

# Section 4 Contexts of Elementary and Secondary Education



# **Section 4**Contexts of Elementary and Secondary Education

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#### Introduction -

The indicators in this section of *The Condition of* Education measure aspects of the context of learning in elementary and secondary schools. Such aspects include the content of learning and expectations for student performance, the climate for learning and other organizational aspects of schools, characteristics of teachers, processes of instruction, mechanisms of choice in education, and financial resources. There are 37 indicators in this section: 13, prepared for this year's volume, appear on the following pages, and all 37, including indicators from previous years, appear on the Web (see the List of Indicators on The Condition of Education website in the Contents section for a full list of the indicators).

The first subsection considers the climate for learning, which is shaped by different factors in the school environment, including measures of student and parent attitudes; the concentration of poverty and of racial and ethnic groups in public schools; the pervasiveness of violence in public schools; and student discipline, reflected by the percentages of student suspensions and expulsions. Indicators in this volume present measures of these last three factors, while the Web displays indicators for the full subsection.

The indicators in the second subsection look at teachers and school staff. Indicators on the Web examine the characteristics of principals, teachers, student support staff, and guidance counselors, while an indicator in this volume examines international comparisons on the extent and nature of teacher training in certain subject areas.

The third subsection focuses on learning opportunities that are afforded to children. Indicators in this volume measure parent and family involvement in education and student/teacher ratios in public schools. Additional indicators on the Web highlight participation in early literacy activities, the availability of advanced-level academic courses, and afterschool activities.

Subsection four looks at special programs that serve the particular educational needs of special populations. Indicators appearing on the Web examine the characteristics of public alternative schools for at-risk students and the extent to which students with disabilities are included in regular classrooms for instructional purposes.

School choice provides parents with the opportunity to choose a school for their children other than the assigned public school; indicators on this topic are found in the fifth subsection. Parents may choose a private school, they may live in a district that offers choice among public schools, or they may move into a particular community in order to enroll their child in their school of choice. Indicators in the school choice subsection on the Web examine parental choice of charter schools and outline characteristics of public charter schools. One indicator in this volume examines parental choice of school as an alternative to their child's assigned public school.

The final subsection details financial support for education. Fundamentally, these financial sources of support are either private, in which individuals decide how much they are willing to pay for education, or public, in which case funding decisions are made by citizens through their governments. In this subsection of The Condition of Education, the primary focus is on describing the forms and amounts of financial support to education from public and private sources, how those funds are distributed among different types of schools, and the items on which they are spent. Among the indicators in this volume of The Condition of Education are indicators on variations in expenditures per student, trends in expenditures per student in elementary and secondary education, and international comparisons of education expenditures.

The indicators on contexts of elementary and secondary schooling from previous editions of The Condition of Education, which are not included in this volume, are available at <a href="http://nces.ed.gov/programs/coe">http://nces.ed.gov/programs/coe</a>.

# **Poverty Concentration in Public Schools**

Greater percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty schools than did White or Asian/Pacific Islander students in 2006-07.

The percentage of students eligible for the free or reducedprice lunch program provides a proxy measure for the concentration of low-income students within a school. In this indicator, high-poverty schools are defined as public schools where more than 75 percent of the students are eligible for free or reduced-price lunch. In 2006-07, approximately 16 percent of all elementary and secondary public school students (or 7.7 million students) attended high-poverty schools (see table A-25-1).

In 2006–07, greater percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty schools than did White or Asian/Pacific Islander students, and greater percentages of Asian/ Pacific Islander students attended these schools than did White students. Some 33 percent of Black, 35 percent of Hispanic, and 25 percent of American Indian/Alaska Native students were enrolled in high-poverty schools, compared with 4 percent of White and 13 percent of Asian/Pacific Islander students. In contrast, greater percentages of White (19 percent) and Asian/Pacific Islander (22 percent) students attended low-poverty schools (public schools with 10 percent or less of students eligible for free or reduced-price lunch) than did Black (4 percent), Hispanic (6 percent), and American Indian/ Alaska Native (6 percent) students.

The pattern seen nationally of higher percentages of Black, Hispanic, and American Indian/Alaska Native students attending high-poverty schools was also found in each of the locality types (cities, suburbs, towns, and rural areas). For example, in 2006-07, among students attending city schools, 46 percent of Blacks, 47 percent of Hispanics, and 27 percent of American Indians/Alaska Natives attended high-poverty schools, compared with 10 percent of Whites and 22 percent of Asians/Pacific Islanders. In rural areas, greater percentages of Black (24 percent), Hispanic (18 percent), and American Indian/ Alaska Native (33 percent) students attended high-poverty schools than did their White and Asian/Pacific Islander (3 percent each) peers.

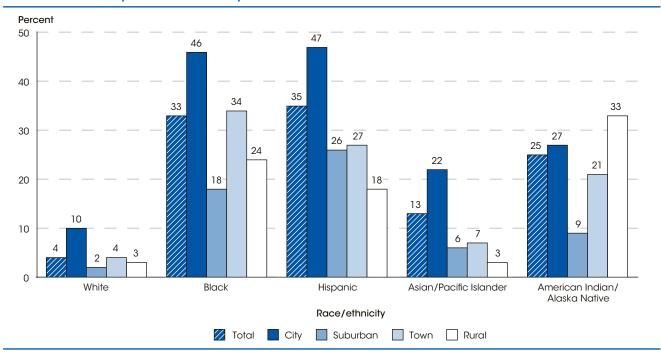


For more information: Table A-25-1; Indicator 26 Glossary: National School Lunch Program, Public school

#### **Technical Notes**

Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, locale, and poverty, see *supplemental note 1*. For more information on the Common Core of Data (CCD), see supplemental note 3.

Private school students are excluded from the analysis because large proportions of private schools do not participate in the free or reduced-price lunch program.



Percentage of public elementary and secondary school students in high-poverty schools, by race/ Figure 25-1. ethnicity and locale: School year 2006-07

NOTE: High-poverty schools are defined as public schools where more than 75 percent of the students are eligible for free or reduced-price lunch. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, locale, and poverty, see supplemental note 1. For more information on the Common Core of Data (CCD), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2006-07.

# Racial/Ethnic Concentration in Public Schools

In 2006-07, approximately 24 percent of all public school students attended schools where the combined enrollment of Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students was at least 75 percent, compared with 16 percent of public school students in 1990-91.

In 2006–07, approximately 24 percent of all public elementary and secondary students attended public schools in which the combined enrollment of Black, Hispanic, Asian/Pacific Islander, and American Indian/ Alaska Native students was at least 75 percent (see table A-26-1). In comparison, over half of all Hispanic (57 percent) and Black (52 percent) students attended such schools—greater percentages than those of Asian/Pacific Islander (33 percent), American Indian/Alaska Native (29 percent), or White (3 percent) students attending such schools.

The percentage of students in schools where the combined enrollment of Blacks, Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives was at least 75 percent varied across school locales in 2006-07, with a greater percentage of public school students in cities (48 percent) attending these schools than their peers in suburban areas (20 percent), towns (11 percent), or rural areas (7 percent). In cities, greater percentages of Hispanic and Black students attended such schools than did Asian/ Pacific Islander, American Indian/Alaska Native, and White students. In suburban areas and towns, however, a greater percentage of Hispanic students attended these schools than did students of any other racial/ethnic background. In rural areas, a greater percentage of American Indian/Alaska Native students attended these schools than did students in any other racial/ethnic group.

Examining the composition of schools by specific racial/ ethnic group provides a more detailed snapshot of the extent to which students are concentrated in schools with large percentages of students who are in a certain racial/ethnic group. Nationally, public schools in which 75 percent or more of the students were Black enrolled 31 percent of all Black public school students and 1 percent or less of public school students from each of the other racial/ethnic groups in 2006-07 (see table A-26-2). Similarly, public schools in which 75 percent or more of the students were Hispanic enrolled 33 percent of all Hispanic public school students, 3 percent of all Asian/Pacific Islander public school students, and 2 percent or less of all public school students from each of the other racial/ethnic groups. Public schools in which 75 percent or more of the students were White enrolled 62 percent of all White students, 23 percent of all American Indian/Alaska Native students, 18 percent of all Asian/Pacific Islander students, 8 percent of all Black students, and 7 percent of all Hispanic public school students.

The extent to which students in particular racial/ethnic groups are concentrated in public schools has changed over time. In 1990-91, public schools where Black, Hispanic, Asian/Pacific Islander, or American Indian/ Alaska Native students comprised at least 75 percent of the student population enrolled 16 percent of all public school students, compared with 24 percent in 2006-07 (see table A-26-3). Three percent of White students attended such schools in 2006-07, an increase of approximately 1 percentage point from 1990-91. Enrollment for Black students in such schools, however, increased by 7 percentage points over the same time period. Increases in enrollments in these schools over this period were also seen for Hispanic students (6 percentage points), Asian/Pacific Islander students (3 percentage points), and American Indian/Alaska Native students (1 percentage point).

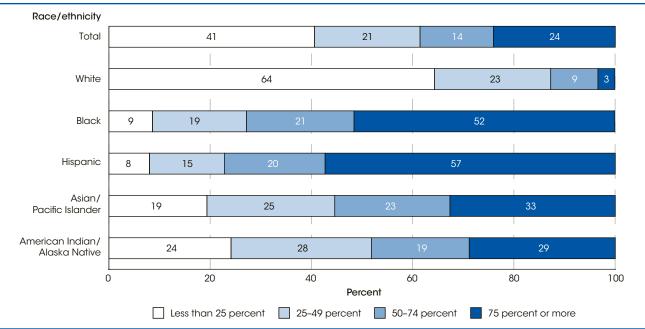


For more information: Tables A-26-1 through A-26-3; Indicators 25 and 38 Glossary: Public school

#### **Technical Notes**

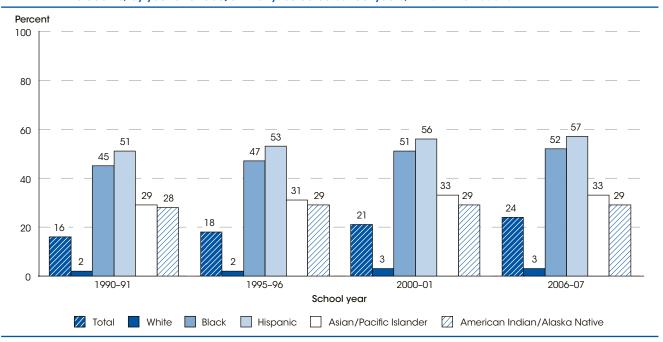
Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity and locale, see supplemental note 1.

Figure 26-1. Percentage distribution of public elementary and secondary school students of each racial/ethnic group, by percent combined enrollment of Black, Hispanic, Asian/Pacific Islander, and American Indian/ Alaska Native students in school: School year 2006-07



NOTE: Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1. For more information on the Common Core of Data (CCD), see supplemental note 3. 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," 2006-07.

Figure 26-2. Percentage of public elementary and secondary school students in schools with at least 75 percent combined enrollment of Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students, by year and race/ethnicity: Selected school years, 1990-91 to 2006-07



NOTE: Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1. For more information on the Common Core of Data (CCD), see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1990-91, 1995-96, 2000-01, and 2006-07.

## School Crime and Safety-

In 2005-06, some 17 percent of public schools experienced at least one serious violent incident. About 3 percent of public schools experienced 10 or more of such incidents.

In the School Survey on Crime and Safety (SSOCS), public school principals were asked to provide the number of incidents of specific crimes that occurred at their schools, as well as the number of incidents of these crimes reported to the police. Each incident of crime was then categorized as a serious violent incident, a violent incident (which includes serious violent incidents), a theft incident, or an "other" incident (see technical notes for detailed definitions). During the 2005-06 school year, 86 percent of public schools indicated that one or more incidents of these crimes had taken place, a lower percentage than that for the 2003-04 school year (88 percent) (see table A-27-1). However, the percentage of schools experiencing crimes in 2005-06 was not measurably different from the percentage in 1999-2000. Reports of crimes to the police followed a similar pattern. In 2005-06, about 61 percent of schools reported an incident of one of the specified crimes to the police, compared with 65 percent in 2003-04 and 62 percent in 1999-2000.

In terms of specific types of crime, in 2005–06, some 78 percent of schools experienced one or more violent incidents of crime, including 17 percent of schools that experienced one or more serious violent incidents. In addition, some 46 percent of schools experienced one or more thefts, and 68 percent experienced one or more other incidents. Thirty-eight percent of public schools reported at least one violent incident to the police, 13 percent reported at least one serious violent incident to the police, 28 percent reported at least one theft to the police, and 51 percent reported one or more of the other incidents to the police.

Some schools had significantly more incidents of violent and serious violent crimes than other schools in 2005-06. For example, 46 percent of schools experienced 20 or more violent incidents, compared with 8 percent that experienced 6-9 of such incidents and 22 percent that experienced no incidents (see table A-27-2). Although 83 percent of schools did not experience any incidents of serious violent crime, 2 percent experienced 1 serious violent incident, 4 percent experienced 2 such incidents, 6 percent experienced 3-5 incidents, 2 percent experienced 6-9 incidents, and 3 percent experienced 10 or more such incidents.

The percentage of schools that experienced violent crime varied by school characteristics. A larger percentage of city schools (53 percent) experienced 20 or more violent incidents than did urban fringe schools (42 percent) and rural schools (43 percent) in 2005-06. There was no measurable difference in the percentages of city and town schools that experienced 20 or more violent incidents. Looking at free or reduced-price lunch eligibility, as the percentage of students eligible increased, so did the percentage of schools that experienced 20 or more violent incidents. In 2005–06, a higher percentage of high poverty schools (55 percent) had 20 or more violent incidents than mid-poverty schools (45 percent) and low poverty schools (29 percent).



For more information: Tables A-27-1 and A-27-2; Indicator 28

Glossary: National School Lunch Program

#### **Technical Notes**

"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. "Theft/ larceny" (taking things worth over \$10 without personal confrontation) was defined for respondents as "the unlawful taking of another person's property without personal confrontation, threat, violence, or bodily harm. Included are 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,

distribution, possession, or use of illegal drugs or alcohol, and vandalism. High poverty schools are defined here as schools where more than 50 percent of the students were eligible for free or reduced-price lunch, *mid-poverty* schools are defined as schools where 21 to 50 percent of the students were eligible, and *low poverty* schools are defined as schools where 20 percent or less of the students were eligible. "At school" was defined for respondents 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 school hours or when school activities or events were in session. For more information on the School Survey on Crime and Safety (SSOCS), see supplemental note 3, and for more information on locale and poverty, see supplemental note 1.

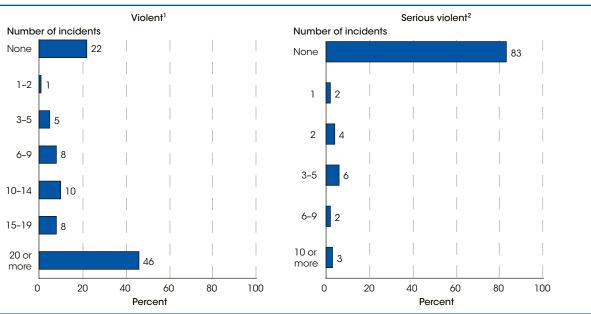
Percent 100 88 Experienced at least one incident 86 80 65 62 Reported at least one incident 60 40 20 Experienced at least one serious violent incident 18 20 Reported at least one serious violent incident 15 13 13 1999-2000 2003-04 2005-06

**Figure 27-1.** Percentage of public schools experiencing and reporting at least one incident of crime that occurred at school to the police, by selected incidents: School years 1999-2000, 2003-04, and 2005-06

NOTE: Responses were provided by the principal or the person most knowledgeable about crime and safety issues at the school. "At school" was defined to include activities 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 supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999-2000, 2003-04, and 2005-06 School Survey on Crime and Safety (SSOCS), 2000, 2004, and 2006.

