrollment," the survey data permit calculations of dropout rates. Both status and event dropout rates are tabulated from the October CPS. Event rates describe the proportion of students who leave school each year without completing a high school program. Status rates provide cumulative data on dropouts among all young adults within a specified age range. Status rates are higher than event rates because they include all dropouts ages 16 through 24, regardless of when they last attended school.

In addition to other survey limitations, dropout rates may be affected by survey coverage and exclusion of the institutionalized population. The incarcerated population has grown more rapidly and has a higher dropout rate than the general population. Dropout rates for the total population might be higher than those for the noninstitutionalized population if the prison and jail populations were included in the dropout rate calculations. On the other hand, if military personnel, who tend to be high school graduates, were included, it might offset some or all of the impact from the theoretical inclusion of the jail and prison population.

Another area of concern with tabulations involving young people in household surveys is the relatively low coverage ratio compared to older age groups. CPS undercoverage results from missed housing units and missed people within sample households. Overall CPS undercoverage for October 2013 is estimated to be about 15 percent. CPS coverage varies with age, sex, and race. Generally, coverage is larger for females than for males and larger for non-Blacks than for Blacks. This differential coverage is a general problem for most household-based surveys. Further information on CPS methodology may be found in the technical documentation at <u>http://www.census.gov/cps</u>.

Further information on the calculation of dropouts and dropout rates may be obtained from *Trends in High School Dropout and Completion Rates in the United States:* 1972–2009 (NCES 2012-006) at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012006 or by contacting

Chris Chapman Sample Surveys Division Cross-Sectional Surveys Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>chris.chapman@ed.gov</u>

#### Educational Attainment

Reports documenting educational attainment are produced by the Census Bureau using March CPS supplement (Annual Social and Economic Supplement [ASEC]) results. The sample size for the 2013 ASEC supplement (including basic CPS) was about 99,000 households. The results were released in *Educational Attainment in the United States: 2013;* the tables may be downloaded at <u>http://www.census.gov/hhes/socdemo/ education/data/cps/2013/tables.html</u>. The sample size for the 2014 ASEC supplement (including basic CPS) was about 98,000 households. The results were released in *Educational Attainment in the United States: 2014;* the tables may be downloaded at <u>http://www.census.gov/hhes/ socdemo/education/data/cps/2014/tables.html</u>.

In addition to the general constraints of 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.

Further information on CPS's educational attainment data may be obtained from

Education and Social Stratification Branch Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/hhes/socdemo/education

#### School Enrollment

Each October, the Current Population Survey (CPS) includes supplemental questions on the enrollment status of the population ages 3 years and over. Prior to 2001, the October supplement consisted of approximately 47,000 interviewed households. Beginning with the October

2001 supplement, the sample was expanded by 9,000 to a total of approximately 56,000 interviewed households. 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.

For the October 2013 basic CPS, the household-level nonresponse rate was 9.86 percent. The person-level nonresponse rate for the school enrollment supplement was an additional 8.0 percent. Since the basic CPS nonresponse rate is a household-level rate and the school enrollment supplement nonresponse rate is a personlevel rate, these rates cannot be combined to derive an overall nonresponse rate. Nonresponding households may have fewer persons than interviewed ones, so combining these rates may lead to an overestimate of the true overall nonresponse rate for persons for the school enrollment supplement.

Further information on CPS methodology may be obtained from <u>http://www.census.gov/cps</u>.

Further information on the CPS School Enrollment Supplement may be obtained from

Education and Social Stratification Branch Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/hhes/school/index.html

### Decennial Census, Population Estimates, and Population Projections

The decennial census is a universe survey mandated by the U.S. Constitution. It is a questionnaire sent to every household in the country, and it is composed of seven questions about the household and its members (name, sex, age, relationship, Hispanic origin, race, and whether the housing unit is owned or rented). The Census Bureau also produces annual estimates of the resident population by demographic characteristics (age, sex, race, and Hispanic origin) for the nation, states, and counties, as well as national and state projections for the resident population. The reference date for population estimates is July 1 of the given year. With each new issue of July 1 estimates, the Census Bureau revises estimates for each year back to the last census. Previously published estimates are superseded and archived. Census respondents self-report race and ethnicity. The race questions on the 1990 and 2000 censuses differed in some significant ways. In 1990, the respondent was instructed to select the one race "that the respondent considers himself/herself to be," whereas in 2000, the respondent could select one or more races that the person considered himself or herself to be. American Indian, Eskimo, and Aleut were three separate race categories in 1990; in 2000, the American Indian and Alaska Native categories were combined, with an option to write in a tribal affiliation. This write-in option was provided only for the American Indian category in 1990. There was a combined Asian and Pacific Islander race categories in 2000.

The census question on ethnicity asks whether the respondent is of Hispanic origin, regardless of the race option(s) selected; thus, persons of Hispanic origin may be of any race. In the 2000 census, respondents were first asked, "Is this person Spanish/Hispanic/Latino?" and then given the following options: No, not Spanish/ Hispanic/Latino; Yes, Puerto Rican; Yes, Mexican, Mexican American, Chicano; Yes, Cuban; and Yes, other Spanish/Hispanic/Latino (with space to print the specific group). In the 2010 census, respondents were asked "Is this person of Hispanic, Latino, or Spanish origin?" The options given were No, not of Hispanic, Latino, or Spanish origin; Yes, Mexican, Mexican Am., Chicano; Yes, Puerto Rican; Yes, Cuban; and Yes, another other Hispanic, Latino, or Spanish origin-along with instructions to print "Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on" in a specific box.

The 2000 and 2010 censuses each asked the respondent "What is this person's race?" and allowed the respondent to select one or more options. The options provided were largely the same in both the 2000 and 2010 censuses: White; Black, African American, or Negro; American Indian or Alaska Native (with space to print the name of enrolled or principal tribe); Asian Indian; Japanese; Native Hawaiian; Chinese; Korean; Guamanian or Chamorro; Filipino; Vietnamese; Samoan; Other Asian; Other Pacific Islander; and Some other race. The last three options included space to print the specific race. Two significant differences between the 2000 and 2010 census questions on race were that no race examples were provided for the "Other Asian" and "Other Pacific Islander" responses in 2000, whereas the race examples of "Hmong, Laotian, Thai, Pakistani, Cambodian, and so on" and "Fijian, Tongan, and so on," were provided for the "Other Asian" and "Other Pacific Islander" responses, respectively, in 2010.

