

The indicators in this section 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 section, 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. Others examine aspects of the context of learning in elementary and secondary schools.

Indicators on elementary and secondary education and outcomes from previous editions of *The Condition of Education* not included in this volume are available at <http://nces.ed.gov/programs/coe>.

SECTION 2



Elementary and Secondary Education

School Characteristics and Climate

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Indicator 12

Characteristics of Elementary and Secondary Schools

In 2009–10, some 5 percent of traditional public schools were combined schools (schools with both elementary and secondary grades), whereas 19 percent of charter schools and 28 percent of private schools were combined schools.

In 2009–10, there were 132,200 schools in the United States, including 93,900 traditional public schools, some 5,000 charter schools, and 33,400 private schools (see table A-12-1). Of the total schools in the United States in that year, approximately two-thirds (67 percent) were elementary schools, 21 percent were secondary schools, 11 percent were combined schools (namely, schools with both elementary and secondary grades) and 1 percent were ungraded. However, there was variation in the distribution of schools at each level by school control, that is, whether they were traditional public, charter or private. For example, 25 percent of traditional public schools and 27 percent of charter schools were secondary schools, compared to 8 percent of private schools. In addition, 5 percent of traditional public schools were combined schools, compared to 19 percent of charter schools and 28 percent of private schools.

The distribution of schools by school size differed by school control in 2009–10. Some 30 percent of traditional public schools were small (enrollment of fewer than 300 students), as compared to 61 percent of charter schools and 85 percent of private schools. In that same year, 9 percent of traditional public schools were large (1,000 or more students), as compared to 4 percent of charter schools and 1 percent of private schools.

The percentage of schools where White students accounted for more than 50 percent of enrollment was lower in 2009–10 than in 1999–2000 (66 vs. 73 percent). In contrast, the percentage of schools where Hispanic students accounted for more than 50 percent of enrollment was higher in 2009–10 than in 1999–2000 (12 vs. 7 percent). In both years, the percentage of schools where Black students accounted for more than 50 percent of enrollment was approximately the same (10 percent). In 2009–10, White students accounted for more than 50 percent of enrollment in 75 percent of private schools, compared to 63 percent of traditional public schools and

41 percent of charter schools. In contrast, Black students accounted for more than 50 percent of enrollment at 26 percent of charter schools, compared to 11 percent of traditional public schools and 8 percent of private schools. Hispanic students accounted for more than 50 percent of enrollment at 20 percent of charter schools in 2009–10, compared to 14 percent of traditional public schools and 5 percent of private schools.

The percentage of public schools (data for private schools are not available) that were high-poverty schools (i.e., schools where more than 75 percent of the students were eligible for the free or reduced-price lunch program) was higher in 2009–10 (20 percent) than in 1999–2000 (12 percent). Conversely, the percentage of public schools that were low-poverty schools (i.e., schools where 25 percent or less of the students were eligible for the free or reduced-price lunch program) was lower in 2009–10 (20 percent) than in 1999–2000 (31 percent). The distributions of public schools by poverty level differed by whether public schools were traditional or charter. In 2009–10, about 33 percent of charter schools were high-poverty schools, compared to 19 percent of traditional public schools.

In 2009–10, the largest percentage of traditional public schools were in rural areas (33 percent), followed by schools in suburban areas (28 percent), cities (25 percent), and towns (14 percent). In contrast, the largest percentage of charter schools was in cities (55 percent); suburban areas had 21 percent of charter schools, rural areas had 16 percent and towns had 8 percent. The largest percentages of private schools were in suburban areas (35 percent) and cities (32 percent), followed by rural areas (23 percent), and towns (10 percent).



Table A-12-1

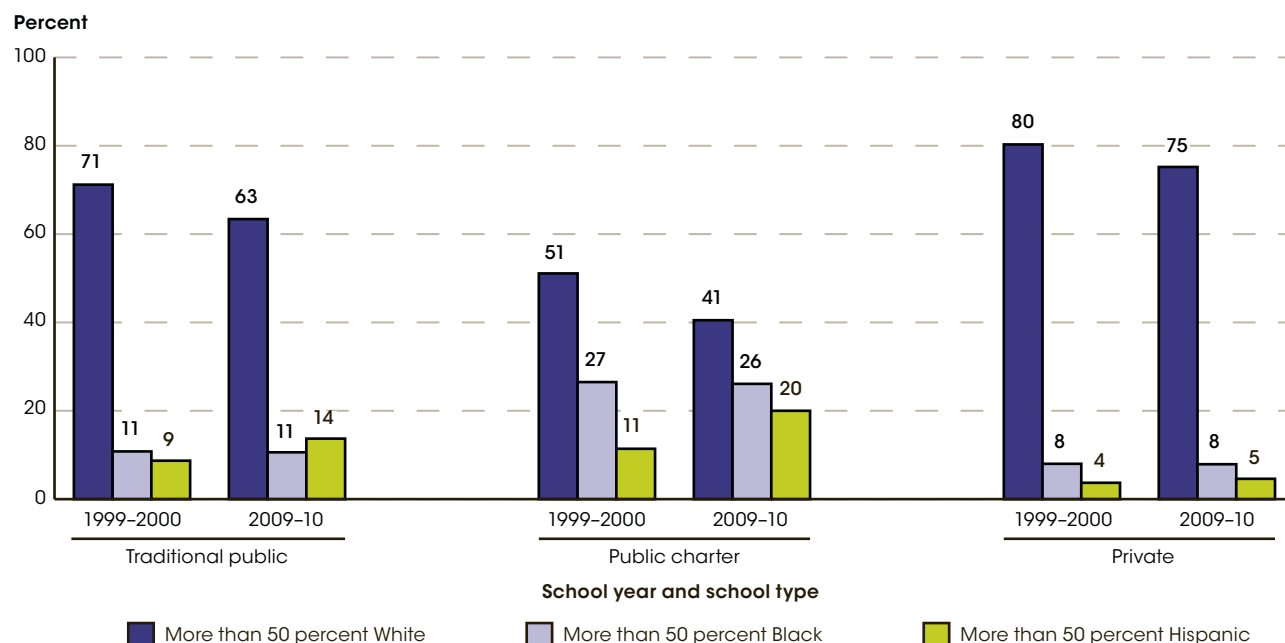
Glossary: *Charter school, Combined school, Elementary school, Private school, Secondary school, Traditional public school*

Technical Notes

The percentage distributions for school size and race/ethnicity exclude schools that did not report enrollment. For more information on locale, poverty, and race/ethnicity, see Appendix C – *Commonly Used Measures*.

For more information on the Common Core of Data (CCD) or the Private School Survey (PSS), see Appendix B – *Guide to Sources*.

Figure 12-1. Percentage distribution of schools, by control and racial/ethnic concentration of schools: School years 1999-2000 and 2009-10



NOTE: Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD) or the Private School Survey (PSS), see Appendix B – *Guide to Sources*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999-2000 (version 1b); and 2009-10 (version 1b), and Private School Survey (PSS), 1999-2000 and 2009-10.

Figure 12-2. Percentage distribution of schools, by locale and control: School year 2009-10



NOTE: For more information on locale, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD) or the Private School Survey (PSS), see Appendix B – *Guide to Sources*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2009-10 (version 1b); and Private School Survey (PSS), 2009-10.

Indicator 13

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

Among public school students in 2009–10, higher percentages of Hispanic (37 percent), Black (37 percent), and American Indian/Alaska Native students (29 percent) attended high-poverty schools than did Asian/Pacific Islander (12 percent) and White students (6 percent).

The percentage of students eligible for the free or reduced-price lunch (FRPL) program provides a proxy measure for the concentration of low-income students within a school. In this indicator, public schools are divided into categories by FRPL eligibility: low-poverty schools are defined as public schools where 25 percent or fewer students are eligible, and high-poverty schools are defined as public schools where 76 percent or more students are eligible. In 2009–10, approximately 25 percent of students attended low-poverty public schools, and 19 percent attended high-poverty public schools (table A-13-1).

In 2009–10, both the percentage of students attending high-poverty schools and the percentage attending low-poverty schools varied by school level and school locale (tables A-13-1 and A-13-2). A higher percentage of elementary-school students than secondary-school students attended high-poverty schools (23 vs. 9 percent), while a lower percentage of elementary-school students than secondary-school students attended low-poverty schools (22 vs. 30 percent) (table A-13-1). Some 33 percent of students in city schools were enrolled in high-poverty schools, compared with 9 percent in rural schools, 14 percent in suburban schools, and 15 percent attending schools in towns (table A-13-2). On the other hand, the percentage of students in suburban schools (38 percent) who attended low-poverty schools was more than twice as large as the percentages of students in city schools and in town schools that were low-poverty schools (14 and 12 percent, respectively). The percentage of students in suburban schools who attended low-poverty schools was also higher than the corresponding percentage of students in rural schools (25 percent).

In terms of the 2009–10 racial/ethnic distribution of students across schools of different poverty levels, higher percentages of Hispanic (37 percent), Black (37 percent), and American Indian/Alaska Native students (29 percent) attended high-poverty public schools than did Asian/Pacific Islander (12 percent) and White students (6 percent) (table A-13-1). In contrast, higher percentages of Asian/Pacific Islander (37 percent) and White students (34 percent) attended low-poverty schools than did American Indian/Alaska Native (12 percent), Hispanic (12 percent), and Black students (8 percent).

The overall national pattern of higher percentages of Black, Hispanic, and American Indian/Alaska Native students attending high-poverty schools was also found by school level (elementary and secondary) and by school locale (city, suburban, town, and rural). For example, at the elementary school level in 2009–10, some 46 percent of Black, 45 percent of Hispanic, and 35 percent of American Indian/Alaska Native students attended high-poverty schools, compared with 14 percent of Asian/Pacific Islander and 7 percent of White students (table A-13-1). At the secondary school level, higher percentages of Hispanic (21 percent), Black (21 percent), and American Indian/Alaska Native students (17 percent) attended high-poverty public schools than did Asian/Pacific Islander (7 percent) and White students (2 percent). Among students attending city schools, higher percentages of Black (48 percent), Hispanic (46 percent), and American Indian/Alaska Native students (30 percent) were in high-poverty schools than were Asian/Pacific Islander (18 percent) and White (12 percent) students (table A-13-2).



Tables A-13-1 and A-13-2

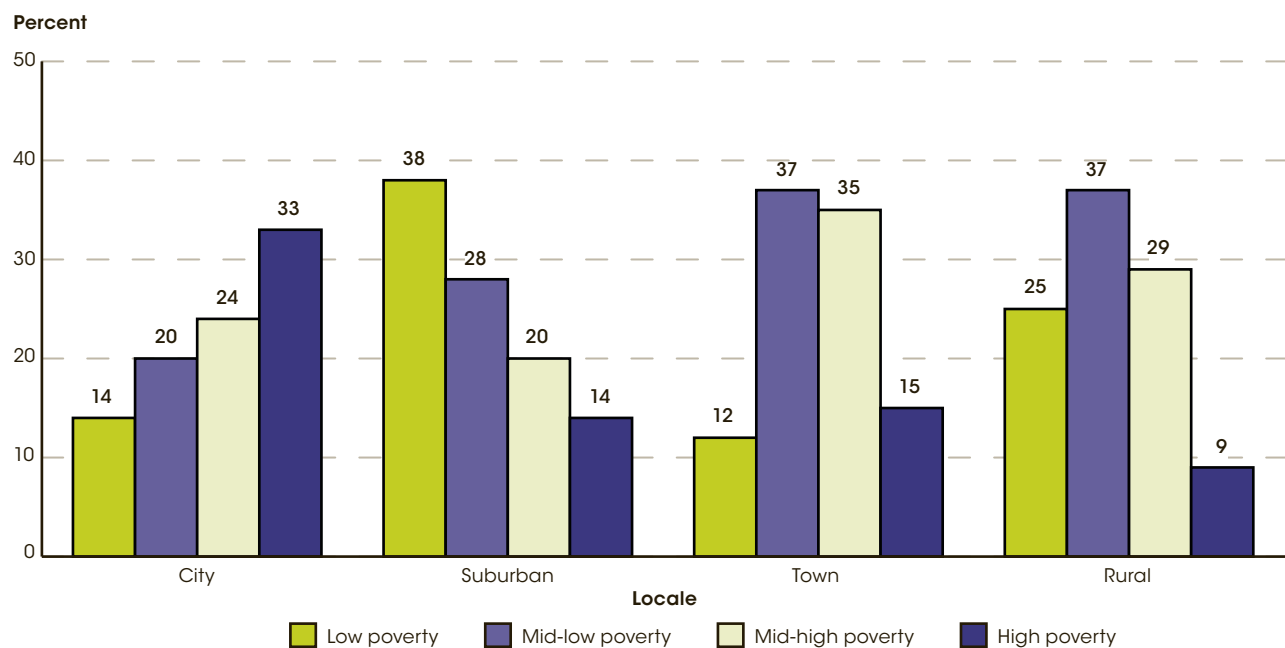
Glossary: *National School Lunch Program, Public school*

Technical Notes

Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, locale, and poverty, see Appendix C – *Commonly Used Measures*. For more

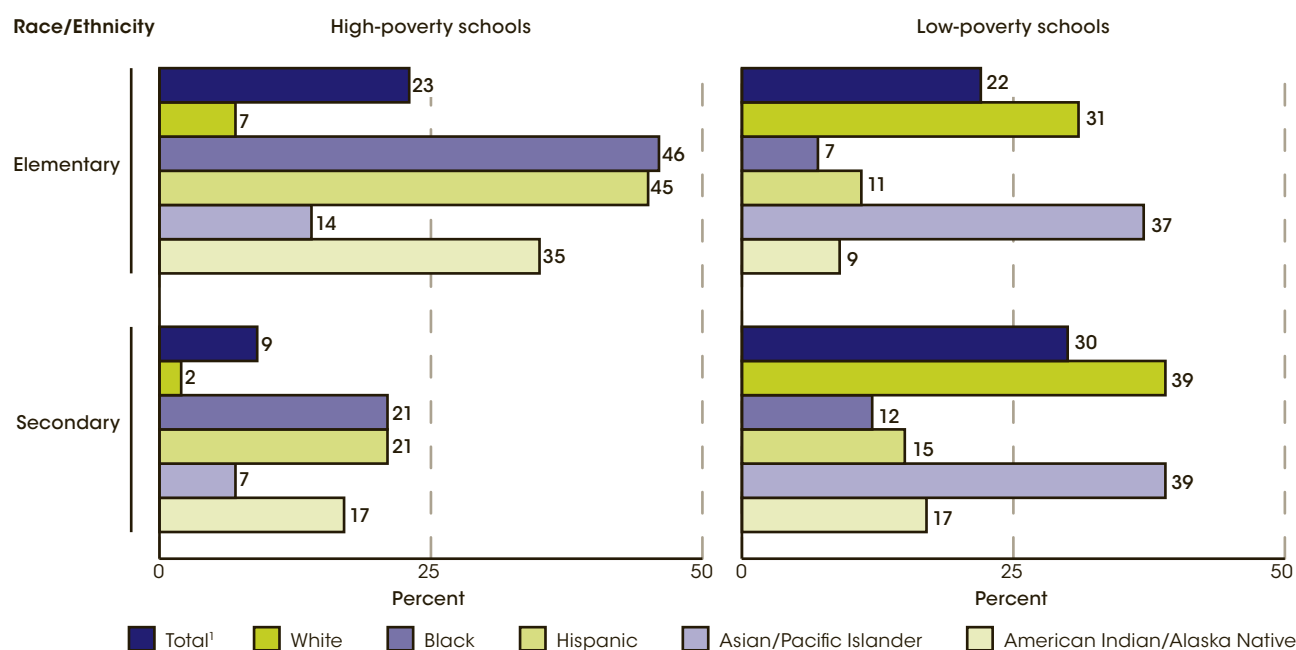
information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*. Percent detail may not sum to percent totals because of rounding.

Figure 13-1. Percentage distribution of public school students, by school locale and poverty level: School year 2009-10



NOTE: *Low-poverty schools* are defined as public schools where 25 percent or fewer students are eligible for the free or reduced-price lunch (FRPL) program, and *mid-low poverty schools* are those schools where 26 percent to 50 percent of students are eligible for FRPL. *Mid-high poverty schools* are defined as public schools where 51 percent to 75 percent of students are eligible, and *high-poverty schools* are those schools where 76 percent or more students are eligible for FRPL. Schools that are missing information on FRPL or did not participate in FRPL are not shown in this figure. For more information on locale and poverty, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*. 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," 2009-10.

Figure 13-2. Percentage of public school students in high-poverty schools and low-poverty schools, by race/ethnicity and school level: School year 2009-10



¹ Includes students whose racial/ethnic group was not reported.

NOTE: *High-poverty schools* are defined as public schools where 76 percent or more students are eligible for the free or reduced-price lunch (FRPL) program; and *low-poverty schools* are those schools where 25 percent or fewer students are eligible for FRPL. Race categories exclude persons of Hispanic ethnicity. Persons of unknown race/ethnicity are not shown. For more information on race/ethnicity and poverty, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2009-10.

Indicator 14

School Crime and Safety

Sixteen percent of public schools recorded at least one incident of serious violent crime in 2009–10; this was lower than the 20 percent of schools recording at least one incident in 1999–2000.

In the School Survey on Crime and Safety (SSOCS), public school principals were asked to provide the number of incidents of specific crimes that were recorded as occurring at their schools, as well as the number of these incidents that were reported to the police. Incidents of crime were then categorized as serious violent incidents, violent incidents (which include serious violent incidents), theft/larceny, and “other” incidents. Violent incidents include physical attacks or fights without a weapon, or threats of physical attacks without a weapon, plus serious violent incidents. Serious violent incidents include rape or attempted rape, sexual battery other than rape, physical attacks or fights with a weapon or threats of physical attacks with a weapon, and robbery with or without a weapon. During the 2009–10 school year, 85 percent of public schools indicated that one or more of these crime incidents had taken place, a percentage not measurably different from that in either 1999–2000 (86 percent) or 2007–08 (85 percent) (see table A-14-1). About 60 percent of public schools reported at least one incident of crime to the police in 2009–10, a percentage not measurably different from that in 1999–2000 or 2007–08 (62 percent each).

There was no consistent pattern of change between 1999–2000 and 2009–10 in the percentage of schools recording at least one violent incident or the percentage reporting at least one violent incident to the police; nor were measurable differences detected in the percentages between 2007–08 and 2009–10. However, the percentage of schools recording one or more serious violent incidents declined between 1999–2000 and 2009–10 from 20 to 16 percent. The percentage of schools that reported at least one serious violent incident to the police declined between 1999–2000 and 2009–10 from 15 to 10 percent; the

percentage also declined between school years 2007–08 (13 percent) and 2009–10.

Although 26 percent of schools recorded no violent incidents in 2009–10, many schools recorded multiple incidents. Some 8 percent of schools recorded 1 or 2 incidents, 29 percent recorded 3–9 incidents, 18 percent recorded 10–19 incidents, and 19 percent recorded 20 or more such incidents. Although most schools (84 percent) recorded no serious violent incidents, some schools recorded one or more such incidents. Eleven percent of schools recorded 1 or 2 violent incidents, 4 percent recorded 3–9 violent incidents, and 2 percent recorded 10 or more such incidents.

The percentage of public schools that recorded incidents of violent crime or incidents of serious violent crime in 2009–10 varied by school characteristics. For example, a lower percentage of rural schools (14 percent) than suburban (19 percent), town (21 percent), and city schools (25 percent) recorded 20 or more violent incidents (see table A-14-2). The percentage of low-poverty schools recording at least one serious violent incident (10 percent) was lower than the percentages of mid-low-poverty schools (16 percent), mid-high-poverty schools (16 percent), and high-poverty schools (23 percent) doing so. Low-poverty schools are those where 25 percent or less of the students were eligible for free or reduced-price lunch (FRPL). Mid-low-poverty, mid-high-poverty, and high-poverty schools are those where 26 to 50 percent, 51 to 75 percent, and 76 percent or more of the students, respectively, were eligible for FRPL.



Tables A-14-1 and A-14-2

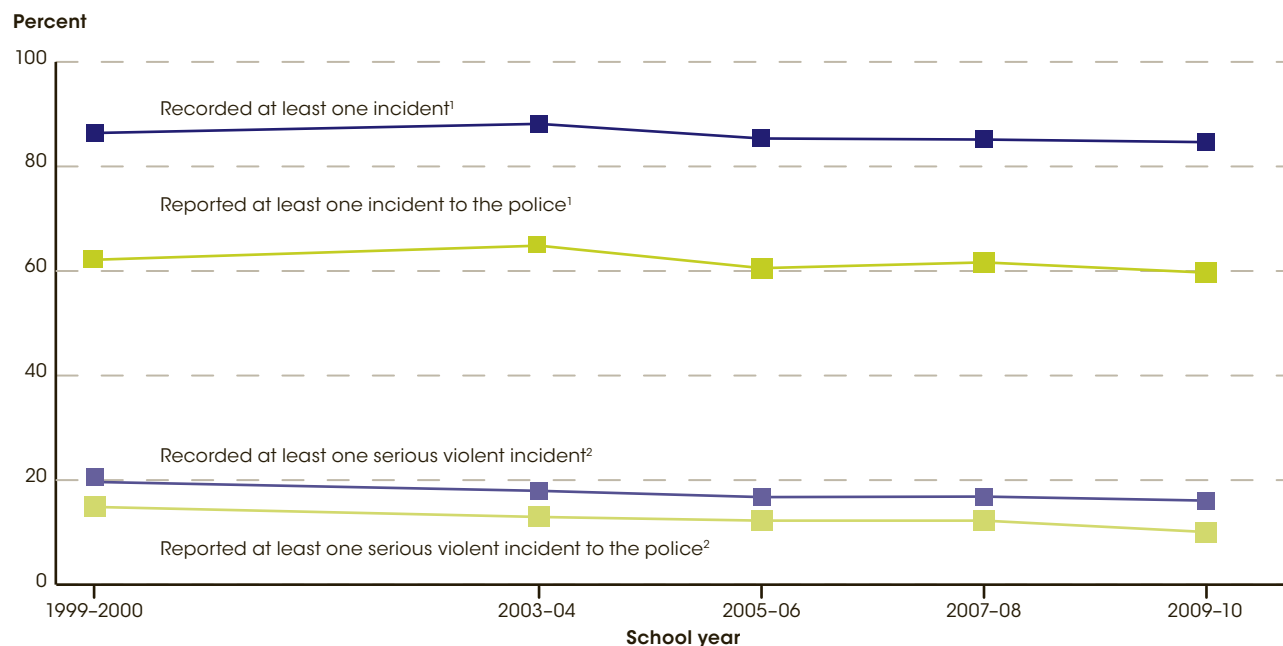
Glossary: *Free or reduced-price lunch, High school, Middle school, Primary school*

Technical Notes

Theft/larceny (taking things worth over \$10 without personal confrontation) includes pocket picking, stealing a purse or backpack (if left unattended or no force was used to take it from owner), theft from a building, theft from a motor vehicle or of motor vehicle parts or accessories, theft of bicycles, theft from vending machines, and all other types of thefts. Other incidents include possession of a firearm or explosive device; possession of a knife or sharp object; inappropriate distribution, possession, or use of prescription drugs; distribution, possession, or use of illegal drugs or alcohol; vandalism; and student sexual harassment of other students. “At school” was defined

to include activities that happen in school buildings, on school grounds, on school buses, and at places that hold school-sponsored events or activities. Respondents were instructed to include incidents that occurred before, during, or after normal school hours or when school activities or events were in session. For more information on the School Survey on Crime and Safety (SSOCS), see Appendix B – *Guide to Sources*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, locale, and poverty, see Appendix C – *Commonly Used Measures*.

Figure 14-1. Percentage of public schools recording and reporting to the police at least one incident or one serious violent incident of crime that occurred at school: Selected school years, 1999–2000 through 2009–10

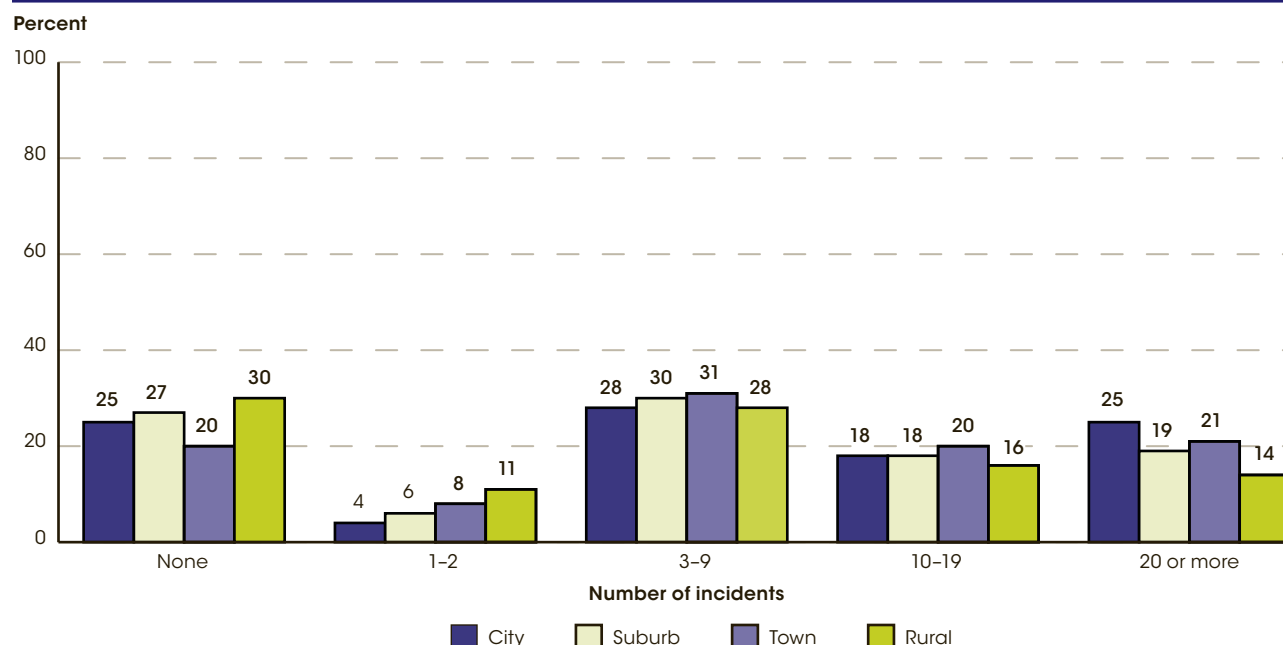


¹ Incidents of crime include serious violent incidents, violent incidents (which include serious violent incidents), theft/larceny, and "other" incidents.

² Serious violent incidents include rape or attempted rape, sexual battery other than rape, physical attack or fight with a weapon, threat of physical attack with a weapon, and robbery with or without a weapon.

NOTE: "At school" was defined to include activities that happen in school buildings, on school grounds, on school buses, and at places that hold school-sponsored events or activities. Respondents were instructed to include incidents that occurred before, during, or after normal school hours or when school activities or events were in session. For more information on the School Survey on Crime and Safety (SSOCS), see Appendix B – *Guide to Sources*. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000, 2003–04, 2005–06, 2007–08, and 2009–10 School Survey on Crime and Safety (SSOCS), 2000, 2004, 2006, 2008, and 2010.

Figure 14-2. Percentage of public schools recording violent incidents of crime that occurred at school, by number of incidents and school locale: School year 2009–10



NOTE: Violent incidents include serious violent incidents (rape or attempted rape, sexual battery other than rape, physical attack or fight with a weapon, threat of physical attack with a weapon, and robbery with or without a weapon), physical attack or fight without a weapon, and threat of physical attack without a weapon. "At school" was defined to include activities that happen in school buildings, on school grounds, on school buses, and at places that hold school-sponsored events or activities. Respondents were instructed to include incidents that occurred before, during, or after normal school hours or when school activities or events were in session. Detail may not sum to totals because of rounding. For more information on locale, see Appendix C – *Commonly Used Measures*. For more information on the School Survey on Crime and Safety (SSOCS), see Appendix B – *Guide to Sources*. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2009–10 School Survey on Crime and Safety (SSOCS), 2010.

Distance Education in Public High Schools

In 2009–10, some 53 percent of public school districts had high school students enrolled in distance education courses. In these districts, there were over 1.3 million high school student enrollments in distance education in 2009–10, compared with 0.3 million five years earlier.

In 2009–10, some 53 percent of public school districts had high school students enrolled in distance education courses (see table A-15-1). Distance education courses are defined as courses that are credit-granting, technology-delivered, have either the instructor in a different location than the students and/or have the course content developed in, or delivered from, a different location than that of the students. By comparison, in 2002–03, approximately 30 percent of public school districts had high school students enrolled in distance education courses. In 2009–10, there was some variation by locale in the percentage of public school districts with students enrolled in distance education courses. Sixty-six percent of public school districts in towns had high school students in distance education courses, which was higher than the percentage for rural (56 percent), suburban (45 percent), or city districts (37 percent).

There were over 1.3 million high school student enrollments in distance education courses in 2009–10, an increase of over 1 million enrollments from 2004–05, when there were just over 300,000 enrollments. By comparison, between 2002–03 and 2004–05, there was an increase of less than 100,000 in the number of high school student enrollments in distance education courses (from 222,000 to 310,000).

Fifty percent of districts that offered distance education courses in 2009–10 reported that a postsecondary institution in the United States delivered the courses in which students were enrolled (see table A-15-2). Other frequently reported entities delivering distance education were independent vendors (47 percent) and a state virtual school in the student's state (33 percent). While half of

all public school districts that offered distance education courses in 2009–10 reported that postsecondary institutions delivered the courses, 61 percent of rural school districts did, compared with 44 percent of town, 37 percent of suburban, and 30 percent of city school districts.