School year

Figure 27-2. Percentage of public schools experiencing violent and serious violent incidents of crime that occurred at school, by number of incidents: School year 2005-06



<sup>1</sup> Violent incidents include rape or attempted rape, sexual battery other than rape, physical attack or fight with or without a weapon, threat of physical attack with or without a weapon, and robbery with or without a weapon. Serious violent incidents are also included in violent incidents. 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: Responses were provided by the principal or the person most knowledgeable about crime and safety issues at the school. "At school" was defined to include activities 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 the School Survey on Crime and Safety (SSOCS), see supplemental note 3.

SOURCÉ: U.S. Department of Education, National Center for Education Statistics, 2005-06 School Survey on Crime and Safety (SSOCS), 2006.

<sup>1</sup> 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.

# **Student Suspensions and Expulsions**

In 2006, larger percentages of Black students were suspended and expelled from school than their White, Asian/Pacific Islander, Hispanic, and American Indian/ Alaskan Native peers.

In 2006, about 1 out of every 14 students (or 7 percent) was suspended from school at least once during the year (see table A-28-1). Suspensions were for disciplinary reasons and do not include in-school detentions. Although the number of students who were suspended increased from 2002 and 2006, from 3.1 to 3.3 million, the percentage of these students remained around 7 percent during this period. During 2006, about 1 out of every 476 students (or 0.2 percent) was expelled from school. Expulsions exclude students from school for disciplinary reasons and remove students from the attendance rolls. The number of students expelled from school in 2006 (102,100) was greater than the number expelled in 2002 (89,100), but it was not measurably different from the number in 2004 (106,200).

For each year presented, student suspension and expulsion rates were higher for males than for females. In 2006, the percentage of males suspended from school was 9 percent, compared with 4 percent for females, and the number of males who were suspended (2.3 million) was more than twice the number of females who were suspended (1.1 million). For both males and females, the number of students who were suspended increased from 2002 to 2006. In 2006, about 0.3 percent of all males

were expelled from school, compared with 0.1 percent of females. The number of males expelled was about three times larger than the number of females (76,400 vs. 25,700).

Student suspension and expulsion rates varied by race/ ethnicity. Across all years presented, greater percentages of Black students were suspended and expelled from school than their White, Hispanic, Asian/Pacific Islander, and American Indian/Alaskan Native peers. For example, in 2006, about 15 percent of Black students were suspended, compared with 8 percent of American Indian/Alaska Native students, 7 percent of Hispanic students, 5 percent of White students, and 3 percent of Asian/Pacific Islander students. Student expulsion rates in 2006 show that about 0.5 percent of Blacks were expelled from school, compared with 0.3 percent of American Indian/Alaska Native students, 0.2 percent of Hispanic students, 0.1 percent of White students, and 0.1 percent of Asian/Pacific Islander students.



For more information: Table A-28-1; Indicator 27

#### **Technical Notes**

Suspension refers to an out-of-school suspension, during which a student is excluded from school for disciplinary reasons for 1 school day or longer; it does not include students who served their suspension in the school. Expulsion is defined as the exclusion of a student from school for disciplinary reasons that results in the student's removal from school attendance rolls or that meets the

criteria for expulsion as defined by the appropriate state or local school authority. Students are counted only once regardless of the number of times they were suspended or expelled, but they may appear in both categories. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1.

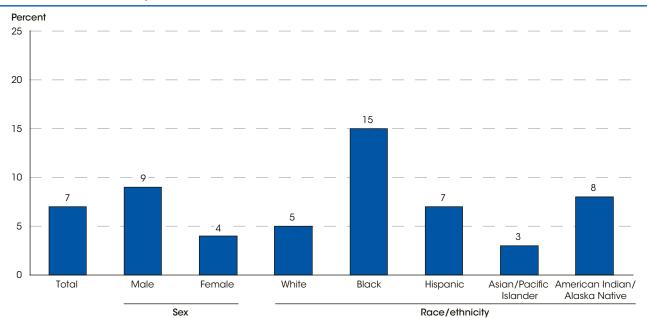


Figure 28-1. Percentage of students who were suspended from public elementary and secondary schools, by sex and race/ethnicity: 2006

NOTE: Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1. Suspension refers to out-of-school suspension, during which a student is excluded from school for disciplinary reasons for 1 school day or longer, it does not include students who served their suspension in the school. Students are counted only once regardless of the number of times they were suspended. SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2006.

# **International Teacher Comparisons**

In 2007, about 80 percent of U.S. eighth-graders had mathematics and science teachers who reported participating in professional development in their subject content area over the previous 2 years.

The 2007 Trends in International Mathematics and Science Study (TIMSS 2007) asked mathematics and science teachers of fourth- and eighth-graders to report on their participation in several areas of professional development in the 2 years before the assessment. This indicator discusses the results in terms of recent professional development in four areas: content, pedagogy/instruction, improving students' criticalthinking or problem-solving skills, and assessment. The countries described are those G-8 countries that participated in TIMSS 2007: England, Germany, Italy, Japan, the Russian Federation, Scotland, and the United States.

In 2007, the percentage of U.S. fourth-graders whose mathematics teachers reported participating in professional development in mathematical content in the previous 2 years was 60 percent; in other countries, this percentage ranged from 22 percent in Italy to 66 percent in the Russian Federation (see table A-29-1). The percentage of U.S. eighth-graders with such mathematics teachers was 81 percent, while the percentages in other countries ranged from 16 percent in Italy to 84 percent in the Russian Federation. The percentage of fourth-graders whose mathematics teachers reported participating in professional development in pedagogy/instruction ranged from 25 percent in Italy to 70 percent in England, with the United States at 50 percent. At eighth grade, the percentage of students ranged from 34 percent in Italy to 93 percent in Scotland, with the United States at 76 percent. The percentage of fourth-graders whose mathematics teachers reported participating in professional development in improving students' critical-thinking or problem-solving skills ranged from 22 percent in Italy to 59 percent in England, with the United States at 51 percent. At eighth grade, the percentage of students ranged from 9 percent in Italy to 65 percent in the United States. The percentage of fourth-graders whose mathematics teachers reported

participating in professional development in assessment ranged from 14 percent in Italy to 55 percent in the Russian Federation, with the United States at 47 percent. At eighth grade, the percentage of students ranged from 17 percent in Italy to 71 percent in Scotland, with the United States at 69 percent.

In 2007, the percentage of U.S. fourth-graders whose science teachers reported participating in professional development in science content was 42 percent; in other countries, this percentage ranged from 16 percent in Italy to 58 percent in the Russian Federation (see table A-29-2). At eighth grade, the percentage of U.S. eighth-graders with such science teachers was 82 percent, while at the other end of the range, the percentage in Italy was 24 percent. The percentage of fourth-graders whose science teachers reported participating in professional development in pedagogy/instruction ranged from 10 percent in Italy to 62 percent in the Russian Federation, with the United States at 29 percent. At eighth grade, the percentage of students ranged from 28 percent in Italy to 84 percent in Scotland, with the United States at 64 percent. The percentage of fourthgraders whose science teachers reported participating in professional development in improving students' criticalthinking or problem-solving skills ranged from 11 percent in Japan to 47 percent in Scotland, with the United States at 36 percent. At eighth grade, the percentage of students ranged from 10 percent in Italy to 73 percent in the United States. The percentage of fourth-graders whose science teachers reported participating in professional development in assessment ranged from 6 percent in Italy to 52 percent in the Russian Federation, with the United States at 24 percent. At eighth grade, the percentage of students ranged from 15 percent in Italy to 65 percent in England, with the United States at 61 percent.



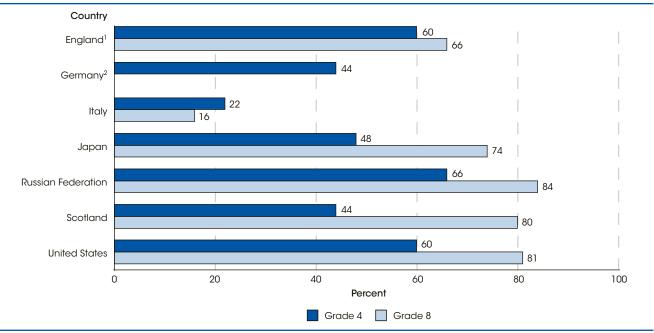
For more information: Tables A-29-1 and A-29-2; Indicators 15 and 16

#### **Technical Notes**

This indicator reports on the Group of Eight (G-8) countries—Canada, France, Germany, Italy, Japan, the Russian Federation, the United Kingdom (estimates are reported separately for England and Scotland), and the United States—that are among the world's most economically developed countries and among the largest economic partners of the United States. Data for this indicator are from the 2007 Trends in International Mathematics and Science Study (TIMSS 2007) Teacher Questionnaire. For this indicator, estimates for Canada and France are not available. It should be noted that the

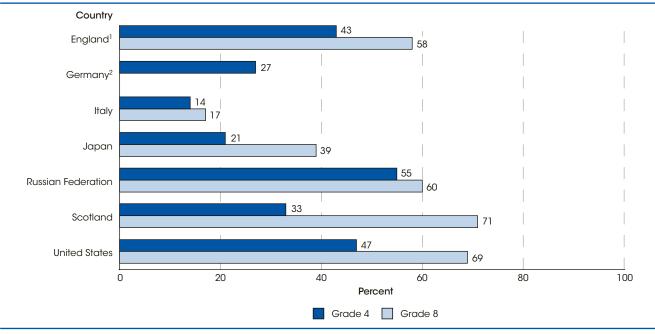
TIMSS 2007 teachers do not constitute representative samples of teachers. Rather, they are the teachers for nationally representative samples of fourth-grade and eighth-grade students. Thus, the teacher data presented in this indicator were analyzed at the student level. Although the teachers discussed here are identified as mathematics and science teachers, they may have been classroom teachers responsible for these subjects, particularly at the fourth-grade level. For more information on TIMSS, see supplemental note 5.

Figure 29-1. Percentage of fourth-grade and eighth-grade students whose mathematics teachers reported that they participated in mathematics content professional development activities in the 2 years prior to assessment, by country: 2007



<sup>&</sup>lt;sup>1</sup> Eighth grade data for England met international guidelines for participation rates in 2007 only after substitute schools were included. <sup>2</sup> Data for Germany are only available at the fourth grade because Germany did not participate in TIMSS 2007 at the eighth grade. NOTE: For more information on the Trends in International Mathematics and Science Study (TIMSS), see supplemental note 5. SOURCE: Mullis, I.V.S., Martin, M.O., and Foy, P. (2008). TIMSS 2007 International Mathematics Report: Findings From IEA's Trends in International Mathematics and Science Study at the Fourth and Eighth Grades, exhibit 6.4. Chestnut Hill, MA: Boston College.

Figure 29-2. Percentage of fourth-grade and eighth-grade students whose mathematics teachers reported that they participated in mathematics assessment professional development activities in the 2 years prior to assessment, by country: 2007



<sup>&</sup>lt;sup>1</sup> Eighth grade data for England met international guidelines for participation rates in 2007 only after substitute schools were included. <sup>2</sup> Data for Germany are only available at the fourth grade because Germany did not participate in TIMSS 2007 at the eighth grade. NOTE: For more information on the Trends in International Mathematics and Science Study (TIMSS), see *supplemental note 5*. SOURCE: Mullis, I.V.S., Martin, M.O., and Foy, P. (2008). TIMSS 2007 International Mathematics Report: Findings From IEA's Trends in International Mathematics and Science Study at the Fourth and Eighth Grades, exhibit 6.4. Chestnut Hill, MA: Boston College.

# Parent and Family Involvement in Education

In 2007, some 89 percent of students had parents who reported attending a general school or PTO/PTA meeting. Other activities included attending parentteacher conferences (78 percent), participating in school fundraising (65 percent), and volunteering/serving on a school committee (46 percent).

Parents and other family members can participate in a child's education in different ways, including participation in school-related activities, such as attending a general school meeting or volunteering on a school committee, or helping their child with homework. In 2007, some 89 percent of students in kindergarten (K) through 12th-grade had parents who reported attending a general school or PTO/PTA meeting. Other activities included attending regularly scheduled parent-teacher conferences (78 percent), attending a school or class event (74 percent), participating in school fundraising (65 percent), and volunteering/serving on a school committee (46 percent) (see table A-30-1).

Overall, parental participation in school-related activities was greater for K through 8th-grade students than for 9th- through 12th-grade students. For instance, 92 percent of K through 8th-grade students had parents who reported attending a general school or PTO/PTA meeting, compared with 83 percent of 9th- through 12th-grade students. In addition, 52 percent of K through 8th-grade students had parents who reported volunteering or serving on a school committee, compared with 34 percent of 9th- through 12th-grade students.

Participation in some school-related activities varied by race/ethnicity at both levels. For instance, at the K through 8th-grade level, a greater percentage of White students (83 percent) had parents who reported attending a school or class event than Black (69 percent), Hispanic (68 percent), and Asian (75 percent) students. Similarly, a greater percentage of White students (61 percent) had parents who reported volunteering or serving on a school committee than Black (41 percent), Hispanic (37 percent), and Asian students (49 percent). In addition, a greater percentage of White students (77 percent) had parents who reported participating in school fundraising than Black (62 percent), Hispanic (54 percent), and Asian (62 percent) students.

At both levels, parental participation in school-related activities was higher for students from nonpoor families than poor families. At the K through 8th-grade level, for example, 58 percent of students in nonpoor families had parents who reported volunteering or serving on a school committee, compared with 32 percent of students in poor families. Similarly, at the 9th- through 12th-grade level, 73 percent of students in nonpoor families had parents who reported attending a school or class event, compared with 43 percent of students in poor families.

Parental help with homework is one indicator of a family's involvement in education. In 2007, approximately 94 percent of K through 12th-grade students reportedly did homework outside of school, and 85 percent had homework reportedly checked by an adult in the household (see table A-30-2). However, a greater percentage of K through 8th-grade students (95 percent) had their homework checked by an adult than 9ththrough 12th-grade students (65 percent).

Homework checking varied by race/ethnicity and poverty status according to parent reports. At the K through 8th-grade level, a greater percentage of Black students (98 percent) had homework checked by an adult than White (94 percent), Hispanic (96 percent), and Asian (88 percent) students. Similarly, at the 9th- through 12th-grade level, a greater percentage of Black students (83 percent) had homework checked by an adult than parents of White (57 percent) and Asian (59 percent) students. In addition, at the same level, a higher percentage of students in poor families (81 percent) had parents who reported checking homework than in nonpoor families (61 percent).



For more information: Tables A-30-1 and A-30-2; Indicators 6 and 32

#### **Technical Notes**

Homework checking by an adult in the household refers to checking for homework completion. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity and poverty status, see supplemental note 1. For more information on the National Household Education Surveys Program (NHES), see supplemental note 3.

Percent 100 94 84 84 82 80 74 61 58 60 49 40 32 20 0 Attended a general Attended Participated in Attended a school Volunteered or school fundraising school or parent-teacher or class event served on a PTO/PTA meeting conferences school committee School-related activities Poor Nonpoor

Figure 30-1. Percentage of students in kindergarten through grade 8 whose parents reported participation in schoolrelated activities, by poverty status: 2007

NOTE: For more information on poverty status, see supplemental note 1. For more information on the National Household Education Surveys Program (NHES), see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the

National Household Education Surveys Program (NHES), 2007.