The census population estimates program modified the enumerated population from the 2010 census to produce the population estimates base for 2010 and onward. As part of the modification, the Census Bureau recoded the "Some other race" responses from the 2010 census to one or more of the five OMB race categories used in the estimates program (for more information, see http://www.census.gov/popest/methodology/2012-nat-st-co-meth.pdf).

Further information on the decennial census may be obtained from <u>http://www.census.gov</u>.

## Survey of Income and Program Participation

The main objective of the Survey of Income and Program Participation (SIPP) is to provide accurate and comprehensive information about the income and program participation of individuals and households in the United States and about the principal determinants of income and program participation. SIPP offers detailed information on cash and noncash income on a subannual basis. The survey also collects data on taxes, assets, liabilities, and participation in government transfer programs. SIPP data allow the government to evaluate the effectiveness of federal, state, and local programs.

The survey design is a continuous series of national panels, with sample size ranging from approximately 14,000 to 36,700 interviewed households. The duration of each panel ranges from 21/2 to 4 years. The SIPP sample is a multistage-stratified sample of the U.S. civilian noninstitutionalized population. For the 1984-93 panels, a new panel of households was introduced each year in February. A 4-year panel was introduced in April 1996. A 2000 panel was introduced in February 2000 for two waves, but was cancelled after 8 months. A 21/2-year panel was introduced in February 2004 and is the first SIPP panel to use the 2000 decennial-based redesign of the sample. All household members ages 15 years and over are interviewed by self-response, if possible. Proxy response is permitted when household members are not available for interviewing. The latest panel was selected in September 2008.

The SIPP content is built around a "core" of labor force, program participation, and income questions designed to measure the economic situation of people in the United States. These questions expand the data currently available on the distribution of cash and noncash income and are repeated at each interviewing wave. The survey uses a 4-month recall period, with approximately the same number of interviews being conducted in each month of the 4-month period for each wave. Interviews are conducted by personal visit and by decentralized telephone. The survey has been designed to also provide a broader context for analysis by adding questions on a variety of topics not covered in the core section. These questions are labeled "topical modules" and are assigned to particular interviewing waves of the survey. Topics covered by the modules include personal history, child care, wealth, program eligibility, child support, utilization and cost of healthcare, disability, school enrollment, taxes, and annual income.

Further information on the SIPP may be obtained from

Economics and Statistics Administration Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/sipp/ intro.html

### My Brother's Keeper Initiative

Established by President Obama in 2014, the My Brother's Keeper Initiative is an interagency effort to improve measurably the expected educational and life outcomes for and address the persistent opportunity gaps faced by boys and young men of color. The Initiative established a Task Force to develop a coordinated federal effort to identify the public and private efforts that are working and how to expand upon them.

The My Brother's Keeper Task Force and the Federal Interagency Forum on Child and Family Statistics have collected federal statistics on a number of national level indicators to provide an initial snapshot of young people's well-being across multiple domains, including health, nutrition, poverty, education, economic opportunity, criminal justice and more. A selection of these data may be accessed at <u>http://mbk.ed.gov/data/</u>.

Further information about the My Brother's Keeper Initiative may be obtained from

https://www.whitehouse.gov/my-brothers-keeper http://mbk.ed.gov/ http://mbk.ed.gov/data/

## **Other Organization Sources**

### International Association for the Evaluation of Educational Achievement

The International Association for the Evaluation of Educational Achievement (IEA) is composed of governmental research centers and national research institutions around the world whose aim is to investigate education problems common among countries. Since its inception in 1958, the IEA has conducted more than 30 research studies of cross-national achievement. The regular cycle of studies encompasses learning in basic school subjects. Examples are the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). IEA projects also include studies of particular interest to IEA members, such as the TIMSS 1999 Video Study of Mathematics and Science Teaching, the Civic Education Study, and studies on information technology in education.

The international bodies that coordinate international assessments vary in the labels they apply to participating education systems, most of which are countries. IEA differentiates between IEA members, which IEA refers to as "countries" in all cases, and "benchmarking participants." IEA members include countries such as the United States and Ireland, as well as subnational entities such as England and Scotland (which are both part of the United Kingdom), the Flemish community of Belgium, and Hong Kong-CHN (which is a Special Administrative Region of China). IEA benchmarking participants are all subnational entities and include Canadian provinces, U.S. states, and Dubai in the United Arab Emirates (among others). Benchmarking participants, like the participating countries, are given the opportunity to assess the comparative international standing of their students' achievement and to view their curriculum and instruction in an international context. Subnational entities that participated as benchmarking participants are excluded from this indicator's analysis.

Some IEA studies, such as TIMSS and PIRLS, include an assessment portion as well as contextual questionnaires to collect information about students' home and school experiences. The TIMSS and PIRLS scales, including the scale averages and standard deviations, are designed to remain constant from assessment to assessment so that education systems (including countries and subnational education systems) can compare their scores over time, as well as compare their scores directly with the scores of other education systems. Although each scale was created to have a mean of 500 and a standard deviation of 100, the subject matter and the level of difficulty of items necessarily differ by grade, subject, and domain/ dimension. Therefore, direct comparisons between scores across grades, subjects, and different domain/dimension types should not be made.

Further information on the International Association for the Evaluation of Educational Achievement may be obtained from <u>http://www.iea.nl</u>.