In 2004–05, internet courses using asynchronous (not simultaneous) instruction and two-way interactive video were the most widely used technologies for delivering distance education courses, with 40 and 41 percent, respectively, of districts that offered distance education reporting these as the primary delivery mode. In 2009–10, however, 63 percent of districts that offered distance education reported that internet courses using asynchronous instruction were the primary delivery mode, and 17 percent of districts reported that two-way interactive video was the primary delivery mode.

Twenty-two percent of districts that offered distance education courses in 2009–10 reported that students enrolled in regular high school programs could take a full course load in an academic term using only distance education courses, and 12 percent reported that students could fulfill all high school graduation requirements using only distance education. Eight percent of rural school districts offering distance education courses reported that students could fulfill all high school graduation requirements using only distance education, compared to 15 percent of suburban, 18 percent of town, and 20 percent of city school districts.



Tables A-15-1 and A-15-2

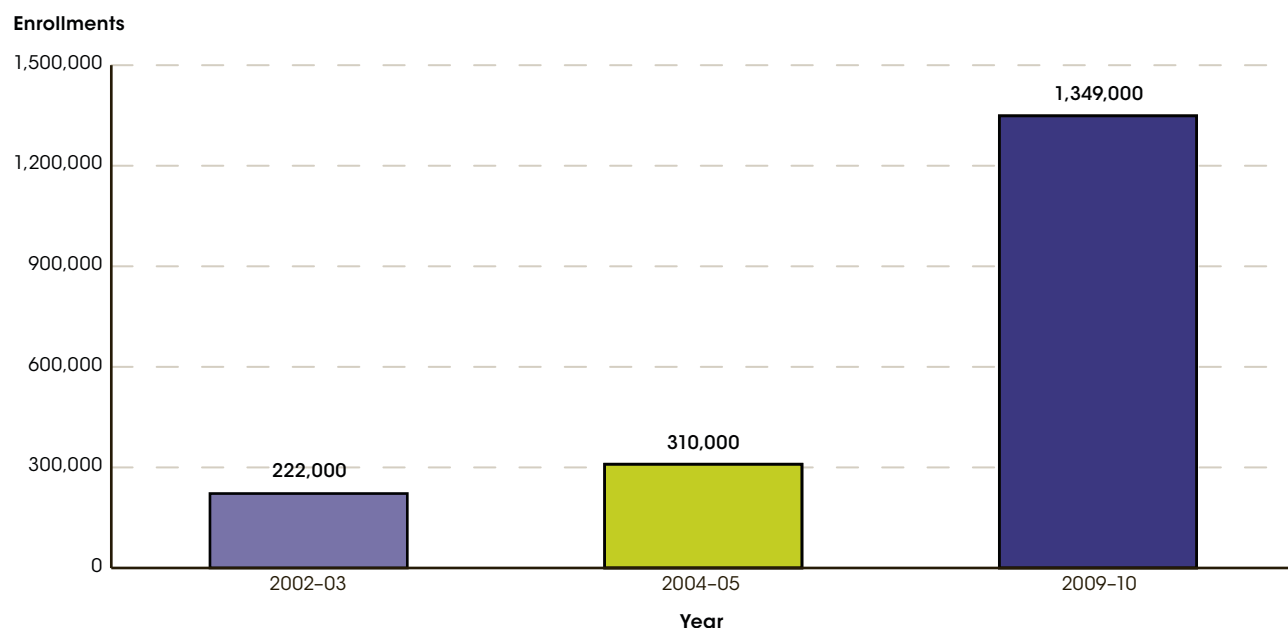
Glossary: *High school, Public school*

Technical Notes

Distance education courses are defined as courses that are credit-granting, technology-delivered, have either the instructor in a different location than the students and/or have the course content developed in, or delivered from, a different location than that of the students. For delivery entities, response options in the questionnaire were “yes,” “no,” and “don’t know.” Percentages are based on districts with students enrolled in distance education

courses. For instructional delivery, “synchronous” refers to simultaneous, or “real time,” instruction. Poverty estimates for school districts were based on Title I data provided to the U.S. Department of Education by the U.S. Census Bureau. For more information on locale and poverty, see Appendix C – *Commonly Used Measures*. For more information on the Fast Response Survey System (FRSS), see Appendix B – *Guide to Sources*.

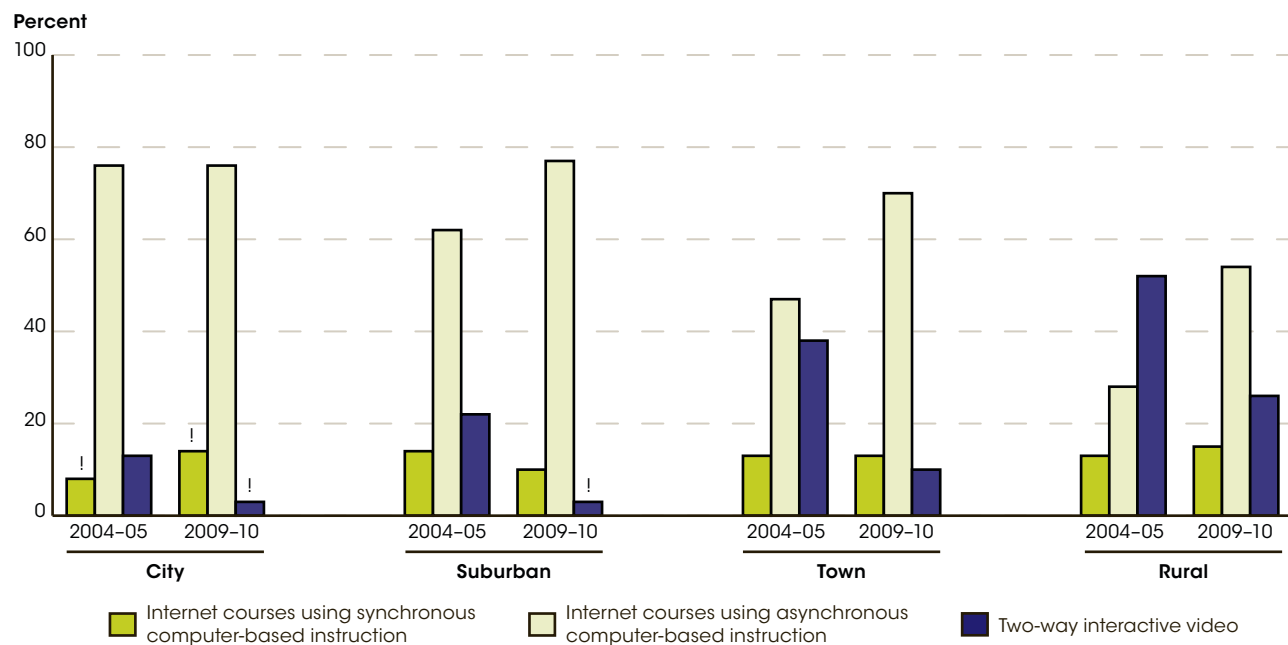
Figure 15-1. Number of public high school student enrollments in distance education courses: School years 2002-03, 2004-05, and 2009-10



NOTE: Distance education courses are defined as courses that are credit-granting, technology-delivered, have either the instructor in a different location than the students and/or have the course content developed in, or delivered from, a different location than that of the students. For more information on the Fast Response Survey System (FRSS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), Fast Response Survey System (FRSS), "Distance Education Courses for Public School Elementary and Secondary Students: 2002-03," FRSS 84, 2003; "Distance Education Courses for Public Elementary and Secondary School Students: 2004-05," FRSS 89, 2005; and "Distance Education Courses for Public Elementary and Secondary School Students: 2009-10," FRSS 98, 2010.

Figure 15-2. Percentage of public school districts that offered distance education, by locale and selected primary modes of instructional delivery: School years 2004-05 and 2009-10



! Interpret with caution. The coefficient of variation (CV) for this estimate is 30 percent or greater.

NOTE: Distance education courses are defined as courses that are credit-granting, technology-delivered, have either the instructor in a different location than the students and/or have the course content developed in, or delivered from, a different location than that of the students. Percentages are based on districts with students enrolled in distance education courses. For instructional delivery, synchronous refers to simultaneous, or "real time," instruction. For more information on the Fast Response Survey System (FRSS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), Fast Response Survey System (FRSS), "Distance Education Courses for Public School Elementary and Secondary Students: 2004-05," FRSS 89, 2005; and "Distance Education Courses for Public Elementary and Secondary School Students: 2009-10," FRSS 98, 2010.

Public High School Retention Rates

Of approximately 15,500 regular high schools with at least 10 seniors in 2009–10, there were 890 schools (6 percent) in which the number of seniors divided by the number of freshmen 4 years earlier was between 10 and 50 percent.

In academic year 2009–10, there were approximately 15,500 regular high schools in the United States with at least 10 seniors that had at least 10 freshmen 4 years earlier, representing over 97 percent of regular schools with seniors in that year (see table A-16-1). In over 4,800 of these schools (or 31 percent of the total) the number of seniors in 2009–10 was between 91 and 150 percent of the number of freshmen 4 years earlier. By contrast, in 890 schools (or 6 percent of the total) the number of seniors in 2009–10 was between 10 and 50 percent of the number of freshmen 4 years earlier. This ratio of the number of seniors in a given year to the number of freshmen 4 years earlier is the retention rate. High schools with senior classes that are substantially smaller than the entering class 4 years earlier are considered to be “low-retention schools.” For this indicator, low-retention high schools are defined as those with a senior class size that is between 10 and 70 percent of the size of the freshman class that had entered 4 years earlier.

In academic year 1990–91, some 24 percent of regular high schools were low-retention schools (5 percent retained between 10 and 50 percent of their students and 19 percent retained between 51 and 70 percent). The percentage of low-retention high schools declined to 22 percent in 1992–93, then increased to 32 percent (4,581 high schools) in 2000–01 before declining to approximately 26 percent in 2005–06, and then remained relatively stable at 26 percent through 2009–10. Approximately 518,000 high school seniors attended low-retention high schools in 1990–91, compared to 845,000 in 2000–01 and 755,000 in 2009–10.

In academic year 2009–10, some 6 percent of low-poverty high schools, meaning those in which 25 percent or less of the students qualified for free or reduced-price lunch, were low retention, compared to 60 percent of high-poverty schools, meaning those in which 76 percent or more of the students qualified for free or reduced-price lunch (see table A-16-2). In contrast, 57 percent of low-poverty schools had retention rates of 91 to 150 percent, compared to 13 percent of high-poverty schools.

Fifty percent of regular high schools in cities were low-retention schools in academic year 2009–10, including 18 percent that retained 10 to 50 percent of their freshman class from 4 years earlier. In that same year, 19 percent of rural high schools, 22 percent of suburban high schools, and 24 percent of town high schools met the definition of low retention.

For regular high schools with more than 50 percent White enrollment, some 16 percent were low-retention schools, compared to 48 percent of regular high schools with more than 50 percent Hispanic enrollment and 67 percent of high schools with more than 50 percent Black enrollment. In contrast, some 39 percent of regular high schools with more than 50 percent White enrollment retained 91 to 150 percent of their students from 2006–07 to 2009–10, which was higher than high schools with more than 50 percent Hispanic enrollment (13 percent) and high schools with more than 50 percent Black enrollment (8 percent).



Tables A-16-1 and A-16-2

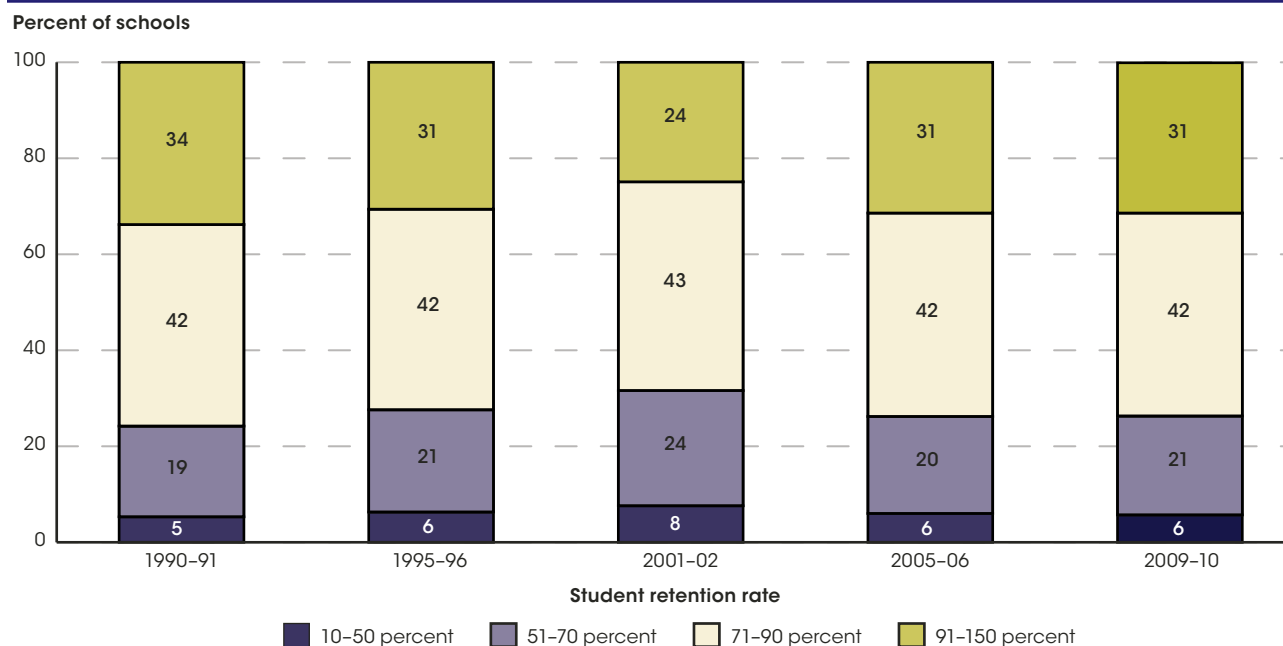
Glossary: *Free or reduced-price lunch, High school, Public school, Regular school*

Technical Notes

Retention rate is defined as the number of 12th-grade students in a given academic year divided by the number of 9th-grade students 4 years prior (the base year). This indicator includes only regular public schools (not alternative, special education or vocational schools) that had 10 or more 9th-grade students in the base year and 10 or more 12th-grade students in the academic year 4 years later. Less than 3 percent of regular schools had

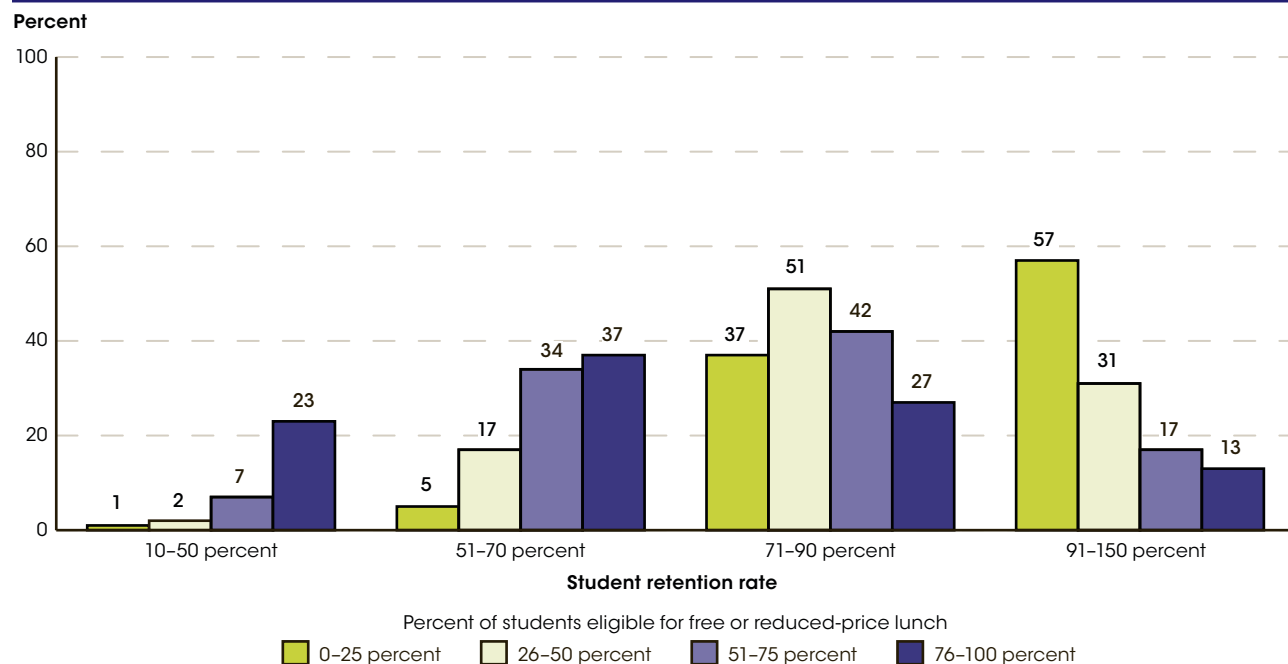
less than ten 12th-graders in 2009–10 and less than ten 9th-graders four years earlier. Race categories exclude persons of Hispanic ethnicity. For more information on free or reduced-price lunch, race/ethnicity, or locale, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*.

Figure 16-1. Percentage distribution of public high schools, by student retention rate: Selected academic years, 1990-91 through 2009-10



NOTE: Retention rate is defined as the number of 12th-grade students in a given academic year divided by the number of 9th-grade students 4 years prior (the base year). Includes only regular public schools that had 10 or more 9th-grade students in the base year and 10 or more 12th-grade students in the academic year shown. Retention rates were limited to between 10 and 150 percent to eliminate outliers. For more information on the Common Core of Data (CCD), see Appendix B - *Guide to Sources*.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1990-91 through 2009-10.

Figure 16-2. Percentage distribution of public high schools, by student retention rate and percentage of students eligible for free or reduced-price lunch: Academic year 2009-10



NOTE: Retention rate is defined as the number of 12th-grade students in a given academic year divided by the number of 9th-grade students 4 years prior. Includes only regular public schools that had 10 or more 9th-grade students in 2006-07 and 10 or more 12th-grade students in 2009-10. Retention rates were limited to between 10 and 150 percent to eliminate outliers. For more information on the Common Core of Data (CCD), see Appendix B - *Guide to Sources*. For more information on free or reduced-price lunch, see Appendix C - *Commonly Used Measures*. 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," 2009-10.

Characteristics of Full-Time Teachers

A larger percentage of full-time teachers held a postbaccalaureate degree in 2007–08 than in 2003–04. Forty-nine percent of elementary school teachers and 54 percent of secondary school teachers held a postbaccalaureate degree in 2007–08, compared with 45 and 50 percent, respectively, in 2003–04.

In the 2007–08 school year, there were 3.5 million full-time teachers, up from 3.3 million in 2003–04. From 2003–04 to 2007–08, there were no measurable changes in the number of full-time elementary school teachers; however, the number of secondary school teachers grew from 1.0 million in 2003–04 to 1.1 million in 2007–08 (see table A-17-1). The number of public secondary school teachers increased from 0.9 million in 2003–04 to 1.0 million in 2007–08. The number of private school teachers was not measurably different between 2003–04 and 2007–08 at either level.

Approximately 75 percent of full-time teachers were women in 2007–08. At the elementary level, 84 percent of public school and 87 percent of private school teachers were female. At the secondary level, 59 percent of public school teachers were female, up from 57 percent in 2003–04. Females represented 53 percent of private secondary school teachers in 2007–08. Eighty-three percent of full-time teachers were White, 7 percent were Black, 7 percent were Hispanic, and 1 percent were Asian in 2007–08. The racial/ethnic distribution of full-time teachers was similar at both the elementary and secondary level.

A larger percentage of full-time teachers held a postbaccalaureate degree (master's degree, education specialist or professional diploma, first-professional degree, or doctoral degree) in 2007–08 than in 2003–04. Forty-nine percent of elementary school teachers and 54 percent of secondary school teachers held a postbaccalaureate degree in 2007–08, compared with 45 and 50 percent, respectively, in 2003–04. In 2007–08, a higher percentage of public elementary school teachers held such degrees than did private elementary school teachers (50 vs. 30 percent). No measurable difference was found between public and private school teachers at the secondary level.

In 2007–08 teachers averaged 14 years of experience, about the same as in 2003–04 (see table A-17-2). Nationally, about 17 percent of teachers had 3 or fewer years of experience, 28 percent had 4–9 years of experience, 27 percent had 10–19 years of experience, and 27 percent had 20 or more years of experience. For the most part, this distribution did not change between 2003–04 and 2007–08; however, the percentage of teachers with 20 or more years of experience was lower in 2007–08 than it was in 2003–04 (30 percent). In public schools, the percentage of teachers with 20 or more years of experience was also lower in 2007–08 than in 2003–04 at both the elementary (27 vs. 30 percent) and secondary (28 vs. 32 percent) levels. This change was not observed for private schools. Examined by school type, a lower percentage of public school teachers had 3 or fewer years of experience, compared to their private school counterparts, in 2007–08 (17 vs. 20 percent). This difference between public and private school teachers was echoed at the elementary level in 2007–08 (17 vs. 20 percent), but was not observed at the secondary level.

In 2007–08, some 28 percent of full-time teachers taught in city schools, 35 percent taught in suburban schools, 13 percent taught in town schools, and 24 percent taught in rural schools (see table A-17-1). The distribution of elementary and secondary school teachers by locale varied between public and private school teachers. For example, 27 percent of public elementary school teachers taught in city schools, compared with 42 percent of private elementary school teachers, and 26 percent of public secondary school teachers taught in city schools, compared with 49 percent of private secondary school teachers.



Tables A-17-1 and A-17-2

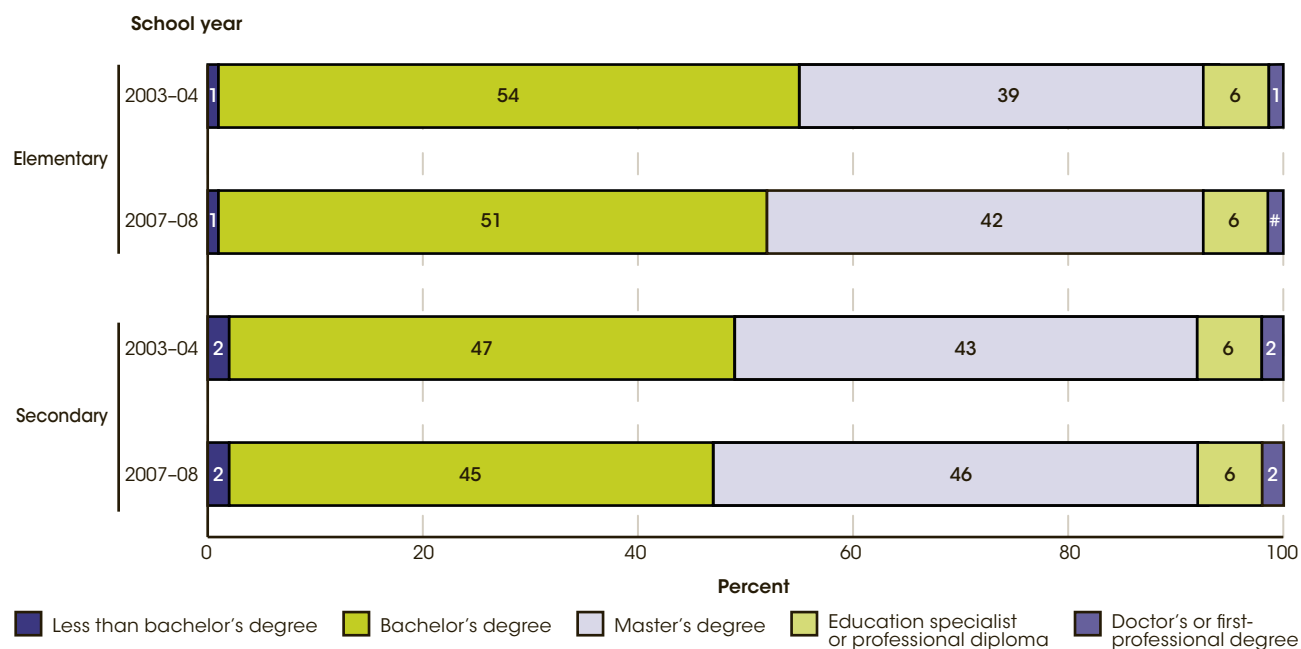
Glossary: *Doctor's degree, Education specialist/ professional diploma, Elementary school, First-professional degree, Master's degree, Private school, Public school, Secondary school*

Technical Notes

Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity see Appendix C – *Commonly Used Measures*. *Regular certification* includes regular or standard state certificates and advanced professional certificates for both public and private school teachers. Full certificates granted by an

accrediting or certifying body other than the state are not included. Probationary certificates are for those who have satisfied all requirements except the completion of a probationary period. For more information on the Schools and Staffing Survey (SASS), see Appendix B – *Guide to Sources*.

Figure 17-1. Percentage distribution of full-time school teachers, by school level and highest degree earned: School years 2003-04 and 2007-08

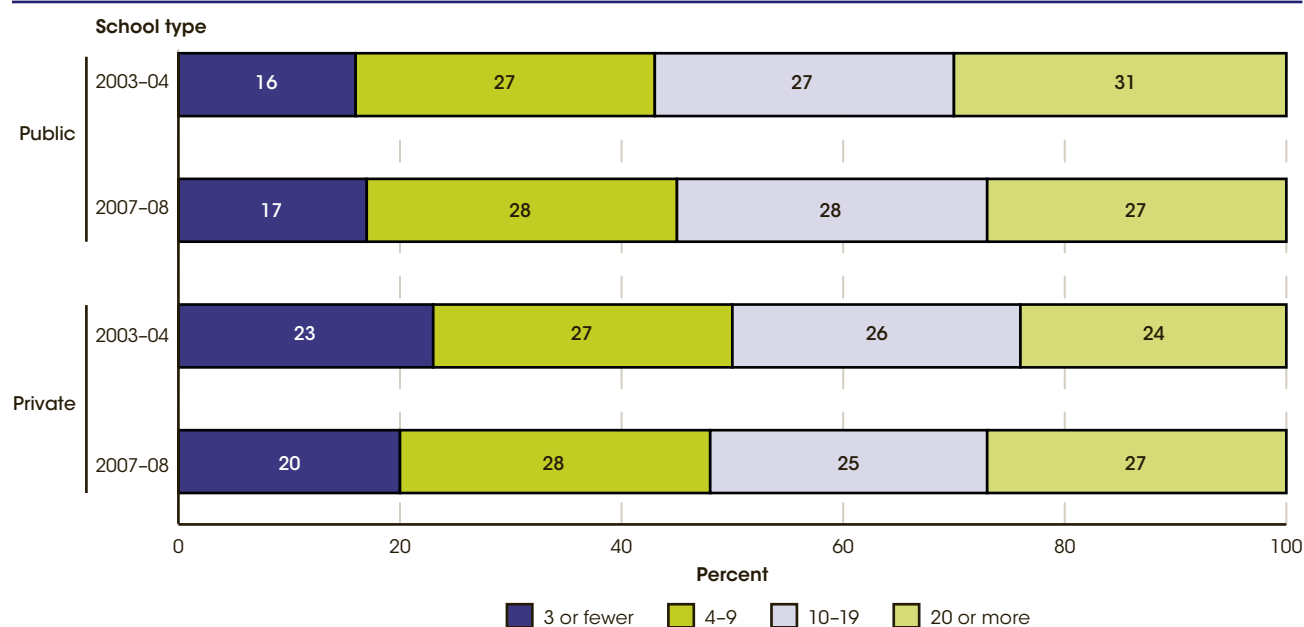


Rounds to zero.

NOTE: *Less than bachelor's degree* includes teachers with an associate's degree, those with a vocational certificate, and those without a postsecondary degree. *Education specialist or professional diploma* includes teachers with a certificate of advanced graduate studies. For more information on the Schools and Staffing Survey (SASS), see Appendix B - *Guide to Sources*. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher and Private School Teacher Data Files," 2003-04 and 2007-08.

Figure 17-2. Percentage distribution of full-time secondary level teachers, by school type and years of experience: School years 2003-04 and 2007-08



NOTE: For more information on the Schools and Staffing Survey (SASS), see Appendix B - *Guide to Sources*. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher and Private School Teacher Data Files," 2003-04 and 2007-08.

Characteristics of School Principals

From 1999–2000 to 2007–08, the percentage of principals who were female increased from 52 to 59 percent at public elementary schools and from 22 to 29 percent at public secondary schools.

Schools employed 118,400 principals in the 2007–08 school year, up from 110,000 principals in 1999–2000 (see table A-18-1). In 2007–08 there were 78,500 elementary school principals, with 79 percent at public and 21 percent at private schools. At the secondary level there were 24,500 principals, with 88 percent at public and 12 percent at private schools.

The percentage of public school principals who were female increased at both the elementary and secondary levels from 1999–2000 to 2007–08, although the gender distribution varied. The percentage of female principals increased from 52 to 59 percent at public elementary schools and from 22 to 29 percent at public secondary schools. There was no measurable change in this percentage at either private school level.