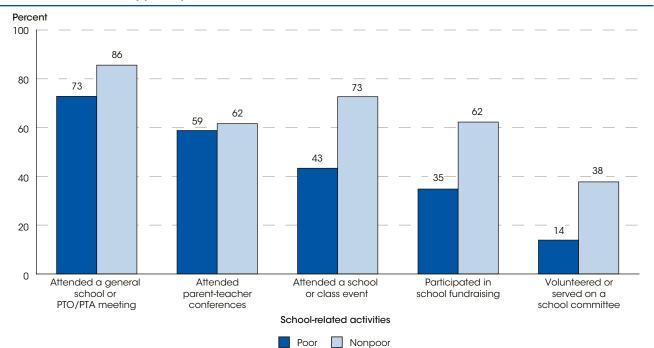


Figure 30-2. Percentage of students in grades 9 through 12 whose parents reported participation in school-related activities, by poverty status: 2007

NOTE: For more information on poverty status, see supplemental note 1. For more information on the National Household Education Surveys Program (NHES), see *supplemental note 3*.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the

National Household Education Surveys Program (NHES), 2007.

# Student/Teacher Ratios in Public Schools

The student/teacher ratio for regular public elementary schools declined from 1990 through 2006, while the student/teacher ratio for regular public secondary schools was of similar size in 1990 and 2006.

The ratio of students to teachers, which is sometimes used as a proxy measure for class size, declined between 1990 and 2006, from 17.6 to 15.9 students per teacher for all regular public schools (see table A-31-1). The student/ teacher ratio for regular public elementary schools also declined from 1990 through 2006 (from 18.2 to 15.6), with most of the decline occurring after 1996. In contrast, the student/teacher ratio for all regular public secondary schools increased between 1990 and 1996 (from 16.7 to 17.6) and then declined to 16.6 in 2006. In regular public combined schools (schools that include both elementary and secondary grades), the student/teacher ratio fluctuated between 14.4 and 16.1 between 1990 and 2006 but was of similar size in 2006 and 1990 (15.7 vs. 15.8) (not all data shown). While in 1990 the student/teacher ratio for elementary schools was higher than that of secondary schools and combined schools, in 2006, the student/ teacher ratio for elementary schools was lower than that of secondary schools and of similar size to that of combined schools.

In every year from 1990 through 2006, the student/ teacher ratio was positively associated with the enrollment size for elementary, secondary, and combined regular public schools: the student/teacher ratio for any given enrollment category was always higher than that of any smaller enrollment category. For example, in 2006, regular secondary schools with 1,500 students or more enrolled 6.5 more students per teacher, on average, than regular secondary schools with enrollments under 300 students.

Generally, the student/teacher ratio of public elementary schools in each enrollment category declined from 1990 through 2006, except in the largest schools

(1,500 students or more) where the student/teacher ratio fluctuated over this period with a low of 19.4 in 2006 and a high of 21.2 in 1996 (not all data shown). Student/ teacher ratios for regular public secondary schools in each enrollment category increased from 1990 through 1996 and then declined from 1996 through 2006. For regular public combined schools, student/teacher ratios for the smallest and largest enrollment categories were higher in 2006 than in 1990, and the student/teacher ratios for the middle three enrollment categories were lower in 2006 than in 1990.

The student/teacher ratios for public alternative, special needs, and vocational schools fluctuated from 1990 through 2006. For alternative schools and vocational schools, the student/teacher ratios were higher in 2006 than in 1990, while for special education schools the student/teacher ratio was lower in 2006 than in 1990.

In 2006, the student/teacher ratio for public schools with higher percentages of students approved for free or reduced-price lunch was generally smaller than the ratio of schools with lower percentages approved for this benefit (see table A-31-2). Also, the student/teacher ratios of schools in cities (16.3) and suburban areas (16.2) were generally larger than those of schools in towns (15.3) and rural areas (14.8). Within rural areas, the student/teacher ratio was largest in the fringe areas (15.8) and smallest in remote areas (12.6).



For more information: Tables A-31-1 and A-31-2 Glossary: National School Lunch Program; Public school

#### **Technical Notes**

Student/teacher ratios do not provide a direct measure of class size. The ratio is determined by dividing the total number of full-time-equivalent teachers into the total student enrollment. These teachers include classroom teachers; prekindergarten teachers in some elementary schools; art, music, and physical education teachers; and teachers who do not teach regular classes every period of the day. Teachers are reported in full-time-equivalent (FTE) units. This is the amount of time required to perform an assignment stated as a proportion of a fulltime position. It is computed by dividing the amount of time an individual is employed by the time normally required for a full-time position. This analysis excludes schools that did not report both enrollment and teacher data. Regular schools include all schools except special education schools, vocational schools, and alternative schools. Charter schools can be of any school type. For more information on the Common Core of Data (CCD), see supplemental note 3. For more information on free and reduced-price and locale codes, see supplemental note 1.

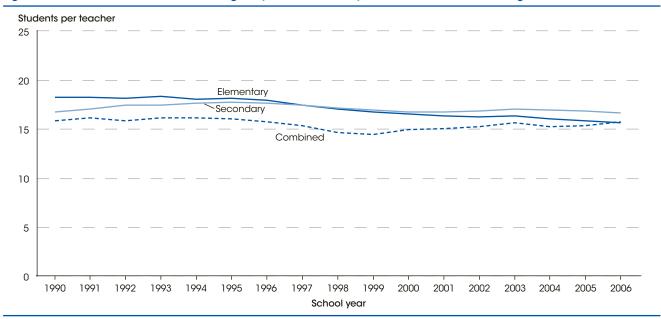
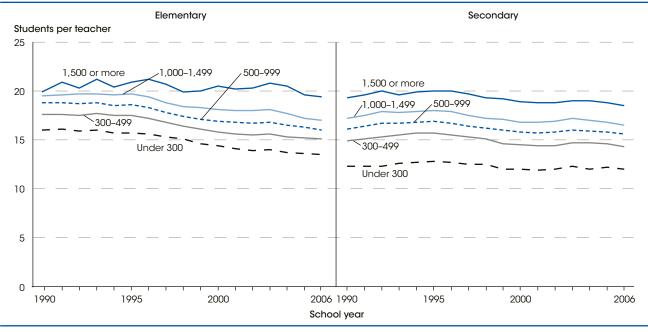


Figure 31-1. Student/teacher ratios in regular public schools, by school level: Fall 1990 through fall 2006

NOTE: The student/teacher ratio is determined by dividing the total number of full-time-equivalent teachers into the total fall enrollment. Regular schools include all schools except special education schools, vocational schools, and alternative schools. Combined schools include both elementary and secondary grades. This analysis excludes schools that did not report both enrollment and teacher data. For more information on the Common Core of Data (CCD), see *supplemental note 3*. 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 2006-07.

Figure 31-2. Student/teacher ratios in regular public elementary and secondary schools, by enrollment: Fall 1990 through fall 2006



NOTE: The student/teacher ratio is determined by dividing the total number of full-time-equivalent teachers into the total fall enrollment. Regular schools include all schools except special education schools, vocational schools, and alternative schools. This analysis excludes schools that did not report both enrollment and teacher data. For more information on the Common Core of Data (CCD), see supplemental note 3. 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 2006-07.

### Parental Choice of School

The percentage of children whose parents enrolled them in a public school other than their assigned public school increased between 1993 and 2007.

This indicator examines the availability of public school choice programs and the students who attend chosen public schools, as reported by parents. From 1993 to 2007, the percentage of children attending a "chosen" public school (a public school other than their assigned public school) increased from 11 to 16 percent, while the percentage of children attending an assigned public school decreased from 80 to 73 percent (see table A-32-1). The percentages of children attending private schools also increased between 1993 and 2007 (from 8 to 9 percent for private church-related schools and from 2 to 3 percent for private not church-related schools).

Some choice among public schools was available to 46 percent of students in 2007, according to their parents' reports (see table A-32-2). Public school choice was available to a greater percentage of students in the West (55 percent) and Midwest (55 percent) than those in the South (41 percent) and Northeast (33 percent), and to a greater percentage of students in cities (52 percent) than those in the suburbs (40 percent). No measurable differences were detected among racial/ethnic groups in terms of parents' reports of having a choice among public schools for their children.

Among students whose parents reported having public school choice, approximately 25 percent attended a chosen public school, while 67 percent attended their assigned school. The other 9 percent attended a private school.

For parents who reported having public school choice, the percentage of students actually attending a chosen public school varied by race/ethnicity and locale. A greater percentage of Black students (36 percent) attended a chosen public school than their White (20 percent) and Hispanic (26 percent) peers. A greater percentage of students in cities (32 percent) attended a chosen public school than students in the suburbs (20 percent), towns (20 percent), and rural areas (21 percent).

Another form of parental choice is to move to a neighborhood so one's child can attend a particular school. In 2007, the parents of 27 percent of public school students reported that they had moved to their current neighborhood so that their child could attend his or her current school (see table A-32-3). A greater percentage of Whites (29 percent) than Blacks (18 percent) and Hispanics (25 percent), and suburban students (33 percent) than students living in other locales (20–23 percent) moved to their current neighborhood so their child could attend the school.



For more information: Tables A-32-1 through A-32-3; Indicators 6 and 30

Glossary: Homeschool, Private school, Public school

#### **Technical Notes -**

Data for 1993 through 2003 include homeschooled students enrolled in public or private schools for 9 or more hours per week. These students constituted 0.1 percent of all students in 2003. Data for 2007 exclude all homeschoolers. Data for all years exclude students in classrooms or schools classified as "ungraded." Public school choice programs allow students to enroll in another public school or district outside their attendance area.

These programs can include within-district or out-ofdistrict schools. These estimates are based on parents' responses; not all parents may have applied this definition of school choice in their response. Detail may not sum to totals because of rounding. For more information on the National Household Education Surveys Program (NHES), see *supplemental note 3*. For more information on race/ethnicity and locale, see *supplemental note 1*.

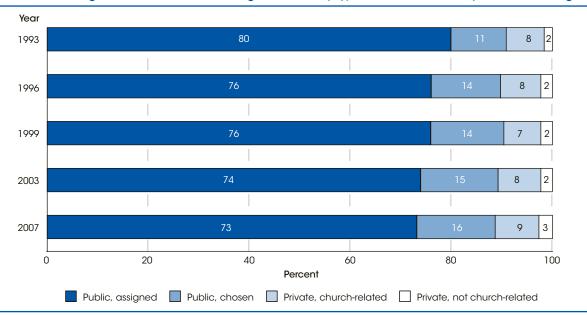
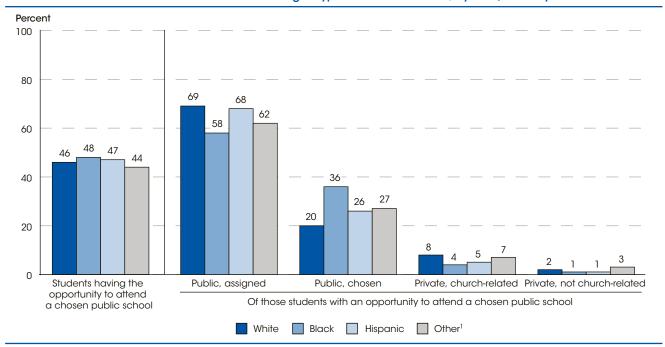


Figure 32-1. Percentage distribution of students in grades 1-12, by type of school: Selected years, 1993 through 2007

NOTE: Public school choice programs allow students to enroll in another public school or district outside their attendance area. These programs can include within-district or out-of-district schools. Estimates are based on parents' responses; not all parents may have applied this definition of school choice in their response. Data for 1993 through 2003 include homeschooled students enrolled in public or private schools for 9 or more hours per week. Data for 2007 exclude all homeschoolers. Data for all years exclude students in classrooms or schools classified as "ungraded." Detail may not sum to totals because of rounding. For more information about NHES, see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent and Family Involvement/Civic Involvement Survey of

Figure 32-2. Percentage of students in grades 1-12 whose parents reported choice among public schools and distribution of these students according to type of school attended, by race/ethnicity: 2007

the NHES, 1996, Parent Survey of the NHES, 1999, and Parent and Family Involvement in Education Survey of the NHES, 2003 and 2007.



<sup>&</sup>lt;sup>1</sup> Includes Asians/Pacific Islanders, Native Hawaiians, American Indians, Alaska Natives, and persons of more than one race NOTE: Public school choice programs allow students to enroll in another public school or district outside their attendance area. These programs can include within-district or out-of-district schools. Estimates are based on parents responses; not all parents may have applied this definition of school choice in their response. Data for 2007 exclude all homeschoolers and exclude students in classrooms or schools classified as "ungraded." Detail may not sum to totals because of rounding. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1. For more information about NHES, see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey, National Household Education Surveys Program (NHES), 2007.

### **Public School Revenue Sources**

Between 1989-90 and 2005-06, federal revenue for public elementary and secondary schools increased 139 percent in constant dollars, compared with increases of 57 percent for state revenue and 51 percent for local revenue. In 2005-06, federal revenues made up 9.1 percent of total public school revenues.

From 1989-90 through 2005-06, total elementary and secondary public school revenue increased 59 percent in constant dollars, from \$348 billion to \$554 billion (see table A-33-1). During this period, the total amount from each revenue source (federal, state, and local) increased, though not at the same rate. Federal and state revenues increased at a faster rate than all local revenues (both property tax revenue and other local revenue). Federal revenue, which is the smallest of the three revenue sources, increased 139 percent, compared with increases of 57 percent for state revenue and 51 percent for local revenue.

The percentage of total revenue for public elementary and secondary education from local sources declined, from 47 percent in 1989–90 to 44 percent in 2005–06, while the percentage of total revenue flowing to public schools from federal sources increased from 6 percent in 1989–90 to 9 percent in 2005–06. The percentage from state sources was the same in 1989-90 as in 2005-06 (47 percent).

There were significant variations across the states in the percentage of public school revenue coming from the federal government. In 2005-06, the percentage of revenue from federal sources was highest in Mississippi (21 percent) and Louisiana (18 percent) and lowest in New Jersey (4 percent) and Connecticut (5 percent). Revenue receipts from federal sources increased 43 percent in constant dollars from 2004-05 to 2005-06 in both Mississippi and Louisiana. Nationally, revenue receipts from federal sources increased 2 percent in constant dollars from 2004-05 to 2005-06. The

percentages of revenue from federal sources were higher in 2005–06 than in 2004–05 for both Mississippi (21 vs. 16 percent) and Louisiana (18 vs. 14 percent) (see table A-33-2 and NCES 2009-020, table 172).

There were also significant differences among states in the percentage of revenues received from state and local sources in 2005-06. In 21 states, the majority of education revenues came from state governments. The percentage of revenue from state sources was highest in Hawaii (90 percent), a state that has only one school district. Of the states with more than one school district, the percentage of revenue from state sources was highest in Vermont (86 percent). In 16 states and the District of Columbia, the majority of revenues came from local sources. The percentage coming from local sources was highest in the District of Columbia (88 percent), which has a single school district and no state government. Among the states, the percentage of revenue from local sources was highest in Nevada (67 percent). The percentage of revenues from property taxes also differed by state, ranging from a high of 55 percent in Connecticut to almost 0 in Hawaii and Vermont. In 13 states, no single revenue source made up a majority of all education revenue.