## Trends in International Mathematics and Science Study

The Trends in International Mathematics and Science Study (TIMSS, formerly known as the Third International Mathematics and Science Study) provides reliable and timely data on the mathematics and science achievement of U.S. fourth- and eighth-graders compared with that of their peers in other countries. TIMSS is on a 4-year cycle, with data collection occurring in 1995, 1999 (eighth grade only), 2003, 2007, and 2011. In 2011, a total of 77 education systems, including 63 IEA members and 14 benchmarking participants, participated in TIMSS. The next TIMSS data collection is scheduled for 2015. TIMSS collects information through mathematics and science assessments and questionnaires. The questionnaires request information to help provide a context for student performance, focusing on such topics as students' attitudes and beliefs about learning mathematics and science, what students do as part of their mathematics and science lessons, students' completion of homework, and their lives both in and outside of school; teachers' perceptions of their preparedness for teaching mathematics and science topics, teaching assignments, class size and organization, instructional content and practices, and participation in professional development activities; and principals' viewpoints on policy and budget responsibilities, curriculum and instruction issues, and student behavior, as well as descriptions of the organization of schools and courses. The assessments and questionnaires are designed to specifications in a guiding framework. The TIMSS framework describes the mathematics and science content to be assessed and provides grade-specific objectives, an overview of the assessment design, and guidelines for item development.

### Progress in International Reading Literacy Study

The Progress in International Reading Literacy Study (PIRLS) provides reliable and timely data on the reading literacy of U.S. fourth-graders compared with that of their peers in other countries. PIRLS is on a 5-year cycle, with data having been collected in 2001, 2006, and 2011. In 2011, a total of 57 education systems, including 48 IEA members and 9 benchmarking participants, participated in PIRLS. The next PIRLS data collection is scheduled for 2016. PIRLS collects information through a reading literacy assessment and questionnaires that help to provide a context for student performance. Questionnaires are administered to collect information about students' home and school experiences in learning to read. A student questionnaire addresses students' attitudes towards reading and their reading habits. In addition, questionnaires are given to students' teachers and school principals to gather information about students' school experiences in developing reading literacy. In countries other than the United States, a parent questionnaire is also administered. The assessments and questionnaires are designed to specifications in a guiding framework. The PIRLS framework describes the reading content to be assessed and provides objectives specific to fourth grade, an overview of the assessment design, and guidelines for item development.

# TIMSS and PIRLS Sampling and Response Rates

It is not feasible to assess every fourth- or eighthgrade student in the United States. As is done in all participating countries and other education systems, representative samples of students are selected. The sample design employed by TIMSS and PIRLS in 2011 is generally referred to as a two-stage stratified cluster sample. In the first stage of sampling, individual schools were selected with a probability proportionate to size (PPS) approach, which means that the probability is proportional to the estimated number of students enrolled in the target grade. In the second stage of sampling, intact classrooms were selected within sampled schools.

TIMSS and PIRLS guidelines call for a minimum of 150 schools to be sampled, with a minimum of 4,000 students assessed. The basic sample design of one classroom per school was designed to yield a total sample of approximately 4,500 students per population.

About 23,000 students in almost 900 schools across the United States participated in the 2011 TIMSS, joining 600,000 other student participants around the world. Because the Progress in International Reading Literacy Study (PIRLS) was also administered at grade 4 in spring 2011, TIMSS and PIRLS in the United States were administered in the same schools to the extent feasible. Students took either TIMSS or PIRLS on the day of the assessments. About 13,000 U.S. students participated in PIRLS in 2011, joining 300,000 other student participants around the world. Accommodations were not provided for students with disabilities or students who were unable to read or speak the language of the test. These students were excluded from the sample. The IEA requirement is that the overall exclusion rate, which is composed of exclusions of schools and students, should not exceed more than 5 percent of the national desired target population.

In order to minimize the potential for response biases, the IEA developed participation or response rate standards that apply to all participating education systems and govern whether or not an education system's data are included in the TIMSS or PIRLS international datasets and the way in which its statistics are presented in the international reports. These standards were set using composites of response rates at the school, classroom, and student and teacher levels. Response rates were calculated with and without the inclusion of substitute schools that were selected to replace schools refusing to participate. In TIMSS 2011 at grade 4 in the United States, the weighted school participation rate was 79 percent before the use of substitute schools and 84 percent after the use of replacement schools; the weighted student response rate was 95 percent. In TIMSS 2011 at grade 8 in the United States, the weighted school participation rate was 87 percent before the use of substitute schools and 87 percent after the use of replacement schools; the weighted student response rate was 94 percent. In the 2011 PIRLS administered in the United States, the weighted school participation rate was 80 percent before the use of substitute schools and 85 percent after the use of replacement schools; the weighted student response rate was 96 percent.

Further information on the TIMSS study may be obtained from

Stephen Provasnik Assessments Division International Assessment Branch National Center for Education Statistics 1990 K Street NW, Room 9034 Washington, DC 20006 (202) 502-7480 stephen.provasnik@ed.gov http://nces.ed.gov/timss http://www.iea.nl/timss\_2011.html

Further information on the PIRLS study may be obtained from

Sheila Thompson Assessments Division International Assessment Branch National Center for Education Statistics 1990 K Street NW, Room 9031 Washington, DC 20006 (202) 502-7425 <u>sheila.thompson@ed.gov</u> <u>http://nces.ed.gov/surveys/pirls/</u> <u>http://www.iea.nl/pirls\_2011.html</u>

## Organization for Economic Cooperation and Development

The Organization for Economic Cooperation and Development (OECD) publishes analyses of national policies and survey data in education, training, and economics in OECD and partner countries. Newer studies include student survey data on financial literacy and on digital literacy.

#### Education at a Glance (EAG)

To highlight current education issues and create a set of comparative education indicators that represent key features of education systems, OECD initiated the Indicators of Education Systems (INES) project and charged the Centre for Educational Research and Innovation (CERI) with developing the cross-national indicators for it. The development of these indicators involved representatives of the OECD countries and the OECD Secretariat. Improvements in data quality and comparability among OECD countries have resulted from the country-to-country interaction sponsored through the INES project. The most recent publication in this series is *Education at a Glance 2014: OECD Indicators (EAG)*.

The 2014 EAG featured data on the 34 OECD countries (Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, the Republic of Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States); two partner countries that participate in INES (Brazil and the Russian Federation); and the other partner countries that do not participate in INES (Argentina, China, Colombia, India, Indonesia, Latvia, Saudi Arabia, and South Africa).

The OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions, and Classifications provides countries with specific guidance on how to prepare information for OECD education surveys; facilitates countries' understanding of OECD indicators and their use in policy analysis; and provides a reference for collecting and assimilating educational data. Chapter 7 of the OECD Handbook for Internationally Comparative Education Statistics contains a discussion of data quality issues. Users should examine footnotes carefully to recognize some of the data limitations.

Further information on international education statistics may be obtained from

Andreas Schleicher Director for the Directorate of Education and Skills and Special Advisor on Education Policy to the OECD's Secretary General OECD Directorate for Education and Skills 2, rue André Pascal 75775 Paris CEDEX 16 France andreas.schleicher@oecd.org http://www.oecd.org

## Program for International Student Assessment

The Program for International Student Assessment (PISA) is a system of international assessments that focuses on 15-year-olds' capabilities in reading literacy, mathematics literacy, and science literacy. PISA also includes measures of general, or cross-curricular, competencies such as learning strategies. PISA emphasizes functional skills that students have acquired as they near the end of mandatory schooling. PISA is organized by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of industrialized countries, and was administered for the first time in 2000, when 43 education systems participated. In 2003, 41 education systems participated in the assessment; in 2006, 57 education systems (30 OECD member countries and 27 nonmember countries or education systems) participated; and in 2009, 65 education systems (34 OECD member countries and 31 nonmember countries or education systems) participated. (An additional nine education systems administered PISA 2009 in 2010.) In PISA 2012, the most recent administration of PISA, 65 education systems (34 OECD member countries and 31 nonmember countries or education systems), as well as the U.S. states of Connecticut, Florida, and Massachusetts, participated.

PISA is a 2-hour paper-and-pencil exam. Assessment items include a combination of multiple-choice questions and open-ended questions that require students to develop their own response. PISA scores are reported on a scale that ranges from 0 to 1,000, with the OECD mean set at 500 and a standard deviation set at 100. In 2012, mathematics, science, and reading literacy were assessed primarily through a paper-and-pencil exam, and problemsolving was administered using a computer-based exam. Education systems could also participate in optional pencil-and-paper financial literacy assessments and computer-based mathematics and reading assessments.

PISA is implemented on a 3-year cycle that began in 2000. Each PISA assessment cycle focuses on one subject in particular, although all three subjects are assessed every 3 years. In the first cycle, PISA 2000, reading literacy was the major focus, occupying roughly two-thirds of assessment time. For 2003, PISA focused on mathematics literacy as well as the ability of students to solve problems in real-life settings. In 2006, PISA focused on science literacy. In 2009, PISA focused on reading literacy again. In 2012, PISA focused on mathematics literacy.

The intent of PISA reporting is to provide an overall description of performance in reading literacy, mathematics literacy, and science literacy every 3 years, and to provide a more detailed look at each domain in the years when it is the major focus. These cycles will allow education systems to compare changes in trends for each of the three subject areas over time.

To implement PISA, each of the participating education systems scientifically draws a nationally representative sample of 15-year-olds, regardless of grade level. In the United States, about 6,100 students from 161 public and private schools took the PISA 2012 assessment. In the U.S. state education systems, about 1,700 students at 50 schools in Connecticut, about 1,900 students at 54 schools in Florida, and about 1,700 students at 49 schools in Massachusetts took the 2012 assessment. PISA 2012 was only administered at public schools in the U.S. state education systems.

In each education system, the assessment is translated into the primary language of instruction; in the United States, all materials are written in English.

Further information on PISA may be obtained from

Holly Xie Dana Kelly Assessments Division International Assessment Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 <u>holly.xie@ed.gov</u> <u>dana.kelly@ed.gov</u> <u>http://nces.ed.gov/surveys/pisa</u> This page intentionally left blank.

## Glossary

## Α

Achievement gap Occurs when one group of students outperforms another group, and the difference in average scores for the two groups is statistically significant (that is, larger than the margin of error).

**Achievement levels, NAEP** Specific achievement levels for each subject area and grade to provide a context for interpreting student performance. At this time they are being used on a trial basis.

*Basic*—denotes partial mastery of the knowledge and skills that are fundamental for *proficient* work at a given grade.

**Proficient**—represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.

Advanced—signifies superior performance.

*Associate's 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.

#### Averaged freshman graduation rate (AFGR) A

measure of the percentage of the incoming high school freshman class that graduates 4 years later. It is calculated by taking the number of graduates with a regular diploma and dividing that number by the estimated count of incoming freshman 4 years earlier, as reported through the NCES Common Core of Data (CCD). The estimated count of incoming freshman is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier (when current seniors were freshman), and the number of 10th-graders 3 years earlier, divided by 3. The purpose of this averaging is to account for the high rate of grade retention in the freshman year, which adds 9th-grade repeaters from the previous year to the number of students in the incoming freshman class each year. Ungraded students are allocated to individual grades proportional to each state's enrollment in those grades. The AFGR treats students who transfer out of a school or district in the same way as it treats students from that school or district who drop out.

## B

**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.

## С

*Certificate* A formal award certifying the satisfactory completion of a postsecondary education program. Certificates can be awarded at any level of postsecondary education and include awards below the associate's degree level.

*Charter school* A school providing free public elementary and/or secondary education to eligible students under a specific charter granted by the state legislature or other appropriate authority, and designated by such authority to be a charter school.

*Classification of Instructional Programs (CIP)* The CIP is a taxonomic coding scheme that contains titles and descriptions of primarily postsecondary instructional programs. It was developed to facilitate NCES' collection and reporting of postsecondary degree completions by major field of study using standard classifications that capture the majority of reportable program activity. It was originally published in 1980 and was revised in 1985, 1990, 2000, and 2010.

**College** A postsecondary school that offers general or liberal arts education, usually leading to an associate's, bachelor's, master's, or doctor's degree. Junior colleges and community colleges are included under this terminology.

*Combined school* A school that encompasses instruction at both the elementary and the secondary levels; includes schools starting with grade 6 or below and ending with grade 9 or above.