At public elementary and secondary schools, the percentage of principals under age 40 increased from 1999–2000 to 2007–08, as did the percentage of principals age 55 and over. The percentages of principals ages 45 to 49 and 50 to 54 decreased. For example, 10 percent of public elementary school principals were under age 40 in 1999–2000, compared with 19 percent in 2007–08. The percentage of public elementary school principals who were age 55 and over increased from 22 to 33 percent during this time. From 1999–2000 to 2007–08, the percentage of private school principals ages 55 and over also increased at the elementary and secondary levels, while the percentage of principals ages 45 to 49 and 50 to 54 decreased at both levels. However, unlike their public school peers, the percentages of elementary and secondary principals at private schools who were under age 40 in 1999–2000 were not measurably different from the percentages in 2007–08.

The percentage of public secondary school principals with 20 or more years of experience as a principal decreased from 10 to 5 percent from 1999–2000 to 2007–08. About 36 percent of public secondary school principals had 3 or fewer years' experience as a principal in 2007–08, compared with 30 percent in 1999–2000. A similar

pattern occurred at the public elementary school level. Higher percentages of private school principals had 20 or more years of experience as principals in 2007–08 than did public school principals. For example, 19 percent of private elementary school principals had 20 or more years of experience as a principal, compared with 8 percent of their public school peers. However, in 2007–08, a greater percentage of elementary private school principals had 3 or fewer years of teaching experience (26 percent) than did public school principals (3 percent).

Educational attainment differed between public and private school principals. In 2007–08, about 32 percent of private elementary school principals and 18 percent of private secondary school principals had a bachelor's degree or less, while 1 percent each of public elementary and public secondary school principals had a bachelor's degree or less. A higher percentage of public elementary school principals held a doctor's or first-professional degree (8 percent) than did private elementary school principals (5 percent); there was no measurable difference between the percentages of public versus private secondary school principals who held a doctor's or first-professional degree.

Principals' median annual salary, calculated in constant 2010–11 dollars, was generally higher in 2007–08 than in 1999–2000. The median salary of public secondary school principals increased from \$88,600 to \$91,900 during this time. Secondary school principals received higher salaries than elementary school principals, and public school principals received higher salaries than private school principals. For example, principals at public elementary schools had a median salary of \$87,700 in 2007–08, compared with \$91,900 for principals at public secondary schools. Private elementary school principals earned a median \$52,200 salary, compared to \$68,900 in private secondary schools.



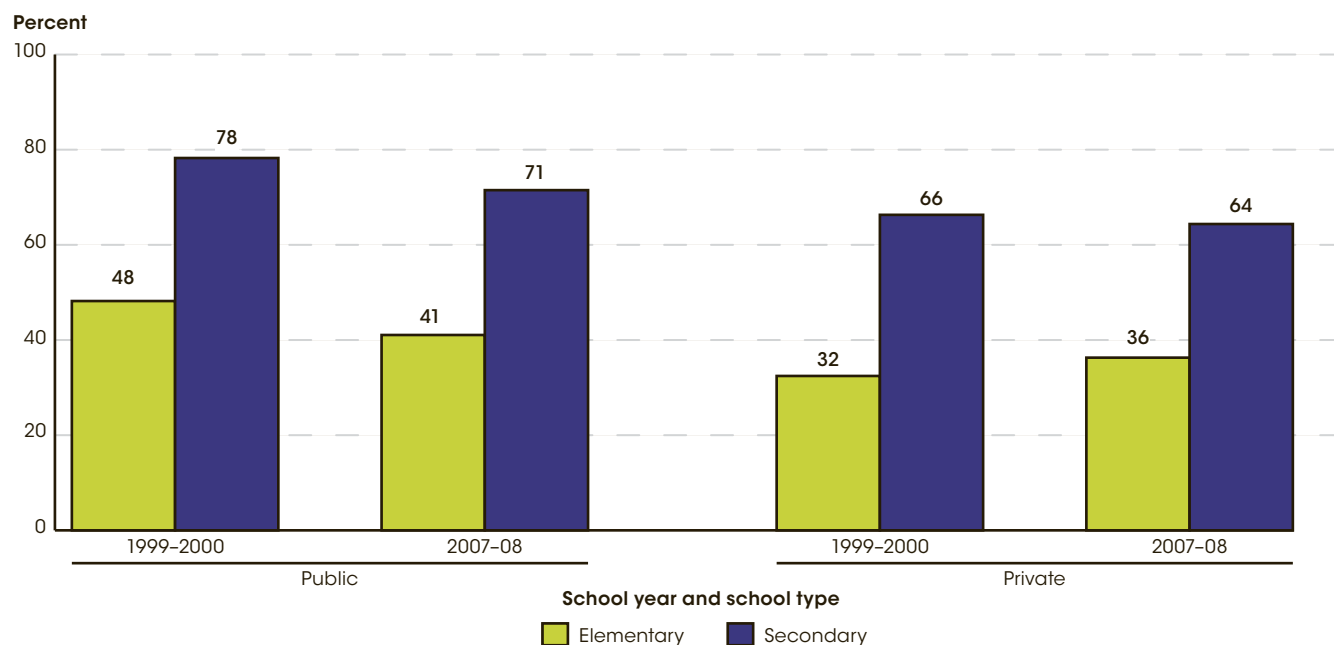
Table A-18-1

Glossary: *Elementary school, Private school, Public school, Secondary school*

Technical Notes

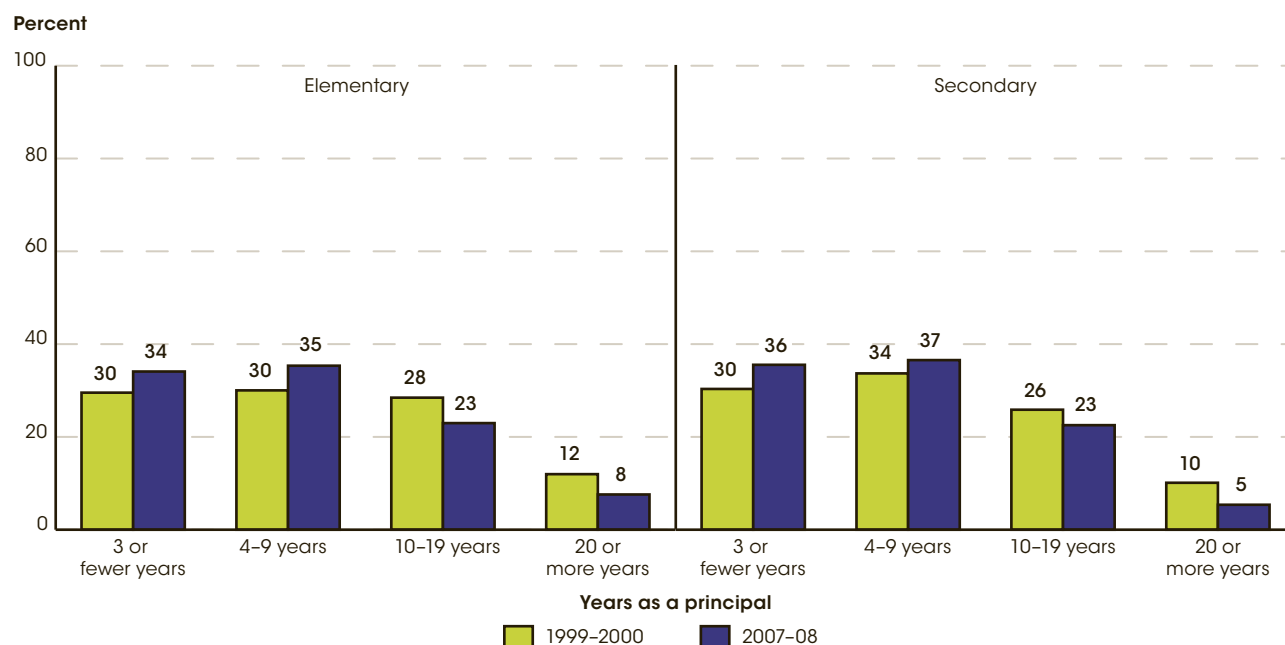
Median annual salary estimates were adjusted using the Consumer Price Index (CPI). For more information on the CPI, see Appendix C – *Finance*. For more information

on the Schools and Staffing Survey (SASS), see Appendix B – *Guide to Sources*.

Figure 18-1. Percentage of male principals, by school type and level: School years 1999–2000 and 2007–08

NOTE: Detail may not sum to totals because of rounding. For more information on the Schools and Staffing Survey (SASS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal and Private School Principal Data Files," 1999–2000 and 2007–08, and "Charter School Principal Data File," 1999–2000.

Figure 18-2. Percentage distribution of public school principals, by school level and years of experience as a principal: School years 1999–2000 and 2007–08

NOTE: Detail may not sum to totals because of rounding. For more information on the Schools and Staffing Survey (SASS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal and Private School Principal Data Files," 1999–2000 and 2007–08, and "Charter School Principal Data File," 1999–2000.

Indicator 19

Public School Revenue Sources

From school years 1988–89 through 2008–09, total elementary and secondary public school revenues increased from \$350 billion to \$611 billion, a 74 percent increase after adjusting for inflation.

From school years 1988–89 through 2008–09, total elementary and secondary public school revenues increased from \$350 billion to \$611 billion (in constant 2010–11 dollars), a 74 percent increase (see table A-19-1). During this period, the total amounts from each revenue source (federal, state, and local) increased, but the percentage of increase differed by revenue source. Federal revenues, the smallest of the three revenue sources, increased by 169 percent, compared with increases of 70 percent for state revenues and 66 percent for local revenues.

The percentage of total revenues for public elementary and secondary education that came from local sources declined from 46 percent in school year 1988–89 to 44 percent in 2008–09. While the percentage coming from state sources was nearly the same in school years 1988–89 and 2008–09 (48 and 47 percent, respectively), the percentage fluctuated between these two years from a low of 45 percent in 1993–94 to a high of 50 percent in 2000–01. The percentage of total revenues from federal sources increased from 6 percent in school year 1989–90 to 10 percent in school year 2008–09.

Looking at revenues from school years 2007–08 to 2008–09, state revenues declined by \$9.7 billion. This decline, which occurred in 25 states (data not shown), is the largest decline in state revenues from the previous year since World War II. Local revenue from sources other than property taxes also declined. Total revenues for public education increased slightly, however, due to an

\$8.6 billion increase in federal revenues and a \$6.8 billion increase in local property taxes.

In school year 2008–09, there were significant variations across the states in the percentages of public school revenues coming from each revenue source. In 21 states, more than half of education revenues came from state governments, while in 14 states and the District of Columbia more than half came from local revenues. In the remaining 15 states, no single revenue source made up more than half of education revenues (see table A-19-2).

In school year 2008–09, the percentages of revenues coming from state sources were highest in Vermont and Hawaii (86 and 82 percent, respectively). The percentages of revenues coming from state sources were lowest in Nevada and Illinois (31 and 28 percent, respectively). The District of Columbia does not receive any state revenue. The percentages of revenues coming from federal sources were highest in South Dakota and Louisiana (16 percent each) and lowest in New Jersey and Connecticut (4 percent each). Among the states, the percentages of revenues coming from local sources were highest in Illinois (61 percent) and lowest in Hawaii (3 percent) and Vermont (8 percent). The percentages of revenues from property taxes also differed by state, ranging from a high of 55 percent in Connecticut and New Hampshire to lows of zero or nearly zero percent in Hawaii and Vermont.



Tables A-19-1 and A-19-2

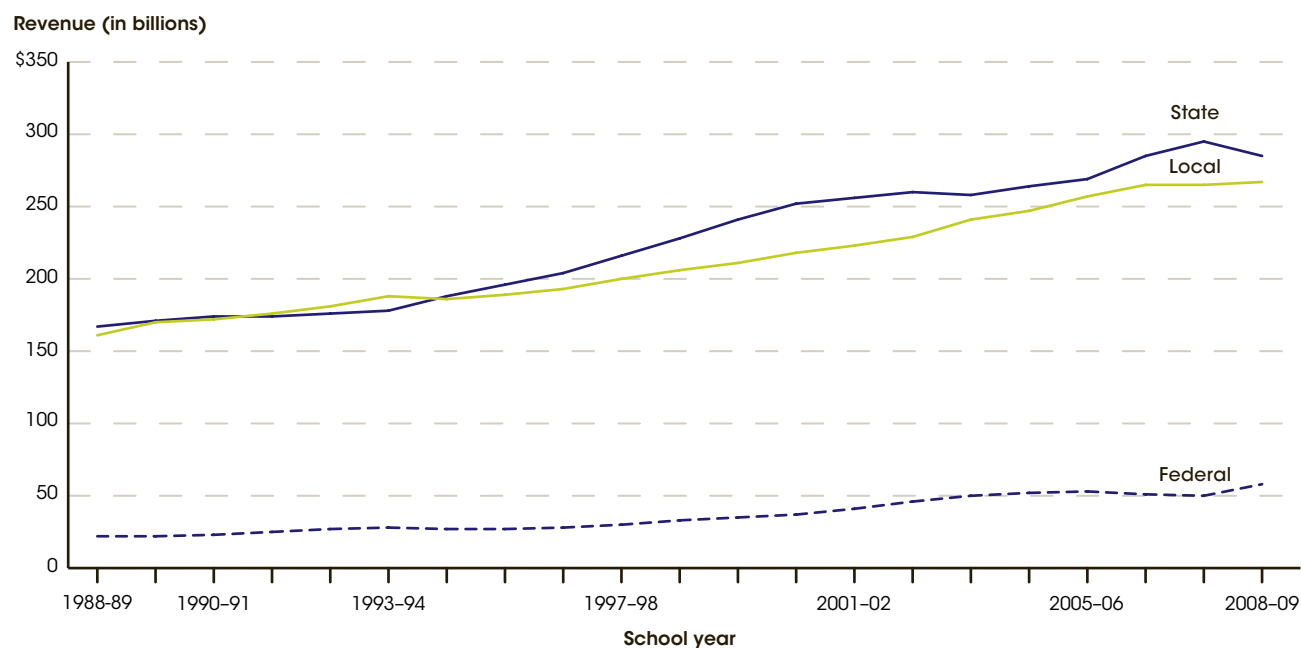
Glossary: *Consumer Price Index (CPI), Elementary school, Property tax, Public school, Revenues, Secondary school*

Technical Notes

Revenues have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2010–11 dollars. For more information about the CPI, see Appendix C – *Finance*. Both the District of Columbia and Hawaii have only one school district each; therefore, neither is comparable to the other states. Other local government revenue includes revenues from

sources such as local nonproperty taxes and investments, as well as revenues from student activities, textbook fees, transportation and tuition fees, and food services. For more information about revenues for public elementary and secondary schools, see Appendix C – *Finance*. For more information about the Common Core of Data, see Appendix B – *Guide to Sources*.

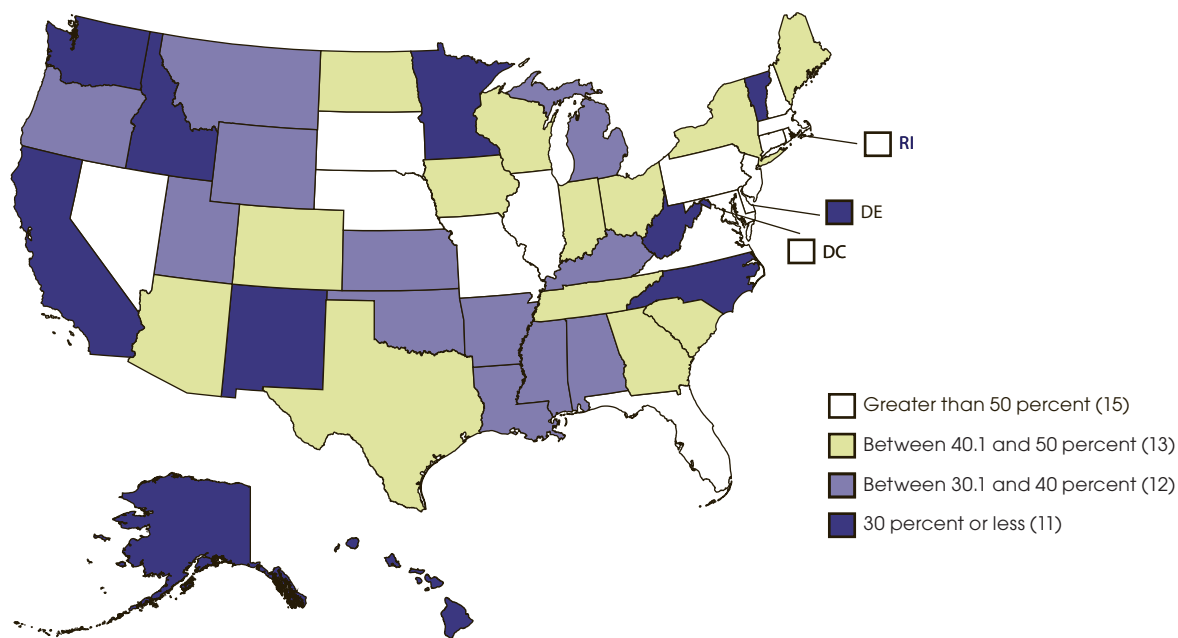
Figure 19-1. Revenues for public elementary and secondary schools, by revenue source: School years 1989-90 through 2008-09



NOTE: Revenues are in constant 2010-11 dollars, adjusted using the Consumer Price Index (CPI). For more information about the CPI and revenues for public elementary and secondary schools, see Appendix C – Finance. For more information about the Common Core of Data, see Appendix B – Guide to Sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1990-91 through 2008-09.

Figure 19-2. Local revenues for public elementary and secondary schools as a percentage of total school revenues, by state: School year 2008-09



NOTE: Both the District of Columbia and Hawaii have only one school district each; therefore, neither is comparable to the other states. For more information about revenues for public elementary and secondary schools, see Appendix C – Finance. For more information about the Common Core of Data, see Appendix B – Guide to Sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2008-09.

Indicator 20

Public School Expenditures

Total expenditures per student in public elementary and secondary schools rose 46 percent in constant dollars from 1988–89 through 2008–09, with interest on school debt increasing faster than current expenditures or capital outlay.

Total expenditures per student in fall enrollment in public elementary and secondary schools rose from \$8,634 in 1988–89 to \$12,643 in 2008–09, a 46 percent increase as measured in constant 2010–11 dollars (see table A-20-1). Most of this increase occurred after 1998–99. The various components of total expenditures experienced different percent increases during this time period. Spending on interest on school debt per student had the highest percent increase (149 percent, from \$141 to \$351), followed by capital outlay, e.g., buildings, at 117 percent (from \$637 to \$1,383) and employee benefits at 75 percent (from \$1,267 to \$2,222).

In 2008–09, salary and employee benefits for school staff amounted to \$8,797 per student, or about 81 percent of current expenditures. From 1988–89 through 2008–09, combined salary and employee benefit expenditures per student increased by 38 percent, with the salary component increasing by 29 percent and the employee benefits component increasing by 75 percent. During this period, the amount of current expenditures spent on purchased services, e.g., contractor services, increased 62 percent. As a result of these different percent increases, salaries as a share of current expenditures decreased from 65 to 60 percent between 1988–89 and 2008–09, while the percentage of current expenditures spent on employee benefits rose from 16 to 20 percent, and the percentage spent on purchased services increased from 8 to 10 percent. The percentage spent on tuition and other items remained around 2 percent throughout the period. Whereas expenditures per student for salaries have

increased by 29 percent between 1988–89 and 2008–09, salaries for teachers and other staff have remained nearly flat. The increase in salary expenditures results from increases in staff greater than the increase in students.

Among the major functions of current expenditures, spending on student and staff support had the highest percent increase (74 percent) between 1988–89 and 2008–09, followed by instruction (39 percent) and transportation (37 percent) (see table A-20-2). Spending increased by a smaller percentage on three other major functions of current expenditures: administration (34 percent), food services (25 percent), and operation and maintenance (23 percent). Expenditures for enterprise operations increased 38 percent, but only made up 0.2 percent of current expenditures. None of the seven major functions of current expenditures declined over this period.

In the 2008–09 school year, 61 percent of the \$10,909 spent on current expenditures in public elementary and secondary schools went toward instruction expenditures such as salaries and benefits of teachers (see table A-20-2). About 11 percent went towards administration, 10 percent toward student and staff support; 10 percent for operation and maintenance; 4 percent each for transportation and food services; and less than 1 percent for enterprise operations.



Tables A-20-1 and A-20-2

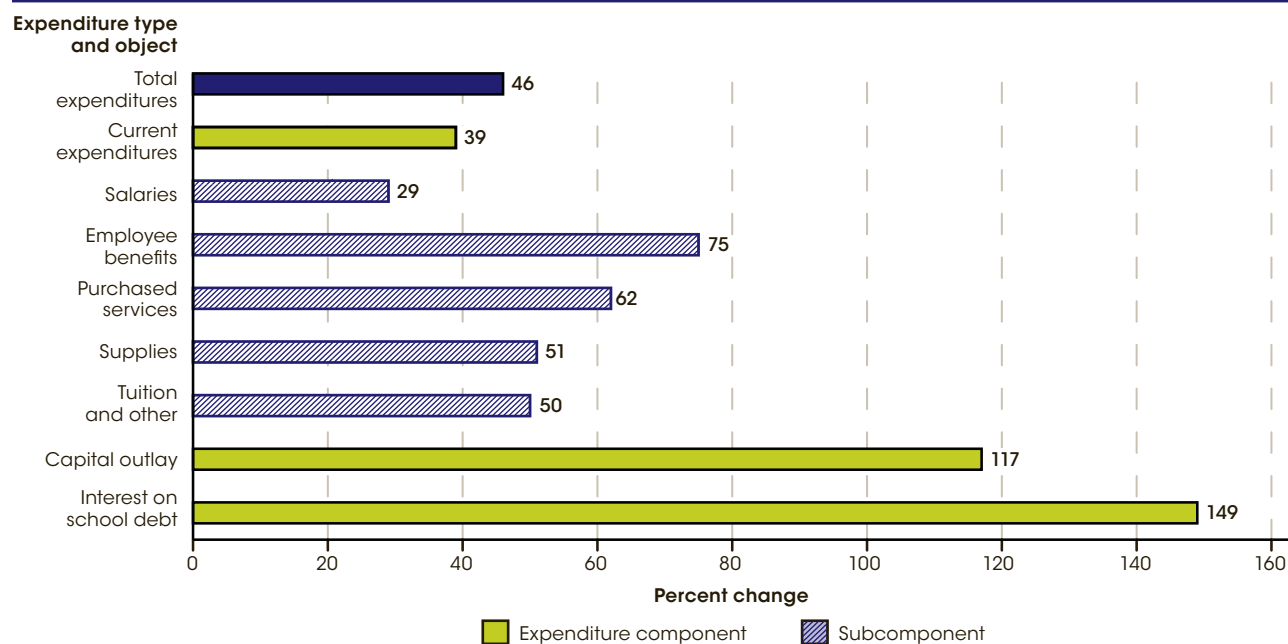
Glossary: *Consumer Price Index (CPI), Expenditures, Public School, Salary*

Technical Notes

Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2010–11 dollars. Current expenditures, which is one component of total expenditures, can be broken down by both the service or commodity bought (object) as well as the activity that is supported by the service or commodity bought (function). Total expenditures exclude “Other current expenditures” such as community services, private school programs, adult education,

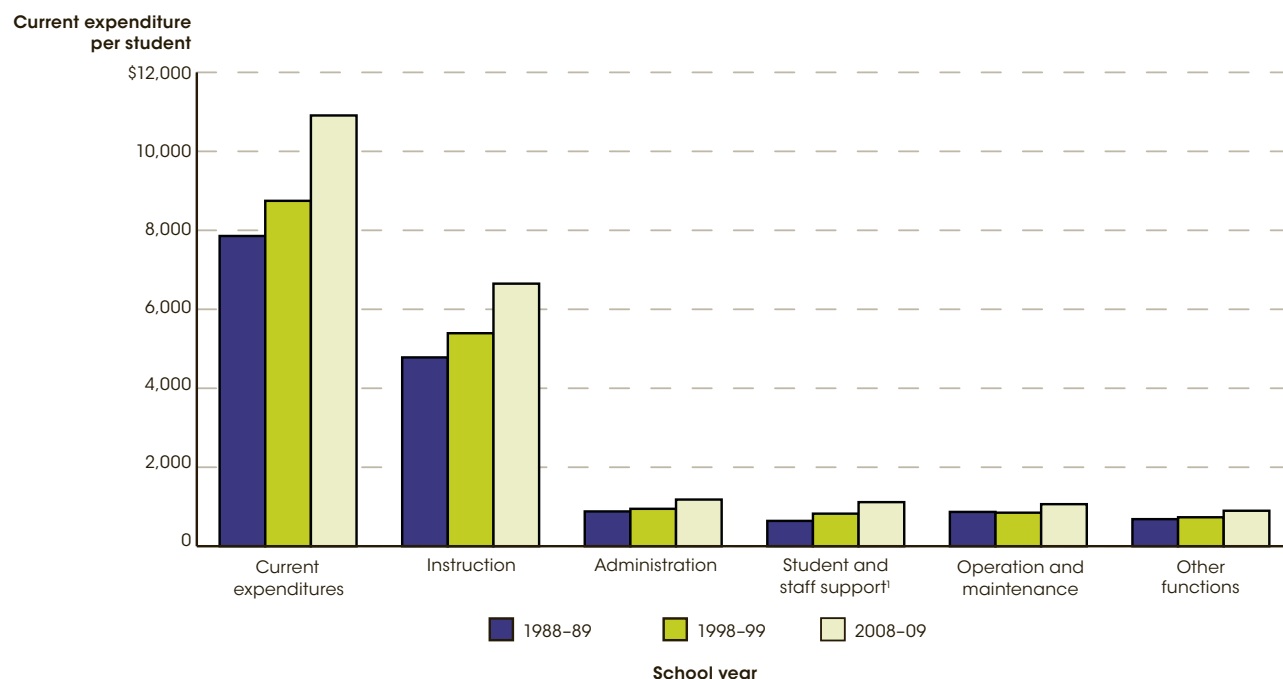
and other programs not allocable to expenditures per student at public schools. Enterprise operations include expenditures for operations funded by sales of products or services, along with amounts for direct program support made available by state education agencies for local school districts. For more information about the CPI and classifications of expenditures, see Appendix C – *Finance*. For more information about the Common Core of Data, see Appendix B – *Guide to Sources*.

Figure 20-1. Percentage change in total expenditures per student in fall enrollment in public elementary and secondary schools, by expenditure type and objects of current expenditures, in constant 2010-11 dollars: School years 1988-89 to 2008-09



NOTE: "Current expenditures," "Capital outlay," and "Interest on school debt" are subcategories of "Total expenditures"; "Salaries," "Employee benefits," "Purchased services," "Supplies," and "Tuition and other" are subcategories of "Current expenditures." Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in 2010-11 constant dollars. For more information about the CPI and classifications of expenditures, see Appendix C - Finance. For more information about the Common Core of Data (CCD), see Appendix B - Guide to Sources. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1988-89 and 2008-09.

Figure 20-2. Current expenditures per student in fall enrollment in public elementary and secondary schools in constant 2010-11 dollars, by expenditure object: School years 1988-89, 1998-99, and 2008-09



¹ Includes expenditures for student support services and instructional support services.

NOTE: Expenditures are in constant 2010-11 dollars, adjusted using the Consumer Price Index (CPI). Current expenditures consist of all of the categories shown. Other functions include student transportation, food services, and enterprise operations. For more information about the CPI and classifications of expenditures, see Appendix C - Finance. For more information about the Common Core of Data (CCD), see Appendix B - Guide to Sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1988-89, 1998-99, and 2008-09.

Variations in Instruction Expenditures

After increasing every year from 1997–98 to 2007–08, total variation in instruction expenditures per student was lower among public school districts in 2008–09 than in 2007–08.

A number of methods can be used to measure the variation between districts and states in the amount that school districts spend per student on instruction. The variation in instruction expenditures per student over time may reflect differences across school districts in the amount of services or goods purchased, such as the number of classroom teachers hired. These changes may, in part, reflect various state finance litigation, school finance reform efforts, and changes in the composition of student enrollment. Further, some of the variation in expenditures per pupil may be due to cost differences across states and districts within states. Changes in cost differences across and within states may also affect the changes in the variation over time.

This indicator uses the *Theil coefficient* to measure the variation in the instruction expenditures per student in unified public school districts for prekindergarten through grade 12. The *Theil coefficient* provides a national measure of differences in instruction expenditures per student that can be decomposed into separate components to measure school district-level variations both between and within states. The between-state and within-state components indicate whether the national variation in instruction expenditures per student is primarily due to differences in expenditures between states or within states. Similarly, the trends in the two components indicate whether the change over time in the national variation of instruction expenditures per student is primarily due to changes between states or changes within states. The *Theil coefficient* can range from zero, indicating no variation, to a maximum possible value of 1.0. The value

of the *Theil coefficient* remains unchanged if expenditures in all districts are increased by the same percentage; it would therefore not be necessary to adjust instruction expenditures for inflation at the national level.

Across U.S. districts, the total variation in instruction expenditures per student decreased between school years 1989–90 and 1997–98, then increased between 1997–98 and 2007–08 (see table A-21-1). The total variation in instruction expenditures per student was greater in 2007–08 than it was in the early 1990s. Total variation was lower in 2008–09 than in 2007–08, but was still higher than in any year from 1989–90 through 2005–06. Both the between-state and within-state variations in instruction expenditures per student decreased between 1989–90 and 1997–98, and increased between 1997–98 and 2007–08. Like the total variation, both between-state and within-state variations were lower in 2008–09 than in 2007–08.

