

Section 4

Contexts of Elementary and Secondary Education





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This List of Indicators includes all the indicators in Section 4 that appear on *The Condition of Education* website (<http://nces.ed.gov/programs/coe>), drawn from previously published print volumes. The list is organized by subject area. The indicator numbers and the years in which the indicators were published are not necessarily sequential.

Introduction: Contexts of Elementary and Secondary Education

The indicators in this section of *The Condition of Education* measure features of the context of learning in elementary and secondary schools. This includes the content of learning and expectations for student performance; processes of instruction; mechanisms of choice in education; characteristics of teachers and the teaching profession; the climate for learning and other organizational aspects of schools; and financial resources. There are 35 indicators in this section: 11, prepared for this year's volume, appear on the following pages, and all 35, including indicators from previous years, appear on the Web (see Website Contents on the facing page 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 parent, teacher, and student attitudes; the concentration of poverty and racial/ethnic groups in schools; and schools' physical security and freedom from violence. 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. One indicator in this volume examines the nature of teacher attrition by various individual and professional characteristics. Other indicators on the Web examine the characteristics of principals, beginning teachers, and guidance counselors.

The third subsection focuses on learning opportunities afforded children. One indicator in this volume measures student/teacher ratios in public schools. Additional indicators on the Web highlight the availability of advanced-level academic courses, participation in early literacy activities, 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 extent to which students with disabilities are included in regular classrooms for instructional purposes and the characteristics of public alternative schools for at-risk students.

School choice provides parents with the opportunity to choose a school for their children beyond the assigned public school. Parents may choose a private school, they may live in a district that offers choice among public schools, or they may select a school by moving into that school's community. Indicators in the school choice subsection on the Web examine parental choice of charter schools and profile the characteristics of public charter schools.

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 on what they are spent. Among the indicators in this volume of *The Condition of Education* are indicators on variations in expenditures per student and trends in expenditures per student in elementary and secondary education.

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 <http://nces.ed.gov/programs/coe/list/i4.asp>.

School Characteristics and Climate

School Violence and Safety

During the 2005–06 school year, 17 percent of public schools experienced at least one serious violent incident at school.

In the School Survey on Crime and Safety, public school principals were asked to provide the number of violent incidents,¹ thefts of items valued at \$10 or greater,² and other incidents³ that occurred at their school, as well as the number of these incidents reported to the police. During the 2005–06 school year, 86 percent of public schools indicated that one or more incidents had taken place at school (see supplemental table 28-1). During the same year, 61 percent of schools reported at least one incident to the police.

In the 2005–06 school year, 78 percent of public schools experienced one or more violent incidents, 17 percent experienced one or more serious violent incidents, 46 percent experienced one or more thefts, and 68 percent experienced one or more of other types of 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 at least one of the other specified incidents to the police.

The percentage of schools experiencing at least one violent incident was lower in 2005–06 than in 2003–04 (78 vs. 81 percent), but the percentage of schools experiencing violent incidents was lowest in 1999–2000 (71 percent). While the percentage of schools reporting at least one violent incident to the police was not measurably different in 2005–06 than in 1999–2000 (38 vs. 36 percent), a larger percentage of schools reported at least one violent incident to the police in 2003–04 (44 percent) than in 1999–2000 or 2005–06.

The prevalence of violent incidents at public schools varied by school level. A smaller percentage of primary schools (67 percent) than middle schools (94 percent) or high schools (95 percent) experienced a violent incident in 2005–06 (see supplemental table 28-2).

¹ 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.

² 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.”

³ 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.

NOTE: “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 respond only for those times that were during normal school hours or when school activities or events were in session. Reported crimes are computed by dividing the number of public schools that reported crimes to the police by all public schools, including those that did not report experiencing crime. For more information, please see supplemental note 3.

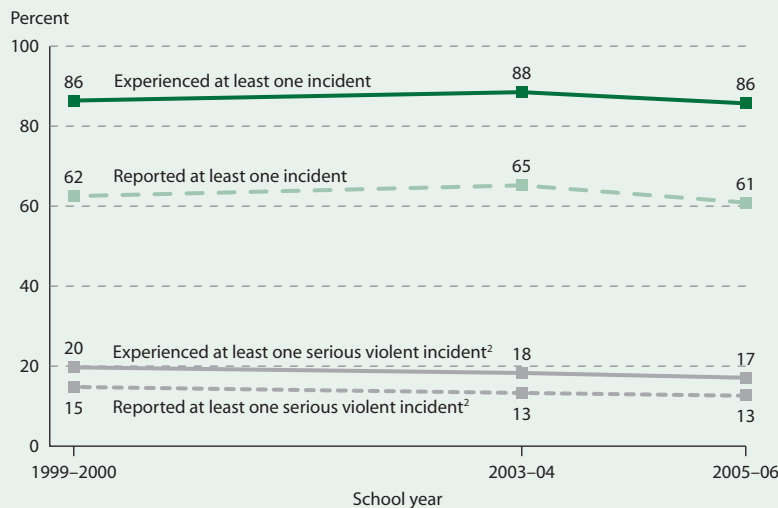
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000, 2003–04, and 2005–06 School Survey on Crime and Safety (SSOCS), 2000, 2004, and 2006.

FOR MORE INFORMATION:
Supplemental Notes 1, 3
Supplemental Tables 28-1,
28-2



NCES 2007-361

SCHOOL VIOLENCE AND SAFETY: Percentage of public schools experiencing at least one incident and reporting at least one incident that occurred at school to the police, by selected incidents: School years 1999–2000, 2003–04, and 2005–06



School Characteristics and Climate

Poverty Concentration in Public Schools by Locale and Race/Ethnicity

Larger percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty schools than White or Asian/Pacific Islander students in 2005–06.