**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 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. Indexes vary for specific areas or regions, periods of time, major groups of consumer expenditures, and population groups. The CPI reflects spending patterns for two population groups: (1) all urban consumers and urban wage earners and (2) clerical workers. CPIs are calculated for both the calendar year and the school year using the U.S. All Items CPI for All Urban Consumers (CPI-U). The calendar year CPI is the same as the annual CPI-U. The school year CPI is calculated by adding the monthly CPI-U figures, beginning with July of the first year and ending with June of the following year, and then dividing that figure by 12.

*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, benefits, student transportation, school books and materials, and energy costs. Beginning in 1980–81, expenditures for state administration are excluded.

*Instruction expenditures* Includes expenditures for activities related to the interaction between teacher and students. Includes salaries and benefits for teachers and instructional aides, textbooks, supplies, and purchased services such as instruction via television. Also included are tuition expenditures to other local education agencies.

*Administration expenditures* Includes expenditures for school administration (i.e., the office of the principal, full-time department chairpersons, and graduation expenses), general administration (the superintendent and board of education and their immediate staff), and other support services expenditures.

*Transportation* Includes expenditures for vehicle operation, monitoring, and vehicle servicing and maintenance.

*Food services* Includes all expenditures associated with providing food to students and staff in a school or school district. The services include preparing and serving regular and incidental meals or snacks in connection with school activities, as well as the delivery of food to schools.

*Enterprise operations* Includes expenditures for activities that are financed, at least in part, by user charges, similar to a private business. These include operations funded by sales of products or services, together with amounts for direct program support made by state education agencies for local school districts.

## D

**Default rate** The percentage of loans that are in delinquency and have not been repaid according to the terms of the loan. According to the federal government, a federal student loan is in default if there has been no payment on the loan in 270 days. The Department of Education calculates a *2-year cohort* default rate, which is the percentage of students who entered repayment in a given fiscal year (from October 1 to September 30) and then defaulted within the following two fiscal years.

**Degree-granting institutions** Postsecondary institutions that are eligible for Title IV federal financial aid programs and grant an associate's or higher degree. For an institution to be eligible to participate in Title IV financial aid programs it must offer a program of at least 300 clock hours in length, have accreditation recognized by the U.S. Department of Education, have been in business for at least 2 years, and have signed a participation agreement with the Department.

**Disabilities, children with** Those children evaluated as having any of the following impairments and who, by reason thereof, receive special education and related services under the Individuals with Disabilities Education Act (IDEA) according to an Individualized Education

Program (IEP), Individualized Family Service Plan (IFSP), or a services plan.

*Autism* Having a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that adversely affects educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. A child is not considered autistic if the child's educational performance is adversely affected primarily because of an emotional disturbance.

**Deaf-blindness** 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.

**Developmental delay** Having developmental delays, as defined at the state level, and as measured by appropriate diagnostic instruments and procedures in one or more of the following cognitive areas: physical development, cognitive development, communication development, social or emotional development, or adaptive development.

*Emotional disturbance* 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 factors; 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.

*Hearing impairment* Having a hearing impairment, whether permanent or fluctuating, which adversely affects the student's educational performance. It also includes 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.

*Intellectual disability* 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.

*Multiple disabilities* Having concomitant impairments (such as intellectually disabled-blind, intellectually disabled-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.

**Orthopedic impairment** 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 impairment** 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 affect the student's educational performance.

*Specific learning disability* 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 disabilities, 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, motor, or intellectual disabilities, or of environmental, cultural, or economic disadvantage.

*Speech or language impairment* Having a communication disorder, such as stuttering, impaired articulation, language impairment, or voice impairment, which adversely affects the student's educational performance.

*Traumatic brain injury* Having an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment or both, that adversely affects the student's educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative or to brain injuries induced by birth trauma.

*Visual impairment* Having a visual impairment which, even with correction, adversely affects the student's educational performance. The term includes partially seeing and blind children.

Doctor's degree An earned degree that generally carries 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 doctor's degrees 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. The doctor's degree classification includes most degrees that NCES formerly classified as first-professional degrees. Such 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 (Pharm.D.), podiatry (D.P.M., Pod.D., or D.P.), veterinary medicine (D.V.M.), chiropractic (D.C. or D.C.M.), and law (L.L.B. or J.D.).

**Dropout** The term is used to describe both the event of leaving school before completing high school and the status of an individual who is not in school and who is not a high school completer. High school completers include both graduates of school programs as well as those completing high school through equivalency programs such as the General Educational Development (GED) program. Transferring from a public school to a private school, for example, is not regarded as a dropout event. A person who drops out of school may later return and graduate but is called a "dropout" at the time he or she leaves school. Measures to describe these behaviors include the event dropout rate (or the closely related school persistence rate), the status dropout rate, and the high school completion rate.

### E

*Educational attainment* The highest grade of regular school attended and completed.

*Educational attainment (Current Population Survey)* This measure uses March CPS data to estimate the percentage of civilian, noninstitutionalized people who have achieved certain levels of educational attainment. Estimates of educational attainment do not differentiate between those who graduated from public schools, those who graduated from private schools, and those who earned a GED; these estimates also include individuals who earned their credential or completed their highest level of education outside of the United States.

**1972–1991** During this period, an individual's educational attainment was considered to be his or her last fully completed year of school. Individuals who completed 12 years of schooling were deemed to be high school graduates, as were those who began but did not complete the first year of college. Respondents who completed 16 or more years of schooling were counted as college graduates.

**1992–present** Beginning in 1992, CPS asked respondents to report their highest level of school completed or their highest degree received. This change means that some data collected before 1992 are not strictly comparable with data collected from 1992 onward and that care must be taken when making comparisons across years. The revised survey question emphasizes credentials received rather than the last grade level attended or completed. The new categories include the following:

- High school graduate, high school diploma, or the equivalent (e.g., GED)
- Some college but no degree
- Associate's degree in college, occupational/ vocational program
- Associate's degree in college, academic program (e.g., A.A., A.S., A.A.S.)
- Bachelor's degree (e.g., B.A., A.B., B.S.)
- Master's degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A.)
- Professional school degree (e.g., M.D., D.D.S., D.V.M., LL.B., J.D.)
- Doctor's degree (e.g., Ph.D., Ed.D.)