For more information: *Tables A-33-1 and A-33-2*; Indicators 34–37 Glossary: Public school, Revenues NCES 2009-020

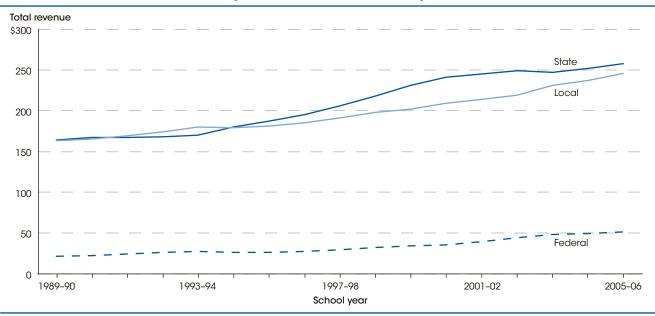
#### **Technical Notes** -

Revenues have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2007–08 dollars. For more information about the CPI, see supplemental note 10. Other local government revenue includes revenue from such sources as local nonproperty taxes, investments, and revenue from student activities,

textbook sales, transportation and tuition fees, and food services. For more information about revenues for public elementary and secondary schools, see supplemental note 10. For more information about the Common Core of Data (CCD), see *supplemental note 3*.

Figure 33-1. Total revenue for public elementary and secondary schools, by revenue source: School years 1989-90 through 2005-06

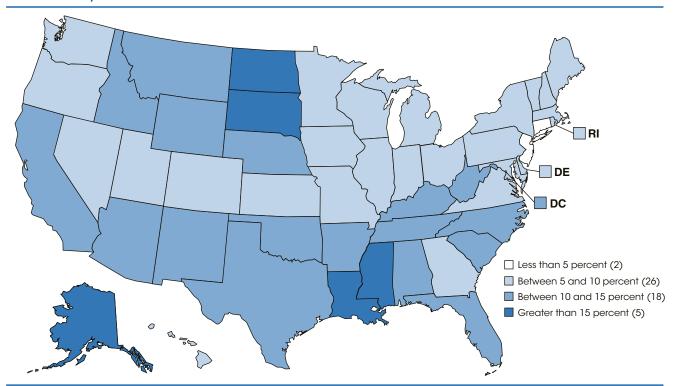
[Billions of constant 2007-08 dollars]



NOTE: Revenues are in constant 2007-08 dollars, adjusted using the Consumer Price Index (CPI). For more information about the CPI and revenues for public elementary and secondary schools, see supplemental note 10. For more information about the Common Core of Data (CCD), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1989–90 through 2005–06.

Figure 33-2. Federal revenue for public elementary and secondary schools as a percentage of total school revenue, by state: 2005-06



NOTE: For more information about revenues for public elementary and secondary schools, see supplemental note 10. For more information about the Common Core of Data (CCD), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2005-06.

# **Public School Expenditures**

Total expenditures per student in public elementary and secondary schools rose 31 percent in constant dollars from 1989-90 through 2005-06, 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 31 percent in constant dollars between 1989-90 and 2005-06, from \$8,627 to \$11,293 (see table A-34-1). Most of this increase occurred after 1997-98. The various components of expenditures increased at different rates during this time period. Spending on interest on school debt per student increased the fastest, at 100 percent (from \$155 to \$311), followed by capital outlay at 70 percent (from \$731 to \$1,243), and current expenditures at 26 percent (from \$7,741 to \$9,739).

In the 2005–06 school year, payments of salaries for instructional and noninstructional staff, after adjusting for inflation, were about \$5,917, or 61 percent of the \$9,739 spent on current expenditures per student in public elementary and secondary schools. From 1989-90 through 2005–06, the amount of current expenditures per student spent on salaries increased 17 percent, while the percentage of current expenditures spent on salaries during this period decreased 5 percentage points, from 66 to 61 percent. The amounts of current expenditures spent on employee benefits and purchased services each increased 47 percent during this period, and the percentage of current expenditures spent on employee benefits and purchased services correspondingly increased as well (from 17 to 20 percent for employee benefits and from 8 to 10 percent for purchased services). In each year from 1989-90 through 2005-06, the percentage

of current expenditures spent on tuition and other expenditures was about 2 percent.

Among the major functions of current expenditures, spending on student and staff support increased the most (49 percent) between 1989-90 and 2005-06, followed by instruction (27 percent) and transportation (24 percent) (see table A-34-2). Spending on three other functions of current expenditures also increased: operation and maintenance (15 percent), food services (12 percent), and administration (10 percent). Of the seven functions of current expenditures, only spending on enterprise operations declined (38 percent).

In the 2005–06 school year, 61 percent of the \$9,739 spent on current expenditures in public elementary and secondary schools went toward instruction expenditures such as salaries and benefits of teachers (see table A-34-2). About 13 percent went toward student and staff support, 10 percent toward operation and maintenance, 8 percent toward administration, 4 percent each toward transportation and food services, and less than 1 percent toward enterprise operations.



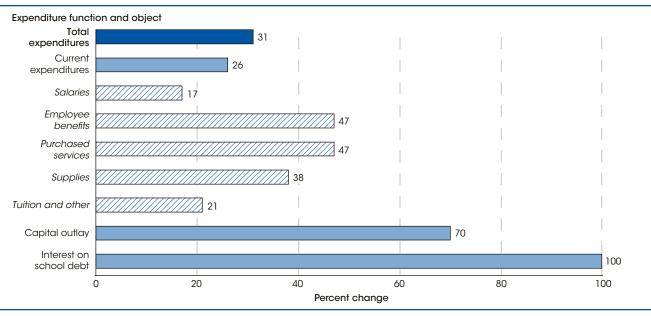
For more information: Tables A-34-1 and A-34-2; Indicators 33, 35-37 Glossary: Expenditures, Public school

#### **Technical Notes -**

Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2007-08 dollars. For more information about the CPI, see supplemental note 10. Current expenditures are presented 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 together with amounts for direct program support made available by state education agencies for local school districts. For more information about the classifications of expenditures, see *supplemental* note 10. For more information about the Common Core of Data (CCD), see supplemental note 3.

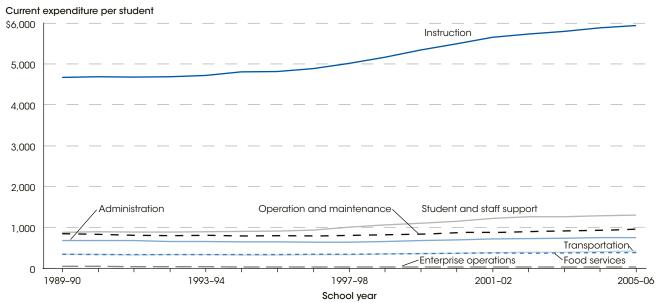
Figure 34-1. Percentage change in total expenditures per student in fall enrollment in public elementary and secondary schools, by expenditure type and objects of current expenditures: School years 1989-90 to 2005-06



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 constant dollars. For more information about the CPI and classifications of expenditures, see supplemental note 10. For more information about the Common Core of Data (CCD), see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1989-90 through 2005-06.

Figure 34-2. Current expenditures per student in fall enrollment in public elementary and secondary schools, by expenditure object: School years 1989-90 through 2005-06





NOTE: Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2007-08 dollars. For more information about the CPI and classifications of expenditures, see supplemental note 10. For more information about the Common Core of Data (CCD), see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education

Financial Survey," 1989-90 through 2005-06.

# Variations in Instruction Expenditures

Between 1989-90 and 2005-06, differences between states accounted for a greater proportion of the variation in instruction expenditures per student among unified public elementary and secondary school districts than did differences within states.

A number of methods can be used to measure the variation in the amount school districts spend per student on instruction. 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 betweenstate and within-state components indicate whether the national variation in instruction expenditures per student is primarily due to differences in expenditures across states or within states. Similarly, the trends in the two components indicate whether the change over time in the national variation of expenditures per student is primarily due to changes between states or within states. The Theil coefficient can range from zero, indicating no variation, to a maximum possible value of 1.0.

Across U.S. districts, the total variation in instruction expenditures per student decreased between school years 1989-90 and 1997-98 (see table A-35-1). While both the between-state and within-state variations also declined, the percentage of the total variation due to between-state differences was higher in 1997-98 (74 percent) than in 1989–90 (72 percent). From 1997–98 through 2005–06, the total variation in instruction expenditures per student increased each year, and in 2005-06, it was greater than it was in the early 1990s. As with the case for total variation, when variations due to between- and within-state differences are considered separately, both components showed increases from 1997-98 through 2005-06. As

the increase in the between-state variation in instruction expenditures per student from 1997–98 through 2005-06 was larger than its decrease from 1989-90 through 1997–98, the between-state variation was greater in 2005-06 than it was in the early 1990s. The increase in the within-state variation from 1997-98 through 2005-06, however, was smaller than its decrease from 1989–90 through 1997–98, so the within-state variation was smaller in 2005-06 than it was in the early 1990s. From 1997–98 through 2005–06, the percentage of the total variation due to between-state differences increased from 74 to 78 percent and that due to within-state differences decreased from 26 to 22 percent.

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 both states and districts within states. Changes in cost differences across and within states may also affect the changes in the variation over time.



For more information: Table A-35-1; Indicators 33-34, 36-37

Glossary: Public school NCES 2000-020

Murray, S.E., Evans, W.E., and Schwab, R.M. (1998)

#### **Technical Notes**

For more information about classifications of expenditures for elementary and secondary education and about the variation in expenditures per student and the *Theil* coefficient, see supplemental note 10. Unified public elementary and secondary districts are those districts that serve both elementary and secondary grades. The *Theil* coefficient was calculated for unified districts only to limit

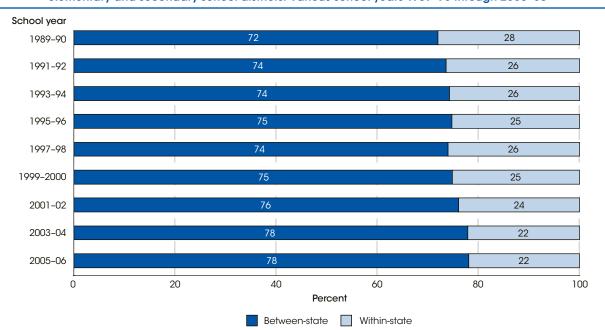
any variations in expenditures per pupil due to the grade levels of the school districts. In 2005-06, approximately 91 percent of all public elementary and secondary school students were enrolled in unified school districts. For more information about the Common Core of Data (CCD), see *supplemental note 3*.

Theil coefficient 0.06 0.05 0.04 0.03 Within-state 0.02 Between-state 0.01 0 1993-94 1997-98 1989-90 2001-02 2005-06 School year

Figure 35-1. Variation in instruction expenditures per student in unified public elementary and secondary school districts, by source of variation: School years 1989-90 through 2005-06

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 value of 1.0. For more information about the variation in expenditures per student and the Theil coefficient, see supplemental note 10. For more information about the Common Core of Data (CCD), see supplemental note 3.

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)," 2003-04 through 2005-06.



Percentage distribution of source of variation in instruction expenditures per student in unified public Figure 35-2. elementary and secondary school districts: Various school years 1989-90 through 2005-06

NOTE: Detail may not sum to totals because of rounding. 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 value of 1.0. For more information about the variation in expenditures per student and the Theil coefficient, see supplemental note 10. For more information about the Common Core of Data (CCD), see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics (NCÉS), 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)," 2003-04 and 2005-06.

# Public School Expenditures by District Poverty-

Current expenditures per student in public elementary and secondary schools increased by 25 percent in constant dollars between 1995-96 and 2005-06.

In 2005–06, current expenditures per student in public elementary and secondary schools, which include instructional, administrative, and operation and maintenance expenditures, were \$9,553, an increase of 25 percent in constant dollars from 1995-96 (see table 36-1). Annual spending and the increase in expenditures over time varied by locale and poverty level of the district. Locale and poverty level of the district are associated; 65 percent of the students in high-poverty districts were in cities, while 69 percent of students in low-poverty districts were in the suburbs (see table A-36-2).

Current expenditures per student were highest in districts located in cities (\$9,934) and in the suburbs (\$9,797) and were lowest in districts located in the towns (\$8,712) (see table 36-1). Rural districts spent \$8,987 per student, and current expenditures per student ranged from \$8,781 in rural fringe districts to \$9,918 in rural remote districts.

Current expenditures per student in 2005–06 were highest in high-poverty districts (\$10,458) and in low-poverty districts (\$10,447) and were lowest in

middle-poverty districts (\$8,630) (see table A-36-1). They increased the most for the high-poverty and middle high-poverty districts (30 percent each), and the least for the middle-poverty districts (21 percent). Current expenditures per student in the middle-low and low poverty categories increased 23 percent.

Among high-poverty districts, current expenditures per student were highest in districts located in cities (\$11,135), followed by districts located in suburbs (\$10,986), rural areas (\$9,008), and towns (\$8,473) (see table 36-1). Districts in other poverty categories had different patterns. For example, among low-poverty districts, suburban districts spent \$10,920 per student, compared with \$9,600 in rural districts, \$9,264 in city districts, and \$9,095 in town districts.



For more information: Tables A-36-1 and A-36-2; Indicators 33-35, 37 Glossary: Public school

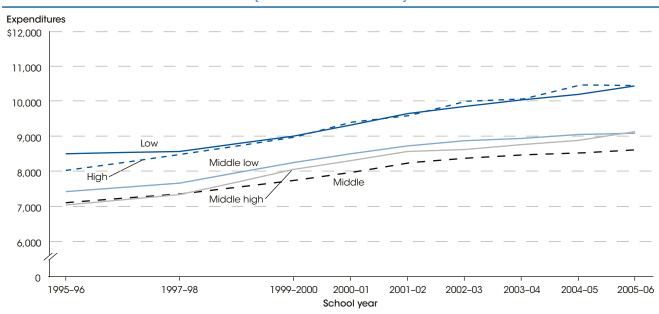
#### Technical Notes —

Districts were ranked by the percentage of school-age children (5- to 17-year-olds) in poverty and then divided into five groups with approximately equal public school enrollments. The low-poverty district category consists of those districts with the lowest percentages of school-age children in poverty. Conversely, the high-poverty district category consists of those with the highest percentages of school-age children in poverty. For more information on poverty and locale code, see *supplemental note 1*. Expenditures have been adjusted for the effects of

inflation using the Consumer Price Index (CPI) and are in constant 2007-08 dollars. For more information on using the CPI to adjust for inflation and on classifications of expenditures for elementary and secondary education, see supplemental note 10. For more information on the Common Core of Data (CCD), see *supplemental note 3*. Districts include elementary/secondary combined districts and separate elementary or secondary districts. They exclude Department of Defense districts and Bureau of Indian Education districts.

Figure 36-1. Current expenditures per student in fall enrollment in public school districts, by district poverty category: Selected school years, 1995-96 through 2005-06

[In constant 2007-08 dollars]



NOTE: Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2007-08 dollars. Districts were ranked by the percentage of school-age children (5- to 17-year-olds) in poverty and then divided into five groups with approximately equal public school enrollments. For more information on poverty, see supplemental note 1. For more information on using the CPI to adjust for inflation and on the classifications of expenditures for elementary and secondary education, see supplemental note 10. For more information on the Common Core of Data (CCD), see supplemental note 3. Districts include elementary/secondary combined districts and separate elementary or secondary districts. They exclude Department of Defense districts and Bureau of Indian Education districts. SOURCE: U.S. Department of Commerce, Census Bureau, "Small Area Income and Poverty Estimates," 1995–96, 1997–98, and 1999–2000 through 2005-06; and U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data (CCD), "School District Finance Survey (Form F-33)," 1995-96, 1997-98, and 1999-2000 through 2005-06.