The percentage of students eligible for the free or reduced-price lunch program provides a proxy measure for the concentration of low-income students within a school. For the purpose of this indicator, high-poverty schools are defined as public schools with more than 75 percent of students eligible for free or reduced-price lunch.¹ In 2005–06, approximately 15 percent of all elementary and secondary public school students (or 7.1 million students) attended high-poverty schools (see supplemental table 29-1).

Nationally, larger percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty schools than did White or Asian/Pacific Islander students in 2005–06, and higher percentages of Asian/Pacific Islander than White students attended these schools. Some 32 percent of Black, 34 percent of Hispanic, and 24 percent of American Indian/Alaska Native students were enrolled in high-poverty schools, compared with 4 percent of White and 10 percent of Asian/Pacific Islander students. In contrast, nationally, larger percentages of White (19 percent) and Asian/

Pacific Islander (24 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 (7 percent), and American Indian/Alaska Native (5 percent) students.

Overall, a similar pattern existed among racial/ethnic groups within different school locales. In each locale (cities, suburban areas, towns, and rural areas), higher percentages of Black, Hispanic, and American Indian/Alaska Native students attended high-poverty schools than did their White and Asian/Pacific Islander peers in 2005–06. Among students attending city schools, for example, 44 percent of Blacks, 46 percent of Hispanics, and 27 percent of American Indians/Alaska Natives attended high-poverty schools, compared with 9 percent of Whites and 17 percent of Asians/Pacific Islanders. In rural areas, higher percentages of Black (25 percent), Hispanic (26 percent), and American Indian/Alaska Native (33 percent) students attended high-poverty schools than did their White and Asian/Pacific Islander (4 percent for both) peers.

¹ Private school students are excluded because large proportions of private schools do not participate in the free or reduced-price lunch program.

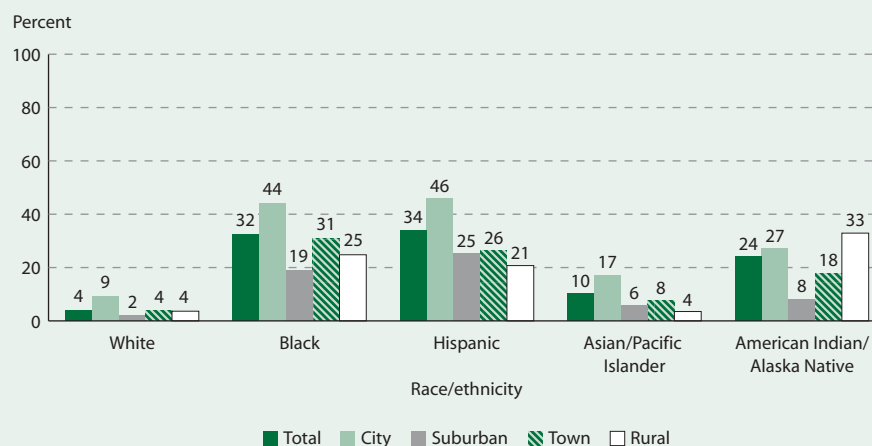
NOTE: Figure represents percentages of students in public schools with more than 75 percent of students eligible for free or reduced-price lunch. The National School Lunch Program is a federally assisted meal program. To be eligible, a student must be from a household with an income at or below 130 percent of the poverty threshold for free lunch or between 130 percent and 185 percent of the poverty threshold for reduced-price lunch. Approximately 10,745 public schools (or 11 percent) did not report information on the number of students eligible for free or reduced-price school lunch. For details on Census-defined areas and poverty thresholds, see *supplemental note 1*. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2005–06.



FOR MORE INFORMATION:
Supplemental Note 1
Supplemental Table 29-1
NCES 2007-039
NCES 2007-040

POVERTY CONCENTRATION: Percentage of public elementary and secondary school students in high-poverty schools, by race/ethnicity and locale: School year 2005–06



School Characteristics and Climate

Concentration of Public School Enrollment by Locale and Race/Ethnicity

In 2005–06, larger percentages of Black and Hispanic public school students attended schools with high minority enrollments than White, American Indian/Alaska Native, and Asian/Pacific Islander public school students.

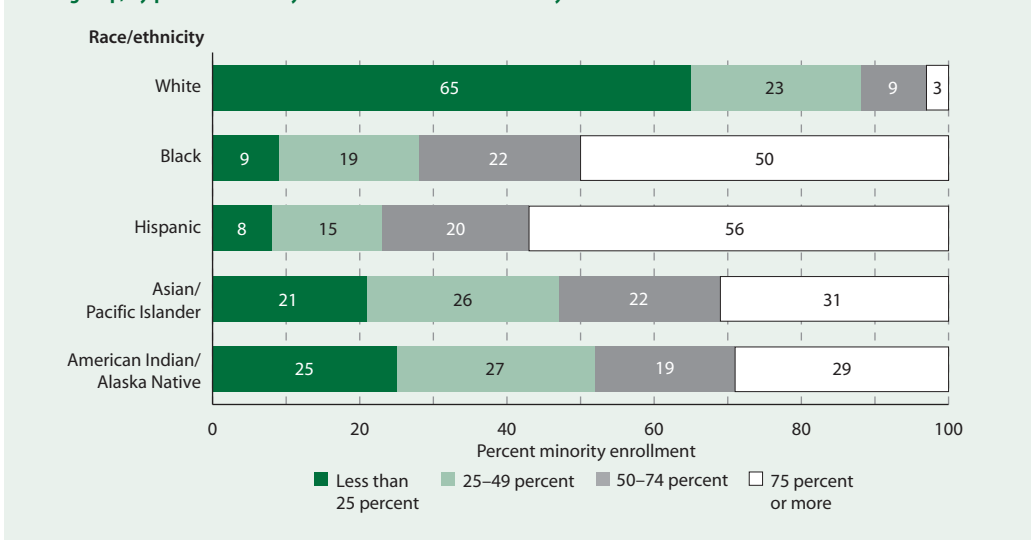
In 2005–06, public schools with high minority enrollments (defined as schools in which 75 percent or more of the students were Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native) enrolled 23 percent of all public elementary and secondary students (see supplemental table 30-1). However, about half of all Hispanic (56 percent) and Black (50 percent) students attended such schools—larger percentages than Asian/Pacific Islander (31 percent), American Indian/Alaska Native (29 percent), or White (3 percent) students at such schools.