*Elementary school* A school classified as elementary by state and local practice and composed of any span of grades not above grade 8.

*English language learner (ELL)* An individual who, due to any of the reasons listed below, has sufficient difficulty speaking, reading, writing, or understanding the English language to be denied the opportunity to learn successfully in classrooms where the language of instruction is English or to participate fully in the larger U.S. society. Such an individual (1) was not born in the United States or has a native language other than English; (2) comes from environments where a language other than English is dominant; or (3) is an American Indian or Alaska Native and comes from environments where a language other than English has had a significant impact on the individual's level of English language proficiency.

*Expenditures, total* For elementary/secondary schools, these include all charges for current outlays plus capital outlays and interest on school debt. For degree-granting institutions, 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 transactions. 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 governments.

*Expenditures per pupil* Charges incurred for a particular period of time divided by a student unit of measure, such as average daily attendance or fall enrollment.

### F

*Financial aid* Grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid (tuition reimbursement), and other monies (other than from relatives or friends) provided to students to help them meet expenses. Except where designated, includes Title IV subsidized and unsubsidized loans made directly to students.

*For-profit institution* A private institution in which the individual(s) or agency in control receives compensation other than wages, rent, or other expenses for the assumption of risk.

*Free or reduced-price lunch* See National School Lunch Program.

*Full-time enrollment* The number of students enrolled in postsecondary education courses with total credit load equal to at least 75 percent of the normal fulltime course load. At the undergraduate level, full-time enrollment typically includes students who have a credit load of 12 or more semester or quarter credits. At the postbaccalaureate level, full-time enrollment includes students who typically have a credit load of 9 or more semester or quarter credits, as well as other students who are considered full time by their institutions.

*Full-time-equivalent (FTE) enrollment* For postsecondary institutions, enrollment of full-time students, plus the full-time equivalent of part-time students. The full-time equivalent of the part-time students is estimated using different factors depending on the type and control of institution and level of student.

## G

*GED certificate* This award is received following successful completion of the General Educational Development (GED) test. The GED program—sponsored by the GED Testing Service (a joint venture of the American Council on Education and Pearson)—enables individuals to demonstrate that they have acquired a level of learning comparable to that of high school graduates. See also High school equivalency certificate. Geographic region One of the four regions of the United States used by the U.S. Census Bureau, as follows:

Northeast
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Connecticut (CT) Maine (ME) Massachusetts (MA) New Hampshire (NH) New Jersey (NJ) New York (NY) Pennsylvania (PA) Rhode Island (RI) Vermont (VT)

Midwest Illinois (IL) Indiana (IN) Iowa (IA) Kansas (KS) Michigan (MI) Minnesota (MN) Missouri (MO) Nebraska (NE) North Dakota (ND) Ohio (OH) South Dakota (SD) Wisconsin (WI)

West

#### South

Alabama (AL)	Alaska (AK)
Arkansas (AR)	Arizona (AZ
Delaware (DE)	California (C
District of Columbia (DC)	Colorado (C
Florida (FL)	Hawaii (HI)
Georgia (GA)	Idaho (ID)
Kentucky (KY)	Montana (M
Louisiana (LA)	Nevada (NV
Maryland (MD)	New Mexico
Mississippi (MS)	Oregon (OR
North Carolina (NC)	Utah (UT)
Oklahoma (OK)	Washington
South Carolina (SC)	Wyoming (W
Tennessee (TN)	_
Texas (TX)	
Virginia (VA)	
West Virginia (WV)	
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Z) CA) CO) 1T) 7) 5 (NM) () (WA) WY)

Graduate enrollment The number of students who are working towards a master's or doctor's degree and students who are in postbaccalaureate classes but not in degree programs.

Gross domestic product (GDP) The total national output of goods and services valued at market prices. GDP 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.

High school completer An individual who has been awarded a high school diploma or an equivalent credential, including a General Educational Development (GED) certificate.

High school diploma A formal document regulated by the state certifying the successful completion of a prescribed secondary school program of studies. In some states or communities, high school diplomas are differentiated by type, such as an academic diploma, a general diploma, or a vocational diploma.

High school equivalency certificate A formal document certifying that an individual has met the state requirements for high school graduation equivalency by obtaining satisfactory scores on an approved examination and meeting other performance requirements (if any) set by a state education agency or other appropriate body. One particular version of this certificate is the General Educational Development (GED) test. The GED test is a comprehensive test used primarily to appraise the educational development of students who have not completed their formal high school education and who may earn a high school equivalency certificate by achieving satisfactory scores. GEDs are awarded by the states or other agencies, and the test is developed and distributed by the GED Testing Service (a joint venture of the American Council on Education and Pearson).

Higher education institutions (basic classification and **Carnegie classification**) See Postsecondary institutions (basic classification by level) and Postsecondary institutions (Carnegie classification of degree-granting institutions).

### L

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### Individuals with Disabilities Education Act (IDEA)

IDEA is a federal law requiring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to eligible infants, toddlers, children, and youth with disabilities. Infants and toddlers with disabilities (birth-age 2) and their families receive early intervention services under IDEA, Part C. Children and youth (ages 3-21) receive special education and related services under IDEA, Part B.

International Standard Classification of Education

(ISCED) Used to compare educational systems in different countries. ISCED is the standard used by many countries to report education statistics to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD).

ISCED divides educational systems into the following seven categories, based on six levels of education.

*ISCED Level 0* Education preceding the first level (early childhood education) usually begins at age 3, 4, or 5 (sometimes earlier) and lasts from 1 to 3 years, when it is provided. In the United States, this level includes nursery school and kindergarten.

*ISCED Level 1* Education at the first level (primary or elementary education) usually begins at age 5, 6, or 7 and continues for about 4 to 6 years. For the United States, the first level starts with 1st grade and ends with 6th grade.