Between 1989–90 and 2008–09, differences between states accounted for a greater proportion of the variation in instruction expenditures per student among public school districts than did differences within states. The percentage of the total variation due to between-state differences increased from 72 percent in 1989–90 to 79 percent in 2008–09, while the percentage of the total variation due to within-state differences decreased from 28 to 21 percent.



Table A-21-1

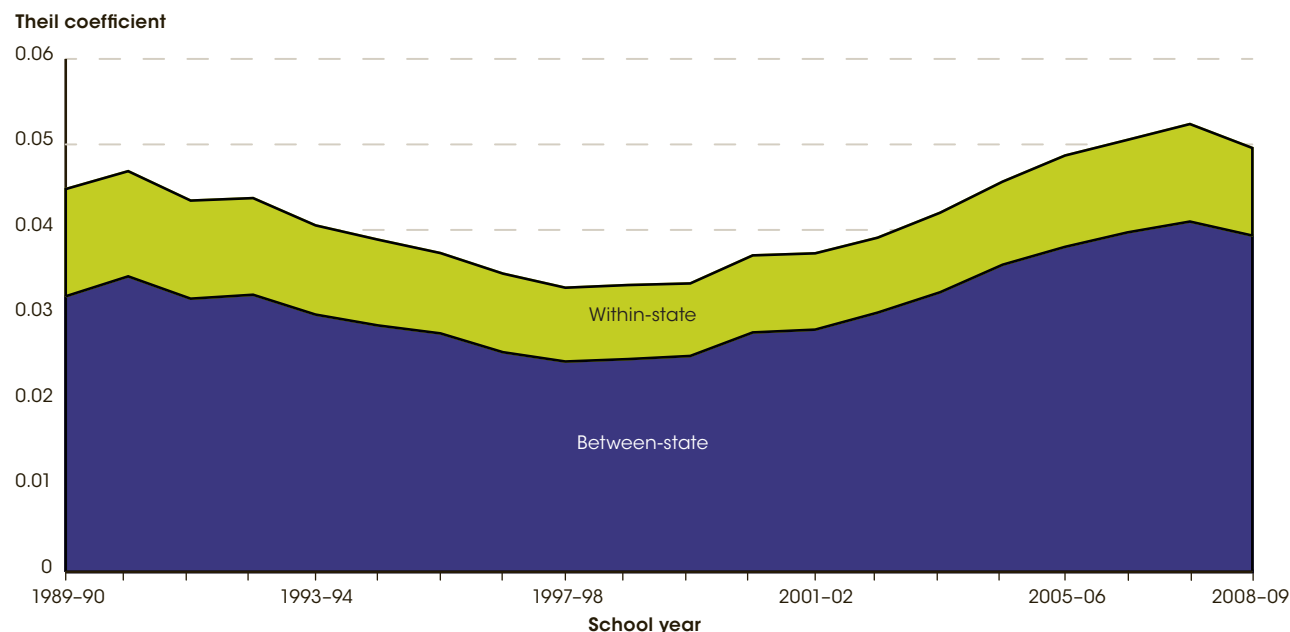
Glossary: *Expenditures, Public school*

Technical Notes

For more information on the variation in expenditures per student, the *Theil coefficient*, and the classifications of expenditures for elementary and secondary education, see Appendix C – *Finance*. This indicator only includes unified public elementary and secondary districts. Unified districts serve both elementary and secondary grades. The *Theil coefficient* was calculated for unified districts only in

order to limit any variations in expenditures per pupil due to the grade levels of the school districts or due to districts serving only students in special programs. In 2008–09, approximately 92 percent of all public elementary and secondary school students were enrolled in unified school districts. For more information on the Common Core of Data, see Appendix B – *Guide to Sources*.

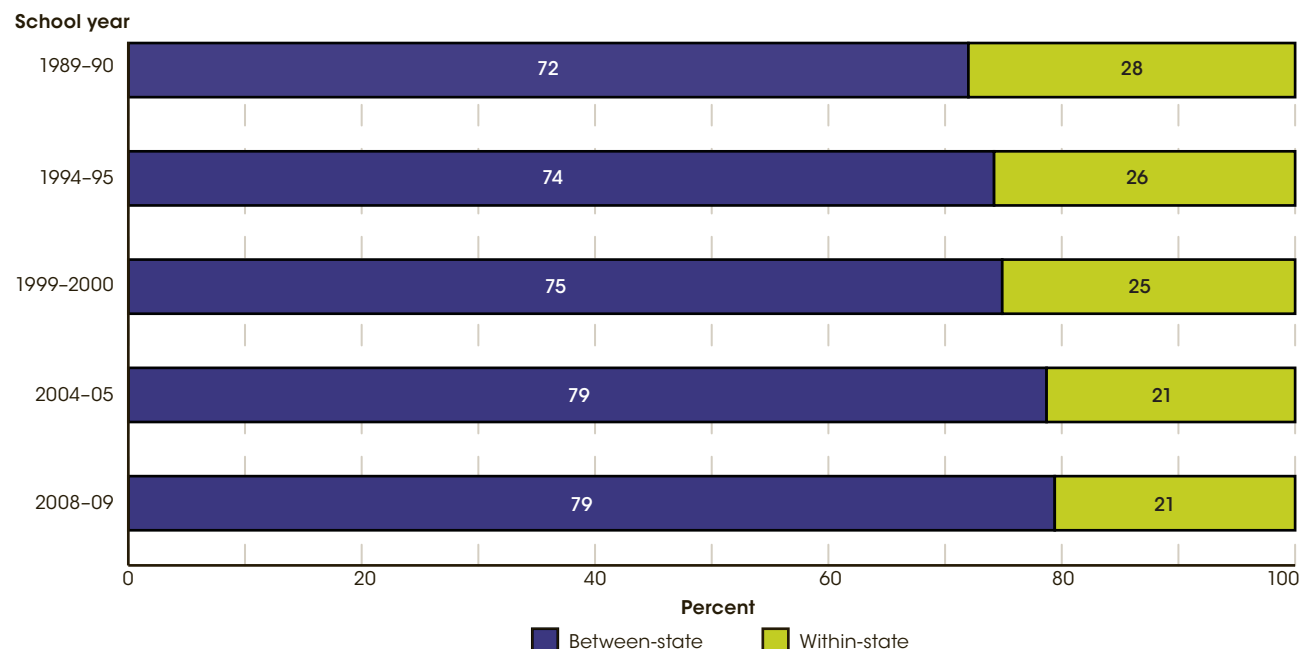
Figure 21-1. Variation in instruction expenditures per student in unified public elementary and secondary school districts, by source of variation: School years 1989–90 through 2008–09



NOTE: The *Theil coefficient* measures variation for groups within a set (i.e., states within the country) and indicates relative variation and any differences that may exist among them. It can be decomposed into components measuring between-state and within-state variation in expenditures per student. It has a minimum value of zero, and increasing values indicate increases in the variation, with a maximum possible value of 1.0. For more information on the variation in expenditures per student and the *Theil coefficient*, see Appendix C – Finance. For more information on the Common Core of Data (CCD), see Appendix B – Guide to Sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data (CCD), "NCES Longitudinal School District Fiscal-Nonfiscal (FNF) File, Fiscal Years 1990 through 2002" and "School District Finance Survey (Form F-33)," 2002-03 through 2008-09.

Figure 21-2. Percentage distribution of source of variation in instruction expenditures per student in unified public elementary and secondary school districts: Selected school years, 1989–90 through 2008–09



NOTE: The *Theil coefficient* measures variation for groups within a set (i.e., states within the country) and indicates relative variation and any differences that may exist among them. It can be decomposed into components measuring between-state and within-state variation in expenditures per student. It has a minimum value of zero, and increasing values indicate increases in the variation, with a maximum possible value of 1.0. For more information on the variation in expenditures per student and the *Theil coefficient*, see Appendix C – Finance. For more information on the Common Core of Data (CCD), see Appendix B – Guide to Sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data (CCD), "NCES Longitudinal School District Fiscal-Nonfiscal (FNF) File, Fiscal Years 1990 through 2000" and "School District Finance Survey (Form F-33)," 2004-05 and 2008-09.

Education Expenditures by Country

In 2008, the United States spent \$10,995 per student on elementary and secondary education, which was 35 percent higher than the OECD average of \$8,169. At the postsecondary level, U.S. expenditures per student were \$29,910, more than twice as high as the OECD average of \$13,461.

This indicator uses material from the Organization for Economic Co-operation and Development (OECD) report *Education at a Glance* to compare countries' expenditures on education using *expenditures per student from both public and private sources* and *total education expenditures as a percentage of gross domestic product (GDP)*. The latter measure allows a comparison of countries' expenditures relative to their ability to finance education. Private sources of expenditures include payments from households for school-based expenses such as tuition, transportation fees, book rentals, or food services, as well as private funds raised by institutions.

In 2008, expenditures per student for the United States were \$10,995 at the combined elementary and secondary level, which was 35 percent higher than the average of \$8,169 for the OECD member countries reporting data (see table A-22-1). The expenditure per student measure is based on full-time-equivalent (FTE) student enrollment rather than headcounts. At the postsecondary level, U.S. expenditures per student were \$29,910, which was more than twice as high as the OECD average of \$13,461. Expenditures per student varied widely across the OECD countries: at the combined elementary and secondary level, expenditures ranged from \$2,284 in Mexico and \$2,635 in Chile to \$16,909 in Luxembourg; at the postsecondary level, they ranged from \$5,780 in Estonia to \$20,903 in Canada, \$21,648 in Switzerland, and \$29,910 in the United States.

Among the OECD countries reporting data in 2008, the top five countries spending the highest percentage of their GDP on total education expenditures were Iceland (7.9 percent), Korea (7.6 percent), Israel (7.3 percent), Norway (7.3 percent), and the United States (7.2 percent) (see table A-22-1). Looking at education expenditures by level,

the percentage of its GDP (4.1 percent) that the United States spent on elementary and secondary education was higher than the average of GDP spent by other reporting OECD countries (3.8 percent). Compared with the percentage of its GDP that the United States spent on elementary and secondary education, 10 countries spent a higher percentage, 20 countries spent a lower percentage, and 1 country spent the same percentage. Among OECD countries, Iceland spent the highest percentage (5.1 percent) of its GDP on elementary and secondary education. At the postsecondary level, the United States spent 2.7 percent of its GDP on education, which was higher than the average percentage spent by OECD countries (1.5 percent) and higher than the percentage spent by any other OECD country reporting data.

A country's wealth (defined as GDP per capita) is positively associated with expenditures per student on education at the combined elementary/secondary level and at the postsecondary level. For example, the education expenditures per student (both elementary/secondary and postsecondary) for each of the 7 OECD countries with the highest GDP per capita in 2008 were higher than the OECD average expenditures per student. The expenditures per student for the 10 OECD countries with the lowest GDP per capita were below the OECD average at both the elementary/secondary level and at the postsecondary level.



Table A-22-1

Glossary: *Elementary/secondary school, Expenditures per student, Full-time-equivalent (FTE) enrollment, Gross Domestic Product (GDP), Postsecondary education, Purchasing Power Parity (PPP) indexes*

Technical Notes

Education expenditures are from public revenue sources (governments) and private revenue sources. Private sources include payments from households for school-based expenses such as tuition, transportation fees, book rentals, or food services, as well as funds raised by institutions through endowments or returns on investments. Data for private school expenditures at the elementary and secondary levels are estimated for some countries, including the United States. Per-student expenditures are based on public and private full-time-equivalent (FTE) enrollment figures and on current expenditures and capital outlays from both public and private sources, where data are available. Purchasing power parity (PPP)

indexes are used to convert other currencies to U.S. dollars (i.e., absolute terms). Within-country consumer price indexes are used to adjust the PPP indexes to account for inflation because the fiscal year has a different starting date in different countries. Luxembourg data are excluded from the graphs because of anomalies with respect to their GDP per capita data (large revenues from international finance institutions distort the wealth of the population). For more information on classification of expenditures for international comparisons, see Appendix C – *Finance*. For more information on the Organization for Economic Co-operation and Development (OECD), see Appendix C – *International Education Definitions*.

Figure 22-1. Annual expenditures per student for elementary and secondary education in selected Organization for Economic Co-operation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2008

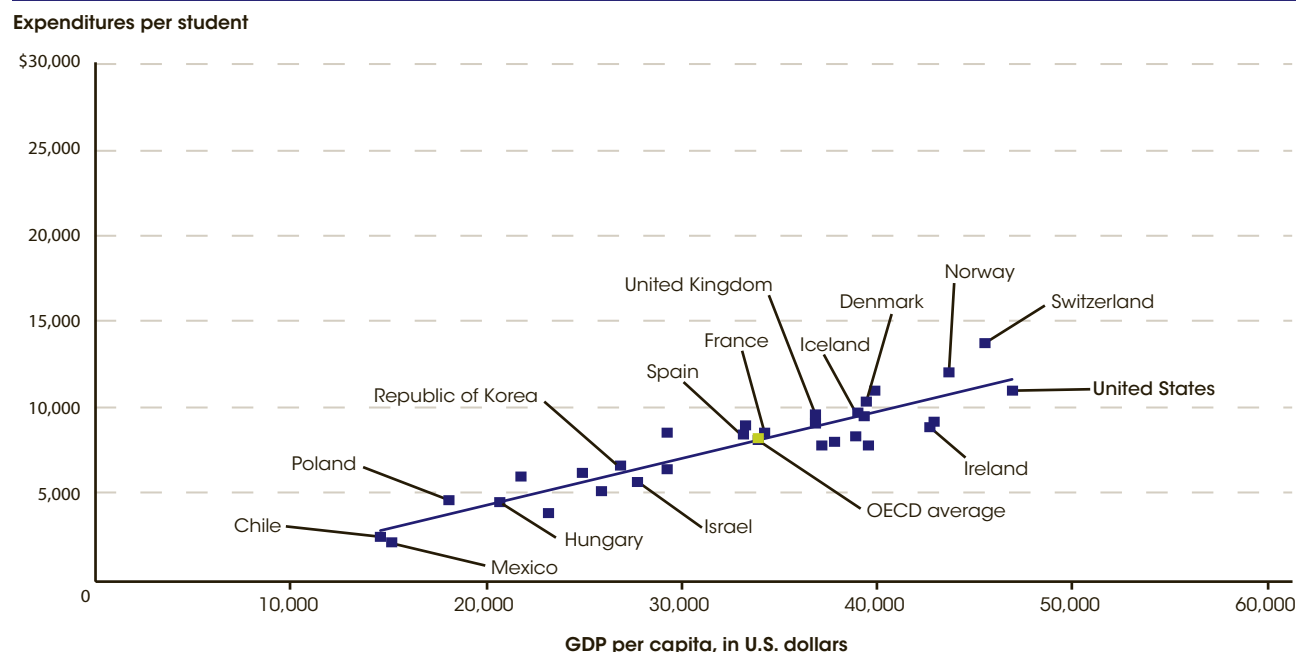
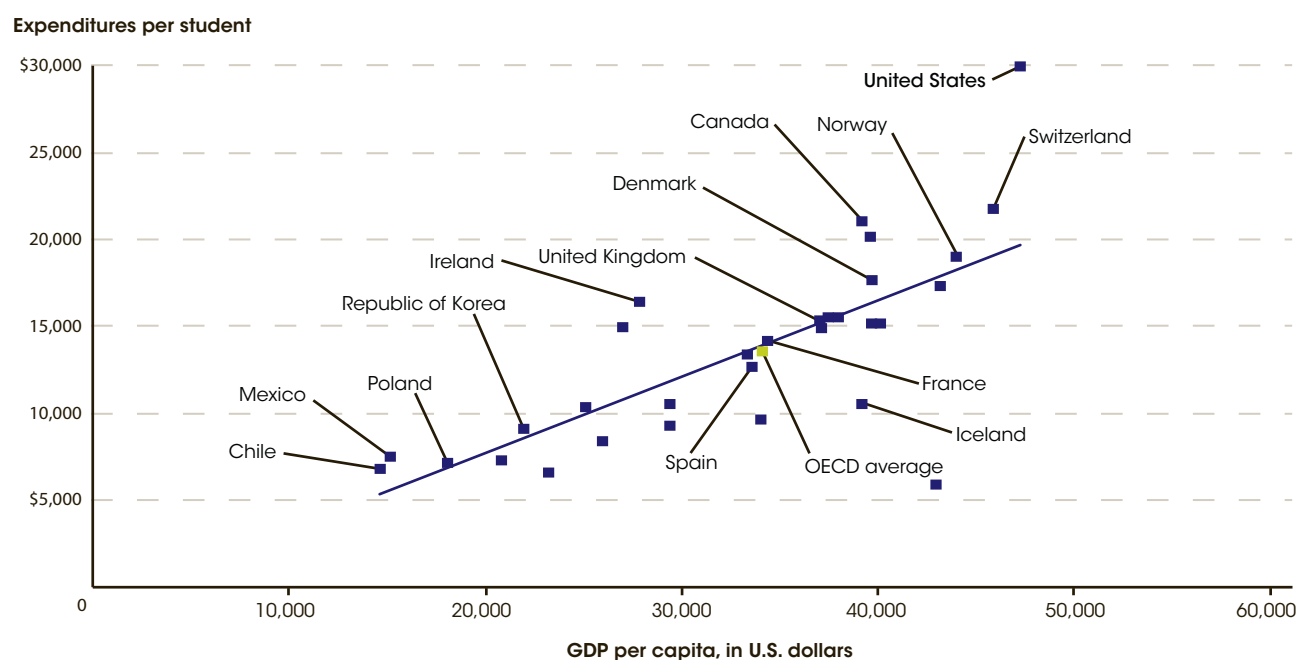


Figure 22-2. Annual expenditures per student for postsecondary education in selected Organization for Economic Co-operation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2008



Indicator 23

Reading Performance

The average grade 4 reading score in 2011 was not measurably different from that in 2009. The average grade 8 score, however, was 1 point higher in 2011 than in 2009.

The National Assessment of Educational Progress (NAEP) most recently assessed 4th- and 8th-grade students' reading skills in 2011, and 12th-grade students were most recently assessed in 2009. In 2011, the average reading score for 4th-grade students (221) was not measurably different from the 2009 score (221), but it was higher than the scores on assessments between 1992 (217) and 2005 (219) (see table A-23-1). For 8th-grade students, the average reading score in 2011 (265) was 1 point higher than in 2009 (264) and 5 points higher than in 1992 (260), but was not always measurably different from scores on assessments given in other years. In 2009, the average reading score for 12th-grade students (288) was 2 points higher than in 2005 (286) but 4 points lower than in 1992 (292).

In 2011, the percentages of 4th-grade students performing at or above the *Basic* (67 percent), at or above the *Proficient* (34 percent), and at the *Advanced* (8 percent) achievement levels in reading showed no measurable change from 2009, but were higher than in 1992. Among 8th-grade students, the percentage performing at or above *Basic* in 2011 (76 percent) was not measurably different from that in 2009 (75 percent) but was higher than the percentage in 1992 (69 percent). A higher percentage of 8th-grade students performed at or above *Proficient* in 2011 (34 percent) than in 2009 (32 percent) and 1992 (29 percent). The percentage at the *Advanced* level in 2011 (3.4 percent) was half a percentage point higher than the percentage performing at *Advanced* in 2009 (2.8 percent) but was not measurably different from the percentage in 1992 (2.9 percent). Among 12th-grade students, the percentage performing at or above *Basic* (74 percent) in 2009 was not significantly different from the percentage in 2005 (73 percent), but was lower than the percentage in 1992 (80 percent). The percentage at or above *Proficient* was higher in 2009 (38 percent) than in 2005 (35 percent) but not significantly different from the percentage in 1992 (40 percent). There was no measurable change in

the percentage of 12th-graders performing at *Advanced* from 2005 to 2009 (5 percent each), although the 2009 percentage was 1 percentage point higher than that in 1992.

At grade 4, the average reading scores in 2011 for White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students were not measurably different from their scores in 2009 (see table A-23-2). The 2011 grade 4 reading scores for White, Black, Hispanic, and Asian/Pacific Islander students were, however, higher than their scores in 1992. At grade 8, average reading scores for White, Black, and Hispanic students were higher in 2011 than their scores in any of the previous assessment years. At grade 12, average scores showed no measurable differences from 1992 to 2009 for White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students.

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 2009 to 2011 in the overall average score for 4th-grade public school students in the nation, average scores were higher in 2011 than in 2009 in Alabama, Hawaii, Maryland, and Massachusetts, and scores were lower in 2011 in Missouri and South Dakota (see table A-23-3). At grade 8, although the average score for public school students in the nation was 2 points higher in 2011 than in 2009, only ten states had higher scores in 2011 than in 2009. These states were Colorado, Connecticut, Hawaii, Idaho, Maryland, Michigan, Montana, Nevada, North Carolina, and Rhode Island. In the remaining states and the District of Columbia, scores showed no measurable change.

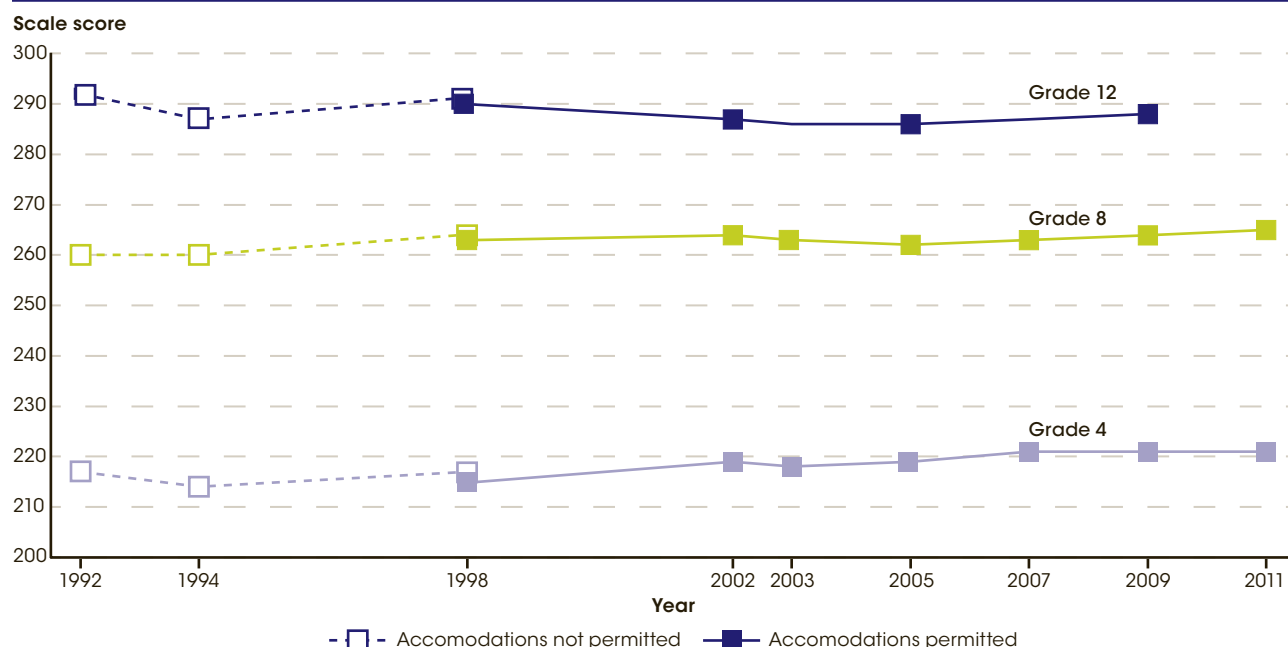


Tables A-23-1, A-23-2, and A-23-3
Glossary: *Achievement levels*

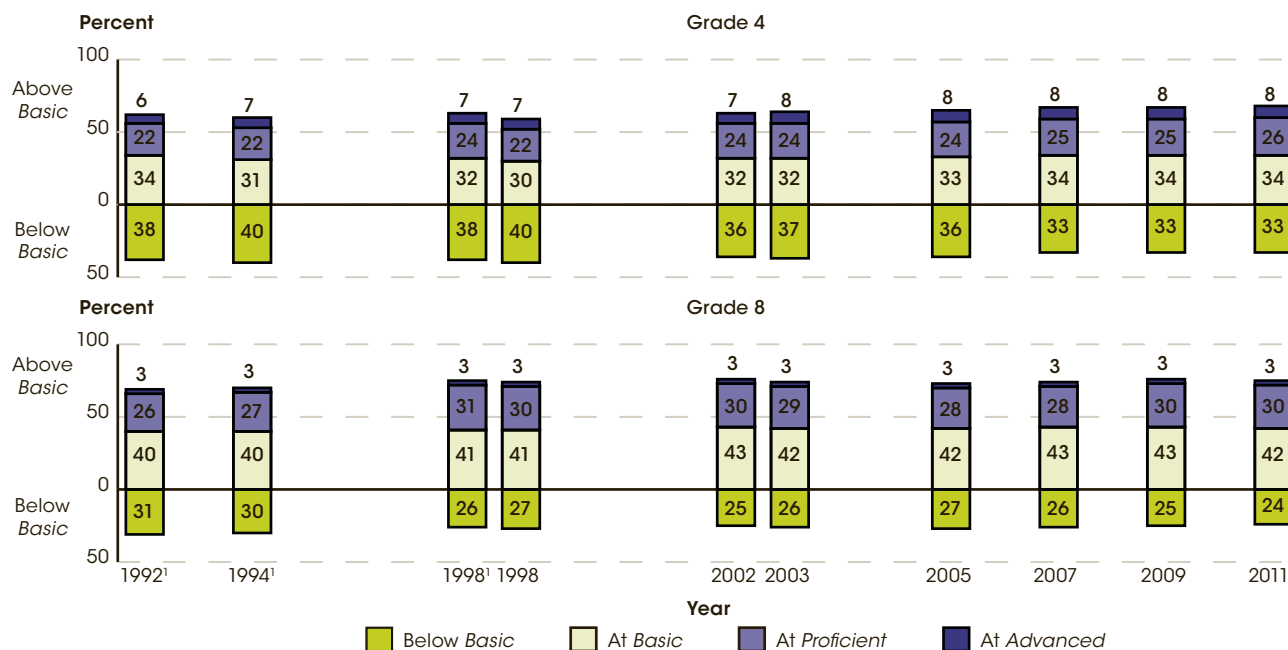
Technical Notes

National Assessment of Educational Progress (NAEP) reading scores range from 0 to 500. The 12th-grade NAEP reading assessment was not administered in 2003, 2007, or 2011. The achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates superior performance.

Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992. For more information on NAEP, see Appendix B – *Guide to Sources*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see Appendix C – *Commonly Used Measures*.

Figure 23-1. Average reading scale scores of 4th-, 8th-, and 12th-grade students: Selected years, 1992-2011

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Student assessments are not designed to permit comparisons across subjects or grades. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998. The 12th-grade NAEP reading assessment was not administered in 2003, 2007, or 2011. For more information on NAEP, see Appendix B – *Guide to Sources*.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992-2011 Reading Assessments, NAEP Data Explorer.

Figure 23-2. Percentage distribution of 4th- and 8th-grade students across National Assessment of Educational Progress reading achievement levels: Selected years, 1992-2011

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted during these assessments. Students were tested with and without accommodations in 1998.

NOTE: Achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates superior performance. Detail may not sum to totals because of rounding. For more information on the National Assessment of Educational Progress (NAEP), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992-2011 Reading Assessments, NAEP Data Explorer.

Indicator 24

Mathematics Performance

At grades 4 and 8, the average mathematics scores in 2011 were higher than the average scores for those grades in all previous assessment years.

In 2011, the average National Assessment of Educational Progress (NAEP) mathematics scores for 4th-grade and 8th-grade students were higher than their average scores in all previous assessment years (see table A-24-1). From 1990 to 2011, the average 4th-grade NAEP mathematics score increased by 28 points, from 213 to 241. During that same time period, the average 8th-grade score increased by 21 points, from 263 to 284. Twelfth-graders were most recently assessed in 2009; in that year, the average 12th-grade mathematics score was 3 points higher than in 2005, the first year that the revised assessment was administered.

In 2011, some 82 percent of 4th-grade students performed at or above the *Basic* achievement level, 40 percent performed at or above the *Proficient* level, and 7 percent performed at the *Advanced* level. While the percentage of students at or above the *Basic* level in 2011 was not measurably different from that in 2009 or 2007 (both 82 percent), it was higher than the percentage in 1990 (50 percent). Higher percentages of 4th-grade students performed at or above *Proficient* and at *Advanced* in 2011 than in all previous assessment years. In 2011, some 73 percent of 8th-grade students performed at or above *Basic*, 35 percent performed at or above *Proficient*, and 8 percent performed at *Advanced*. The percentage of 8th-grade students performing at or above *Proficient* increased by 1 percentage point from 2009 to 2011. The percentages at or above *Basic* and at *Advanced* in 2011 showed no measurable change from 2009, but were higher than the percentages in all assessment years prior to 2009. The percentages of 12th-grade students performing at or above *Basic* (64 percent) and at or above *Proficient* (26 percent) were each 3 percentage points higher in 2009 than in 2005. The percentages performing at the *Advanced* level in 2005 and 2009 were not measurably different (2 and 3 percent, respectively).

At grade 4, the average mathematics scores in 2011 for White (249), Black (224), and Hispanic students (229) were higher than their scores in both 2009 and 1990 (see table A-24-2). The 2011 score for Asian/Pacific Islander 4th-graders (256) was not measurably different from the 2009 score (255), but was higher than the score in 1990. At grade 8, the average mathematics score for Hispanic students was 4 points higher in 2011 (270) than in 2009 (266), but the scores for White, Black, and Asian/Pacific Islander students did not measurably change. The 2011 scores for these four groups were, however, higher than their scores in 1990. The 2011 score for American Indian/Alaska Native 8th-grade students was not measurably different from their score in 2009. At grade 12, average mathematics scores were higher in 2009 than in 2005 for all racial/ethnic groups. For example, the average score for Asian/Pacific Islander 12th-grade students increased by 13 points, and the average score for American Indian/Alaska Native students increased by 10 points.