Table 36-1. Current expenditures per student in fall enrollment in public school districts, by locale and district poverty category: School year 2005-06

[In constant 2007-08 dollars]

			Suburban	Town	Rural			
District poverty category <sup>1</sup>	Total	City			Total	Fringe	Distant	Remote
Total	\$9,553	\$9,934	\$9,797	\$8,712	\$8,987	\$8,781	\$8,844	\$9,918
Low	10,447	9,264	10,920	9,095	9,600	9,708	9,178	10,368
Middle low	9,089	9,028	9,136	9,007	9,084	8,729	9,175	10,064
Middle	8,630	8,545	8,562	8,691	8,867	8,390	8,938	10,109
Middle high	9,140	9,461	9,661	8,544	8,550	8,186	8,387	9,697
High	10,458	11,135	10,986	8,473	9,008	8,458	8,780	9,860

Districts were ranked by the percentage of school-age children (5- to 17-year-olds) in poverty, and then divided into five groups with approximately equal public school enrollments. For more information on poverty and locale, see supplemental note 1. NOTE: Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2007-08 dollars. For more information on using the CPI to adjust for inflation and on classifications of expenditures for elementary and secondary education, see supplemental note 10. For more information on the Common Core of Data (CCD), see supplemental note 3. Districts include elementary/ secondary combined districts and separate elementary or secondary districts. They exclude Department of Defense districts and Bureau of Indian Education districts.

SOURCE: U.S. Department of Commerce, Census Bureau, "Small Area Income and Poverty Estimates," 2005–06; and U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data (CCD), "Local Education Agency Universe Survey," 2005-06, "School District Finance Survey (Form F-33)," 2005-06.

# **Education Expenditures by Country**

At the combined elementary and secondary level in 2005, the United States spent \$9,769 per student, which was 38 percent higher than the OECD average of \$7,065. At the postsecondary level, U.S. expenditures per student were \$24,370, more than twice as high as the OECD average of \$11,821.

Two measures used when comparing countries' investments in education are 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 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.

In 2005, expenditures per student for the United States were \$9,769 at the combined elementary and secondary level, which was 38 percent higher than the average of \$7,065 for the member countries of the Organization for Economic Cooperation and Development (OECD) reporting data (see table A-37-1). This measure is based on (full-time equivalent [FTE]) student enrollment rather than headcount. At the postsecondary level, U.S. expenditures per student were \$24,370, which was more than twice as high as the OECD average of \$11,821. Expenditures per student varied widely across the OECD countries, ranging from \$2,025 in Mexico to \$15,930 in Luxembourg at the combined elementary and secondary level, and from \$5,593 in Poland to \$21,734 in Switzerland and \$24,370 in the United States at the postsecondary level.

Among the OECD countries reporting data in 2005, the countries that spent the highest percentage of their GDP on total education expenditures were Iceland (8.0 percent), Denmark (7.4 percent), Korea (7.2 percent), and the United States (7.1 percent). Looking at education expenditures by level, the United States spent 3.8 percent of its GDP on elementary and secondary education,

which was the same as the average for all OECD countries reporting data. Compared with the percentage of GDP that the United States spent on elementary and secondary education, 12 countries spent a higher percentage, 13 countries spent a lower percentage, and 2 countries spent the same percentage. Iceland spent the highest percentage (5.4 percent) of its GDP on elementary and secondary education. At the postsecondary level, 2.9 percent of the GDP of the United States was spent on education; this amount was higher than the OECD average of 1.5 percent and higher than that of 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 both the combined elementary and secondary and postsecondary levels. For example, of the 10 OECD countries with the highest GDP per capita, each country spent more per student on elementary and secondary and postsecondary education than the OECD average, with two exceptions: the Netherlands (elementary and secondary) and Ireland (elementary and secondary and postsecondary). Of the 10 OECD countries with the lowest GDP per capita, each country reported expenditures per student at the elementary and secondary and postsecondary levels that were below the OECD average.



For more information: Table A-37-1.

Glossary: Elementary/Secondary school, Expenditures per student, Full-time-equivalent enrollment, Gross domestic product, Gross national product, Organization for Economic Cooperation and Development, Postsecondary education, Purchasing power parity (PPP)

#### **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. 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) indices are used to convert other

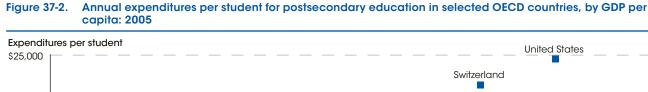
currencies to U.S. dollars (i.e., absolute terms). Withincountry consumer price indices are used to adjust the PPP indices to account for inflation because the fiscal year has a different starting date in different countries. Luxembourg data are excluded from the graphs because of anomalies with respect to their GDP per capita data (large revenues from international finance institutions distort the wealth of the population). The OECD average for GDP per capita for each graph is based on the number of countries with data available (28 for figure 37-1 and 28 for figure 37-2).

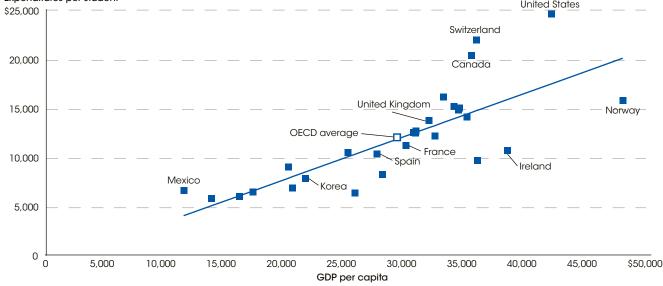
Expenditures per student \$25,000 20,000 15,000 Switzerland **United States** Spạin France 10,000 Norway Korea Hungary Ireland 5,000 OECD average United Kingdom Mexico 0 0 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 45,000 \$50,000 GDP per capita

Figure 37-1. Annual expenditures per student, by GDP per capita for elementary and secondary education in selected OECD countries, by GDP per capita: 2005

NOTE: Luxembourg data are excluded because of anomalies with respect to their GDP per capita data. (Large revenues from international finance institutions distort the wealth of the population.)

SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2008). Education at a Glance, 2008: OECD Indicators, tables B1.1b, B2.1, and X2.1.





Linear relationship between spending per student and country wealth for 28 OECD countries (postsecondary); r<sup>2</sup>=0.60; slope=0.44; intercept= -983.

SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2008). Education at a Glance, 2008: OECD Indicators, tables B1.1b, B2.1, and X2.1.

Linear relationship between spending per student and country wealth for 28 OECD countries (elementary and secondary), r<sup>2</sup>=0.81; slope=0.23; intercept= 110.



# Section 5 Contexts of Postsecondary Education





# Section 5 Contexts of Postsecondary Education

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#### Introduction

The indicators in this section of *The Condition of Education* examine features of postsecondary education, many of which parallel those presented in the previous section on elementary and secondary education. There are 24 indicators in this section: 9, prepared for this year's volume, appear on the following pages, and all 24, including indicators from previous years, are on the Web (see the List of Indicators on *The Condition of Education* website in the Contents section for a full list of the indicators).

Postsecondary education is characterized by diversity both in the types of institutions and in the characteristics of students. Postsecondary institutions vary in terms of the types of degrees awarded, control (public or private), and whether they are operated on a not-for-profit or for-profit basis. Beyond these basic differences, postsecondary institutions have distinctly different missions and provide a wide range of learning environments for students. For example, some institutions are research universities with strong graduate programs, while others focus on undergraduate education; some have a religious affiliation, while others do not; and some have selective entrance policies, while others have more open admissions. The student bodies of postsecondary institutions are diverse in other ways as well. For example, students are from different racial and ethnic groups and many come from foreign countries. Indicators in the first subsection of The Condition of Education found on the following pages and on the website measure these and other dimensions of diversity that are fundamental to the character of postsecondary education.

The second subsection highlights the courses and programs of study in which students enroll, which are an important feature of postsecondary education. Indicators in this volume highlight data on degree completion, which show trends in the fields of study for undergraduate and graduate degree recipients; another

indicator compares the distribution of degrees awarded by different types of institutions. Indicators on the Web also present information on the provision of and participation in remedial education and on distance education courses taught by faculty.

Like elementary and secondary schools, postsecondary institutions provide learning opportunities for all students, along with support and accommodations for special populations of students. An indicator on the Web in the third subsection describes data on remedial coursetaking.

Faculty members, highlighted in the fourth subsection, are another defining feature of postsecondary institutions; they teach students, conduct research, and serve their institutions and communities. An indicator in this volume highlights trends in faculty salaries and benefits at different postsecondary levels and across different types of institutions.

Finally, The Condition of Education examines financial support for postsecondary education. Indicators on the Web look at the institutional aid available to students, total and net access price of attending postsecondary institutions, and the debt burden of college graduates. Indicators in this year's volume include the number and characteristics of college students who are employed as well as the types and amounts of financial aid received by first-time students. Another indicator examines the levels and sources of postsecondary revenues and expenditures.

The indicators on the contexts of postsecondary education from previous editions of *The Condition of Education*, which are not included in this volume, are available at http://nces.ed.gov/programs/coe.

# Racial/Ethnic Concentration in Higher Education

In 2007, White students accounted for 64 percent of college student enrollment. In that year, 13 percent of college students were Black, 11 percent were Hispanic, 7 percent were Asian/Pacific Islander, 1 percent were American Indian/Alaska Native, and 3 percent were nonresident aliens.

This indicator examines the fall 2007 racial/ethnic distribution of students in the 4,339 public and private (both not-for-profit and for-profit) 2- and 4-year degreegranting institutions. Overall, 64 percent of college students were White; 13 percent were Black; 11 percent were Hispanic; 7 percent were Asian/Pacific Islander; 1 percent were American Indian/Alaska Native; and 3 percent were nonresident alien students (see table A-38-1). Compared with the percentages of Black students in all institutions, the percentages of Black students at public and not-for-profit 2-year institutions were higher (14 and 19 percent, respectively). Similarly, the percentage of Hispanic students at public 2-year institutions (16 percent) was higher than the percentages of Hispanic students at all institutions. The percentage of students at for-profit institutions who were White (53 percent) was lower than the percentages of students who were White at public and not-for-profit 2- and 4-year institutions (from 61 to 70 percent). In contrast, the percentage of students at for-profit institutions who were Black (26 percent) was higher than the percentages of students who were Black at public and not-for-profit 2- and 4-year institutions (from 11 to 19 percent).

About 7 percent of all college students attended the 396 institutions in which 75 percent or more of the students were Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native. This group of institutions comprised 8 percent of the enrollment at public 2-year colleges and 6 percent of the enrollment at public 4-year institutions. A higher percentage of students at not-for-profit 2-year institutions were enrolled in these institutions than the percentage of students at not-forprofit 4-year institutions (15 vs. 3 percent). At for-profit (2- and 4-year) institutions, the percentage of students at such colleges was 10 percent. Compared with other racial/ ethnic groups, a relatively high percentage of Hispanic

and Black students (21 and 20 percent, respectively) attended these institutions. The comparable percentages were 11 percent for American Indian/Alaska Native students, 9 percent for Asian/Pacific Islander students, and 1 percent for White students.

Examining the concentration of specific racial/ethnic groups provides a more detailed snapshot of the racial/ ethnic composition of the institutions students attend. In 2007, some 52 percent of White students attended institutions where more than 75 percent of the enrollment was White (see table A-38-2). Compared with students in other racial/ethnic groups, a relatively high percentage of Black students (13 percent) attended colleges where they constituted 75 percent or more of the enrollment. Some of these institutions were historically Black colleges and universities (HBCUs), which are institutions established prior to 1964 with the primary mission of educating Black Americans. In fall 2006, about 11 percent of Black students attended an HBCU. Compared with Black students, a smaller percentage of Hispanic students (6 percent) attended colleges where they constituted 75 percent or more of the enrollment in 2007. Despite their small percentage of the overall population, in 2007, about 8 percent of American Indian/Alaska Native students attended colleges where they made up 75 percent or more of the total enrollment. With few exceptions, most of these institutions were tribal colleges, which are institutions that are tribally controlled and located on reservations.



For more information: Tables A-38-1 and A-38-2; Indicator 26

Glossary: Nonresident alien, Postsecondary education institution

NCES 2009-020

#### **Technical Notes**

This indicator includes information for institutions that grant associate's or higher degrees and participate in Title IV federal financial aid programs. The percentage of Black students enrolled in HBCUs in fall 2006 was derived from data in the Digest of Education Statistics, 2008 (NCES 2009-020), tables 226 and 241. For the

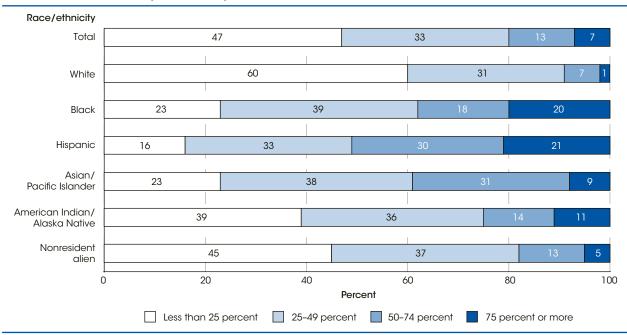
number of institutions in which 75 percent or more of students were Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native, see NCES 2009-020, table 230. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1.

Control/type of institution Total 64 11 Public 2-year 16 Public 4-year 9 4 Nor-for-profit 8 2-year Not-for-profit 5 4-year For-profit 53 13 20 60 0 40 80 100 Percent Black Hispanic Asian/Pacific Islander American Indian/ Nonresident alien Alaska Native

Figure 38-1. Percentage distribution of fall enrollment in degree-granting institutions, by race/ethnicity and control and type of institution: Academic year 2007

NOTE: Private institutions are presented as three categories: not-for-profit 2-year; not-for-profit 4-year; and for-profit (including both 2- and 4-year) institutions. Nonresident aliens are persons who are not citizens of the United States and who are in this country on a temporary basis and do not have the right to remain indefinitely. Nonresident aliens are shown separately because information about their race/ethnicity is not available. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3. Detail may not sum to totals because of rounding SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007 Integrated Postsecondary Education Data System (IPEDS), Spring 2008.

Figure 38-2. Percentage distribution of fall enrollment in degree-granting institutions, by percent combined enrollment of Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native students at institution and race/ethnicity: Academic year 2007



NOTE: Nonresident aliens are persons who are not citizens of the United States and who are in this country on a temporary basis and do not have the right to remain indefinitely. Nonresident aliens are shown separately because information about their race/ethnicity is not available. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see supplemental note 1. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3. Detail may not sum to totals because of rounding SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007 Integrated Postsecondary Education Data System (IPEDS), Spring 2008.

# International Students in the United States

In 2007-08, approximately 624,000 international students were enrolled in postsecondary institutions in the United States. These students accounted for 3 percent of the total enrollment in U.S. postsecondary institutions.

In the 1969-70 academic year, 135,000 students from other countries were enrolled in postsecondary institutions in the United States (see table A-39-1). International student enrollment increased each year through 2002-03 to 586,000 students, declined over the next few years to 565,000 in 2005-06, increased again to 583,000 in 2006-07 and to 624,000 n 2007-08. International students accounted for 3 percent of students at the postsecondary level in 2007–08; this percentage has remained between 3 and 4 percent since 1992–93. International student enrollment in U.S. institutions has varied by academic level over time, with a greater share of enrollment at the graduate level. For example, in 2007-08, international graduate students accounted for 10 percent of total graduate enrollment while international undergraduate students accounted for 2 percent of total undergraduate enrollment.

India, China, and South Korea were the top three countries of origin for international students studying in the U.S. in 2007-08. Of the 624,000 international students who were enrolled in postsecondary institutions in the U.S. in that year, 94,600 (or 15 percent) had come from India, 81,100 (or 13 percent) had come from China, and 69,100 (or 11 percent) had come from South Korea. Other leading countries of origin for international students included Japan, Canada, and Taiwan (5 percent each). Students from these six countries accounted for over half of international student enrollment in 2007–08.