The percentage of students in schools with high minority enrollments varied across school locales in 2005–06, with a larger percentage of public school students in cities (45 percent) attending such schools than in suburban areas (20 percent), towns (10 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 such schools than did students of any other race/ethnicity. In rural areas, a greater percentage of

American Indian/Alaska Native students attended schools with high minority enrollments than did students of any other race/ethnicity.

Examining the concentration of specific racial/ethnic groups provides a more detailed snapshot of the extent to which students are in racially and ethnically diverse schools. Nationally, public schools in which 75 percent or more of the students were Black enrolled 31 percent of all Black students and less than 1 percent of students of each other race/ethnicity in 2005–06 (see supplemental table 30-2). Public schools in which 75 percent or more of the students were Hispanic enrolled 33 percent of Hispanic public school students, 3 percent of Asian/Pacific Islander public school students, and 2 percent or less of public school students of each other race/ethnicity (see supplemental table 30-3). Public schools in which 75 percent or more of the students were White enrolled 64 percent of White public school students, 24 percent of American Indian/Alaska Native, 20 percent of Asian/Pacific Islander, 9 percent of Black, and 8 percent of Hispanic public school students (see supplemental table 30-4).

MINORITY CONCENTRATION: Percentage distribution of public elementary and secondary school students of each racial/ethnic group, by percent minority enrollment in school: School year 2005–06



NOTE: Minority enrollment includes Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2005–06.

FOR MORE INFORMATION:
Supplemental Note 1
Supplemental Tables 30-1,
30-2, 30-3, 30-4



Teachers and Staff

Teacher Turnover

Teacher turnover is higher in high-poverty than in low-poverty public schools.

At the end of the 2003–04 school year, 17 percent of the elementary and secondary teacher workforce (or 621,000 teachers) left the public and private schools where they had been teaching (see supplemental tables 31-1 and 31-2). Almost half of this teacher turnover was due to transfers: 8 percent of the teacher workforce (or 289,000 teachers) transferred to a different school. The remainder (9 percent of the teacher workforce or 333,000 teachers) was due to teachers who left teaching: teachers who took a job in a field other than elementary or secondary teaching (4 percent), returned to school for further education (0.3 percent), left for family reasons (e.g., to raise children or take care of other family members) (1 percent), retired (2 percent), and left for miscellaneous “other”¹ reasons (1 percent).

percentages of teachers in these categories at the end of 2003–04 were not measurably different from the earlier school years. Virtually all of this relative increase was due to increases in the percentages of teachers who retired (which was greater at the end of 2003–04 than 1987–88, 1990–91, or 1993–94) and teachers who took another job or left teaching for miscellaneous other reasons (both of which were greater at the end of 2003–04 than 1987–88 or 1990–91).

In public schools, the turnover rate for high-poverty schools was greater than for low-poverty schools at the end of 2003–04 (21 vs. 14 percent) (see supplemental table 31-3). Schools were considered high poverty if 75 percent or more of their students were eligible for free or reduced-price lunch, and low poverty if less than 15 percent of their students were eligible.² Much of the difference between the two turnover rates is due to the higher transfer rate among teachers in high- versus low-poverty schools (11 vs. 6 percent). This same difference in transfer rates was observed for teachers in high- and low-poverty schools in 1991–92, 1993–94, and 1999–2000, but no difference was measurable in 1987–88.³

Rounds to zero.

! Interpret data with caution (estimates are unstable).

¹ Leavers in this category left teaching for a variety of personal reasons, ranging from “starting their own business” to becoming “a member of a contemplative religious community.” However, the most common reason reported by leavers who left for “other” reasons was to take a year-long sabbatical or leave of absence from teaching.

² Poverty differences in private schools are not examined because a large proportion of private schools do not participate in the free or reduced-price lunch program. Public schools for which data are missing or that do not participate in the program were excluded.

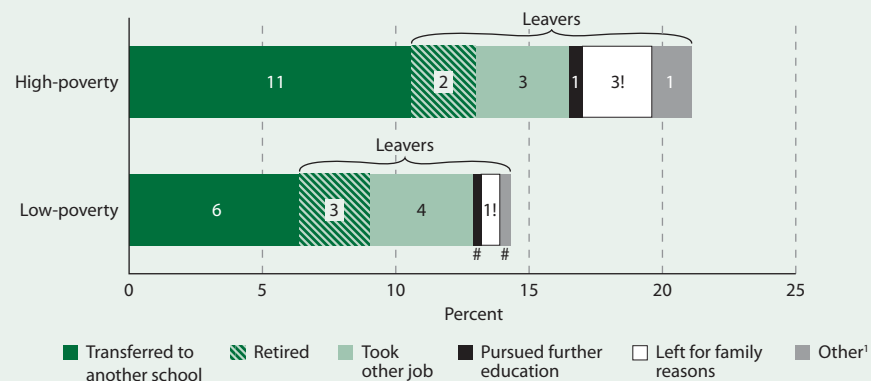
³ High- and low-poverty schools can only be identified in 1990–91 based on the percentage of students who receive free or reduced-price lunches and not on the percentage eligible to receive free or reduced-price lunches.