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 increased from 2009 to 2011 in eight states (Alabama, Arizona, Georgia, Hawaii, Maryland, New Mexico, Rhode Island, and Wyoming) and the District of Columbia and decreased in New York (see table A-24-3). At grade 8, scores were higher in 2011 than in 2009 in 12 states (Arkansas, Colorado, Hawaii, Maine, Mississippi, Nevada, New Mexico, Ohio, Oklahoma, Rhode Island, Texas, and West Virginia) and the District of Columbia. The average 8th-grade score in Missouri decreased.

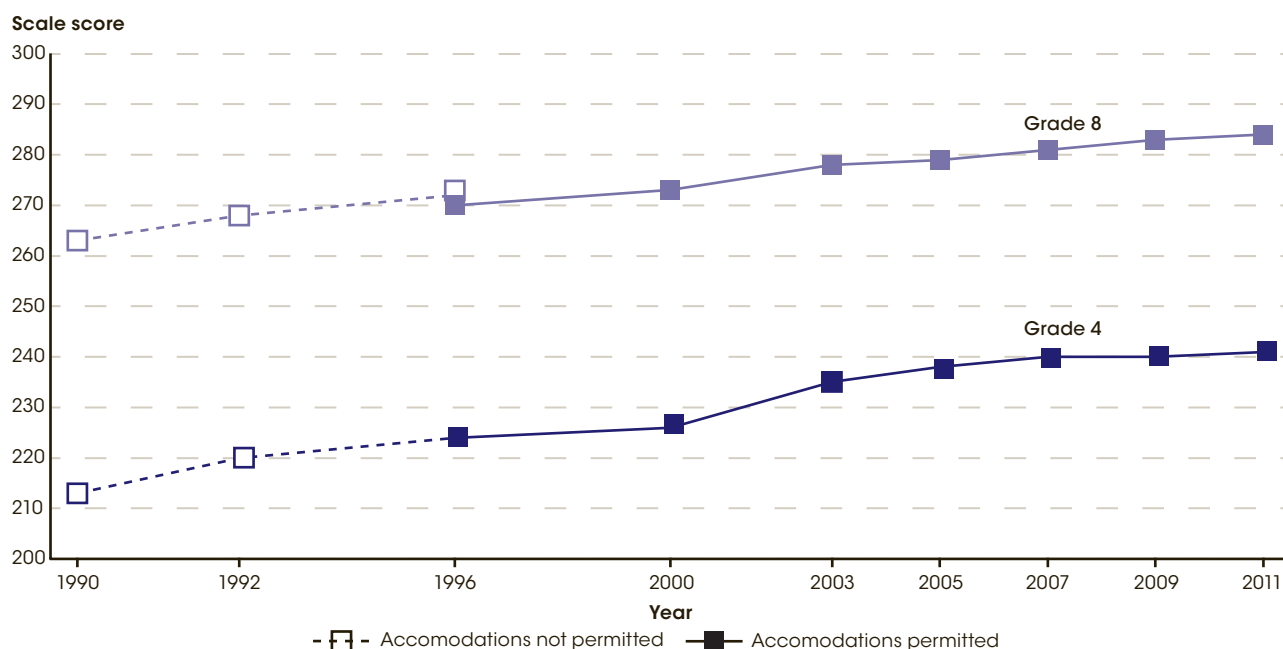


Tables A-24-1, A-24-2, and A-24-3
Glossary: *Achievement levels*

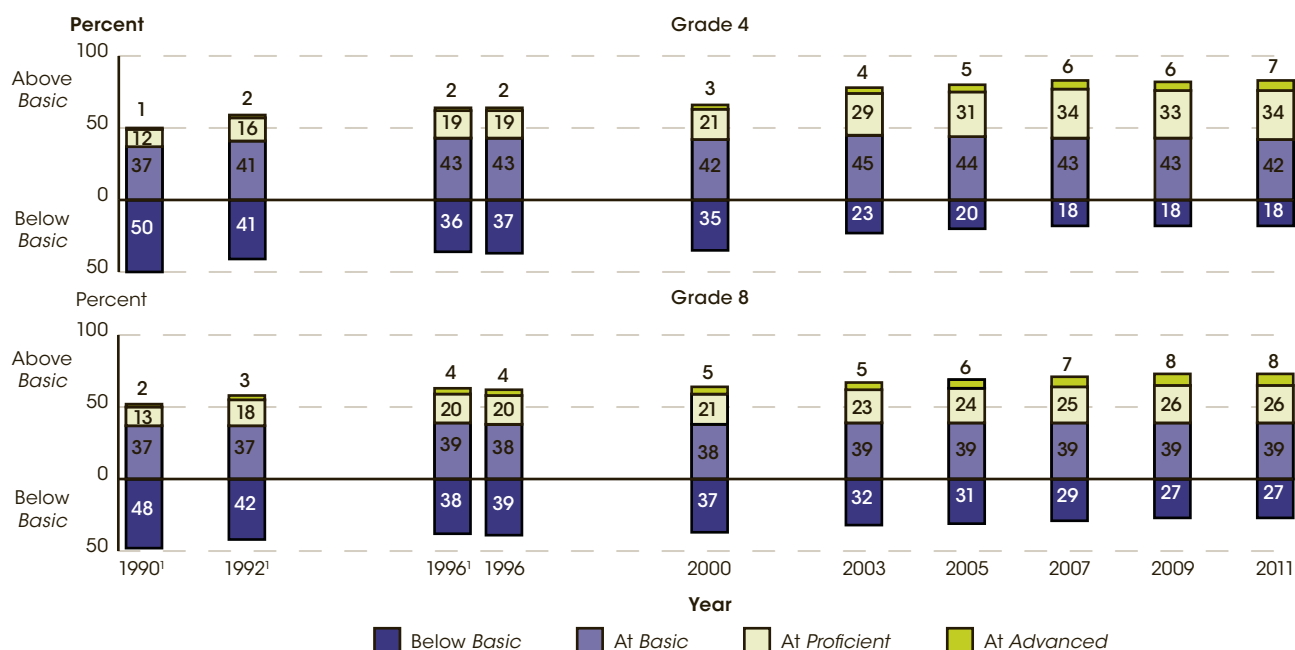
Technical Notes

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 and 2009 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300. The achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates

superior performance. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990 and 1992. Students in grades 4 and 8 were tested with and without accommodations in 1996. For more information on NAEP, see Appendix B – *Guide to Sources*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see Appendix C – *Commonly Used Measures*.

Figure 24-1. Average mathematics scale scores of 4th- and 8th-grade students: Selected years, 1990–2011

NOTE: 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; students were tested with and without accommodations in 1996. For more information on NAEP, see Appendix B – *Guide to Sources*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2011 Mathematics Assessments, NAEP Data Explorer.

Figure 24-2. Percentage distribution of 4th- and 8th-grade students across National Assessment of Educational Progress mathematics achievement levels: Selected years, 1990–2011

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted during these assessments. Students were tested with and without accommodations in 1996.
 NOTE: Achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills; *Proficient* indicates demonstrated competency over challenging subject matter; and *Advanced* indicates superior performance. Detail may not sum to totals because of rounding. For more information on the National Assessment of Educational Progress (NAEP), see Appendix B – *Guide to Sources*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2011 Mathematics Assessments, NAEP Data Explorer.

U.S. History, Geography, and Civics Performance

At grade 12, the NAEP U.S. history score was 2 points higher in 2010 than in 1994, while the geography score was 2 points lower. There was no measurable difference in the civics score from 1998 to 2010.

In 2010, the National Assessment of Educational Progress (NAEP) assessed students' knowledge of U.S. history, geography, and civics in grades 4, 8, and 12. For U.S. history, the average scores were higher in 2010 than in 1994 at all grades (see table A-25-1). From 1994 to 2010, the U.S. history scores increased from 205 points to 214 points for 4th-grade students, from 259 points to 266 points for 8th-grade students, and from 286 points to 288 points for 12th-grade students. At grade 12, the U.S. history scores were higher in 2010 than in 1994 for White (296 vs. 292 points), Hispanic (275 vs. 267 points), and Asian/Pacific Islander students (293 vs. 283 points). In 2010, the scores for White and Asian/Pacific Islander 12th-grade students (296 and 293, respectively) were not measurably different from each other, but both were higher than the scores for Black (268), Hispanic (275), and American Indian/Alaska Native students (278). The grade 12 U.S. history score for male students was 2 points higher in 2010 (290) than in 1994 (288), while the 2010 score for female students was not measurably different from the 1994 score. Male 12th-graders scored 4 points higher than female 12th-graders on the 2010 U.S. history assessment.

For geography, the average score for 4th-grade students was higher in 2010 (213) than in 1994 (206) (see table A-25-2), while the 2010 average score for 8th-grade students was not measurably different from the 1994 score. For 12th-grade students, the score was lower in 2010 (282) than in 1994 (285). At grade 12, none of the racial/ethnic groups had geography scores that were measurably different between 1994 and 2010. In 2010, White students had the highest average geography score (290), followed by Asian/Pacific Islander (285), American Indian/Alaska Native (277), Hispanic (270), and Black (261) students. The geography score for male 12th-graders was lower in 2010 (285) than in 1994 (288), while the 2010 score for female 12th-graders was not measurably different from the 1994 score. Male 12th-graders scored 5 points higher than female 12th-graders on the 2010 geography assessment.

For civics, the average score for 4th-grade students was higher in 2010 (157) than in 1998 (150), the first year the assessment was administered (see table A-25-3), but the scores for 8th-grade and 12th-grade students were not measurably different between 2010 and 1998. At grade 12, the average civics score for Hispanic students was higher in 2010 (137) than in 1998 (132), but the scores for the other racial/ethnic groups were not measurably different between the two years. In 2010, the average scores of White (156) and Asian/Pacific Islander 12th-graders (153) students were not measurably different from each other, and both were higher than the average scores for Black (127) and Hispanic 12th-graders (137). The average civics score for female 12th-grade students was lower in 2010 (148) than in 1998 (152), while the 2010 and 1998 civics scores for male 12th-grade students were not measurably different.

In 2010, in each of the three subjects, less than one-quarter of 12th-grade students performed at or above the *Proficient* achievement level (see table A-25-4). At grade 12, the percentages of students performing at or above *Basic* (45 percent) and at or above *Proficient* (12 percent) on the 2010 U.S. history assessment were not measurably different from the percentages performing at or above *Basic* and at or above *Proficient* on the 1994 assessment. On the geography assessment, the percentage of students performing at or above *Basic* in 2010 (70 percent) was not measurably different from the percentage performing at or above *Basic* in 1994. The percentage performing at or above *Proficient* in 2010 (20 percent) was lower than in 1994 (27 percent). On the 2010 civics assessment, the percentages of students performing at or above *Basic* (64 percent) and at or above *Proficient* (24 percent) were not measurably different from the percentages performing at or above *Basic* and at or above *Proficient* in 1998.

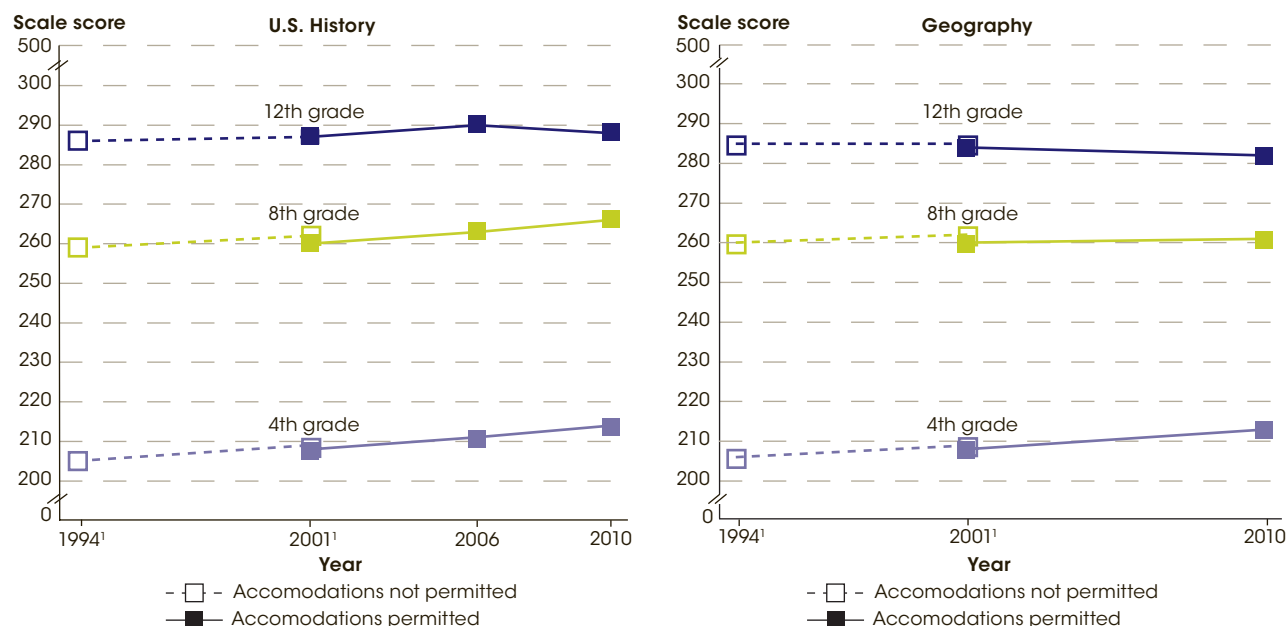


Tables A-25-1, A-25-2, A-25-3, and A-25-4
Glossary: *Achievement levels*

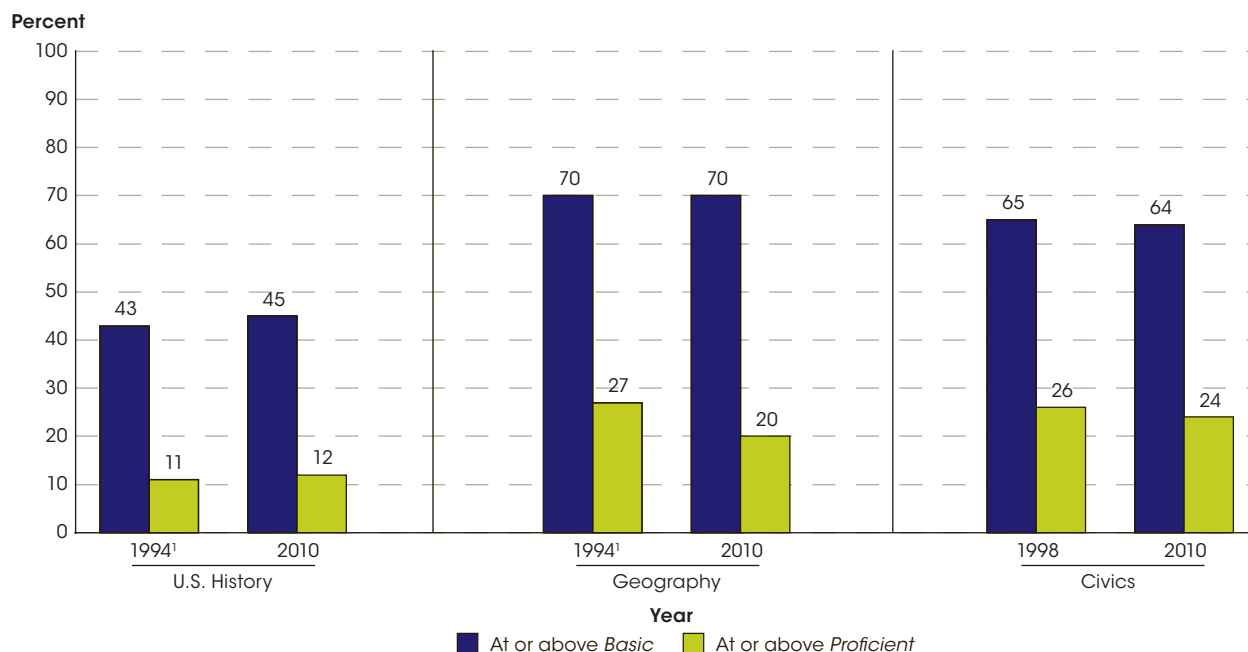
Technical Notes

National Assessment of Educational Progress (NAEP) U.S. history and geography scores range from 0 to 500. Civics scores range from 0 to 300. The 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. Testing accommodations (e.g., extended time, small group

testing) for children with disabilities and English language learners were not permitted in 1994. Students were tested with and without accommodations in the 2001 U.S. history and geography assessments. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see Appendix C – *Commonly Used Measures*. For more information on NAEP, see Appendix B – *Guide to Sources*.

Figure 25-1. Average scale scores of 4th-, 8th-, and 12th-grade students, by subject: Selected years, 1994–2010

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1994. Students were tested with and without accommodations in 2001.
 NOTE: National Assessment of Educational Progress (NAEP) U.S. history and geography scores range from 0 to 500. For more information on the NAEP see Appendix B – *Guide to Sources*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1994–2010 U.S. History Assessments, and selected years, 1994–2010 Geography Assessments, NAEP Data Explorer.

Figure 25-2. Percentage of 12th-grade students at selected National Assessment of Educational Progress achievement levels, by subject: 1994, 1998, and 2010

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1994.
 NOTE: 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. For more information on the National Assessment of Educational Progress (NAEP), see Appendix B – *Guide to Sources*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 and 2010 U.S. History Assessments, 1994 and 2010 Geography Assessments, and 1998 and 2010 Civics Assessments, NAEP Data Explorer.

International Reading, Mathematics, and Science Proficiency

In 2009, the percentage of high-performing 15-year-olds in the United States was higher in reading literacy, lower in mathematics literacy, and not measurably different in science literacy than the respective percentages in the OECD countries on average.

The Program for International Student Assessment (PISA) is an international assessment that reports on the performance of 15-year-olds in reading, mathematics, and science literacy using both average scale scores and the distribution of students reaching proficiency levels. Proficiency levels for each subject are associated with descriptions of tasks students are expected to complete at each level, with level 2 serving as the baseline level at which students begin to demonstrate the competencies enabling them to participate effectively in life situations, and levels 5 and above representing the high end of the skill distribution. This indicator presents PISA data on the low performers (students scoring below level 2) and on the high performers (students scoring at level 5 and above).

In 2009, the percentage of U.S. low performers on the reading literacy scale (18 percent) was not measurably different from the percentage of low performers in the Organization for Economic Co-operation and Development (OECD) countries on average (19 percent) (see table A-26-1). In 2009, a higher percentage of U.S. students (10 percent) were high performers in reading literacy than were students in the OECD countries on average (8 percent). From 2000 to 2009, there was no measurable change in the percentage of U.S. low performers in reading literacy; however, the percentage of low performers in the OECD countries on average was higher in 2000 (19 percent) than in 2009 (18 percent). While there was no measurable change in the percentage of U.S. high performers in reading literacy, the percentage of high performers in the OECD countries on average was higher in 2000 (9 percent) than in 2009 (8 percent).

In 2009, the percentage of U.S. low performers on the mathematics literacy scale (23 percent) was not

measurably different from the percentage of low performers in the OECD countries on average (22 percent); however, a lower percentage of U.S. students were high performers on the mathematics literacy scale (10 percent) than were students in the OECD countries on average (13 percent) (see table A-26-2). While no measurable change was seen in the percentage of U.S. low performers from 2003 to 2009 (2003 being the first time point to which PISA 2009 mathematics literacy scores can be compared), the percentage of low performers in the OECD countries on average was lower in 2003 (21 percent) than in 2009 (22 percent). There was no measurable change in the percentage of U.S. high performers on the mathematics literacy scale from 2003 to 2009; however, the percentage of high performers in the OECD countries on average was higher in 2003 (15 percent) than in 2009 (13 percent).

In 2009, the percentages of both the U.S. low as well as high performers on the science literacy scale were not measurably different from the corresponding percentages in the OECD countries on average (18 percent for low and 9 percent for high performers, respectively) (see table A-26-3). On the science literacy scale, the percentage of low performers was higher in 2006 compared to 2009 for both the United States (24 to 18 percent) and in the OECD countries on average (20 to 18 percent) (2006 being the first time point to which PISA 2009 science literacy scores can be compared). While there was no measurable change in the percentage of U.S. high performers in science literacy between these two time points, the percentage of high performers across OECD countries on average was higher in 2006 than in 2009 when comparing unrounded data.



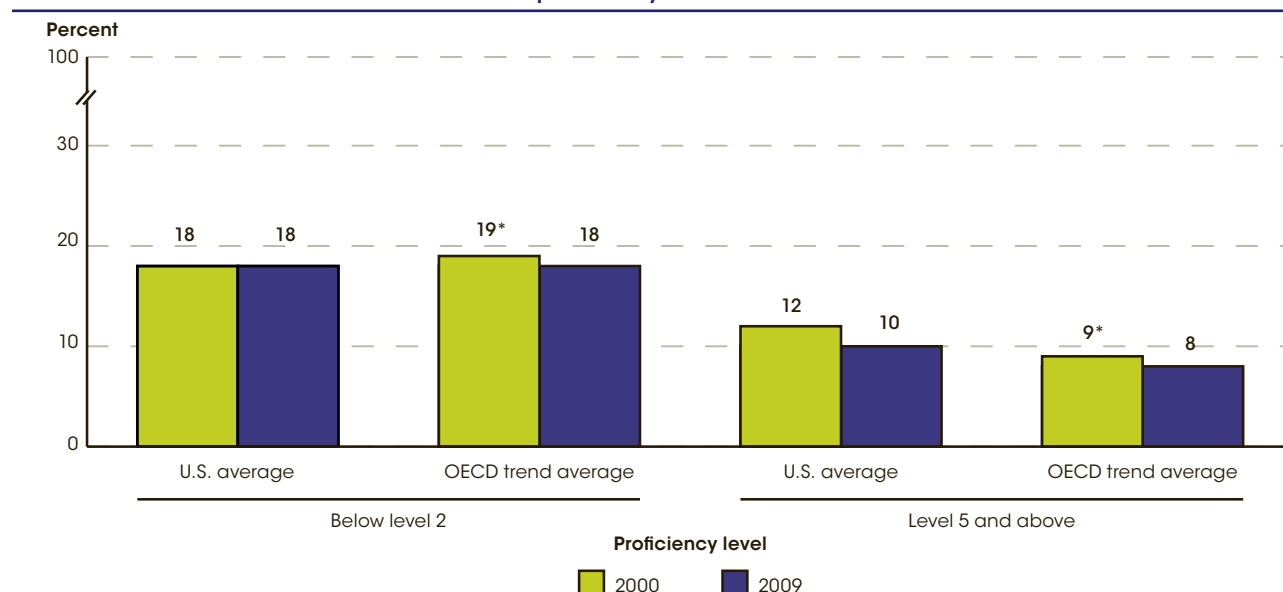
Tables A-26-1, A-26-2, and A-26-3

Technical Notes

Participants in PISA 2009 include 65 countries and other education systems, including 34 OECD countries, which represent many of the world's advanced and emerging economies. The OECD average used for comparisons across countries in 2009 is the average of the national averages of the 34 OECD member countries, with each country weighted equally. The PISA 2000 and 2009 OECD averages used in the analysis of trends in reading literacy are based on the averages of 27 OECD countries

reporting comparable data in both years. The PISA 2003 and 2009 OECD averages used in the analysis of trends in mathematics literacy are based on the averages of 29 OECD countries reporting comparable data in both years. The PISA 2006 and 2009 OECD averages used in the analysis of trends in science literacy are based on the averages of all 34 OECD countries. Scale scores range from 0 to 1,000. For more information on PISA proficiency levels, see Appendix B – *Guide to Sources*.

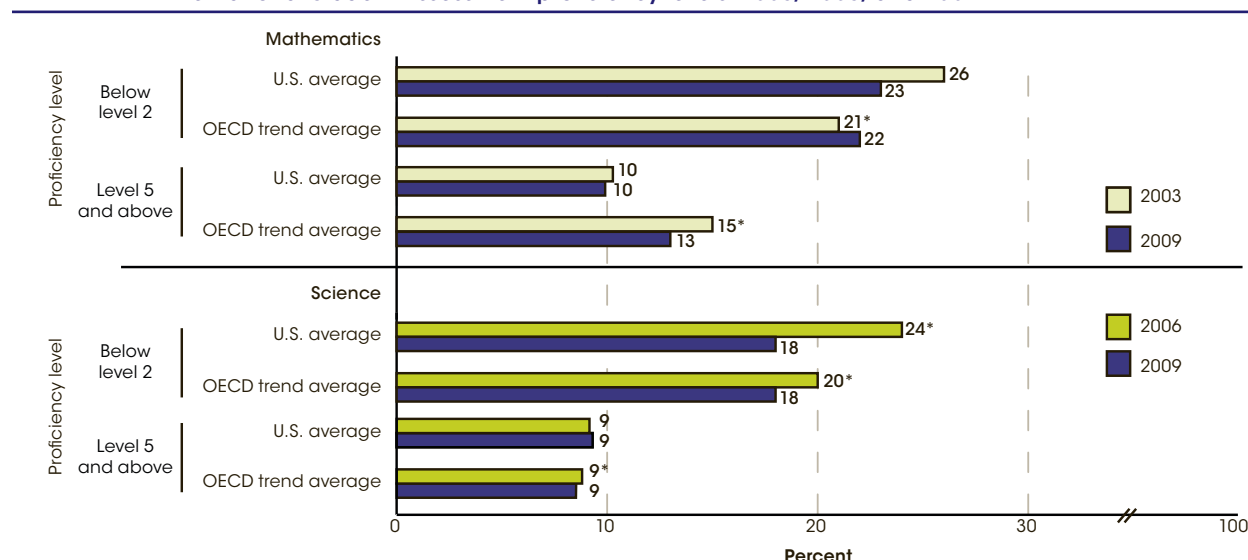
Figure 26-1. Percentage of 15-year-old students on the combined reading literacy scale in the United States and Organization for Economic Co-operation and Development countries, by selected Program for International Student Assessment proficiency levels: 2000 and 2009



* $p < .05$. Significantly different from average in 2009 at the .05 level of statistical significance.

NOTE: The Organization for Economic Co-operation and Development (OECD) trend average used for the analysis of reading literacy trends is based on the averages of 27 OECD countries with comparable data for 2000 and 2009, with each country weighted equally. In the Program for International Student Assessment (PISA), proficiency in reading was defined in terms of levels based on student performance scores on each literacy scale. Reading literacy was assessed along a continuum, with proficiency below level 2 indicative of the low-performing students and proficiency level 5 and above indicative of the high-performing students. In reading, proficiency below level 2 is defined by scoring below 407, and proficiency at level 5 and above is defined by scoring 626 and above. Scores are reported on a scale from 0 to 1,000. For more information on PISA, see Appendix B - Guide to Sources. SOURCE: Fleischman, H.L., Hopstock, P.J., Pelczar, M.P., and Shelley, B.E. (2010). *Highlights From PISA 2009: Performance of U.S. 15-Year-Old Students in Reading, Mathematics, and Science Literacy in an International Context* (NCES 2011-004), table R7A; OECD. (2010). *PISA 2009 Results: Learning Trends - Changes in Student Performance Since 2000* (Volume V), table V.2.2; and OECD, previously unpublished tabulations (October 2011).

Figure 26-2. Percentage of 15-year-old students on the mathematics and science literacy scales in the United States and Organization for Economic Co-operation and Development countries, by selected Program for International Student Assessment proficiency levels: 2003, 2006, and 2009



* $p < .05$. Significantly different from the average in 2009 at the .05 level of statistical significance.

NOTE: The Organization for Economic Co-operation and Development (OECD) trend average used for the analysis of mathematics literacy trends is based on the averages of the 29 OECD countries with comparable data for 2003 and 2009, with each country weighted equally. The OECD trend average used for the analysis of science literacy trends is based on the averages of the 34 OECD countries with comparable data for 2006 and 2009, with each country weighted equally. In the Program for International Student Assessment (PISA), proficiency in both mathematics and science was defined in terms of levels based on student performance scores. Mathematics literacy was assessed along a continuum, with proficiency below level 2 indicative of the low-performing students and proficiency level 5 and above indicative of the high-performing students. In mathematics, proficiency below level 2 is defined by scoring below 420, and proficiency level 5 and above is defined by scoring 607 and above. Science literacy was assessed along a continuum, with proficiency below level 2 indicative of the low-performing students and proficiency level 5 and above indicative of the high-performing students. In science, proficiency below level 2 is defined by scoring below 410, and proficiency level 5 and above is defined by scoring 633 and above. Scores are reported on a scale from 0 to 1,000. For more information on PISA, see Appendix B - Guide to Sources. SOURCE: Fleischman, H.L., Hopstock, P.J., Pelczar, M.P., and Shelley, B.E. (2010). *Highlights From PISA 2009: Performance of U.S. 15-Year-Old Students in Reading, Mathematics, and Science Literacy in an International Context* (NCES 2011-004), tables M4A and S4A; OECD. (2010). *PISA 2009 Results: Learning Trends - Changes in Student Performance Since 2000* (Volume V), tables V.3.2 and V.3.5; and OECD, previously unpublished tabulations (October 2011).

Extracurricular Activities of High School Students

In 2010, some 40 percent of high school seniors participated in athletics, including 44 percent of males and 36 percent of females.