Nearly 40 percent of all international students who were enrolled in U.S. postsecondary institutions in 2007-08 studied in either the field of business and management (20 percent) or in engineering (17 percent) (see table

A-39-2). Other leading fields of study for international students included physical and life sciences (9 percent), social sciences (9 percent), and math and computer science (8 percent). There were also differences in enrollment in specific fields of study by academic level in 2007-08. For example, a greater percentage of undergraduate students were enrolled in business and management than graduate students (26 vs. 16 percent), while a lower percentage of undergraduate students were enrolled in engineering than graduate students (12 vs. 23 percent).

In addition, enrollment in science, technology, engineering, and mathematics (STEM) fields was prevalent among international students in 2007-08, particularly among international graduate students. For the purposes of this indicator, STEM fields include the fields of engineering, physical and life sciences, math and computer science, and health professions. About 53 percent of international graduate students were studying in a STEM field, compared with 30 percent of international undergraduate students.



For more information: Tables A-39-1 and A-39-2; Indicators 40 and 41

Glossary: Postsecondary education, STEM fields Open Doors 1948-2004: Report on International Educational Exchange. (2005) Open Doors 2008: Report on International Educational Exchange. (2008)

#### **Technical Notes**

The data collection process changed in 1974-75, thus refugees were counted from 1975-76 to 1990-91. While this indicator focuses on aggregated data for undergraduate and graduate education, Open Doors also features disaggregated information on academic programs at the associate's, bachelor's, master's, and doctoral levels, as well as information on international scholars and intensive English programs. Undergraduate estimates include associate's and bachelor's enrollments.

Graduate estimates include master's, doctoral, professional training, and unspecified enrollments. Estimates from Open Doors may differ from those derived from the Integrated Postsecondary Education Data System (IPEDS) because of differences in data collection and categorization procedures. For more information on the Open Doors International Student Census and IPEDS, see supplemental note 3.

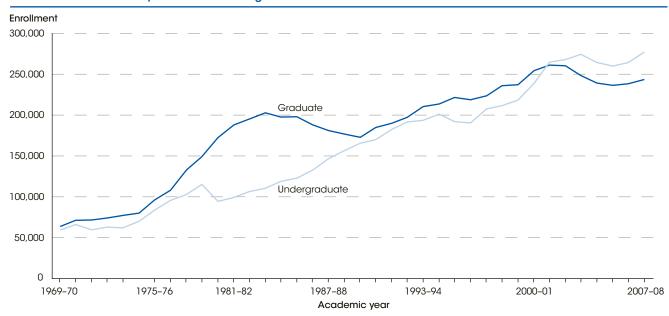


Figure 39-1. Number of international students enrolled in U.S. postsecondary institutions, by academic level: Academic years 1969-70 through 2007-08

NOTE: Undergraduate estimates include associate's and bachelor's enrollments. Graduate estimates include master's, doctoral, professional training, and unspecified enrollments. The data collection process changed in 1974-75; thus, refugees were counted from 1975-76 to 1990-91. After 1990-91, refugees were no longer counted. For more information on the Open Doors International Student Census and on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

SOURCE: Open Doors: Report on International Educational Exchange. New York: Institute of International Education, selected years, 1969-70 through 2007-08.

Table 39-1. Number and percentage of international students enrolled in U.S. postsecondary institutions, by selected countries of origin: Academic year 2007-08

Country of origin	Total	Percentage of international student total	Country of origin	Total	Percentage of international student total
World total	623,805	100.0			
India	94,563	15.2	Nepal	8,936	1.4
China	81,127	13.0	Germany	8,907	1.4
South Korea	69,124	11.1	Vietnam	8,769	1.4
Japan	33,974	5.4	United Kingdom	8,367	1.3
Canada	29,051	4.7	Hong Kong	8,286	1.3
Taiwan	29,001	4.6	Indonesia	7,692	1.2
Mexico	14,837	2.4	Brazil	7,578	1.2
Turkey	12,030	1.9	France	7,050	1.1
Saudi Arabia	9,873	1.6	Colombia	6,662	1.1
Thailand	9,004	1.4	Nigeria	6,222	1.0

NOTE: Only the top 20 countries of origin are featured here. For more information on the Open Doors International Student Census, see supplemental note 3.

SOURCE: Bhandari, R., and Chow, P. (2008). Open Doors 2008: Report on International Educational Exchange. New York: Institute of International Education.

# **Undergraduate Fields of Study**

In 2006-07, degrees in the field of business made up 21 percent of the bachelor's degrees awarded. Over 327,500 bachelor's degrees were awarded in business that year.

In 2006–07, of the 1.5 million bachelor's degrees awarded that year, over 50 percent were concentrated in five fields: business (21 percent); social sciences and history (11 percent); education (7 percent); health professions and related clinical sciences (7 percent); and psychology (6 percent) (see table A-40-1). During the same time period, the fields of visual and performing arts (6 percent), engineering and engineering technologies (5 percent), communication and communications technologies (5 percent), and biological and biomedical sciences (5 percent) represented about an additional 20 percent of all bachelor's degrees awarded.

Overall, 351,200 more bachelor's degrees were awarded in 2006-07 than in 1996-97 (a 30 percent increase). Bachelor's degrees awarded in the field of parks, recreation, leisure and fitness studies had the largest percent increase (93 percent), followed by the fields of visual and performing arts (70 percent) and computer and information sciences and support services (66 percent). The field of education had the smallest percent increase over this time period (0.5 percent).

About 57 percent of all bachelor's degrees conferred in 2006-07 were awarded to females. In the five most prevalent bachelor's degree fields, females earned between 49 and 86 percent of all degrees awarded. In 2006-07, females earned fewer bachelor's degrees than males (i.e., males earned more degrees than females) in fields including engineering and engineering technologies (17 percent of these degrees were awarded to females), computer and information sciences and support services (19 percent female), philosophy and religious studies (38 percent female), and physical sciences and science technologies (41 percent female). For females, the field with the largest percent increase in bachelor's degrees

awarded between 1996-97 and 2006-07 was security and protective services (97 percent), while the field with the smallest percent increase during this time period for females was education (5 percent). There was a 14 percent decrease in the number of males who earned a bachelor's degree in the field of education over this time period.

In 2006–07, of the 728,100 associate's degrees earned, 54 percent were awarded in two broad areas of study: liberal arts and sciences, general studies, and humanities (34 percent) and health professions and related clinical sciences (20 percent). Overall, 156,900 more associate's degrees were awarded in 2006-07 than in 1996-97 (a 27 percent increase). The field with the largest percent increase over this time period was computer and information sciences and support services (90 percent). Several fields experienced a decline in the number of associate's degrees awarded during this period. For example, 6,700 fewer associate's degrees were awarded in engineering and engineering technologies in 2006-07 than in 1996-97 (a 12 percent decrease).

In addition, females earned 62 percent of all associate's degrees awarded in 2006-07. Females earned the majority (96 percent) of all associate's degrees awarded in the field of family and consumer sciences/human sciences. Females earned fewer associate's degrees than males in fields including precision production trades (6 percent of these degrees were awarded to females) and engineering and engineering technologies (10 percent female).



For more information: Table A-40-1; Indicators 39

Glossary: Associate's degree, Bachelor's degree

#### **Technical Notes**

The percent increases discussed in this indicator refer to aggregate fields of study. For more information on fields of study for postsecondary degrees, see supplemental note 9. The new Classification of Instructional Programs was initiated in 2002-03. Estimates for 1996-97 have been reclassified when necessary to conform to the new

taxonomy. For more information on the Classification of Postsecondary Education Institutions, see *supplemental* note 8. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

Field of study Engineering and 75,757 engineering technologies 82,072 Visual and 50.083 performing arts 85,186 74,308 Psychology 90,039 87,997 Health professions and related clinical sciences 101,810 105,116 Education 105,641 Social sciences 124,891 and history 164,183 225,934 **Business** 327,531 350,000 0 50,000 100,000 150,000 200,000 250,000 300,000 Number of bachelor's degrees awarded 1996-97 2006-07

Figure 40-1. Number of bachelor's degrees awarded by degree-granting institutions in selected fields of study: Academic years 1996-97 and 2006-07

NOTE: For more information on fields of study for postsecondary degrees, see supplemental note 9. The new Classification of Instructional Programs was initiated in 2002-03. Estimates for 1996-97 have been reclassified when necessary to conform to the new taxonomy. For more information on the Classification of Postsecondary Education Institutions, see supplemental note 8. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), 1996-97 and 2006-07 Integrated Postsecondary Education Data System, "Completions Survey" (IPEDS-C:97) and Fall 2007.

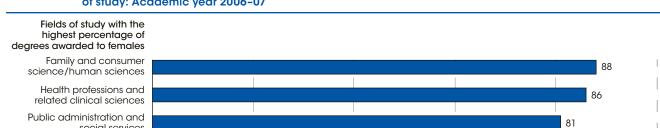
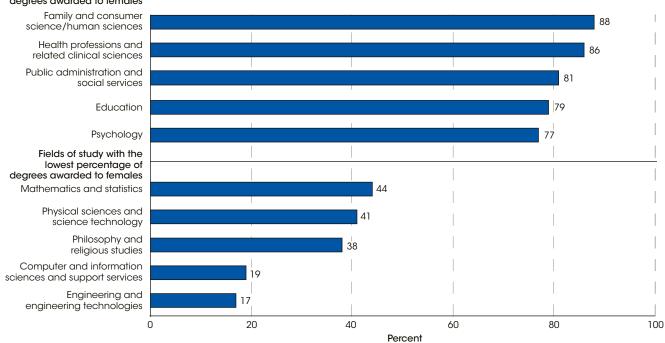


Figure 40-2. Percentage of bachelor's degrees awarded to females by degree-granting institutions in selected fields of study: Academic year 2006-07



NOTE: For more information on fields of study for postsecondary degrees, see supplemental note 9. For more information on the Classification of Postsecondary Education Institutions, see supplemental note 8. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), 2006-07 Integrated Postsecondary Education Data System, "Completions Survey," Fall 2007.

# Graduate and First-Professional Fields of Study-

Overall, 604,600 master's degrees and 60,600 doctoral degrees were awarded in 2006-07, an increase of 44 and 32 percent, respectively, since 1996-97.

In 2006-07, of the 605,000 master's degrees awarded that year, over 50 percent were concentrated in two fields: education (29 percent) and business (25 percent) (see table A-41-1). During that same time period, an additional 9 percent of all master's degrees awarded were in the field of health professions and related clinical sciences. The fewest number of master's degrees were conferred in the field of mathematics and statistics (about 1 percent or 4,900 degrees).

Overall, 185,000 more master's degrees were awarded in 2006–07 than in 1996–97 (a 44 percent increase). Master's degrees awarded in the field of security and protective services had the largest percent increase (166 percent), followed by the field of education (62 percent). The field of physical sciences and science technologies had the smallest percent increase over this period (6 percent).

Females earned 61 percent of all master's degrees awarded in 2006-07. In the two most prevalent master's degree fields, education and business, females earned 77 and 44 percent, respectively, of all degrees awarded. In addition, females earned 80 percent of all degrees awarded in the field of health professions and related clinical sciences. However, females earned fewer master's degrees than males in 2006-07 in fields such as engineering and engineering technologies (23 percent female) and computer and information sciences and support services (26 percent female). For females and males, the field with the largest percent increase in master's degrees awarded was security and protective services (247 and 111 percent, respectively). For females, this was followed by a 75 percent increase in master's degrees conferred in the field of business, and for males, a 59 percent increase in computer and information sciences and support services.

In 2006-07, of the 60,600 doctoral degrees awarded, over 50 percent were awarded in four fields: health professions and related clinical sciences (14 percent), education (14 percent), engineering and engineering technologies (13 percent), and biological and biomedical sciences (10 percent). Overall, 14,700 more doctoral degrees were awarded in 2006-07 than in 1996-97 (a 32 percent increase). The doctoral field of health professions and related clinical sciences had the greatest percent increase over this time period (283 percent).

Females earned about 50 percent (or 30,400 degrees) of all doctoral degrees awarded in 2006-07, a 62 percent increase from 1996-97. Females earned fewer doctoral degrees than males (i.e., males earned more degrees than females) in 2006-07 in fields such as engineering and engineering technologies (21 percent female).

In 2006–07, of the 90,100 first-professional degrees awarded, over 48 percent were awarded in the field of law. An additional 17 percent of first-professional degrees were conferred in the field of medicine, and 12 percent were conferred in pharmacy. Between 1996–97 and 2006–07, there was a 14 percent increase in the number of first-professional degrees awarded. The field with the greatest percent increase over this period was pharmacy (285 percent). Females earned half of all first-professional degrees awarded in 2006-07, a 36 percent increase from 1996-97.



For more information: Table A-41-1; Indicators 39

Glossary: Doctoral degree, First-professional degree, Master's degree

#### Technical Notes

The percent increases discussed in this indicator refer to aggregate fields of study. For more information on fields of study for postsecondary degrees, see supplemental note 9. The new Classification of Instructional Programs was initiated in 2002-03. Estimates for 1996-97 have been reclassified when necessary to conform to the new

taxonomy. For more information on the Classification of Postsecondary Education Institutions, see supplemental note 8. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

Field of study 24,781 Public administration and social services 27,106 Engineering and engineering technologies 32.162 36,162 Health professions and related clinical sciences 54,531 97.204 **Business** 150,211 108,720 Education 176,572 0 50,000 100,000 150,000 200,000 Number of master's degrees awarded 1996-97 2006-07

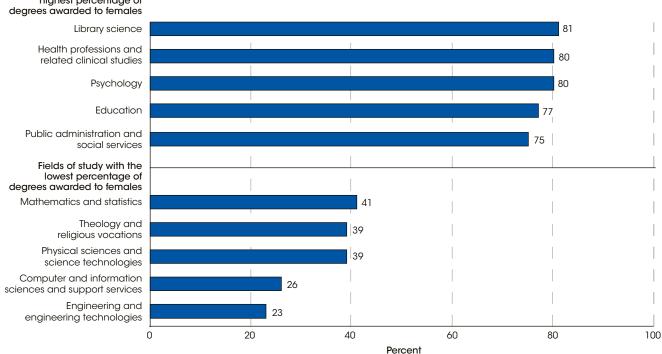
Figure 41-1. Number of master's degrees awarded by degree-granting institutions in selected fields of study: Academic years 1996-97 and 2006-07

NOTE: For more information on fields of study for postsecondary degrees, see supplemental note 9. The new Classification of Instructional Programs was initiated in 2002-03. Estimates for 1996-97 have been reclassified when necessary to conform to the new taxonomy. For more information on the Classification of Postsecondary Education Institutions, see supplemental note 8. For more information on the Integrated Postsecondary Education Data System (IPEDS), see *supplemental note 3*.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), 1996–97 and 2006–07 Integrated Postsecondary

Education Data System, "Completions Survey" (IPEDS-C:97) and Fall 2007.





NOTE: For more information on fields of study for postsecondary degrees, see supplemental note 9. For more information on the Classification of Postsecondary Education Institutions, see supplemental note 8. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), 2006-07 Integrated Postsecondary Education Data System, "Completions Survey," Fall 2007.

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

The number of associate's, bachelor's, master's, and doctoral degrees conferred by private for-profit institutions increased by a larger percentage than the number conferred by public and private not-for-profit institutions between 1996-97 and 2006-07.