NOTE: Figure created from unrounded data. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Data File,” 2003–04, and Teacher Follow-up Survey (TFS), “Current Teacher Data File” and “Former Teacher Data File,” 2004–05.

The percentage of teacher turnover at the end of 2003–04 was larger than at the end of 1987–88, 1990–91, and 1993–94 but was not measurably different from that at the end of 1999–2000. This relative increase in turnover from earlier years was not due to changes in the percentages of teachers who transferred, pursued further education, or left for family reasons: the per-

TEACHER TURNOVER: Percentage of 2003–04 public K–12 teachers who did not teach in the same school the following school year, by poverty level of school and the reason teachers left



FOR MORE INFORMATION:
 Supplemental Note 3
 Supplemental Tables 31-1,
 31-2, 31-3
 NCES 2005-114

Teachers and Staff

Public School Staff

In 2003–04, professional instructional staff accounted for 64 percent of public school staff, with teachers making up the majority of all staff.

In 2003–04, public schools employed over 5.5 million staff (see supplemental table 32-1).¹ Of these staff, 2.8 million were employed by elementary schools, 1.4 million by secondary schools, and 950,000 by middle schools. Professional instructional staff² accounted for 64 percent of public school staff, with teachers making up 57 percent of all staff. Student services professional staff³ and school aides accounted for 5 and 13 percent of public school staff, respectively.

The average number of students per staff member varied by staff type and by school characteristics (see supplemental table 32-2).⁴ In terms of school enrollment size, the average number of students per staff member was consistently higher for larger schools than for smaller schools. This finding held for all staff except school counselors. For example, for social workers and psychologists, there was an average of 156 students per staff member in schools with less than 300 students, compared with an average of 1,106 students per staff member in schools with 1,500 or more students.

In contrast with patterns for enrollment size, the average number of students per staff member

was generally lower for schools with larger percentages of students approved for free or reduced-price lunch than for schools with smaller percentages of students approved for this benefit. This finding held for principals, nurses, social workers and psychologists, speech therapists, other professional staff, special needs aides, and other aides.⁵ For example, on average, there were 669 students per speech therapist in schools with 10 percent or fewer students approved for free or reduced-price lunch, compared with 512 students per speech therapist in schools with more than 75 percent of students approved for this benefit.

Differences in the average number of students per staff member were also found by school locale. Schools in rural areas generally had lower average numbers of students per staff member than did schools in other locales for principals, teachers, librarians/library media specialists, school counselors, nurses, social workers and psychologists, speech therapists, and other aides. For example, for nurses, rural schools had an average of 481 students per staff member, compared with 563 in towns, 688 in suburban areas, and 685 in cities.

¹ Data are for full- and part-time staff. Not all schools have each type of staff member. Full-time-equivalent calculations were completed for part-time staff within each staff category.

² Professional instructional staff include principals, teachers, instructional coordinators and supervisors, librarians/library media specialists, and school counselors.

³ Student services professional staff include nurses, social workers and psychologists, speech therapists, and other professional staff.

⁴ Data for each staff category are derived from schools with staff members in those categories.

⁵ Other aides include regular Title I aides, library media center instructional and noninstructional aides, and other classroom instructional and non-instructional aides.

NOTE: Elementary schools are defined as schools with at least one grade lower than 5 and no grade higher than 8. Middle schools are defined as schools with no grade lower than 5 and no grade higher than 8. Secondary schools are defined as schools with no grade lower than 7 and at least one grade higher than 8. Combined schools have at least one grade lower than 7 and at least one grade higher than 8; schools with only ungraded classes are also included in combined schools. Detail may not sum to totals because of rounding. See supplemental note 3 for more information on the Schools and Staffing Survey (SASS).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Data File," 2003–04.

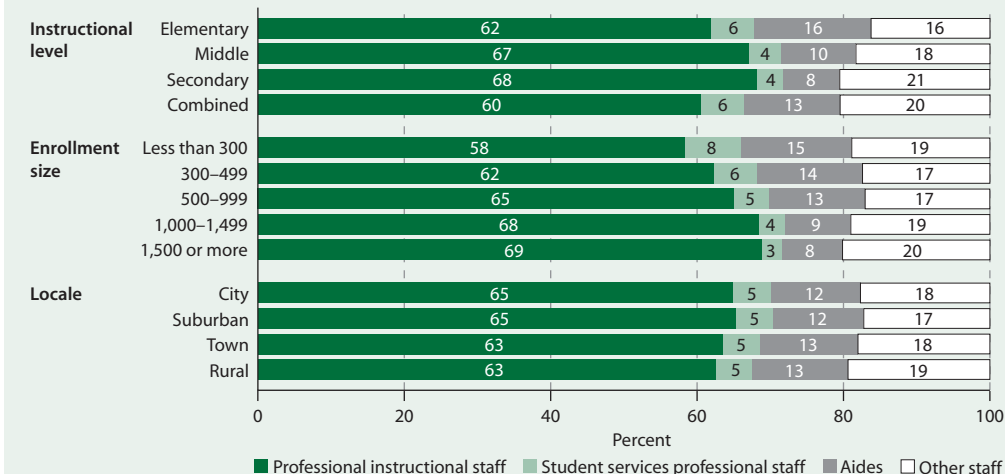
FOR MORE INFORMATION:
Supplemental Notes 1,3

Supplemental Tables 32-1, 32-2, 32-3,

NCES 2007-064, indicators 30, 33–35



PUBLIC SCHOOL STAFF: Percentage distribution of staff employed in public schools, by instructional level, enrollment size, and locale: School year 2003–04



Learning Opportunities

Student/Teacher Ratios in Public Elementary and Secondary Schools

Student/teacher ratios tend to be higher in public schools with larger enrollments than in public schools with smaller enrollments.