In 2010, some 40 percent of high school seniors participated in athletics as an extracurricular activity, which was higher than the percentage who participated in other school clubs/activities (32 percent), music/performing arts (23 percent), academic clubs (14 percent), newspaper/yearbook (10 percent), and student council/government (9 percent) (see table A-27-1). Since 1990, there has been no measurable change in the participation of high school seniors in the extracurricular activities of newspaper/yearbook, music/performing arts, academic clubs, and other school clubs/activities. However, the percentage of high school seniors who participated in athletics in 2010 (40 percent) was higher than the percentage who participated in 1990 (36 percent), and the percentage who participated in student council/government was lower in 2010 (9 percent) than in 1990 (11 percent).

As was the case with high school seniors in 2010, a higher percentage of sophomores participated in athletics than in other extracurricular activities. Forty-three percent of high school sophomores participated in athletics in 2010, some 28 percent participated in other clubs/activities, 23 percent participated in music/performing arts, and 4 percent participated on a newspaper/yearbook.

In 2010, a higher percentage of female than male high school seniors participated on a newspaper/yearbook (13 vs. 6 percent), in music/performing arts (28 vs. 18 percent), in academic clubs (18 vs. 11 percent), in student council/government (12 vs. 6 percent), and in other school clubs/activities (41 vs. 24 percent), while a higher

percentage of male than female high school seniors participated in athletics (44 vs. 36 percent). For each of these activities, other than for athletics and student council/government, the participation rates were not measurably different in 2010 than they were in 1990. For athletics, the percentage of female high school seniors who participated was higher in 2010 (36 percent) than in 1990 (28 percent). For student council/government, the percentage of male high school seniors who participated was lower in 2010 (6 percent) than in 1990 (9 percent).

High school seniors who planned on attending college had higher participation rates in various extracurricular activities in 2010 than those who did not have college plans (see table A-27-2). For example, 43 percent of those who had college plans participated in athletics, compared to 25 percent of those who did not plan to attend college. Among those with plans to attend college, 37 percent participated in other clubs/activities, 25 percent participated in music/performing arts, 17 percent participated in academic clubs, and 11 percent (each) participated in student council/government and on a newspaper/yearbook. For those who did not plan on attending college, the participation rates were 15 percent for other school clubs/activities, 14 percent for music/performing arts, 5 percent for academic clubs, 2 percent for student council/government, and 5 percent for newspaper/yearbook.



Tables A-27-1 and A-27-2

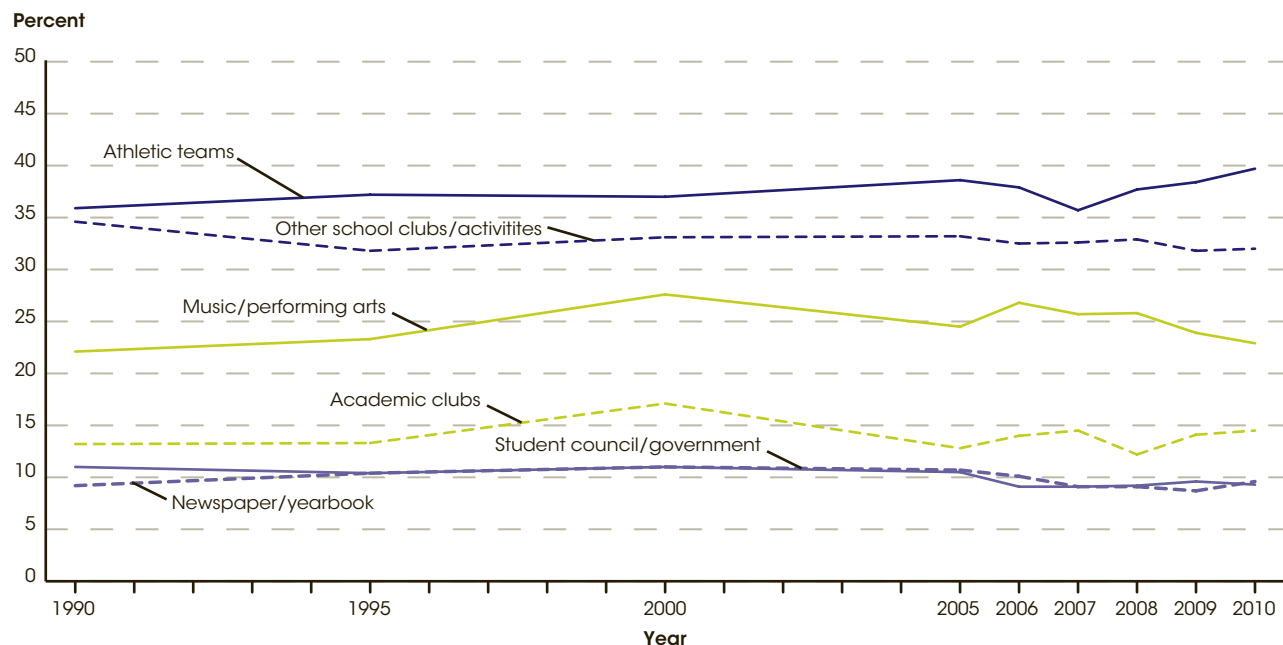
Glossary: *High school*

Technical Notes

Percentages reflect the proportion of students who responded that they participated in these activities “to a considerable extent” or “to a great extent.” The 10th-grade and 12th-grade data for “other school clubs/activities” are not comparable because the available response alternatives

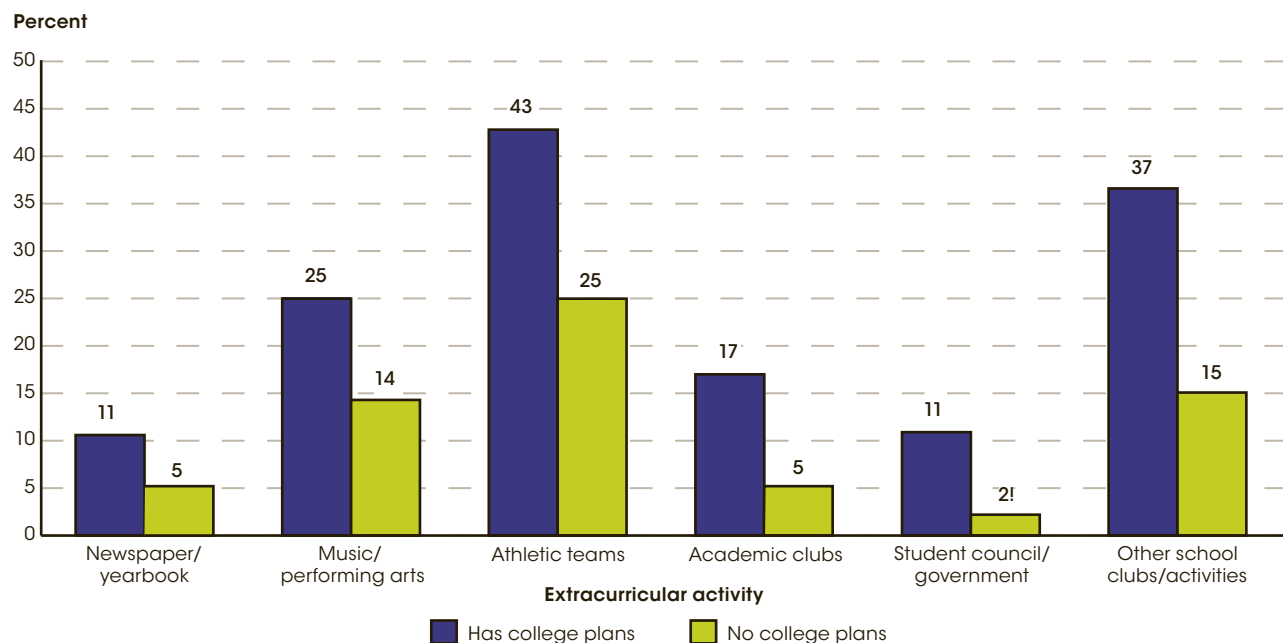
were not the same. The response rates for Monitoring the Future (MTF) do not meet National Center for Education Statistics (NCES) standards. For more information on MTF, see Appendix B – *Guide to Sources*.

Figure 27-1. Percentage of high school seniors who participated in various extracurricular activities, by type of activity: Selected years, 1990 through 2010



NOTE: Percentages reflect the proportion of seniors who responded that they participated in these activities "to a considerable extent" or "to a great extent." The response rates for this survey do not meet National Center for Education Statistics (NCES) standards. For more information on *Monitoring the Future*, see Appendix B - *Guide to Sources*.
SOURCE: University of Michigan, Institute for Social Research, *Monitoring the Future*, selected years, 1990-2010.

Figure 27-2. Percentage of high school seniors who participated in various extracurricular activities, by college plans: 2010



! Interpret data with caution (coefficient of variation is greater than 30 percent).
NOTE: Percentages reflect the proportion of seniors who responded that they participated in these activities "to a considerable extent" or "to a great extent." The response rates for this survey do not meet National Center for Education Statistics (NCES) standards. For more information on *Monitoring the Future*, see Appendix B - *Guide to Sources*.
SOURCE: University of Michigan, Institute for Social Research, *Monitoring the Future*, 2010.

Indicator 28

Student Absenteeism

In 2009, the average National Assessment of Educational Progress (NAEP) reading score of 12th-grade students with perfect attendance (292) was not measurably different from the score of those who reported missing 1–2 days in the previous month (290), but was higher than those who reported missing 3–4 days (284), and missing 5 or more days (273).

In 2011, when asked about their school attendance in the previous month, 51 percent of 4th-grade students and 45 percent of 8th-grade students reported having perfect attendance (i.e., no absences from school) (see table A-28-1). In that same year, 30 percent of 4th-grade students reported missing 1–2 days, 12 percent missed 3–4 days, and 7 percent missed 5 or more days of school in the previous month. Thirty-five percent of 8th-grade students missed 1–2 days, 13 percent missed 3–4 days, and 6 percent reported missing 5 or more days of school. In 2009 in 12th grade, the latest year for which data are available, 38 percent of students reported perfect attendance, 39 percent reported missing 1–2 days, 15 percent reported missing 3–4 days, and 8 percent reported missing 5 or more days.

Absenteeism patterns remained relatively stable for 4th-grade students between 1994 and 2011 (see table A-28-1). For 8th-grade students, there was no measurable change over this period in the percentages reporting perfect attendance in the previous month or missing 3–4 days. Higher percentages of 8th-grade students reported missing 1–2 days in 2011 than in 1992 (35 vs. 33 percent). Lower percentages of 8th-grade students reported missing 5 or more days (6 vs. 8 percent). For 12th-grade students, a higher percentage reported perfect attendance in 2009 than in 1992 (38 vs. 35 percent), while lower percentages reported missing 3–4 days (15 vs. 17 percent) and missing 5 or more days (8 vs. 9 percent).

In general, students with higher absenteeism have lower scores on the National Assessment of Educational Progress (NAEP) reading assessment. There was no measurable difference in the 4th-grade reading scores on the NAEP in 1994 between students with perfect attendance (217) and those who reported missing 1–2 days of school in the previous month (215), although both scores were higher than those for students missing 3–4 days (208) and 5 or more days (198) (see table A-28-2). In 2011, 4th-grade

students with perfect attendance in the previous month had higher reading scale scores (225) than those who reported missing 1–2 days (221), those missing 3–4 days (216), and those missing 5 or more days (207). This scoring pattern was similar for 8th-grade students. In 1992, 8th-grade students who reported missing no days or 1–2 days of school in the previous month had higher reading scale scores (263 and 264, respectively) than those who reported missing 3–4 days (256) and 5 or more days (244). The average reading score of 8th-grade students with perfect attendance (269) was higher in 2011 than those who reported missing 1–2 days in the previous month (266), missing 3–4 days (258), and missing 5 or more days (248). For 12th-grade students, there was no measurable difference in reading scores in either 1992 or 2009 between students who had perfect attendance (296 and 292, respectively) and those who reported missing 1–2 days in the previous month (295 and 290). However, in both years, these scores were higher than for those who reported missing 3–4 days (287 and 284, respectively) and 5 or more days (279 and 273).

The percentages of students in 2011 who reported missing 3 or more days of school in the previous month varied by student and school characteristics. For example, at the 8th-grade level, 11 percent of Asian/Pacific Islander students reported missing 3 or more days of school in the previous month, compared to 18 percent of White students, 20 percent of students of two or more races, 21 percent of Hispanic students, 23 percent of Black students, and 31 percent of American Indian/Alaska Native students (see table A-28-2). For 12th-grade students, 26 percent of those who qualify for free or reduced-price lunch reported missing 3 or more days of school in the previous month, compared to 22 percent of students who did not qualify.



Tables A-28-1 and A-28-2

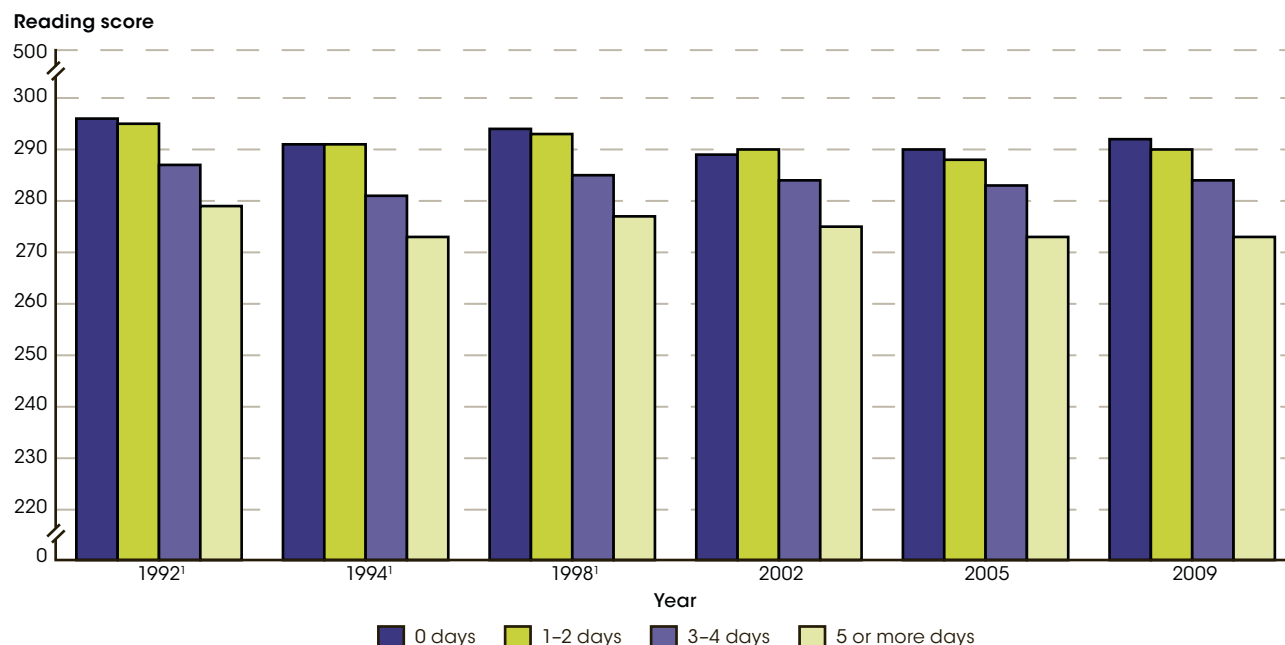
Glossary: *Free or reduced-price lunch, National School Lunch Program*

Technical Notes

From 1994 to 2000, students responded to the question, “How many days of school did you miss last month?” After 2001, students were asked “How many days were you absent from school in the last month?” Race categories exclude persons of Hispanic ethnicity. For more

information on race/ethnicity, free or reduced-price lunch, or locale, see Appendix C – *Commonly Used Measures*. For more information on the National Assessment of Educational Progress (NAEP), see Appendix B – *Guide to Sources*.

Figure 28-1. Average National Assessment of Educational Progress reading scale scores of 12th-grade students, by the number of days of school they reported missing in the previous month: Various years, 1992–2009

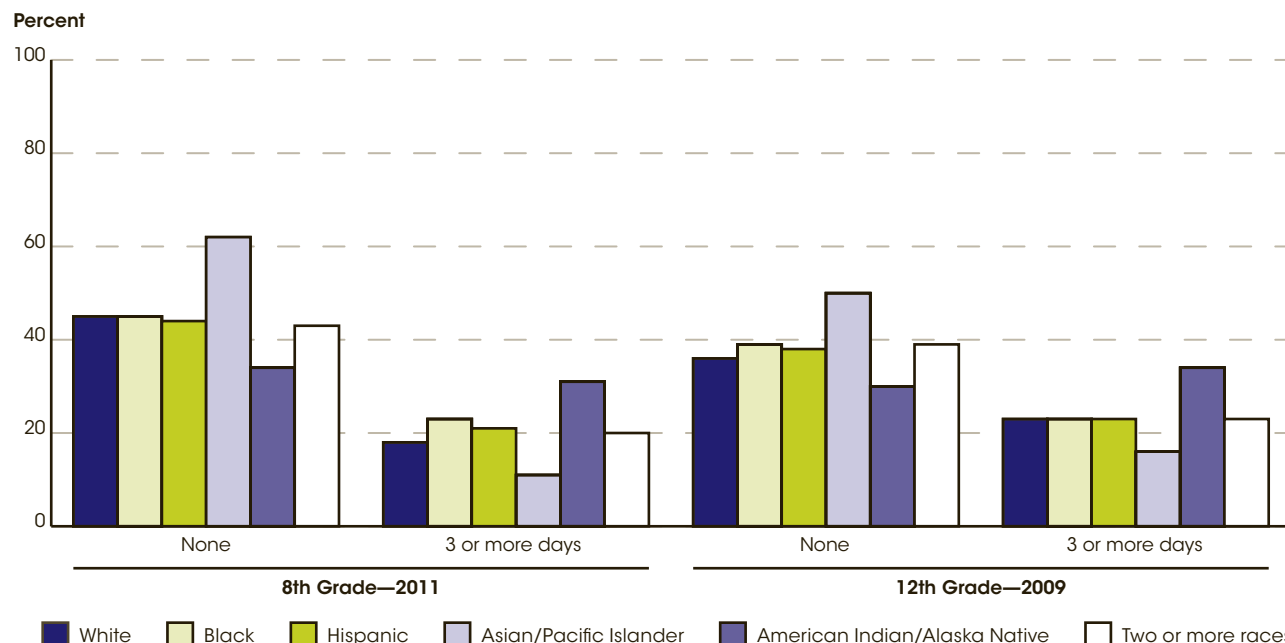


¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998, and the number shown is with accommodations.

NOTE: From 1992 to 2000, students responded to the question "How many days of school did you miss last month?" After 2001, students were asked "How many days were you absent from school in the last month?" The National Assessment of Educational Progress (NAEP) reading scale ranges from 0–500. For more information on NAEP, see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2009 Reading Assessments, NAEP Data Explorer.

Figure 28-2. Percentage of 8th- and 12th-grade students, by number of days of school missed in the previous month and race/ethnicity: 2009 and 2011



NOTE: The National Assessment of Educational Progress (NAEP) reading assessment was not administered to 12th-graders in 2011. For more information on NAEP, see Appendix B – *Guide to Sources*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see Appendix C – *Commonly Used Measures*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 and 2011 Reading Assessments, NAEP Data Explorer.

Youth Neither in School nor Working

In 2011, about 14 percent of youth ages 16–24 were neither enrolled in school nor working.

There are many reasons why youth between the ages of 16 and 24 may be neither enrolled in school nor working. For example, they may be seeking but unable to find work, or they may have left the workforce or school, either temporarily or permanently, to start a family. This indicator provides information on youth at an age when most are transitioning into postsecondary education or the workforce. This is a critical period for young people as they pursue their educational goals and career paths.

From 1990 through 2011, the percentage of youth ages 16–24 neither enrolled in school nor working remained between 11 and 16 percent annually (see table A-29-1). Within any single year, the percentage of such youth varied across certain subgroups of the population. In 2011, for example, the percentage of such youth varied by race/ethnicity, citizenship, family poverty, age, household type, and geographic region, though it was not measurably different by sex.

Higher percentages of Black and Hispanic youth than White youth were neither enrolled in school nor working in each year observed (1990, 1995, 2000, 2005, 2010, and 2011). In 2011, some 19 percent of Black youth and 18 percent of Hispanic youth were neither enrolled in school nor working, compared with 12 percent of Whites and 9 percent of Asians/Pacific Islanders. Also in that year, a greater percentage of non-U.S. citizen youth (20 percent) were neither enrolled in school nor working than U.S.-born youth (14 percent).

Family poverty was related to the prevalence of youth who were neither enrolled in school nor working. In each year observed, the percentage of youth neither enrolled

in school nor working was higher for those from poor families than for those from nonpoor families. In 2011, the percentages for these groups were 27 percent and 11 percent, respectively.

In 2011, about 14 percent of youth ages 16–24 (approximately 5.6 million) were neither enrolled in school nor working. The percent neither enrolled in school nor working varied across age groups. For example, about 20 percent of youth ages 20–24 (approximately 4.2 million) were neither in school nor working, compared with 3 percent of youth ages 16–17 (approximately 0.3 million). This pattern of higher percentages of youth ages 20–24 than youth ages 16–17 neither enrolled in school nor working held across all years observed.

Although the percentages of Black and Hispanic youth who were neither enrolled nor working in 2011 were higher than the percentage of White youth, the majority of youth with these characteristics were White (see table A-29-2). That is, higher numbers of youth neither enrolled in school nor working were White (2.8 million) than Black (1.1 million), Hispanic (1.4 million), or Asian/Pacific Islander (151,000). In 2011, about 0.6 million non-U.S. citizens ages 16–24 were neither enrolled in school nor working, compared to 4.9 million of their U.S.-born counterparts. Also, in the South, more youth ages 16–24 were neither enrolled in school nor working than in all other regions of the United States in 2011 (2.2 million in the South vs. 1 million in the Northeast, 1 million in the Midwest, and 1.4 million in the West).



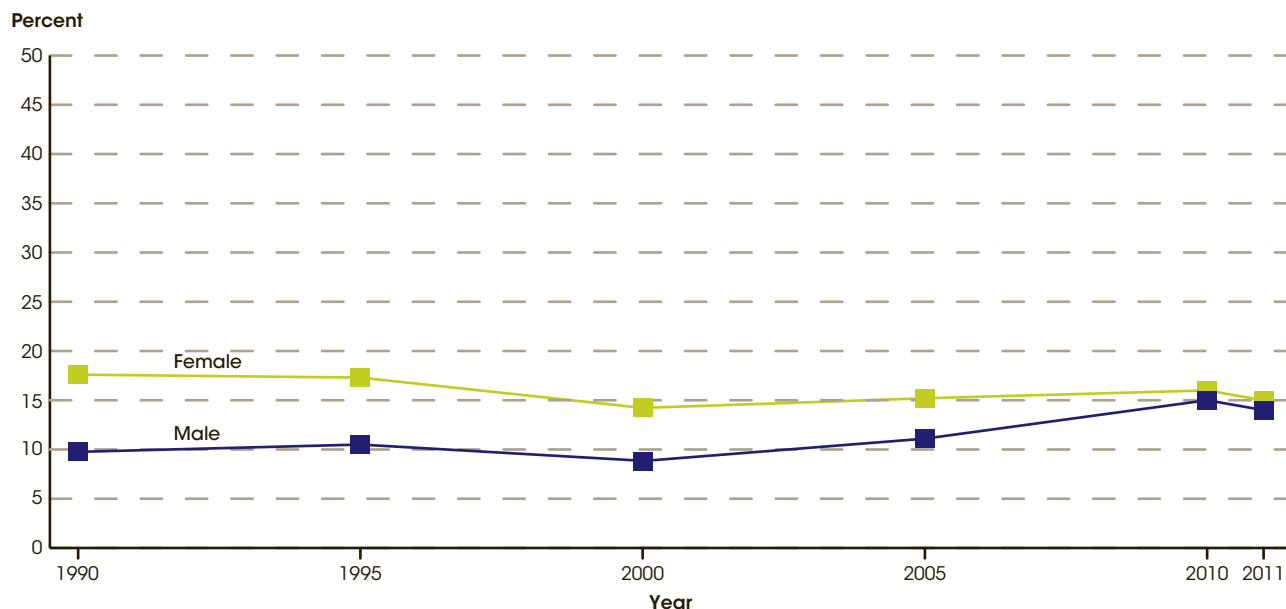
Tables A-29-1 and A-29-2

Technical Notes

The data presented here represent the percentage of civilian, noninstitutionalized 16- to 24-year-olds who are neither enrolled in school nor working. *Poor* is defined to include families below the poverty threshold; *nonpoor* is defined to include families at or above the poverty threshold. U.S.-born includes foreign-born U.S. citizens. Naturalized U.S. citizens are those who, having been born

in another country or otherwise reared as a foreigner, have been granted U.S. citizenship and the rights and privileges of that status. Race categories exclude persons of Hispanic ethnicity. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*. For more information on poverty or race/ethnicity, see Appendix C – *Commonly Used Measures*.

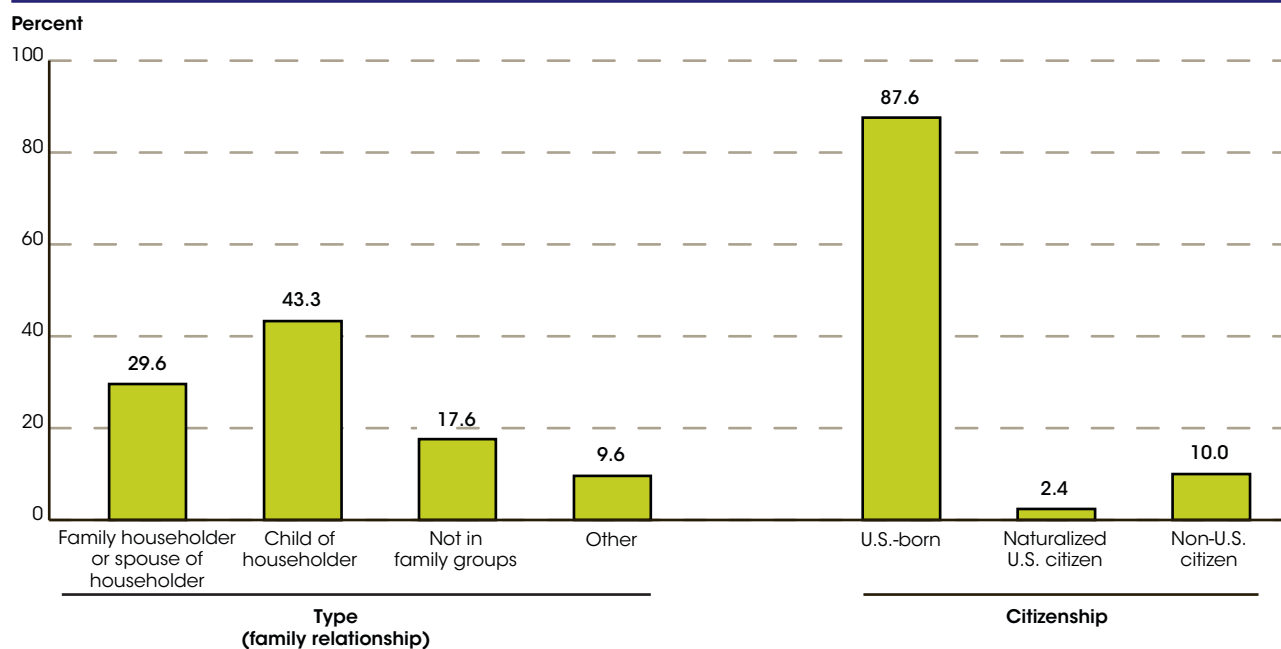
Figure 29-1. Percentage of youth ages 16–24 who were neither enrolled in school nor working, by sex: Selected years, 1990–2011



NOTE: The data presented here represent the percentage of civilian, noninstitutionalized 16- to 24-year-olds who were neither enrolled in school nor working. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, selected years, 1990–2011.

Figure 29-2. Percentage of youth ages 16–24 who were neither enrolled in school nor working, by household type and citizenship: 2011



NOTE: The data presented here represent the number of civilian, noninstitutionalized 16- to 24-year-olds who were neither enrolled in school nor working. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, 2011.

Employment of High School Students

Between 1980 and 2010, the percentage of high school students age 16 years and above who were employed decreased from 36 percent to 16 percent. For male high school students, the decrease was from 37 percent in 1980 to 14 percent in 2010.

In 2010, approximately 16 percent of high school students age 16 years and above were employed; 7 percent were employed for less than 15 hours per week and 8 percent were employed for 15 or more hours per week. The percentage of female high school students age 16 years and above who were employed (18 percent) was higher than the percentage of male high school students age 16 years and above who were employed (14 percent). The same pattern held for those who worked less than 15 hours per week as well as for those who worked 15 hours per week or more (see table A-30-1).

Between 1980 and 2010, the percentage of high school students age 16 years and above who were employed decreased from 36 percent to 16 percent. For male high school students age 16 years and above, the decrease was from 37 percent in 1980 to 14 percent in 2010. In 1980, some 14 percent of high school students age 16 years and above were employed less than 15 hours per week and 21 percent were employed for 15 or more hours per week; these percentages declined to 7 percent and 8 percent, respectively, by 2010. The percentage of males age 16 years and above who were employed for less than 15 hours per week declined from 14 percent in 1980 to 6 percent in 2010. For females, the percentages who were employed less than 15 hours per week declined from 14 percent to 8 percent over the same time period. For male students age 16 years and above employed 15 or more hours per week, the decline was from 22 percent in 1980 to 7 percent in

2010; for females, 19 percent were employed 15 or more hours per week in 1980 and 9 percent were in 2010.