Between 1996-97 and 2006-07, the number of postsecondary degrees conferred by public and private institutions generally increased for each type of degree, although at varying rates. For associate's, bachelor's, master's, and doctoral degrees, the percentage increases were larger for private for-profit institutions than for public and private not-for-profit institutions. During this period, the share of these degrees conferred by private for-profit institutions increased from 3 to 8 percent.

The number of associate's degrees conferred by private for-profit institutions more than doubled between 1996–97 and 2006–07, from 56,600 to 117,800 degrees. For public institutions, the number of associate's degrees increased by 22 percent (from 465,500 to 566,500 degrees) during this period; for private not-for-profit institutions, the number decreased by 11 percent (from 49,200 to 43,800 degrees). Due to these changes, associate's degrees awarded by private for-profit institutions made up 16 percent of all associate's degrees awarded in 2006-07, up from a 10 percent share in 1996-97 (see table A-42-1).

Between 1996-97 and 2006-07, the number of bachelor's degrees conferred by private for-profit institutions increased from 12,100 to 70,800 degrees, compared with an increase from 776,700 to 975,500 degrees for public institutions and an increase from 384,100 to 477,800 degrees for private not-for-profit institutions. During this period, the number of master's degrees conferred by private for-profit institutions increased from 5,100 to 50,900 degrees. The numbers of master's degrees awarded by public and private not-for-profit institutions also increased during this period but at slower rates, from 233,200 to 292,000 and from 181,000 to 262,000, respectively. A shift was evident in the share of master's degrees awarded by institution type: in 1996–97, public institutions awarded 56 percent of all master's degrees and private for-profit institutions awarded 1 percent; in 2006-07, public institutions awarded 48 percent of all master's degrees and private for-profit institutions awarded 8 percent. The share awarded by private not-forprofit institutions remained at 43 percent for both academic years.

The total number of first-professional degrees increased by 14 percent (from 78,700 to 90,100 degrees) between 1996-97 and 2006-07, with few changes in the proportion of degrees awarded by type of institution. In 2006–07, private not-for-profit institutions awarded 59 percent of first-professional degrees. Degrees from public institutions accounted for 41 percent, while degrees from private for-profit institutions made up less than 1 percent of all first-professional degrees. Between 1996–97 and 2006–07, the number of doctoral degrees awarded increased for public institutions from 29,800 to 36,200 degrees, for private not-for-profit institutions from 15,700 to 22,500 degrees, and for private for-profit institutions from 340 to 1,900 degrees.

The increase in the number of degrees conferred corresponded to an increase in the total number of degree-granting institutions, particularly in the number of private for-profit institutions. Between 1996-97 and 2006–07, there was a net decrease in the number of public institutions (from 1,702 to 1,688), consisting of a decrease in the number of 2-year institutions and an increase in the number of 4-year institutions (see table A-42-2). Private institutions had a net gain of 319 institutions during this period, with increases in the numbers of not-for-profit 4-year institutions and for-profit 2- and 4-year institutions. The number of for-profit institutions increased the most, as the number of 2-year institutions increased by 13 percent (from 470 to 533 institutions) and the number of 4-year institutions increased by 215 percent (from 144 to 453 institutions). Although enrollment size is not reported here, the growing number of degree-granting for-profit institutions provides context for the percentage increases in the number of degrees conferred by for-profit institutions.



For more information: Tables A-42-1 and A-42-2;

Glossary: Doctoral degree, First-professional degree NCES 2009-020

#### **Technical Notes**

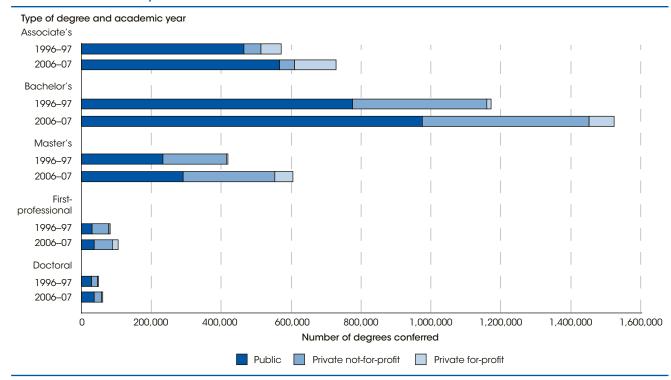
Includes degree-granting institutions that participated in Title IV federal financial aid programs. For more information on the Integrated Postsecondary Education Data System (IPEDS) and IPEDS classification of institutions, see *supplemental notes 3* and 8, respectively.

Number and percentage change of degrees conferred by degree-granting institutions, by control of institution and type of degree: Academic years 1996-97 and 2006-07

Type of degree and		Public		Private		
academic year	Total		Total	Not-for-profit	For-profit	
Associate's						
1996–97	571,226	465,494	105,732	49,168	56,564	
2006-07	728,114	566,535	161,579	43,829	117,750	
Percent change	27.5	21.7	52.8	-10.9	108.2	
Bachelor's						
1996-97	1,172,879	776,677	396,202	384,086	12,116	
2006-07	1,524,092	975,513	548,579	477,805	70,774	
Percent change	29.9	25.6	38.5	24.4	484.1	
Master's						
1996-97	419,401	233,237	186,164	181,104	5,060	
2006-07	604,607	291,971	312,636	261,700	50,936	
Percent change	44.2	25.2	67.9	44.5	906.6	
First professional						
1996-97	78,730	31,243	47,487	47,029	458	
2006-07	90.064	36,855	53,209	52,746	463	
Percent change	14.4	18.0	12.0	12.2	1.1	
Doctoral						
1996-97	45,876	29,838	16,038	15,694	344	
2006-07	60,616	36,230	24,386	22,483	1,903	
Percent change	32.1	21.4	52.1	43.3	453.2	

NOTE: Includes institutions that participated in Title IV federal financial aid programs. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3. See the glossary for definitions of first-professional and doctoral degrees. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996-97 and 2006-07 IPEDS, "Completions Survey" (IPEDS-C:97) and Fall 2007.

Figure 42-1. Number of degrees conferred by degree-granting institutions, by type of degree and control of institution: Academic years 1996-97 and 2006-07



NOTE: Includes institutions that participated in Title IV federal financial aid programs. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3. See the glossary for definitions of first-professional and doctoral degrees. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996-97 and 2006-07 IPEDS, "Completions Survey" (IPEDS-C:97) and Fall 2007.

# Faculty Salaries, Benefits, and Total Compensation

After increasing by 14 percent during the 1980s and by 5 percent during the 1990s, average salaries for faculty were 2 percent higher in 2007-08 than in 1999-2000, after adjusting for inflation.

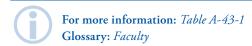
In 2007-08, the average faculty salary was \$71,100, with institutional averages ranging from \$43,400 at private 2-year colleges to \$93,700 at private doctoral universities (see table A-43-1). Between 1979-80 and 2007-08, the average salary for full-time instructional faculty in colleges and universities increased by 22 percent, after adjusting for inflation. Average salaries were higher in 2007-08 than in 1979-80 for faculty with academic ranks. The increase was greatest for instructors, whose average salary increased by 44 percent, followed by that of professors, whose average salary increased by 27 percent. Similarly, the average salary was higher in 2007-08 than in 1979-80 at most types of institutions, ranging from an increase of 7 percent at public 2-year colleges to 38 percent at private doctoral universities.

Much of the growth in faculty salaries between 1979-80 and 2007-08 occurred during the earlier years of this time span. After increasing by 14 percent during the 1980s and by 5 percent during the 1990s, average salaries for faculty were 2 percent higher in 2007-08 than in 1999–2000, after adjusting for inflation. In 2007–08, faculty salaries at public and private doctoral universities and private master's degree universities were about 1 percent higher than in 1999-2000. Salaries decreased by 1 percent between 1999–2000 and 2007–08 at public master's degree universities, public 2-year colleges, and public other 4-year colleges. In contrast, there was an increase of 6 percent at private other 4-year colleges. Faculty salaries at private 2-year colleges were 3 percent lower in 2007-08 than in 1999-2000.

Fringe benefits for faculty (adjusted for inflation) have increased by a higher percentage than salaries since

1979-80 (76 vs. 22 percent). Between 1999-2000 and 2007-08, fringe benefits rose among most types of institutions, in contrast to the decreases in salaries for many types of institutions. Overall, average fringe benefits for faculty were 19 percent higher in 2007–08 than in 1999–2000, while faculty salaries were 2 percent higher. Average fringe benefits for faculty generally increased by a larger percentage at public institutions than at private institutions. The average benefit for faculty at public doctoral universities increased by 15 percent, compared to an 11 percent increase for faculty at private doctoral institutions. The average benefit for faculty at public master's degree institutions increased by 23 percent, compared to 14 percent for faculty at private master's degree universities. The average benefit for faculty at public other 4-year colleges increased by 31 percent, compared to 21 percent for faculty at private other 4-year colleges. Faculty at public 2-year institutions had an increase of 25 percent in faculty benefits, while benefits for faculty at private 2-year colleges were 2 percent lower in 2007-08 than in 1999-2000.

Combining salary with benefits, full-time instructional faculty received a total compensation package in 2007-08 that was about 5 percent higher than they had received in 1999–2000. In 2007–08, the average compensation package for faculty was about \$90,800, including \$71,100 in salaries and \$19,800 in benefits.



#### **Technical Notes**

Total compensation is the sum of salary and fringe benefits. Salary does not include outside income. Fringe benefits may include benefits such as retirement plans, medical/dental plans, group life insurance, or other benefits. Institutions in this indicator are classified based on the number of highest degrees awarded. For example, institutions that award 20 or more doctoral degrees per year are classified as doctoral universities. For more information about classifications of postsecondary institutions, see supplemental note 8. Salaries reflect an average of all faculty on 9- and 10-month contracts rather than a weighted average based on contract length that appears in some other NCES reports. Data exclude

faculty on less-than-9-month and 11- and 12-month contracts. In 2007–08, less than 1 percent of faculty were on less-than-9-month contracts and 16 percent were on 11- and 12-month contracts. Salaries, benefits, and compensation are adjusted by the Consumer Price Index (CPI) to constant 2007–08 dollars. Academic ranks include professor, associate professor, assistant professor, instructor, and lecturer. Detail may not sum to totals because of rounding. For more information about the CPI, see *supplemental note 10*. For more information about the Integrated Postsecondary Data System (IPEDS), see supplemental note 3.

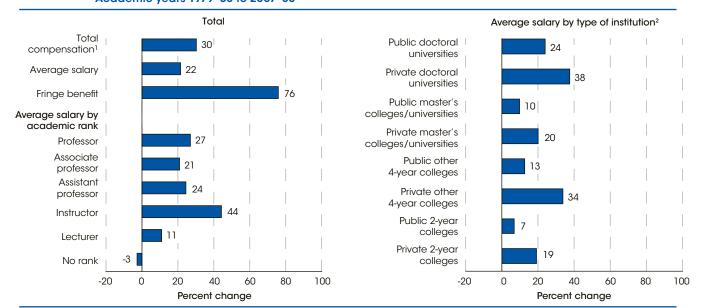
Total Average salary by type of institution<sup>2</sup> Tota Public doctoral \$90,800 \$79,200 compensation<sup>1</sup> universities Average salary Private doctoral \$93,700 universities Fringe benefit \$19,800 Public master's \$64,900 colleges/universities Average salary by academic rank Private master's \$64,600 \$98,500 colleges/universities Professor Associate Public other \$70,800 \$59,500 professor 4-year colleges Assistant \$59,300 professor Private other \$62,800 4-year colleges Instructor \$55,300 Public 2-year \$59,600 colleges Lecturer \$49,400 Private 2-year \$43,400 No rank \$54,400 colleges \$20,000 \$40,000 \$60,000 \$80,000 \$100,000 \$20,000 \$40,000 \$60,000 \$80,000 \$100,000 \$0 \$0 Average salary Average salary

Total compensation, average salary, and fringe benefits for full-time instructional faculty on 9- and Figure 43-1. 10-month contracts at degree-granting institutions: Academic year 2007–08

NOTE: Salaries reflect an average of all faculty on 9- and 10-month contracts rather than a weighted average based on contract length that appears in some other reports of the National Center for Education Statistics. For more information about the Integrated Postsecondary Data System (IPEDS), see supplemental note 3. Detail may not sum to totals because of rounding

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 Integrated Postsecondary Education Data System (IPEDS), Fall 2006 and Winter 2007-08.





<sup>&</sup>lt;sup>1</sup> Total compensation is the sum of salary and fringe benefits. Salary does not include outside income. Fringe benefits may include benefits such as retirement plans, medical/dental plans, group life insurance, or other benefits.

NOTE: Salaries reflect an average of all faculty on 9- and 10-month contracts rather than a weighted average based on contract length that appears in some other reports of the National Center for Education Statistics. Salaries, benefits, and compensation adjusted by the Consumer Price Index (CPI) to constant 2007-08 dollars. For more information about the CPI, see supplemental note 10. For more information about the Integrated Postsecondary Data System (IPEDS), see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1979-80 Higher Education General Information Survey (HEGIS), "Faculty Salaries, Tenure, and Fringe Benefits Survey"; and 2007-08 Integrated Postsecondary Education Data System (IPEDS), Fall 2006 and Winter 2007-08.

<sup>&</sup>lt;sup>1</sup> Total compensation is the sum of salary and fringe benefits. Salary does not include outside income. Fringe benefits may include benefits such as retirement plans, medical/dental plans, group life insurance, or other benefits.

Institutions are classified based on the number of highest degrees awarded. For more information about classifications of postsecondary

institutions, see supplemental note 8.

<sup>&</sup>lt;sup>2</sup> Institutions are classified based on the number of highest degrees awarded. For more information about classifications of postsecondary institutions, see supplemental note 8.

### College Student Employment

### In 2007, about 46 percent of full-time and 81 percent of part-time college students ages 16-24 were employed.

The percentage of full-time college students ages 16–24 who were employed increased from 34 to 52 percent between 1970 and 2000, decreased to 47 percent in 2001, and fluctuated between 46 and 49 percent during the period of 2001 through 2007 (see table A-44-1). In 2007, about 46 percent of full-time college students were employed, a level similar to the percentage of students employed during the early 1990s. The number of hours these students worked per week increased. The percentage of students working at least 20 hours per week increased between 1970 and 2000 and then remained relatively steady through 2007. Specifically, in 1970, some 10 percent of full-time students worked 20-34 hours per week, and 4 percent worked 35 or more hours per week. By comparison, the percentage of these students who worked 20-34 hours per week was 22 percent in 2000 and fluctuated between 21 and 22 percent through 2007 and the percentage of these students who worked 35 or more hours per week was 9 percent in 2000 and fluctuated between 8 and 9 percent through 2007.

In 2007, about 81 percent of part-time college students ages 16-24 were employed. In contrast to the increase among full-time college students, there was no measurable change between 1970 and 2007 in the percentage of parttime college students who were employed. In addition, part-time college students worked fewer hours in 2007 than they did in 1970, with the percentage of students working 35 or more hours per week decreasing from 60 to 46 percent during this period.

The trend in the percentage of full-time college students in public and private 4-year institutions and public 2-year colleges who were employed generally followed

the patterns of the overall percentage of full-time college students who were employed between 1990 and 2007. For example, the percentage of full-time students attending public 4-year institutions who were employed increased from 43 percent in 1990 to 51 percent in 2000, decreased to 46 percent in 2001, and fluctuated between 45 and 50 percent during the period of 2001 through 2007. The percentages of students who were employed differed by type of institution. In general, the percentages of students who were employed were higher for those attending public 2-year colleges than the percentages of those attending 4-year institutions for all years of data shown between 1990 and 2007. In addition, the percentages of students who were working while attending public 4-year institutions were higher than the percentages of students attending private 4-year institutions. In 2007, for example, about 54 percent of full-time students attending public 2-year colleges were employed, compared with 45 percent of full-time students attending public 4-year institutions and 39 percent attending private 4-year institutions.