ISCED Level 2 Education at the second level (lower secondary education) typically begins at about age 11 or 12 and continues for about 2 to 6 years. For the United States, the second level starts with 7th grade and typically ends with 9th grade. Education at the lower secondary level continues the basic programs of the first level, although teaching is typically more subject focused, often using more specialized teachers who conduct classes in their field of specialization. The main criterion for distinguishing lower secondary education from primary education is whether programs begin to be organized in a more subject-oriented pattern, using more specialized teachers conducting classes in their field of specialization. If there is no clear breakpoint for this organizational change, lower secondary education is considered to begin at the end of 6 years of primary education. In countries with no clear division between lower secondary and upper secondary education, and where lower secondary education lasts for more than 3 years, only the first 3 years following primary education are counted as lower secondary education.

*ISCED Level 3* Education at the third level (upper secondary education) typically begins at age 15 or 16 and lasts for approximately 3 years. In the United States, the third level starts with 10th grade and ends with 12th grade. Upper secondary education is the final stage of secondary education in most OECD countries. Instruction is often organized along subject-matter lines, in contrast to the lower secondary level, and teachers typically must have a higher level, or more subject-specific, qualification. There are substantial differences in the typical duration of programs both across and between countries, ranging from 2 to 5 years of schooling. The main criteria for classifications are (1) national boundaries between lower and upper secondary education and (2) admission into educational programs, which usually requires the completion of lower secondary education or a combination of basic education and life experience that demonstrates the ability to handle the subject matter in upper secondary schools.

**ISCED Level 4** Education at the fourth level (postsecondary nontertiary education) straddles the boundary between secondary and postsecondary education. This program of study, which is primarily vocational in nature, is generally taken after the completion of secondary school and typically lasts from 6 months to 2 years. Although the content of these programs may not be significantly more advanced than upper secondary programs, these programs serve to broaden the knowledge of participants who have already gained an upper secondary qualification.

*ISCED Level 5* Education at the fifth level (first stage of tertiary education) includes programs with more advanced content than those offered at the two previous levels. Entry into programs at the fifth level normally requires successful completion of either of the two previous levels.

**ISCED Level 5A** Tertiary-type A programs provide an education that is largely theoretical and is intended to provide sufficient qualifications for gaining entry into advanced research programs and professions with high skill requirements. Entry into these programs normally requires the successful completion of an upper secondary education; admission is competitive in most cases. The minimum cumulative theoretical duration at this level is 3 years of full-time enrollment. In the United States, tertiary-type A programs include first university programs that last approximately 4 years and lead to the award of a bachelor's degree and second university programs that lead to a master's degree.

*ISCED Level 5B* Tertiary-type B programs are typically shorter than tertiary-type A programs and focus on practical, technical, or occupational skills for direct entry into the labor market, although they may cover some theoretical foundations in the respective programs. They have a minimum duration of 2 years of full-time enrollment at the tertiary level. In the United States, such programs are often provided at community colleges and lead to an associate's degree.

**ISCED Level 6** Education at the sixth level (advanced research qualification) is provided in graduate and professional schools that generally require a university degree or diploma as a minimum condition for admission. Programs at this level lead to the award of an advanced, postgraduate degree, such as a Ph.D. The theoretical duration of these programs is 3 years of full-time enrollment in most countries (for a cumulative total of at least 7 years at levels five and six), although the length of the actual enrollment is often longer. Programs at this level are devoted to advanced study and original research.

### Μ

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. Some master's degrees—such as divinity degrees (M.Div. or M.H.L./Rav), which were formerly classified as "first-professional"-may require more than 2 years of full-time study beyond the bachelor's degree.

### Ν

*National School Lunch Program* Established by President Truman in 1946, the program is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. To be eligible for free lunch, a student must be from a household with an income at or below 130 percent of the federal poverty guideline; to be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the federal poverty guideline.

*Nonprofit institution* A private institution in which the individual(s) or agency in control receives no compensation other than wages, rent, or other expenses for the assumption of risk. Nonprofit institutions may be either independent nonprofit (i.e., having no religious affiliation) or religiously affiliated.

*Nursery school* An instructional program for groups of children during the year or years preceding kindergarten, which provides educational experiences under the direction of teachers. See also Prekindergarten.

## 0

## Organization for Economic Cooperation and

**Development (OECD)** An intergovernmental organization of industrialized countries that serves as a forum for member countries to cooperate in research and policy development on social and economic topics of common interest. In addition to member countries, partner countries contribute to the OECD's work in a sustained and comprehensive manner.

**Part-time enrollment** The number of students enrolled in postsecondary education courses with a total credit load less than 75 percent of the normal full-time credit load. At the undergraduate level, part-time enrollment typically includes students who have a credit load of less than 12 semester or quarter credits. At the postbaccalaureate level, part-time enrollment typically includes students who have a credit load of less than 9 semester or quarter credits.

**Postbaccalaureate enrollment** The number of students working towards advanced degrees and of students enrolled in graduate-level classes but not enrolled in degree programs. See also Graduate 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.

## Postsecondary institutions (basic classification by level)

**4-year institution** An institution offering at least a 4-year program of college-level studies wholly or principally creditable toward a baccalaureate degree.

**2-year institution** An institution 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. Data prior to 1996 include some institutions that have a less-than-2-year program, but were designated as institutions of higher education in the Higher Education General Information Survey.

*Less-than-2-year institution* An institution that offers programs of less than 2 years' duration below the baccalaureate level. Includes occupational and vocational schools with programs that do not exceed 1,800 contact hours.

## Postsecondary institutions (Carnegie classification of degree-granting institutions)

**Doctorate-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. These institutions are assigned to one of the three subcategories listed below based on level of research activity (for more information on the research activity index used to assign institutions to the subcategories, see <u>http://carnegieclassifications.iu.edu/</u>): *Research university, very high* Characterized by a very high level of research activity.

*Research university, high* Characterized by a high level of research activity.

*Doctoral/research university* Awarding at least 20 doctor's degrees per year, but not having a high level of research activity.