In 2010, some 47 percent of high school students age 16 years and above who were employed worked less than 15 hours, and 53 percent worked 15 or more hours per week (see table A-30-2). Hours worked per week varied by student characteristic. Forty-eight percent of younger (16 to 17 years old) high school students who were employed worked 15 or more hours per week, compared to 66 percent of older (18 years old and older) high school students who were employed.

In 2010, about 44 percent of employed high school students age 16 years and above from high-income families (the top 20 percent of family incomes) worked 15 or more hours per week, compared with 56 percent of employed students from middle-income families (the middle 60 percent of family incomes), and 62 percent of employed students from low-income families (the bottom 20 percent of family incomes). For native-born employed high school students age 16 years and above (those who were born in the 50 states and the District of Columbia), 52 percent worked 15 or more hours per week, compared to 75 percent of foreign-born employed high school students.



Tables A-30-1 and A-30-2

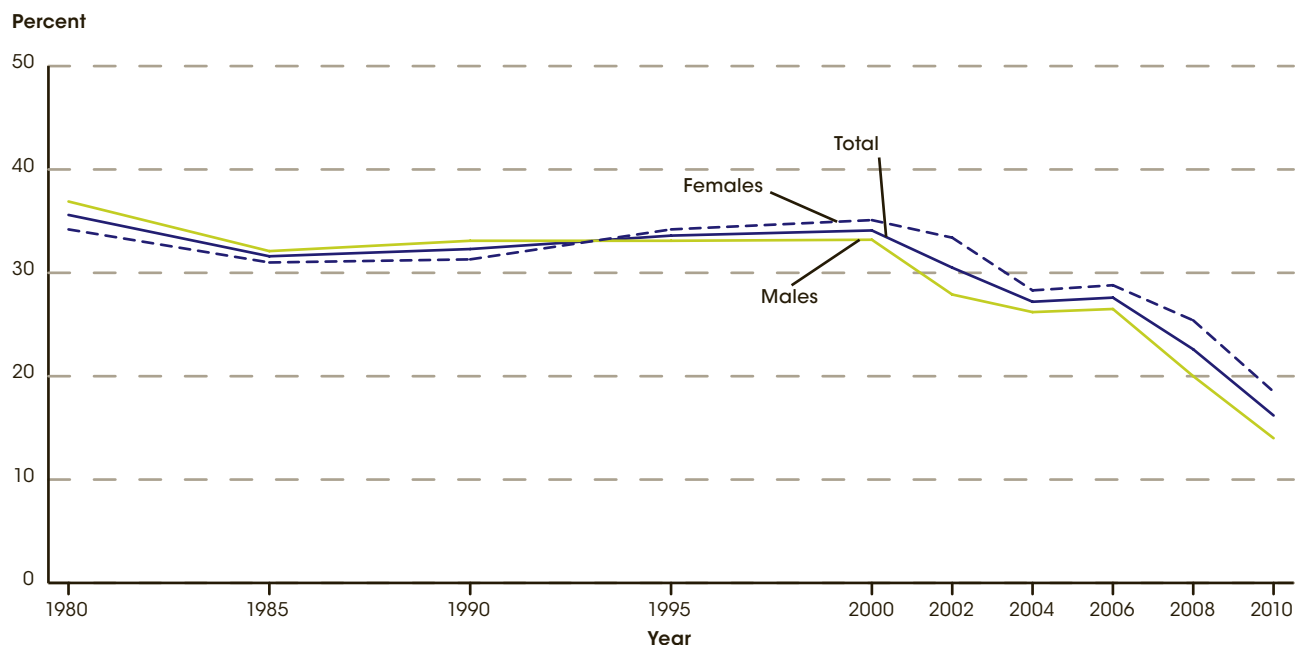
Glossary: *Family income, High school, Hours worked per week*

Technical Notes

The percentage of employed high school students includes those who were employed but not at work during the survey week. *Hours worked per week* refers to the number of hours the respondent worked at all jobs during the survey week. *Native-born* refers to high school students

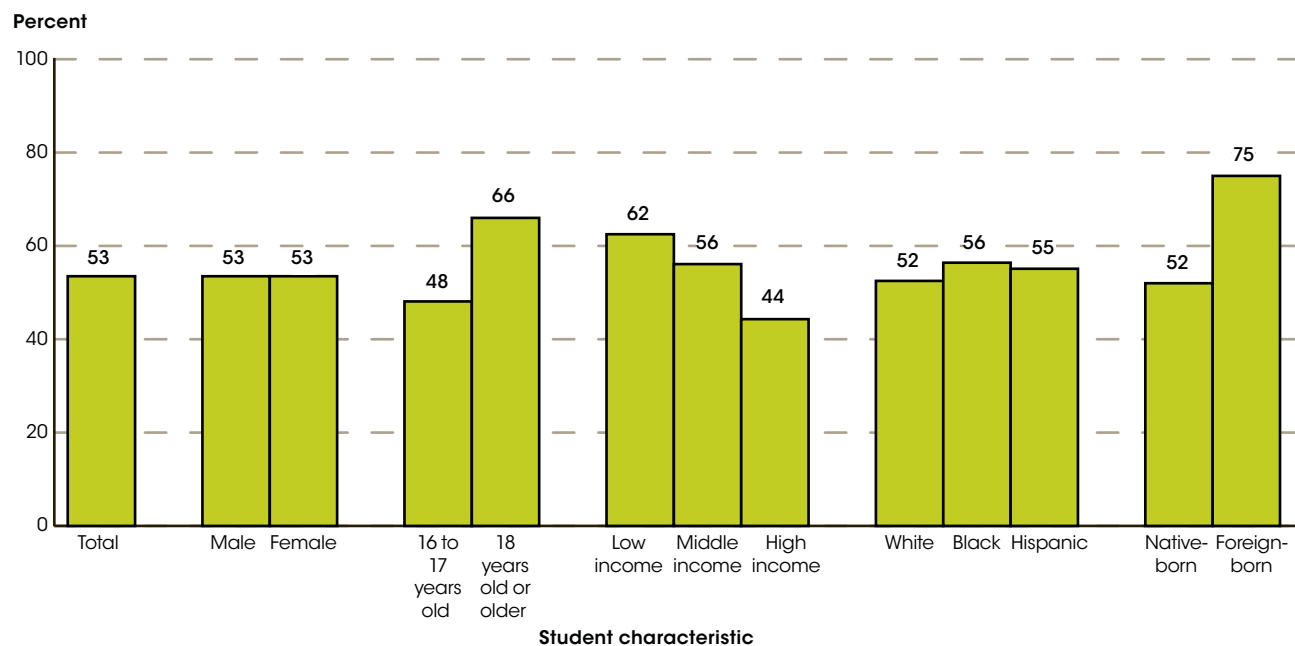
born in the 50 states and the District of Columbia. For more information on family income, see Appendix C – *Commonly Used Measures*. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*.

Figure 30-1. Percentage of high school students age 16 years and above who were employed, by sex: Selected years, 1980 to 2010



NOTE: The data presented here represent the percentage of civilian, noninstitutionalized 16- to 24-year-olds who were neither enrolled in school nor working. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*.
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, selected years, 1990–2011.

Figure 30-2. Percentage of employed high school students age 16 years and above who worked more than 15 hours per week, by selected student characteristics: 2010



NOTE: The data presented here represent the number of civilian, noninstitutionalized 16- to 24-year-olds who were neither enrolled in school nor working. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*.
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, 2011.

Indicator 31

High School Coursetaking

The percentages of high school graduates who took mathematics courses in geometry, algebra II/trigonometry, analysis/precalculus, statistics/probability, and calculus while in high school were higher in 2009 than in 1990.

The percentages of high school graduates who took mathematics courses in geometry, algebra II/trigonometry, analysis/precalculus, statistics/probability, and calculus while in high school were higher in 2009 than in 1990 (see table A-31-1). Similarly, the percentages of high school graduates who took science courses in biology, chemistry, physics, both biology and chemistry, or in all three of these science courses while in high school were higher in 2009 than in 1990. For example, while in high school, 16 percent of 2009 graduates versus 7 percent of 1990 graduates took calculus, and 30 percent of 2009 graduates took biology, chemistry, and physics in high school versus 19 percent of 1990 graduates. In contrast, 69 percent of 2009 graduates took algebra I in high school versus 77 percent of 1990 graduates. Looking at more recent changes, the percentages of graduates who took mathematics and science courses were higher in 2009 than in 2005 for all courses except algebra I and the combination of biology, chemistry, and physics, for which no measurable differences were found.

Across subgroups, the percentages of high school graduates who had taken calculus and biology, chemistry, and physics were generally higher in 2009 than in 1990. For example, 9 percent of Hispanic 2009 high school graduates had taken calculus versus 4 percent of 1990 graduates. Also, 28 percent of female 2009 graduates had taken biology, chemistry, and physics versus 16 percent of 1990 graduates. Comparing 2009 with 2005, the percentages of graduates who had taken these courses were higher for some subgroups. For instance, 12 percent of 2009 graduates with disabilities had taken biology, chemistry, and physics versus 7 percent of 2005 graduates.

For both calculus and biology, chemistry, and physics, higher percentages of certain 2009 graduates took these courses while in high school than their peers in other subgroups. For example, higher percentages of Asian/

Pacific Islander (42 percent) and White graduates (18 percent) had taken calculus than their Black (6 percent) and Hispanic peers (9 percent). Calculus coursetaking was also more prevalent for private than public school graduates and for graduates of suburban high schools than their peers from city, town, and rural schools. Among 2009 graduates who had taken biology, chemistry, and physics, a higher percentage of males than females had taken these courses (32 vs. 28 percent). Also, a higher percentage of high school graduates who attended schools with 25 percent or fewer students eligible for free or reduced-price lunch (low-poverty schools) had taken these courses than those who attended schools with more than 75 percent of students eligible for free or reduced-price lunch (high-poverty schools).

For 2009 high school graduates, higher average scale scores on the National Assessment of Educational Progress (NAEP) 12th-grade mathematics assessment were associated with higher levels of mathematics coursetaking in high school (see table A-31-2). 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, at each mathematics level in 2009, certain graduates had higher average scale scores than their peers in other subgroups. Looking at graduates who had taken calculus, the average scale score was higher for males than females (197 vs. 190). Average scale scores were also higher for calculus takers who were Asian/Pacific Islander (203) and White (194) than for their Hispanic (179) and Black (170) peers. Among calculus takers, the average scale score for those who had attended low-poverty schools was 199 versus a score of 163 for their peers at high-poverty schools.



Tables A-31-1 and A-31-2

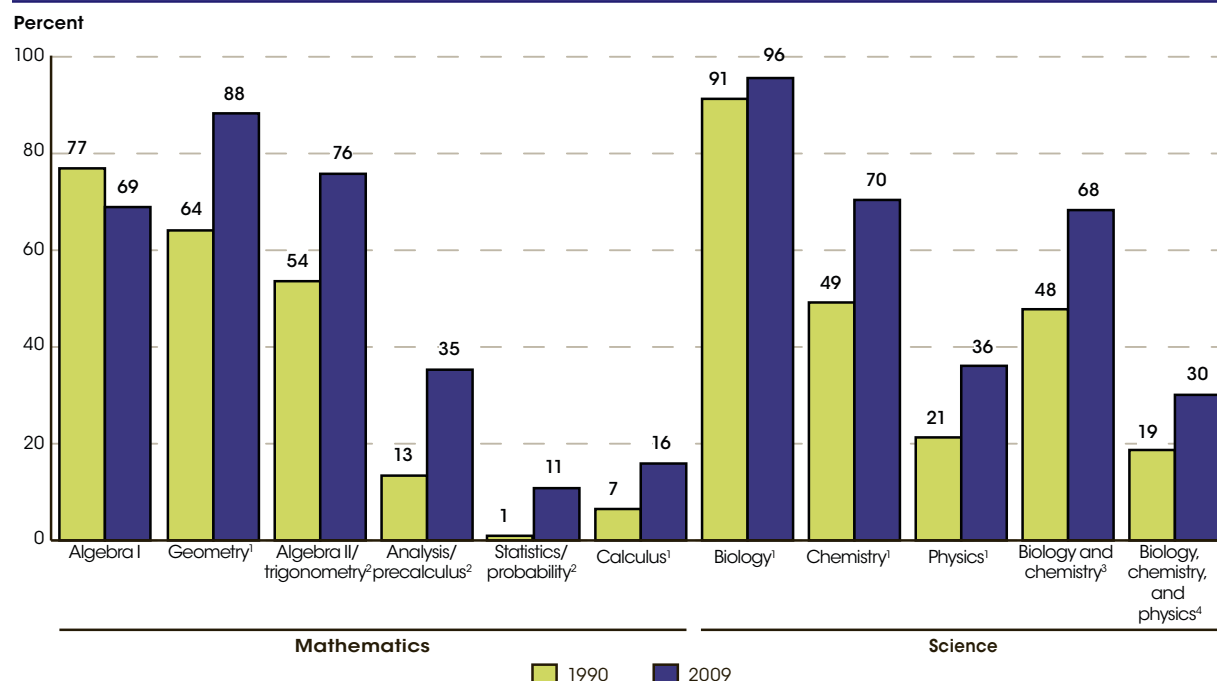
Glossary: *Charter school, Free or reduced-price lunch, High school, Private school, Public school*

Technical Notes

Data reflect only the percentage of graduates who earned course credit while in high school (grades 9–12). For a transcript to be included in the analyses, it had to meet three requirements: (1) the graduate received either a standard or honors diploma, (2) the graduate's transcript contained 16 or more Carnegie credits, and (3) the graduate's transcript contained more than 0 Carnegie credits in English courses. Coursetaking estimates should be considered within the context of course access,

which can vary across schools. Estimates for public schools exclude charter schools. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, free or reduced-price lunch, or locale, see Appendix C – *Commonly Used Measures*. For more information on the National Assessment of Educational Progress (NAEP) or the High School Transcript Study (HSTS), see Appendix B – *Guide to Sources*.

Figure 31-1. Percentage of high school graduates who completed selected mathematics and science courses in high school: 1990 and 2009



¹ Percentages are for students who earned at least one Carnegie credit.

² Percentages are for students who earned at least one-half of a Carnegie credit.

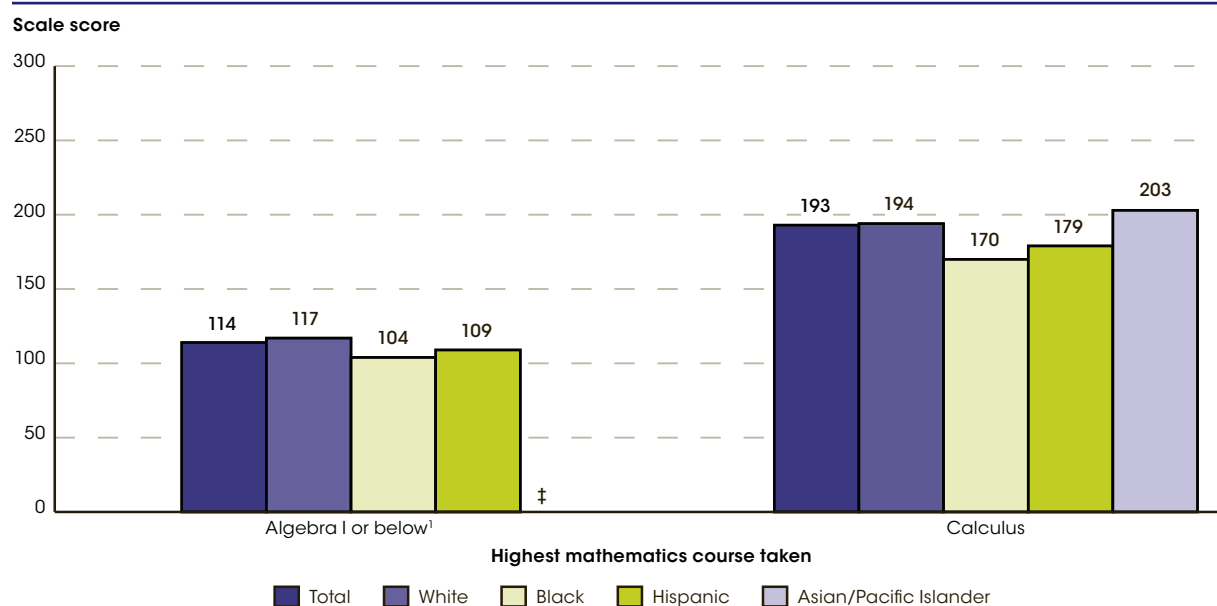
³ Percentages are for students who earned at least one Carnegie credit each in biology and chemistry.

⁴ 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, it had to meet three requirements: (1) the graduate received either a standard or honors diploma, (2) the graduate's transcript contained 16 or more Carnegie credits, and (3) the graduate's transcript contained more than 0 Carnegie credits in English courses. For more information on the National Assessment of Educational Progress (NAEP) or the High School Transcript Study (HSTS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study (HSTS), 1990 and 2009.

Figure 31-2. Average National Assessment of Educational Progress (NAEP) 12th-grade mathematics scale scores of high school graduates, by highest mathematics course taken and race/ethnicity: 2009



‡ Reporting standards not met (too few cases).

¹ Includes basic math, general math, applied math, pre-algebra, and algebra I.

NOTE: The scale of the National Assessment of Educational Progress (NAEP) mathematics assessment for grade 12 ranges from 0 to 300. For a transcript to be included in the analyses, it had to meet three requirements: (1) the graduate received either a standard or honors diploma, (2) the graduate's transcript contained 16 or more Carnegie credits, and (3) the graduate's transcript contained more than 0 Carnegie credits in English courses. 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. For more information on race/ethnicity, see Appendix C – *Commonly Used Measures*. For more information on the National Assessment of Educational Progress (NAEP) or the High School Transcript Study (HSTS), see Appendix B – *Guide to Sources*.

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.

Public High School Graduation Rates

In school year 2008–09, more than three-quarters of public high school students graduated on time with a regular diploma.

This indicator examines the percentage of public high school students who graduate on time with a regular diploma. To do so, it uses the *averaged freshman graduation rate* (AFGR)—an estimate of the number of regular diplomas issued in a given year divided by an estimate of the averaged enrollment base for the freshman class 4 years earlier. For each year, the averaged freshman enrollment base is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier (when current-year seniors were freshmen), and the number of 10th-graders 3 years earlier, divided by 3. The intent 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.

Among public high school students in the class of 2008–09, the averaged freshman graduation rate was 75.5 percent; that is, just over 3 million students graduated on time (see table A-32-1). Wisconsin had the highest graduation rate, at 90.7 percent. Fifteen other states had rates of 80 percent or more (ordered from high to low): Vermont, Minnesota, North Dakota, Iowa, New Jersey, New Hampshire, Massachusetts, Missouri, Nebraska, Montana, South Dakota, Idaho, Pennsylvania, Kansas, and Maryland. Nevada had the lowest rate, at 56.3 percent. Seven other states and the District of Columbia had graduation rates below 70 percent (ordered from high

to low): Alabama, Florida, Georgia, Louisiana, South Carolina, New Mexico, the District of Columbia, and Mississippi.

The overall AFGR was higher for the graduating class of 2008–09 (75.5 percent) than it was for the graduating class of 1990–91 (73.7 percent). However, from school year 1990–91 to 1995–96, the overall averaged freshman graduation rate decreased from 73.7 percent to 71.0 percent. In terms of changes by state, there was an increase in the graduation rate in 30 states and the District of Columbia from school year 1990–91 to 2008–09. In 1 state (Vermont) the rate increased by more than 10 percentage points; in 6 others (Louisiana, Missouri, New Hampshire, New York, Tennessee, and Wisconsin) and the District of Columbia, rates increased by more than 5 percentage points. The graduation rate decreased from 1990–91 to 2008–09 in 20 states (Alaska, Arizona, Arkansas, Connecticut, Georgia, Hawaii, Indiana, Kansas, Maine, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Carolina, South Dakota, Washington, and Wyoming), with decreases of greater than 5 percentage points occurring in New Mexico (5.3 percent), Wyoming (6.0 percent), and Nevada (20.7 percent).



Table A-32-1

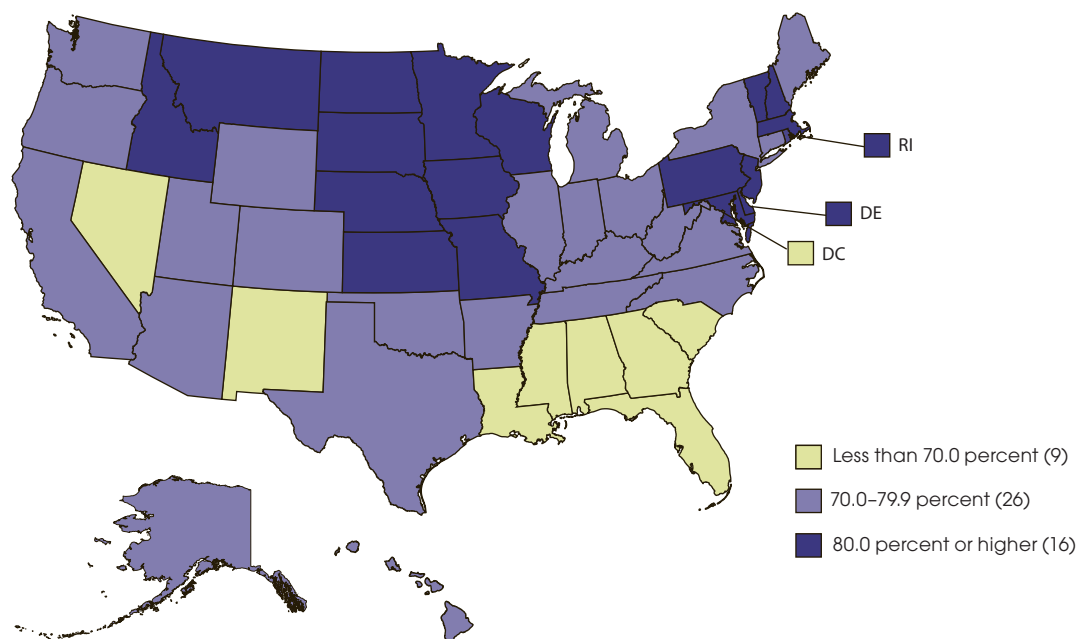
Glossary: *High school, High school diploma, Public school*

Technical Notes

Ungraded students were allocated to individual grades proportional to each state's enrollment in those grades. Graduates include only those who earned regular diplomas or diplomas for advanced academic achievement (e.g., honors diploma) as defined by the state or jurisdiction. The 2003–04 national estimates include imputed data for New York and Wisconsin. The 2005–06 national estimates include imputed data for the District of Columbia, Pennsylvania, and South Carolina. The 2007–08 estimate for Maine includes graduates from semi-private schools. The 2008–09 national estimates include imputed data for California and Nevada. The

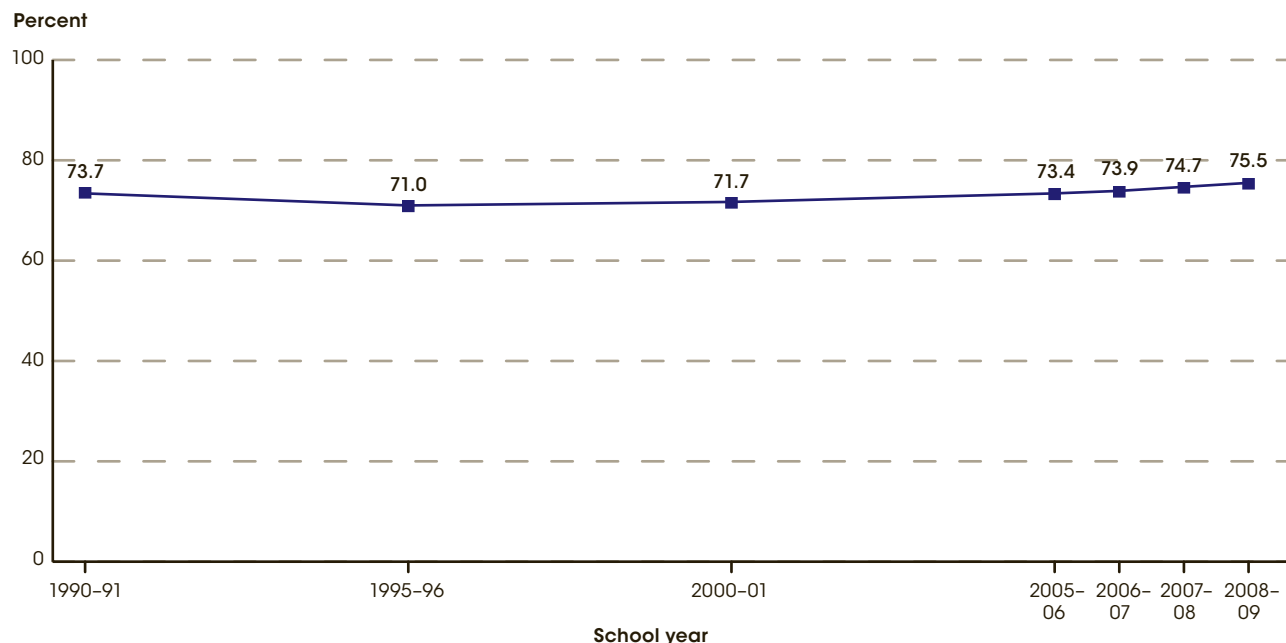
2008–09 imputations for individual states are constructed from the prior year's AFGR by race/ethnicity applied to the AFGR population base. By way of example, this computation results in an imputed overall AFGR for California that is minimally different from the prior year (0.2 percent), and the impact of the estimate on the U.S. value is also minimal. For more information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*. For more information on measures of student progress and persistence, see Appendix C – *Commonly Used Measures*.

Figure 32-1. Averaged freshman graduation rate for public high school students, by state or jurisdiction: School year 2008–09



NOTE: The averaged freshman graduation rate is the number of graduates divided by the estimated freshman enrollment count 4 years earlier. This count is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier, and the number of 10th-graders 3 years earlier, divided by 3. Ungraded students were allocated to individual grades proportional to each state's enrollment in those grades. Graduates include only those who earned regular diplomas or diplomas for advanced academic achievement (e.g., honors diploma) as defined by the state or jurisdiction. Data for California and Nevada were imputed. For more information on measures of student progress and persistence, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File," school year 2008–09, version 1a.

Figure 32-2. Averaged freshman graduation rate for public high school students: Selected school years 1990–91 through 2008–09



NOTE: The averaged freshman graduation rate is the number of graduates divided by the estimated freshman enrollment count 4 years earlier. This count is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier, and the number of 10th-graders 3 years earlier, divided by 3. Ungraded students were allocated to individual grades proportional to each state's enrollment in those grades. Graduates include only those who earned regular diplomas or diplomas for advanced academic achievement (e.g., honors diploma) as defined by the state or jurisdiction. The 2005–06 national estimates include imputed data for the District of Columbia, Pennsylvania, and South Carolina. The 2007–08 estimate for Maine includes graduates from semiprivate schools. The 2008–09 national estimates include imputed data for California and Nevada. For more information on measures of student progress and persistence, see Appendix C – *Commonly Used Measures*. For more information on the Common Core of Data (CCD), see Appendix B – *Guide to Sources*.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File," school year 2007–08; 2008–09, version 1a; and "State Nonfiscal Survey of Public Elementary/Secondary Education," 1990–91, Version 1b; 1995–96, Version 1b; 2000–01, Version 1b; 2005–06, Version 1b, and 2006–07, Version 1b.

Indicator 33

Status Dropout Rates

Between 1990 and 2010, status dropout rates declined for Whites, Blacks, and Hispanics. Over this period, the status dropout rate was generally lowest for Asians/Pacific Islanders, followed by Whites, Blacks, and Hispanics.

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). In this indicator, status dropout rates are estimated using both the Current Population Survey (CPS) and the American Community Survey (ACS). Data for the CPS have been collected annually over the last few decades, allowing for detailed consideration of long-term trends for those in the civilian, noninstitutionalized population. National-level data from the ACS are available from 2000 onward, and include noninstitutionalized and institutionalized populations. The 2010 ACS has larger sample sizes than the CPS, which allows for more detailed comparisons of status dropout rates by sex, race/ethnicity, and nativity.

Based on the CPS, the status dropout rate declined from 12 percent in 1990 to 7 percent in 2010 (see table A-33-1). Between 1990 and 2010, status dropout rates also declined for Whites (from 9 percent to 5 percent), Blacks (from 13 percent to 8 percent), and Hispanics (from 32 percent to 15 percent). Over this period, the status dropout rate was generally lowest for Asians/Pacific Islanders, followed by Whites, Blacks, and Hispanics. In 2010, the status dropout rate for Asians/Pacific Islanders and Whites (4 percent and 5 percent, respectively) were not measurably different from each other, but both were lower than the status dropout rates for Blacks (8 percent), and Hispanics (15 percent). The gap between Whites and Hispanics narrowed from 23 percentage points in 1990 to 10 percentage points in 2010; the gaps between Whites and Blacks in these two years were not measurably different.

The ACS allows for comparisons of status dropout rates for 16- through 24-year-olds residing in households, as well as those in noninstitutionalized group quarters (such as college housing and military quarters), and institutionalized group quarters (such

as adult and juvenile correctional facilities and nursing facilities). Among those living in households and noninstitutionalized group quarters, the status dropout rate was 8 percent in 2010 (see table A-33-2). A higher percentage of males than females were status dropouts (9 vs. 7 percent). This pattern was evident across all racial/ethnic groups, except for Native Hawaiians/Pacific Islanders. In 2010, the status dropout rate among the institutionalized population was 37 percent (see table A-33-3).