The ratio of students to teachers, which is sometimes used as a proxy measure for class size, declined between 1990 and 2005 from 17.6 to 16.1 students per teacher for all regular¹ schools (see supplemental table 33-1). This pattern changes, however, when public elementary, secondary, and combined schools are examined separately.

The student/teacher ratio for regular public elementary schools declined from 1990 through 2005 (from 18.2 to 15.8), with most of the decline occurring after 1996. Generally, elementary schools in each enrollment category showed similar patterns except in the largest schools (1,500 students or more), where the student/teacher ratio fluctuated between 19.6 and 21.2 over this period.

In contrast, student/teacher ratios for all regular public secondary schools increased between 1990 and 1996 (from 16.7 to 17.6) and then declined to 16.8 in 2005. Secondary schools in each enrollment category showed similar patterns.

In regular public combined schools (schools that include both elementary and secondary grades), student/teacher ratios were lower in 2005 (15.3) than in 1990 (15.8). This pattern varied by the school enrollment: the student/teacher ratio for the largest enrollment category was higher in 2005 than in 1990, the student/teacher ratios for the middle three enrollment categories were lower in 2005 than in 1990, and the student/teacher ratio for the smallest enrollment category was of similar magnitude in 2005 and 1990 (11.1 versus 11.0).

In every year from 1990 through 2005, the student/teacher ratio was positively associated with the enrollment for elementary, secondary, and combined regular public schools: the student/teacher ratio for any given enrollment category was always larger than that of any smaller enrollment category. For example, in 2005, regular secondary schools with 1,500 students or more enrolled 6.6 more students per teacher, on average, than regular secondary schools with enrollments under 300.

¹ Regular schools include all schools except special education schools, vocational schools, and alternative schools. Charter schools can be of any school type.

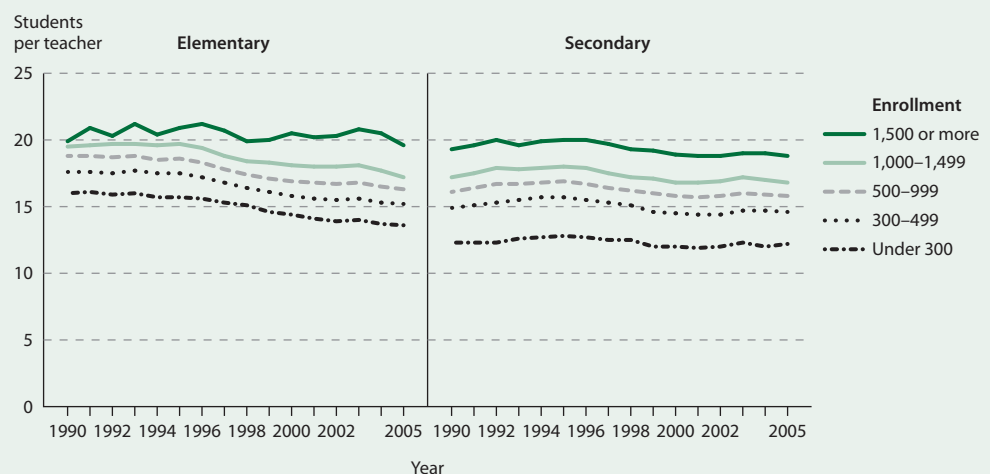
NOTE: Student/teacher ratios do not provide a direct measure of class size. The ratio is determined by dividing the total number of full-time-equivalent teachers into the total student enrollment. These teachers include classroom teachers; prekindergarten teachers in some elementary schools; art, music, and physical education teachers; and teachers who do not teach regular classes every period of the day. This analysis excludes schools that did not report both enrollment and teacher data.

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 2005–06.



FOR MORE INFORMATION:
Supplemental Note 3
Supplemental Table 33-1

STUDENT/TEACHER RATIO: Student/teacher ratios in regular public elementary and secondary schools, by school level and enrollment: Fall 1990–2005



Finance

Changes in Sources of Public School Revenue

Federal, state, and local revenues all increased from 1989–90 to 2004–05, though at different rates.

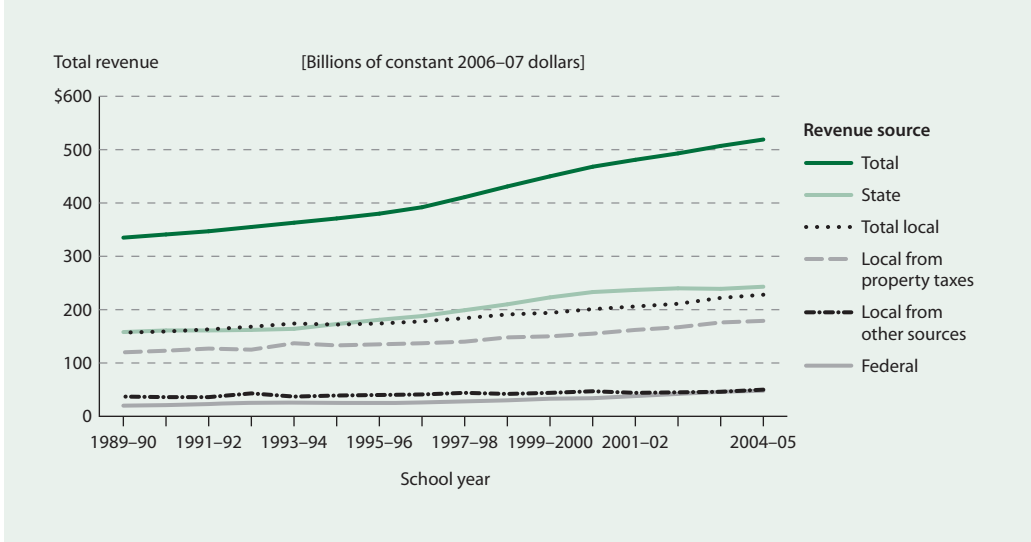
From 1989–90 to 2004–05, total elementary and secondary public school revenues increased 55 percent in constant dollars. During this period, the total amount from each revenue source (federal, state, and local) increased, though not at the same rate (see supplemental table 34-1). Federal and state revenues increased at a faster rate than all local revenues (both property tax revenue and other local revenue). Federal revenue increased 134 percent, compared with an increase of 54 percent for state revenue and 45 percent for local revenue. The total amount of revenue from each revenue source increased in each region as well.