In 2007, the percentage of full-time college students ages 16-24 who were employed differed by sex and race/ethnicity. A higher percentage of female than male full-time students were employed (48 vs. 43 percent) (see table A-44-2). Also, the employment rates of full-time students were higher among White and Hispanic students (48 and 49 percent, respectively) than among Black and Asian students (36 and 29 percent, respectively).



For more information: Tables A-44-1 and A-44-2; Indicator 45

#### **Technical Notes**

College includes both 2- and 4-year institutions. College students were classified as attending full time if they were taking at least 12 hours of classes (or at least 9 hours of graduate classes) during an average school week and as part time if they were taking fewer hours. Hours worked

per week refers to the number of hours the respondent worked at all jobs during the survey week. For more information on the Current Population Survey (CPS), see supplemental note 2.

Full-time students Part-time students Percent 100 Total employed 80 35 or more hours 60 Total employed 40 20-34 hours 20-34 hours Less than 20 hours 20 Less than 20 hours 35 or more hours 0 1970 1995 1975 1980 1985 1990 2000 2007 1970 1975 1980 1985 1995 2007 1990 2000 Year

Figure 44-1. Percentage of 16- to 24-year-old college students who were employed, by attendance status and hours worked per week: October 1970 through October 2007

NOTE: College includes both 2- and 4-year institutions. College students were classified as attending full time if they were taking at least 12 hours of classes (or at least 9 hours of graduate classes) during an average school week and as part time if they were taking fewer hours. Percent employed estimates include 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—these estimates exclude those who were employed but not at work during the survey week; therefore, detail may not sum to total percentage employed. For more information on the Current Population Survey (CPS), see

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1970-2007.

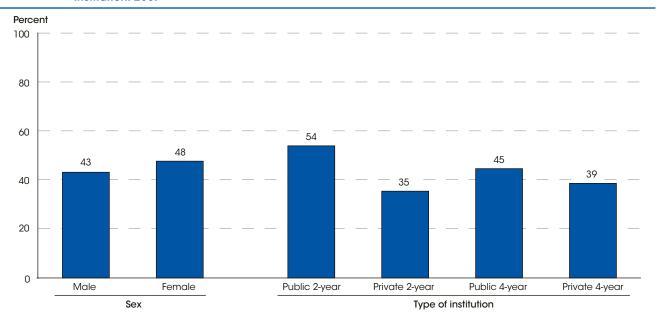


Figure 44-2. Percentage of 16- to 24-year-old full-time college students who were employed, by sex and type of institution: 2007

NOTE: College includes both 2- and 4-year institutions. College students were classified as attending full time if they were taking at least 12 hours of classes (or at least 9 hours of graduate classes) during an average school week. Percent employed estimates include those who were employed but not at work during the survey week. For more information on the Current Population Survey (CPS), see supplemental note 2. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 2007.

### Financial Aid for First-Time Students

Nearly three-quarters of full-time, first-time undergraduates received a student loan or grant in 2006-07. The percentage receiving financial aid was higher at not-forprofit institutions (85 percent) than at public institutions (70 percent) and for-profit institutions (69 percent).

This indicator examines the types and amounts of financial aid received by full-time, first-time degree/ certificate-seeking undergraduates at 2- and 4-year colleges. In 2006-07, about 73 percent of these undergraduates participated in some type of financial aid program, including federal, state/local, and institutional grants, and student loans (see table A-45-1). The percentage of undergraduates receiving financial aid was higher at private not-for-profit institutions (85 percent) than at public institutions (70 percent) and at private for-profit institutions (69 percent). Among undergraduates at public institutions, the percentage receiving aid was lower at 2-year institutions (61 percent) than at public 4-year institutions (75 percent). In contrast, 55 percent of undergraduates at for-profit 4-year institutions received financial aid, compared with 89 percent at for-profit 2-year institutions.

In addition to the differences in the overall percentages of full-time, first-time undergraduates receiving financial aid at public, not-for-profit, and for-profit institutions, there were differences in the types of financial aid they received. About 74 percent of full-time, first-time undergraduates at private not-for-profit institutions received an institutional grant in 2006-07, compared with 25 percent of those at public institutions and 8 percent of those at for-profit institutions. About 35 percent of undergraduates at public institutions received a state/local government grant, compared to 30 percent of undergraduates at not-forprofit institutions and 9 percent of undergraduates at for-profit institutions. About 45 percent of undergraduates at for-profit institutions received a federal grant compared with undergraduates at public institutions (31 percent) and undergraduates at not-for-profit institutions (26 percent). Also, higher percentages of undergraduates received a student loan at for-profit institutions

(62 percent) and not-for-profit institutions (59 percent) than undergraduates at public institutions (34 percent).

Average financial aid awards for full-time, first-time undergraduates were higher at not-for-profit institutions than at public institutions. In 2006-07, the average federal grant was \$3,841 (in 2007-08 dollars) at not-forprofit institutions, compared with \$3,214 at public institutions and \$2,878 at for-profit institutions (see figure 45-2). Similarly, the average award for state/local grants was higher at not-for-profit institutions (\$3,444) than at public institutions (\$2,404) and at for-profit institutions (\$2,565). When comparing the size of financial aid awards, the institutions differed most in institutional grants, where the average award at not-for-profit institutions was \$11,122, compared with \$3,439 at public institutions and \$1,602 at for-profit institutions. The average award for student loans at for-profit institutions (\$6,747) was higher than the average award at both not-for-profit institutions (\$5,750) and public institutions (\$4,232).

Average financial aid awards for full-time, first-time undergraduates were higher in 2006-07 than in 2000-01, after adjustment for inflation. The average award for institutional aid was 19 percent higher in 2006-07 than in 2000-01, compared with the smaller increases of 8 percent for federal grants and 65 percent for state grants (see table A-45-2). The average student loan amount was 14 percent higher in 2006-07 than in 2000-01.



For more information: Tables A-45-1 and A-45-2.

#### Technical Notes

All measures in this indicator include only data for fulltime, first-time degree/certificate-seeking undergraduates enrolled at 2- and 4-year institutions that grant associate's or higher degrees and participate in Title IV federal financial aid programs. Average amounts awarded are for students receiving the indicated type of aid. The data for loans include all Title IV subsidized and unsubsidized loans made directly to students, as well as institutionally

and privately sponsored student loans. The data for loans do not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents. For more information on tuition and fees, room, and board rates for public institutions and private for-profit and not-for-profit institutions, see NCES 2009-020, table 331. For more information about the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

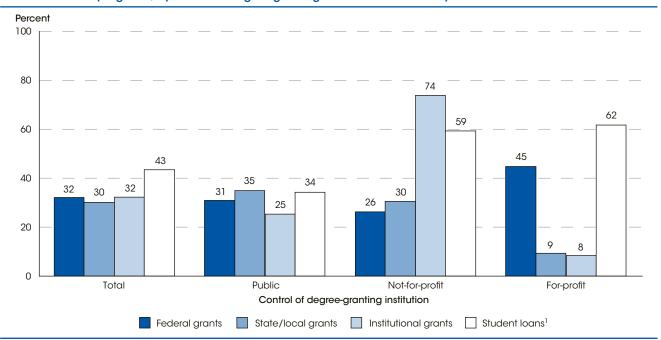
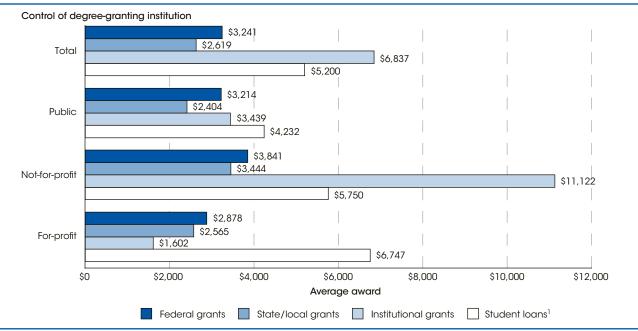


Figure 45-1. Percentage of full-time, first-time degree/certificate-seeking undergraduates participating in financial aid programs, by control of degree-granting institution: Academic year 2006-07

Figure 45-2. Average award for full-time, first-time degree/certificate-seeking undergraduates participating in financial aid programs, by control of degree-granting institution: Academic year 2006-07



<sup>1</sup> Includes all Title IV subsidized and unsubsidized loans made directly to students, as well as institutionally and privately sponsored student loans. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

<sup>1</sup> Includes all Title IV subsidized and unsubsidized loans made directly to students, as well as institutionally and privately sponsored student loans. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents. NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. For more information about the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2006-07 Integrated Postsecondary Education Data System (IPEDS), Spring 2008.

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Average awards for students participating in indicated programs. For more information about the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3

SÓÚRCE: U.S. Department of Education, National Center for Education Statistics, 2006-07 Integrated Postsecondary Education Data System (IPEDS), Spring 2008.

# **Postsecondary Revenues and Expenditures**

In 2006-07, student tuition accounted for 17 percent of the total revenue for public institutions, 26 percent for private not-for-profit institutions, and 88 percent for private for-profit institutions. State appropriations (24 percent) were the largest source of revenue for public institutions.

This indicator compares the revenues and expenses for public, private not-for-profit, and private for-profit postsecondary institutions. While detailed comparisons of financial data cannot be made across these sectors because of differences in accounting and data collection procedures for some categories of items, some general patterns can be observed. In 2006-07, student tuition and fees accounted for 26 percent of the total revenue for private not-for-profit institutions and 88 percent for private for-profit institutions (see table A-46-1). State appropriations (24 percent) were the largest source of revenue for public institutions, while tuition and fees (17 percent) constituted the second largest single revenue category. Private institutions report most federal student financial aid as tuition or auxiliary enterprise revenue (college housing and food services) rather than as direct revenue from the federal government. Public institutions report federal financial grant aid as federal grant revenue, although loans supported through federal programs are reported as tuition or auxiliary enterprise revenue.

In 2006–07, public institutions spent \$239 billion (\$26,062 per student in 2007-08 dollars) (see table A-46-2). About 28 percent of this amount, \$7,332 per student, was spent on instruction. The remaining funds were spent on other activities ranging from research (10 percent) and teaching hospitals (9 percent) to various types of services for students and the public, including public service (4 percent), student services (5 percent), and auxiliary enterprises (8 percent). Items more directly related to the administration of institutions included academic support (7 percent) and institutional support (8 percent). The expenses per student for public institutions were 3 percent higher in 2006-07 than in 2003–04, after adjustment for inflation.

In 2006–07, private not-for-profit institutions spent \$125 billion (about \$43,619 per student in 2007–08 dollars). About 33 percent of this amount, \$14,436 per student, was spent on instruction. The percentages of the budget spent by not-for-profit institutions on some categories of expenses—such as research (11 percent) and hospitals (8 percent)—were similar to the percentages spent by public institutions. For public service, the percentage for not-for-profit institutions (2 percent) was lower than for public institutions (4 percent). About 9 percent of the total spent at not-for-profit institutions was for academic support, and 14 percent was for institutional support. Part of the difference between revenues and expenses for 2006-07 was due to the size of the revenue from investments (\$19,578 per student) (see table A-46-1). These revenues may be volatile from year to year, affecting not only the amount of revenue from investments per student, but also the total revenues and the percentage distribution of the sources of revenues. The expenses per student for not-for-profit institutions were 3 percent higher in 2006-07 than in 2003-04, after adjustment for inflation.

In 2006–07, the expenses of private for-profit institutions amounted to \$12 billion (about \$13,357 per student in 2007-08 dollars) (see table A-46-2). About \$3,170 per student, or 24 percent of total expenses, was spent on instruction. About \$8,529 per student (64 percent of total expenses) was spent on a major grouping-made up of student services and academic and institutional support that includes a wide range of administrative costs plus the profit of the institution.



For more information: Tables A-46-1 and A-46-2 Glossary: Expenditures, Revenues

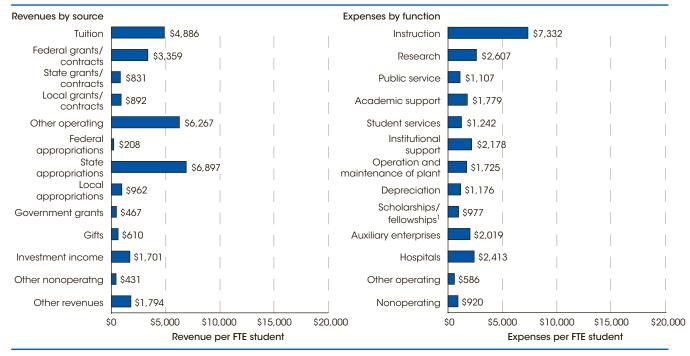
#### **Technical Notes**

Academic support includes services that directly support an institution's primary missions of instruction, research, or public service, such as libraries, galleries, audio/visual services, academic computing support, ancillary support, academic administration, personnel development, and course and curriculum development. Institutional support includes general administrative services, executive direction and planning, legal and fiscal operations, and community relations. Student services include expenses associated with admissions; registrar activities; and activities whose primary purpose is to contribute to students' emotional and physical well-being and to their

intellectual, cultural, and social development outside the context of the formal instructional program. Examples include student activities, cultural events, student newspapers, intramural athletics, student organizations, supplemental instruction (such as remedial instruction), counseling, financial aid administration, and student records. Revenue from endowments can fluctuate from year to year. For example, see negative revenues for investment return for years 2000-01 and 2001-02 in NCES 2009-020, table 353. For more information on the Integrated Postsecondary Education Data System (IPEDS), see supplemental note 3.

Figure 46-1. Public degree-granting postsecondary institutions' revenue per student, by source, and expenses per student, by function: Academic year 2006-07

[In constant 2007-08 dollars]

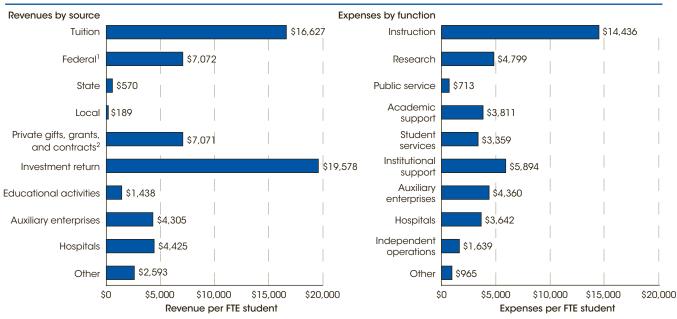


<sup>1</sup> Excludes discounts and allowances. In 2006-07, about 59 percent of the total scholarships were reported under discounts and allowances. NOTE: Full-time-equivalent (FTE) enrollment includes full-time students plus the full-time equivalent of the part-time students. For more information on IPEDS, see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007-08 Integrated Postsecondary Education Data System (IPEDS), Winter 2007-08.

Figure 46-2. Private not-for-profit degree-granting postsecondary institutions' revenue per student, by source, and expenses per student, by function: Academic year 2006-07

[In constant 2007-08 dollars]



<sup>&</sup>lt;sup>1</sup> Includes independent operations.

<sup>&</sup>lt;sup>2</sup> Includes contracts and contributions from affiliated entities.

NOTE: Full-time-equivalent (FTE) enrollment includes full-time students plus the full-time equivalent of the part-time students. For more information on IPEDS see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 Integrated Postsecondary Education Data System (IPEDS), Winter 2007-08.