The status dropout rate includes all 16- through 24-year-old dropouts, regardless of when they last attended school, as well as individuals who may never have attended school in the United States and may never have earned a high school credential. In order to highlight the experiences of young people in our education system, it is possible to isolate data for immigrants, who may have had little or no experiences with the U.S. education system, from those born in the United States, who presumably did attend U.S. schools. In 2010, the status dropout rate for Hispanics born in the United States was higher than the rates for Asians and Whites born in the United States. No measurable differences were found, however, between the rates of U.S.-born Hispanics and Blacks. Overall, the status dropout rate for U.S.-born 16- through 24-year-olds was lower than the rate for their peers born outside of the United States (7 vs. 18 percent). Hispanics and Asians 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. A higher dropout rate among Hispanics who were foreign born (31 percent) versus those who were native born (10 percent) partially accounts for the relatively high overall Hispanic dropout rate (16 percent).



Tables A-33-1, A-33-2, and A-33-3

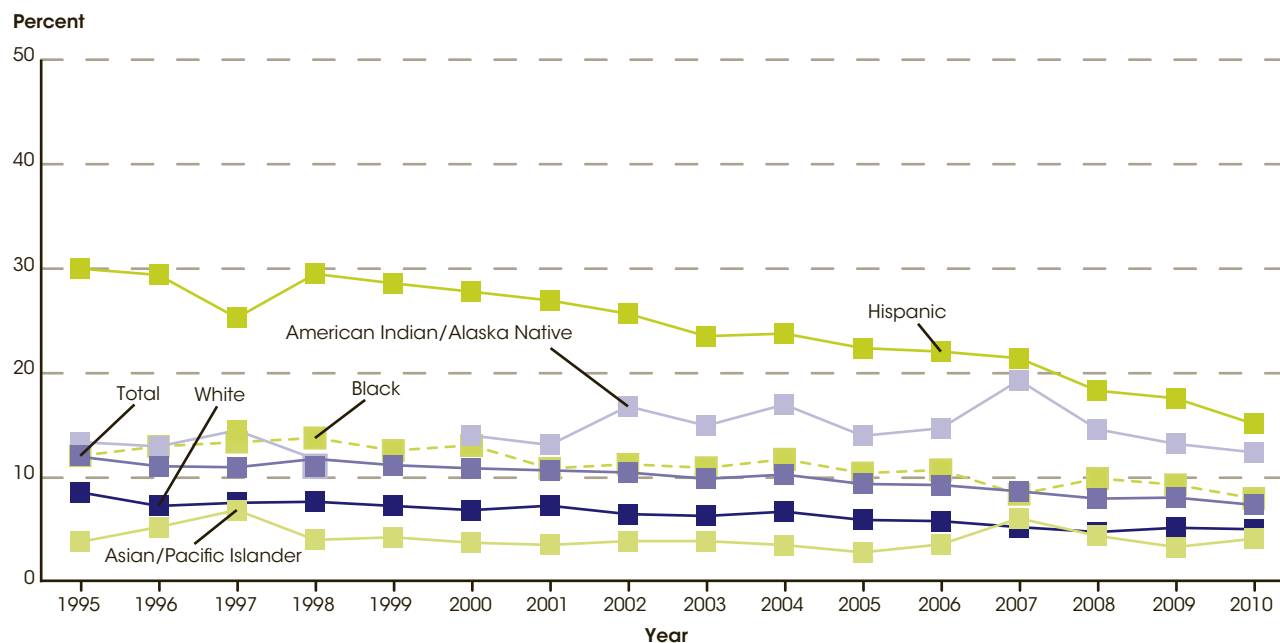
Glossary: *Dropout, GED certificate, High school diploma, High school equivalency certificate*

Technical Notes

The United States refers to the 50 states and the District of Columbia. The Current Population Survey (CPS) estimates of the status dropout rate include civilian, noninstitutionalized 16- through 24-year-olds. Young adults in the military or those who are incarcerated, for instance, are not included in the CPS measure. However, the American Community Survey (ACS) estimates of the status dropout rate include those living in noninstitutionalized and institutionalized group

quarters. Due to the methodological differences between the CPS and the ACS, status dropout estimates from the two surveys are not directly comparable. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity and the status dropout rate, see Appendix C – *Commonly Used Measures*. For more information on the CPS and the ACS, see Appendix B – *Guide to Sources*.

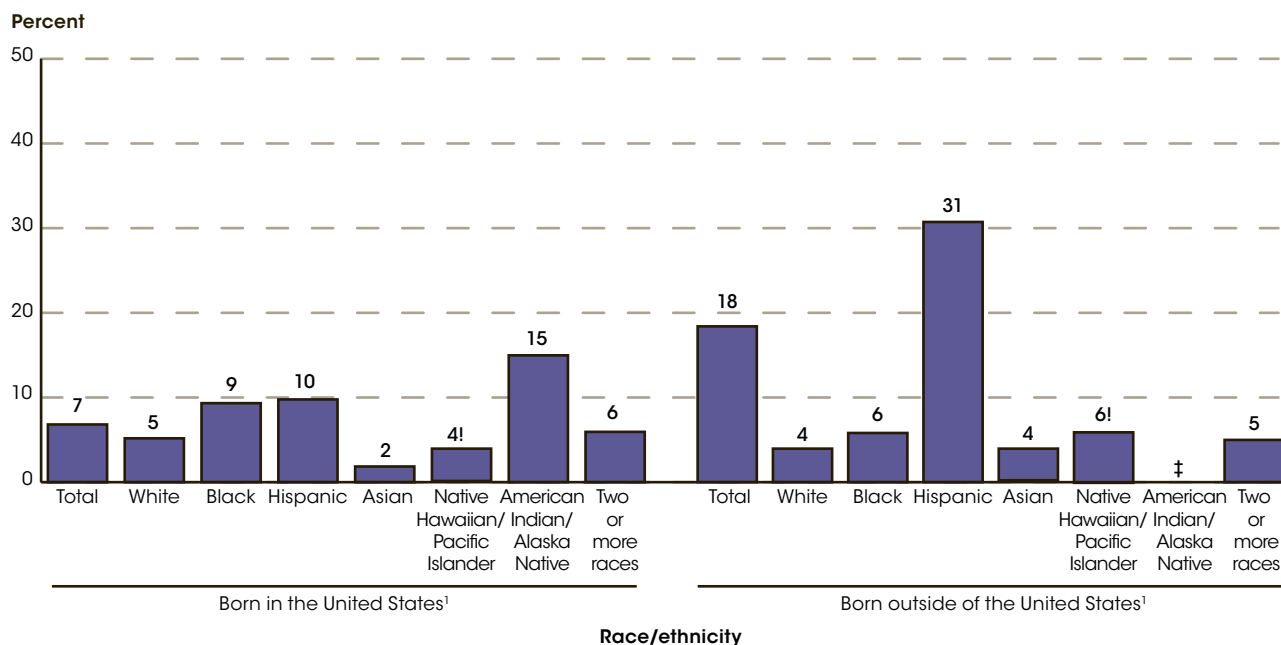
Figure 33-1. Status dropout rates of 16- through 24-year-olds in the civilian, noninstitutionalized population, by race/ethnicity: October Current Population Survey (CPS) 1995-2010



NOTE: Data for American Indians/Alaska Natives in 1999 have been suppressed due to unstable estimates. This figure uses a different data source than figure 33-2; therefore, estimates for 2010 are not directly comparable to the estimates in figure 33-2. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity and the status dropout rate, see Appendix C – *Commonly Used Measures*. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1995-2010.

Figure 33-2. Status dropout rates of 16- through 24-year-olds in the noninstitutionalized group quarters and household population, by nativity and race/ethnicity: American Community Survey (ACS) 2010



‡ Reporting standards not met (too few cases).

¹ United States refers to the 50 states and the District of Columbia.

NOTE: This figure uses a different data source than figure 33-1; therefore, estimates are not directly comparable to the 2010 estimates in figure 33-1. 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. For more information on race/ethnicity and the status dropout rate, see Appendix C – *Commonly Used Measures*. For more information on the ACS, see Appendix B – *Guide to Sources*.

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2010.

Indicator 34

Immediate Transition to College

Over the 35-year period between 1975 and 2010, the rate of immediate college enrollment after high school ranged from a low of 49 percent in 1979 and 1980, to a high of 70 percent in 2009. This rate increased most recently from 2001 to 2009.

The *immediate college enrollment rate* is defined as the percentage of high school completers of a given year who enroll in 2- or 4-year colleges in the fall immediately after completing high school. During the period of 1975 through 2010, the immediate college enrollment rate ranged from a low of 49 percent to a high of 70 percent (see table A-34-1). Specifically, this rate increased from 1975 to 1997 (51 to 67 percent), declined from 1997 to 2001 (to 62 percent), then increased from 2001 to 2009 (to 70 percent). There was no measurable difference between the rate for 2009 and that for 2010 (68 percent).

In each year between 1975 and 2010, the immediate college enrollment rates of high school completers from low- and middle-income families were lower than those of high school completers from high-income families. Most recently, in 2010, the immediate college enrollment rate of high school completers from low-income families was 52 percent, 30 percentage points lower than the rate of high school completers from high-income families (82 percent). The immediate college enrollment rate of high school completers from middle-income families (67 percent) was 15 percentage points lower than the rate of their peers from high-income families.

Separate data on Asian high school completers have been collected since 2003. Between 2003 and 2010, immediate college enrollment rates increased for Asian high school completers from 80 to 88 percent (see table A-34-2). Despite some apparent increases, there were no measurable differences over this period in the rates for White, Black, or Hispanic high school completers. During the longer period of 1975 to 2010, immediate college enrollment rates increased for White (51 vs. 70 percent) and Black high school completers (43 vs. 66 percent). After accounting for possible sampling error, there was no measurable difference in Hispanic rates

over this period of time (approximately 60 percent in both years). In each year between 2003 and 2010, the immediate college enrollment rate of Asian high school completers was higher than the rates of White, Black, and Hispanic high school completers. The immediate college enrollment rate of White high school completers was also higher than the rate for Hispanic students in every year during this period and for Black students in every year from 2003 to 2009. In 2010, there was no measurable difference between the rates for Whites and for Blacks.

Overall, the immediate college enrollment rates of high school completers at both 2- and 4-year colleges increased between 1975 and 2010 (see table A-34-3). In 1975, about 18 percent of high school completers enrolled at a 2-year college immediately after high school, while 27 percent did so in 2010. Similarly, in 1975, some 33 percent of high school completers enrolled at a 4-year college immediately after high school, compared with 41 percent in 2010. In each year during this period, immediate college enrollment rates at 2-year colleges were lower than those at 4-year colleges.

Between 1975 and 2010, immediate college enrollment rates increased for both males and females: the rate for males increased from 53 to 63 percent and that for females, from 49 to 74 percent. Thus, the enrollment pattern has shifted over time to higher enrollment rates for females than males. The percentage of male high school completers who enrolled in a 2-year college immediately after high school (29 percent) was not measurably different from the percentage for their female peers (25 percent). In contrast, the percentage of high school completers who enrolled in a 4-year college immediately after high school was lower for males than females (34 vs. 49 percent).



Tables A-34-1, A-34-2, and A-34-3

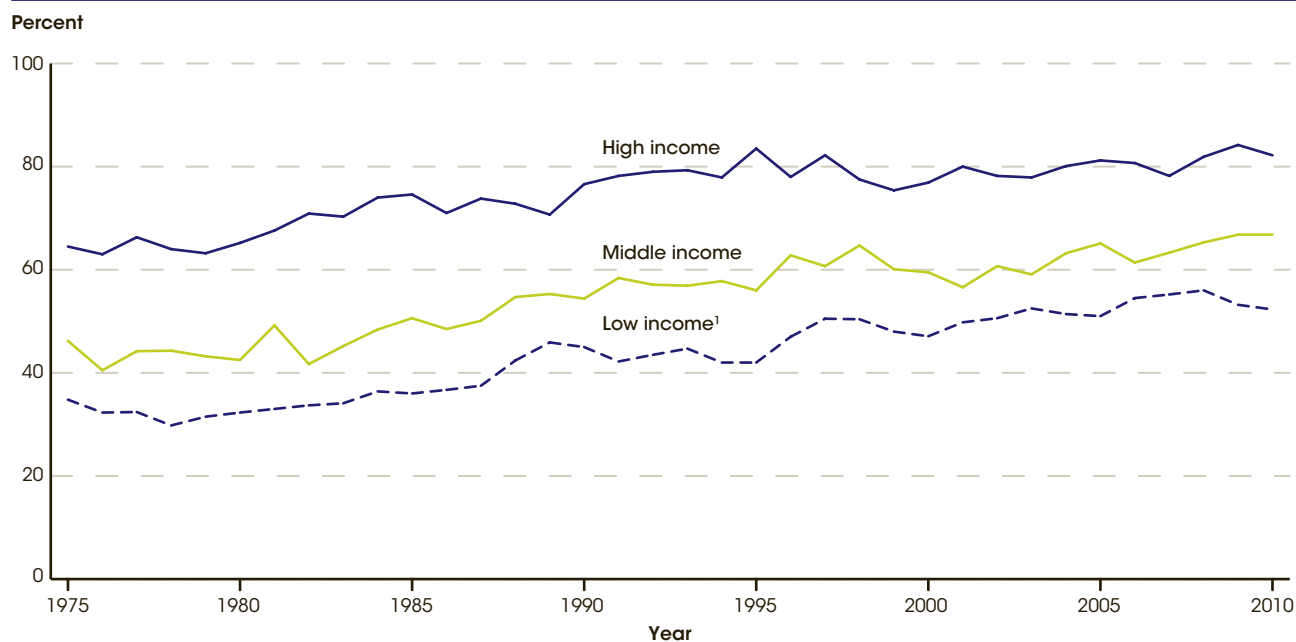
Glossary: *Family income, High school completer*

Technical Notes

This indicator provides data on high school completers ages 16–24, who account for about 98 percent of all high school completers in a given year. Enrollment rates were calculated using data from the Current Population Survey (CPS). Before 1992, *high school completer* referred to those who had completed 12 years of schooling. As of 1992, *high school completer* refers to those who have received a high school diploma or equivalency certificate. *Low income* refers to the bottom 20 percent of all family incomes, *high income* refers to the top 20 percent of

all family incomes, and *middle income* refers to the 60 percent in between. Race categories exclude persons of Hispanic ethnicity. Estimates for Black, Hispanic, Asian, and low-income categories are based on moving averages, which were calculated due to short-term data fluctuations in some years associated with small sample sizes for these groups. For more information on the CPS, see Appendix B – *Guide to Sources*. For more information on educational attainment, family income, and race/ethnicity, see Appendix C – *Commonly Used Measures*.

Figure 34-1. Percentage of high school completers who were enrolled in 2- or 4-year colleges the October immediately following high school completion, by family income: 1975–2010

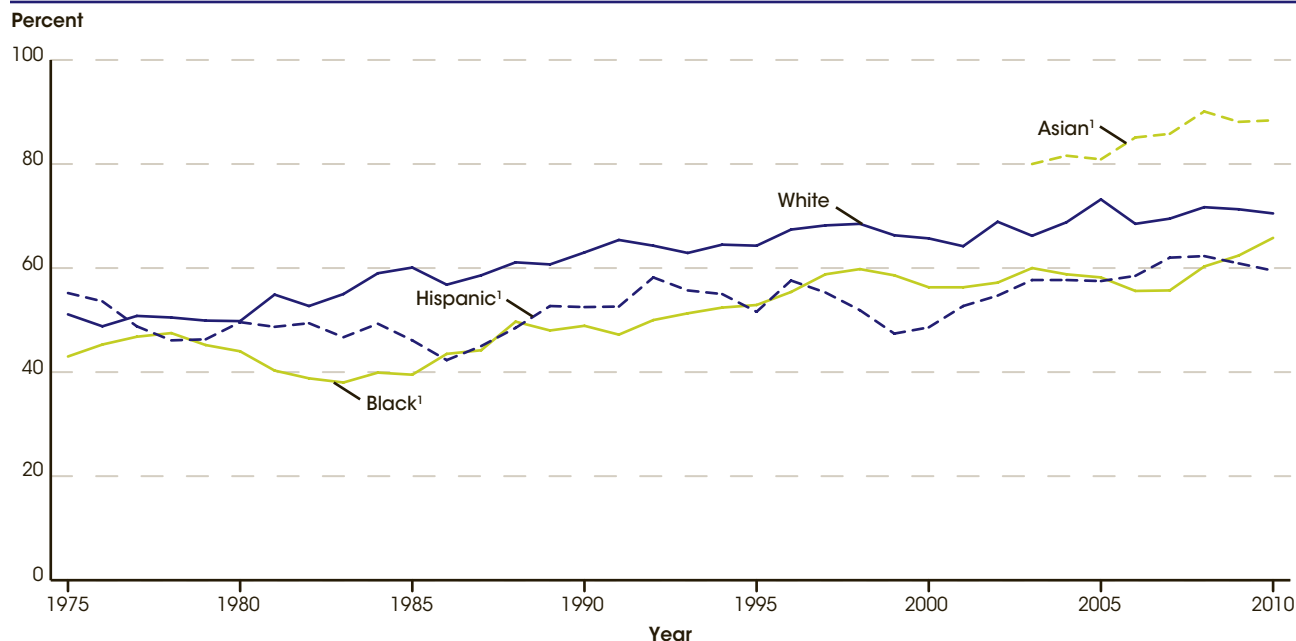


¹ Due to the small sample size for the low-income category, data are subject to relatively large sampling errors. Therefore, moving averages are used to produce more stable estimates. The 3-year moving average is an arithmetic average of the year indicated, the year immediately preceding, and the year immediately following. For 1975 and 2010, a 2-year moving average is used: data for 1975 reflect an average of 1975 and 1976, and data for 2010 reflect an average of 2009 and 2010.

NOTE: Includes high school completers ages 16–24, who account for about 98 percent of all high school completers in a given year. *Low income* refers to the bottom 20 percent of all family incomes, *high income* refers to the top 20 percent of all family incomes, and *middle income* refers to the 60 percent in between. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*. For more information on educational attainment and family income, see Appendix C – *Commonly Used Measures*.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1975–2010.

Figure 34-2. Percentage of high school completers who were enrolled in 2- or 4-year colleges the October immediately following high school completion, by race/ethnicity: 1975–2010



¹ Due to the small sample sizes for the Black, Hispanic, and Asian categories, data are subject to relatively large sampling errors. Therefore, moving averages are used to produce more stable estimates. The 3-year moving average is an arithmetic average of the year indicated, the year immediately preceding, and the year immediately following. For 1975 and 2010, a 2-year moving average is used: data for 1975 reflect an average of 1975 and 1976, and data for 2010 reflect an average of 2009 and 2010.

NOTE: Includes high school completers ages 16–24, who account for about 98 percent of all high school completers in a given year. Race categories exclude persons of Hispanic ethnicity. From 2003 onward, data for Asians and Pacific Islanders were collected separately. Separate data for the Asian category are not available prior to 2003. For more information on the Current Population Survey (CPS), see Appendix B – *Guide to Sources*. For more information on educational attainment and race/ethnicity, see Appendix C – *Commonly Used Measures*.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1975–2010.

Postsecondary Graduation Expectations

In 1990, 2000, and 2010, higher percentages of female than male 12th-grade students had definite plans to graduate from a 4-year college. This gap in expectations by sex was larger in 2010 than in 1990 (13 vs. 5 percentage points).

The percentage of 12th-grade students who had definite plans to graduate from a 4-year college was higher in both 2010 (60 percent) and 2000 (56 percent) than in 1990 (48 percent), but there was no measurable difference between the 2000 and 2010 percentages (see table A-35-1).

In 2010, the percentage of 12th-grade males with plans to graduate from a 4-year college was higher than the percentage in 1990 (53 vs. 46 percent), but was not measurably different from the percentage in 2000 (52 percent). For female 12th-graders, the percentage with plans to graduate from college was higher in 2010 than the respective percentages in both 1990 and 2000 (66 vs. 51 and 61 percent). In all three years, higher percentages of female than male 12th-graders planned to graduate from college. This gap in expectations regarding college completion by sex was larger in 2010 than in 1990 (13 vs. 5 percentage points).

The percentage of White 12th-graders who had definite plans to graduate from a 4-year college was higher in 2010 than in 1990 (61 vs. 50 percent), but not measurably different from the percentage in 2000 (57 percent). Similarly, for Black 12th-graders, the percentage who planned to graduate from college was higher in 2010 than in 1990 (59 vs. 38 percent), but not measurably different from the percentage in 2000 (57 percent). The percentage of Hispanic 12th-graders who planned to graduate from college was also higher in 2010 than in 1990 (50 vs. 38 percent), but not measurably different from the percentage in 2000 (43 percent). In 1990, a higher percentage of White than Black and Hispanic 12th-graders had definite plans to graduate from college. In both 2000 and 2010, there was no measurable difference in the percentage of White and Black 12th-graders who planned to complete college. However, the percentages of both White 12th-graders and Black 12th-graders with definite plans to

graduate from college were higher in those years than the percentage of Hispanic 12th-graders with definite plans to graduate from college. Despite some apparent differences, the sizes of the gaps in expectations regarding college completion between Hispanics and Whites and between Hispanics and Blacks were not measurably different between 1990 and 2010.

The percentages of 12th-grade students who planned to graduate from a 4-year college were higher in 2010 than in 1990 at each level of parents' educational attainment (46 vs. 32 percent for those whose parents attained high school completion or less, 57 vs. 47 percent for those whose parents attained some college, 66 vs. 58 percent for those whose parents attained a bachelor's, and 78 vs. 72 percent for those whose parents attained a graduate or professional degree). In each year shown, higher percentages of 12th-graders whose parents had more education planned to graduate from college when compared with their peers whose parents had less education. For example, in 2010, some 78 percent of 12th-graders whose parents had a graduate or professional degree planned to graduate from college, compared with 46 percent of 12th-graders whose parents had completed a high school education or less. Also in this year, a higher percentage of 12th-graders whose parents had a bachelor's degree (66 percent) planned to graduate from college than their peers whose parents had completed high school or less. However, the gaps in expectations among these groups of 12th-graders were smaller in 2010 than in 1990 (32 vs. 40 percentage points and 20 vs. 26 percentage points, respectively).



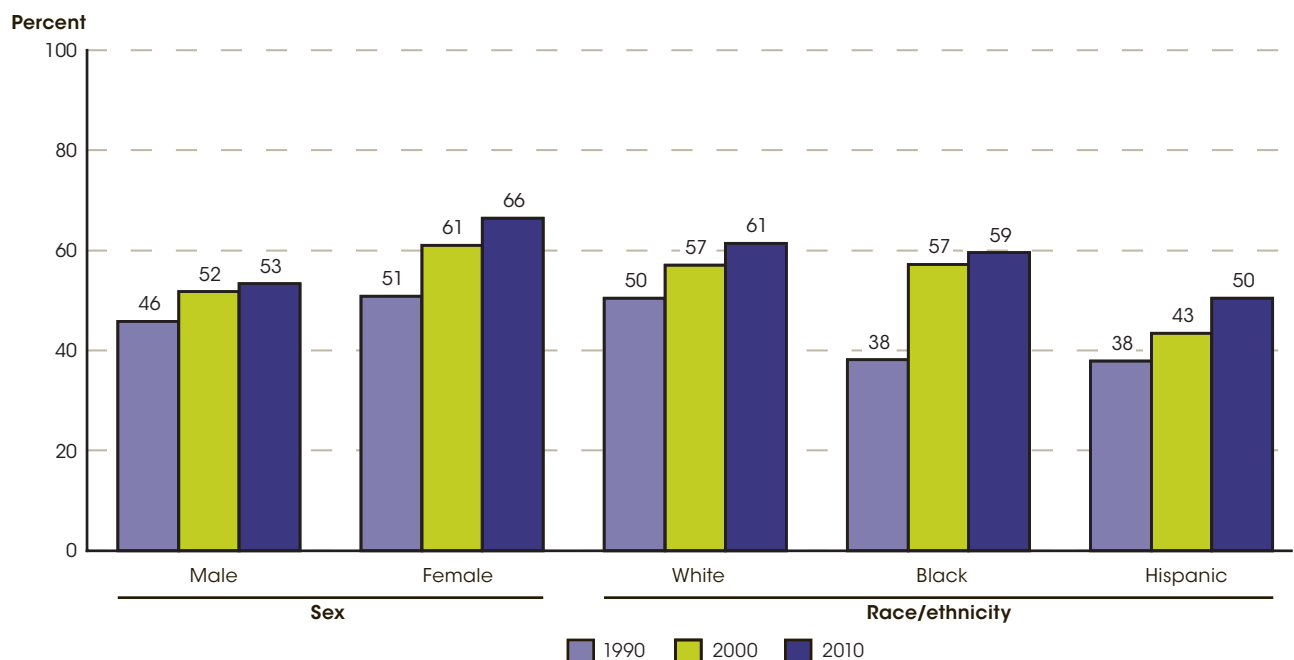
Table A-35-1

Technical Notes

Percentages reflect 12th-grade students who indicated that they “definitely will” graduate from college, which refers here to a 4-year degree program. Parents' highest level of education reflects an average of mother's education and father's education based on the respondent's answers about the highest level of education achieved by each parent using the following scale: (1) completed grade school or

less, (2) some high school, (3) completed high school, (4) some college, (5) completed college, (6) graduate or professional school after college. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, please see Appendix C – *Commonly Used Measures*. For more information on the Monitoring the Future study, please see Appendix B – *Guide to Sources*.

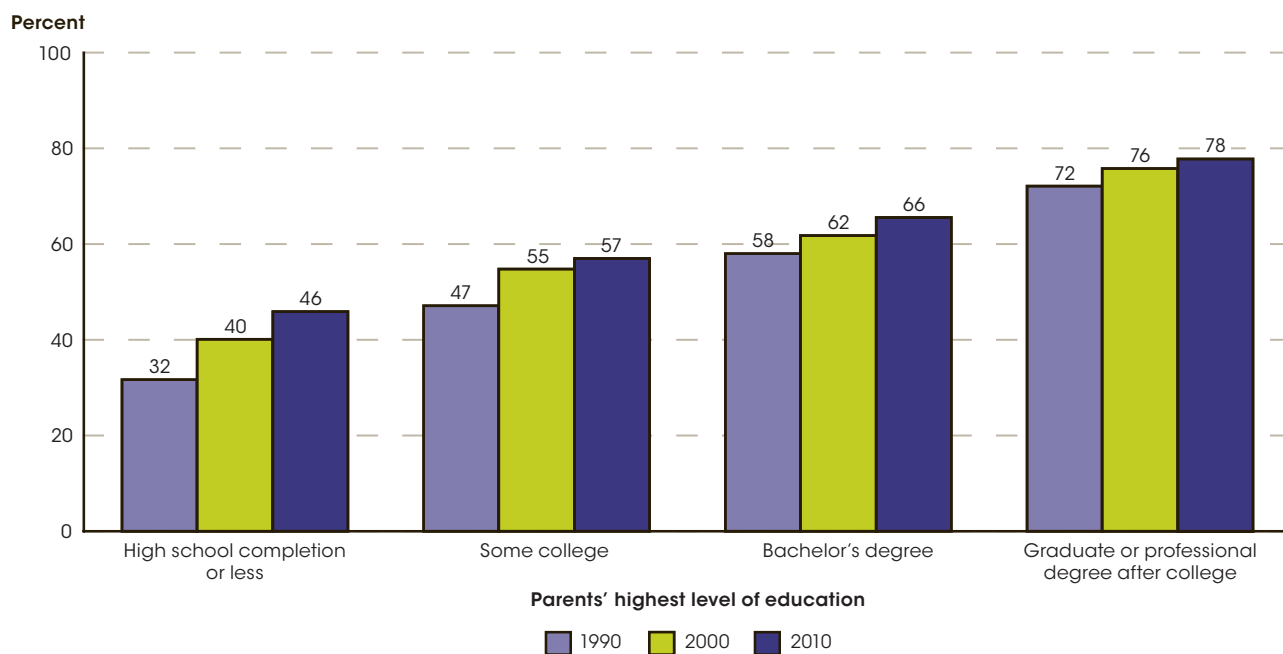
Figure 35-1. Percentage of 12th-grade students with definite plans to graduate from a 4-year college, by sex and race/ethnicity: 1990, 2000, and 2010



NOTE: Percentages reflect students who indicated that they "definitely will" graduate from a 4-year college. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, please see Appendix C – *Commonly Used Measures*. For more information on the Monitoring the Future study, please see Appendix B – *Guide to Sources*.

SOURCE: University of Michigan, Institute for Social Research, Monitoring the Future, 1990, 2000, and 2010, <http://www.monitoringthefuture.org/>.

Figure 35-2. Percentage of 12th-grade students with definite plans to graduate from a 4-year college, by parents' highest level of education: 1990, 2000, and 2010



NOTE: Percentages reflect students who indicated that they "definitely will" graduate from a 4-year college. Parents' highest level of education reflects an average of mother's education and father's education based on the respondent's answers about the highest level of education achieved by each parent. For more information on parents' education, please see Appendix C – *Commonly Used Measures*. For more information on the Monitoring the Future study, please see Appendix B – *Guide to Sources*.

SOURCE: University of Michigan, Institute for Social Research, Monitoring the Future, 1990, 2000, and 2010, <http://www.monitoringthefuture.org/>.