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 2004–05, while the percentage of total revenue flowing to public schools from federal sources increased from 6 percent in 1989–90 to 9 percent in 2004–05 (see supplemental table 34-2). The percentage from state sources was the same in 1989–90 as in 2004–05 (47 percent).

In each region, as in the nation, state and local sources were the two largest sources of revenue in 2004–05. There were, however, differences in the percentages contributed by these two revenue sources in the four regions. In the Northeast, a majority of all revenue was from local sources (52 percent) in 2004–05. Another 42 percent was from state sources. In the Midwest, about the same percentage of revenue was from local sources (45 percent) as from state sources (46 percent) in 2004–05. In the South, as in the Midwest, about the same percentage of revenue came from state sources (44 percent) and local sources (45 percent) in 2004–05. In the West, a majority of revenue was from state sources (56 percent) in 2004–05, with 33 percent from local sources.

The percentage of revenue from federal sources increased in each region from 1989–90 to 2004–05. In 2004–05, the percentage of revenue from federal sources ranged from about 7 percent in the Northeast and 8 percent in the Midwest to 11 percent in the South and West.

REVENUES BY SOURCE: Total revenue for public elementary and secondary schools, by revenue source: School years 1989–90 to 2004–05



NOTE: 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. Property tax revenue and other local government revenues were imputed for Texas for 1992–93. See supplemental note 11 for information about revenue for public elementary and secondary schools. Estimates are revised from previous publications.

SOURCE: U.S. Department of Education, National Center of Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1989–90 to 2004–05.

FOR MORE INFORMATION:
Supplemental Notes 1, 3, 11
Supplemental Tables 34-1,
34-2



Finance

Public Elementary and Secondary Expenditures by Type and Function

The percentage of current expenditures spent on salaries declined 4 percentage points from 1989–90 to 2004–05, from 66 to 62 percent. During this period, the percentage spent on employee benefits increased 3 percentage points.

Total expenditures per student rose 29 percent in constant dollars between 1989–90 and 2004–05, from \$8,437 to \$10,892 (see supplemental table 35-1). This rate of increase in total expenditures was not evenly distributed among the types of expenditures. Spending on interest on school debt increased the most (94 percent), followed by capital outlays (66 percent), other total expenditures¹ (41 percent), and current expenditures (24 percent).

Among the functions of current expenditures, spending on student and staff support increased the most (48 percent), followed by instruction (26 percent) and transportation (20 percent). Spending on three other functions of current expenditures also increased: operation and maintenance (11 percent), food services (11 percent), and administration (10 percent). Of the seven functions of current expenditures, only spending on enterprise operations declined (39 percent) (see supplemental table 35-2).

In the 2004–05 school year, 61 percent of the \$9,266 spent on current expenditures in public

elementary and secondary schools went toward instruction expenditures such as teacher salaries and employee benefits. About 13 percent went toward student and staff support, 10 percent toward operation and maintenance, 8 percent toward administration, and 4 percent each toward transportation and food services.

From 1989–90 to 2004–05, the amount of current expenditures spent on salaries increased 16 percent (see supplemental table 35-1). Despite this increase, the percentage of current expenditures spent on salaries declined 4 percentage points, from 66 to 62 percent. The percentage of current expenditures spent on employee benefits increased almost 3 percentage points during this period, and the percentage spent on purchased services and supplies each increased 1 percentage point. In each year, the percentage spent on tuition and other expenditures was about 2 percent. The greatest increase was for employee benefits, which rose 43 percent, from \$1,246 to \$1,787 per student.

¹ Other expenditures include funds for adult education, community colleges, private school programs funded by local and state education agencies, and community services.

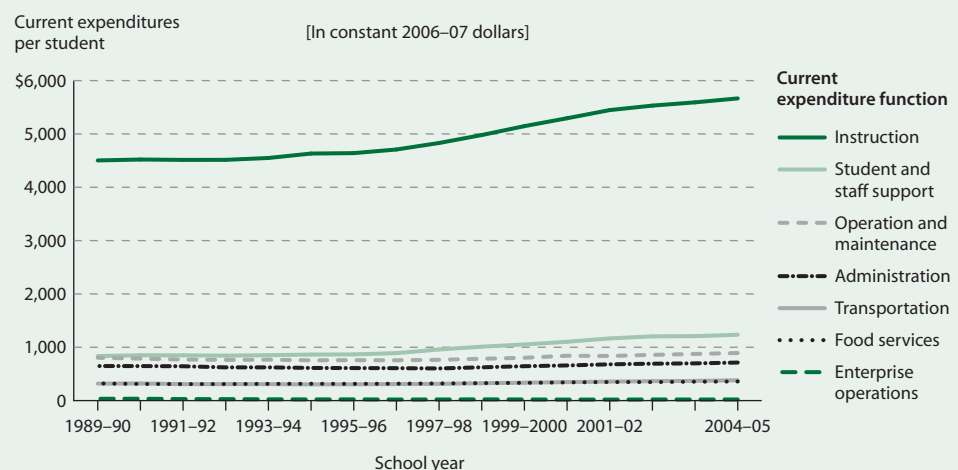
NOTE: Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2006–07 dollars. See supplemental note 11 for information about this index and about classifications of expenditures for elementary and secondary education. All analyses were performed with unrounded numbers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 1989–90 through 2004–05.