*Master's* Characterized by diverse postbaccalaureate programs but not engaged in significant doctoral-level education.

**Baccalaureate** Characterized by primary emphasis on general undergraduate, baccalaureate-level education. Not significantly engaged in postbaccalaureate education.

*Special focus* 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.

*Associate's* Institutions conferring at least 90 percent of their degrees and awards for work below the bachelor's level. In NCES tables, excludes all institutions offering any 4-year programs leading to a bachelor's degree.

*Tribal* Colleges and universities that are members of the American Indian Higher Education Consortium, as identified in IPEDS Institutional Characteristics.

**Poverty** The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition. A family, along with each individual in it, is considered poor if the family's total income is less than that family's threshold. The poverty thresholds do not vary geographically and are adjusted annually for inflation using the Consumer Price Index. The official poverty definition counts money income before taxes and does not include capital gains and noncash benefits (such as public housing, Medicaid, and food stamps).

**Prekindergarten** Preprimary education for children typically ages 3–4 who have not yet entered kindergarten. It may offer a program of general education or special education and may be part of a collaborative effort with Head Start.

**Private institution** An institution that 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.

**Private nonprofit institution** An institution in which the individual(s) or agency in control receives no compensation other than wages, rent, or other

expenses for the assumption of risk. These include both independent nonprofit institutions and those affiliated with a religious organization.

*Private for-profit institution* An institution in which the individual(s) or agency in control receives compensation other than wages, rent, or other expenses for the assumption of risk (e.g., proprietary schools).

**Private school** Private elementary/secondary schools surveyed by the Private School Universe Survey (PSS) are assigned to one of three major categories (Catholic, other religious, or nonsectarian) and, within each major category, one of three subcategories based on the school's religious affiliation provided by respondents.

*Catholic* Schools categorized according to governance, provided by Catholic school respondents, into parochial, diocesan, and private schools.

**Other religious** Schools that have a religious orientation or purpose but are not Roman Catholic. Other religious schools are categorized according to religious association membership, provided by respondents, into Conservative Christian, other affiliated, and unaffiliated schools. Conservative Christian schools are those "Other religious" schools with membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, and Oral Roberts University Education Fellowship. Affiliated schools are those "Other religious" schools not classified as Conservative Christian with membership in at least 1 of 11 associations—Association of Christian Teachers and Schools, Christian Schools International, Evangelical Lutheran Education Association, Friends Council on Education, General Conference of the Seventh-Day Adventist Church, Islamic School League of America, National Association of Episcopal Schools, National Christian School Association, National Society for Hebrew Day Schools, Solomon Schechter Day Schools, and Southern Baptist Association of Christian Schools—or indicating membership in "other religious school associations." Unaffiliated schools are those "Other religious" schools that have a religious orientation or purpose but are not classified as Conservative Christian or affiliated.

*Nonsectarian* Schools that do not have a religious orientation or purpose and are categorized according to program emphasis, provided by respondents, into regular, special emphasis, and special education schools. Regular schools are those that have a regular elementary/secondary or early childhood program emphasis. Special emphasis schools are those that have a Montessori, vocational/technical, alternative, or special program emphasis. Special education schools are those that have a special education program emphasis.

*Property tax* The sum of money collected from a tax levied against the value of property.

**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.

**Purchasing Power Parity (PPP) indexes** PPP exchange rates, or indexes, are the currency exchange rates that equalize the purchasing power of different currencies, meaning that when a given sum of money is converted into different currencies at the PPP exchange rates, it will buy the same basket of goods and services in all countries. PPP indexes are the rates of currency conversion that eliminate the difference in price levels among countries. Thus, when expenditures on gross domestic product (GDP) for different countries are converted into a common currency by means of PPP indexes, they are expressed at the same set of international prices, so that comparisons among countries reflect only differences in the volume of goods and services purchased.

### R

**Racial/ethnic group** Classification indicating general racial or ethnic heritage. Race/ethnicity data are based on the *Hispanic* ethnic category and the race categories listed below (five single-race categories, plus the *Two or more races* category). Race categories exclude persons of Hispanic ethnicity unless otherwise noted.

*White* A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

*Black or African American* A person having origins in any of the black racial groups of Africa. Used interchangeably with the shortened term *Black*.

*Hispanic or Latino* A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Used interchangeably with the shortened term *Hispanic*.

*Asian* A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. Prior to 2010–11, the Common Core of Data (CCD) combined Asian and Pacific Islander categories.

*Native Hawaiian or Other Pacific Islander* A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. Prior to 2010–11, the Common Core of Data (CCD) combined Asian and Pacific Islander categories. Used interchangeably with the shortened term Pacific Islander.

*American Indian or Alaska Native* A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

*Two or more races* A person identifying himself or herself as of two or more of the following race groups: White, Black, Asian, Native Hawaiian or Other Pacific Islander, or American Indian or Alaska Native. Some, but not all, reporting districts use this category. "Two or more races" was introduced in the 2000 Census and became a regular category for data collection in the Current Population Survey (CPS) in 2003. The category is sometimes excluded from a historical series of data with constant categories. It is sometimes included within the category "Other."

**Regular school** A public elementary/secondary or charter school providing instruction and education services that does not focus primarily on special education, vocational/ technical education, or alternative education.

*Revenue* 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.

### S

**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.

**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.

**Student membership** Student membership is an annual headcount of students enrolled in school on October 1 or the school day closest to that date. The Common Core of Data (CCD) allows a student to be reported for only a single school or agency. For example, a vocational school (identified as a "shared time" school) may provide classes for students from a number of districts and show no membership.

### Т

*Traditional public school* Publicly funded schools other than public charter schools. See also Public school or institution and Charter school.

*Tuition and fees* A payment or charge for instruction or compensation for services, privileges, or the use of equipment, books, or other goods. Tuition may be charged per term, per course, or per credit.

## U

*Undergraduate students* Students registered at an institution of postsecondary education who are working in a baccalaureate degree program or other formal program below the baccalaureate, such as an associate's degree, vocational, or technical program.

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