FOR MORE INFORMATION:
Supplemental Notes 3, 11
Supplemental Tables 35-1,
35-2

EXPENDITURES BY FUNCTION: Current expenditures per student in fall enrollment in public elementary and secondary schools, by expenditure function: School years 1989–90 through 2004–05



Finance

Variations in Instruction Expenditures per Student

Between 1997–98 and 2004–05, differences between states accounted for a greater percentage of the variation in instruction expenditures per student among unified public 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* because it 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. In this indicator, a coefficient of zero indicates that there is no variation in the instruction expenditures per student in unified public school districts for kindergarten through grade 12, and the Theil coefficient, which has a maximum possible value of 1.0, increases as the amount of variation present increases.

Across U.S. districts, the total variation, after controlling for geographic cost differences,¹ in instruction expenditures per student increased between the 1997–98 and 2004–05 school years (see supplemental table 36-1). The between-state variation also increased during that

time, but the within-state component remained largely unchanged. In the 1997–98 school year, 57 percent of the variation in instruction expenditures per student was due to the between-state differences and 43 percent was due to within-state differences. As the between-state component of the variation increased from 1997–98 to 2004–05 and the within-state component remained largely unchanged, the percentage of the total variation due to the between-state component increased to 66 percent in 2004–05 and that due to the within-state component decreased to 34 percent.

Changes in the variation in instruction expenditures per student over time may also 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 litigation, school finance reform efforts, and changes in the composition of student enrollment.

¹ Instruction expenditures in this indicator have been adjusted for geographic cost differences using the Comparable Wage Index (CWI). In *indicator 35*, expenditures were not presented by geographic area so no such adjustment was required. Rather, in *indicator 35*, the Consumer Price Index (CPI) was used to adjust for the effects of inflation. The CWI is available from 1997–98 to 2004–05. See *supplemental note 11* for more information.

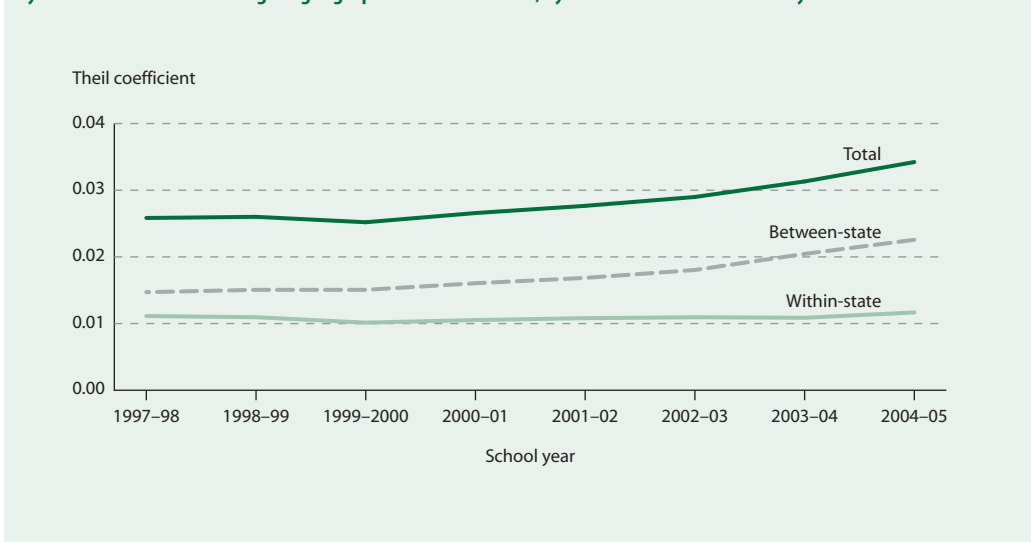
NOTE: For more information about the *Theil coefficient*, see *supplemental table 36-1* and *supplemental note 11*. Public elementary and secondary unified districts are those districts that serve both elementary and secondary grades. In 2004–05, approximately 91 percent of all public elementary and secondary school students were enrolled in unified school districts.

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 to 2002"; "School District Finance Survey (Form F-33)," 2002–03 to 2004–05; and NCES Comparable Wage Index Files, "School District CWI."

FOR MORE INFORMATION:
 Supplemental Notes 3, 11
 Supplemental Table 36-1
 NCES 2000-020
 NCES 2006-321
 Murray, Evans, and Schwab
 1998



VARIATIONS IN EXPENDITURES: Variation in instruction expenditures per student in unified public elementary and secondary school districts controlling for geographic cost differences, by source of variation: School years 1997–98 to 2004–05



Finance

Public Elementary and Secondary Expenditures by District Poverty

Current expenditures per student in 2004–05 were highest in high-poverty school districts and next highest in low-poverty school districts.

Current expenditures per student in public elementary and secondary schools vary by the level of poverty in a district. For example, in 2004–05, current expenditures per student, which include instructional, administrative, and operation and maintenance expenditures, were highest in high-poverty districts (\$9,892), next highest in low-poverty districts (\$9,263), and lowest in middle-poverty districts (\$8,536) (see supplemental table 37-1). 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. All expenditures in this indicator have been adjusted to account for inflation and geographic cost of living differences.¹

Between 1997–98 and 2004–05, current expenditures per student increased by 20 percent in constant dollars, from \$7,602 to \$9,094. Cur-

rent expenditures per student increased the most for the high-poverty districts (26 percent), and the least for the middle-poverty districts (16 percent). Expenditures in the other three categories increased between 18 and 20 percent.

In 2004–05, current expenditures per pupil also differed by the type of community in which the school district was located. When adjusted for geographic cost differences, current expenditures per student were highest in districts located in towns (\$9,430) and rural areas (\$9,426) and lowest in the suburbs (\$8,862) (see supplemental table 37-2). In every district poverty category, rural areas had either the highest or second highest current expenditures per pupil.

There were differences in the types of communities in which low- and high-poverty school districts were located. For example, among students in low-poverty districts, 69 percent were enrolled in the suburbs, while 10 percent were enrolled in cities (see supplemental table 37-3). In contrast, 69 percent of the students in high-poverty districts were enrolled in cities, while the suburbs enrolled 7 percent.

¹The NCES Comparable Wage Index (CWI) was used to adjust for geographic cost differences. As the CWI measures geographic differences in wages, it is more appropriate to use the CWI for expenditure categories with larger percentages of salaries, such as current expenditures and instruction expenditures, than for other expenditures with smaller percentages of salaries such as total expenditures. All expenditures in this indicator are in constant 2006–07 dollars. The Consumer Price Index (CPI) was used to adjust expenditures into constant dollars. See *supplemental note 11* for information on the CWI, the CPI, and classifications of expenditures.

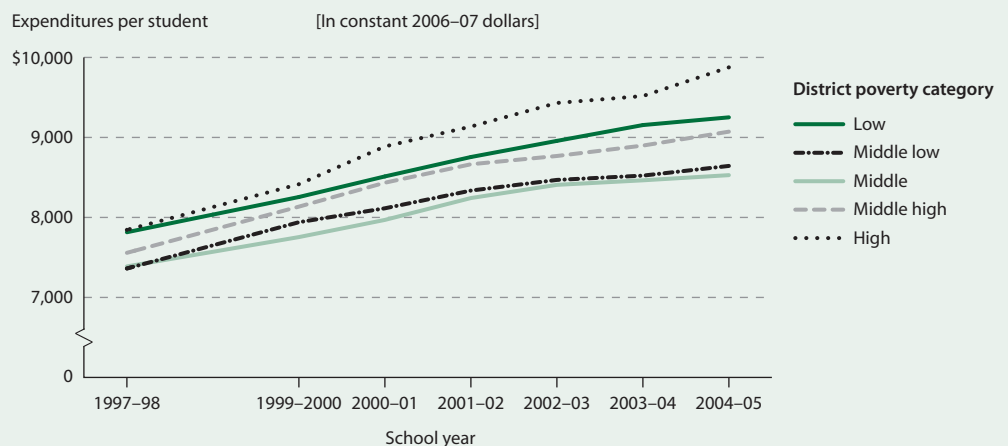
NOTE: See *supplemental note 1* for further information on poverty and community types. Regular districts include elementary/secondary combined districts and separate elementary or secondary districts. They exclude Department of Defense districts and Bureau of Indian Education districts.

SOURCE: U.S. Department of Commerce, Census Bureau, "Small Area Income and Poverty Estimates," 1997–98 and 1999–2000 to 2004–05; and U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data (CCD), "School District Finance Survey (Form F-33)," 1997–98 and 1999–2000 to 2004–05, and NCES Comparable Wage Index Files, "2005 School District CWI."



FOR MORE INFORMATION:
Supplemental Notes 1, 3, 11
Supplemental Tables 37-1,
37-2, 37-3
NCES 2001-323
Orlofsky 2002

CURRENT EXPENDITURES PER STUDENT: Public school district geographic cost-adjusted expenditures per student, by district poverty category: Various school years, 1997–98 to 2004–05



Finance

International Comparisons of Expenditures for Education

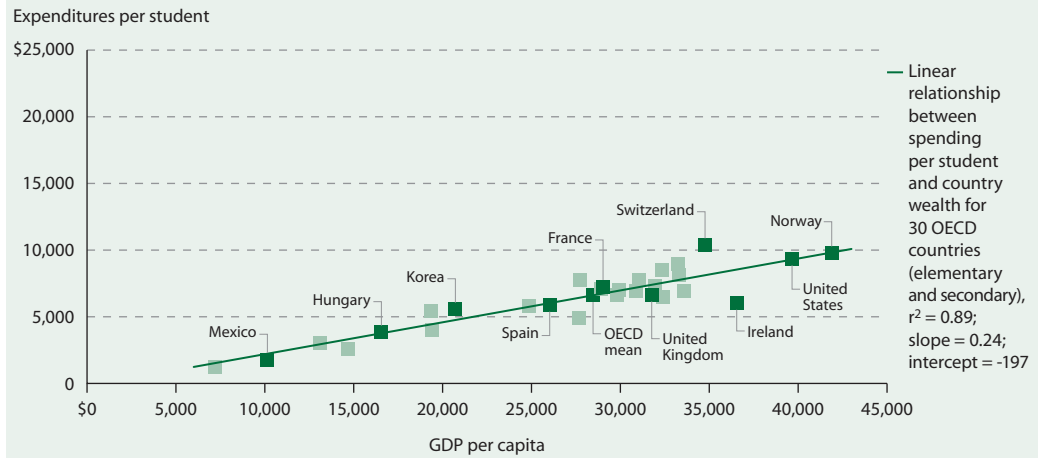
At the postsecondary level in 2004, U.S. expenditures per student were \$22,476, which was higher than the OECD average of \$11,418.

Two measures used to compare 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.

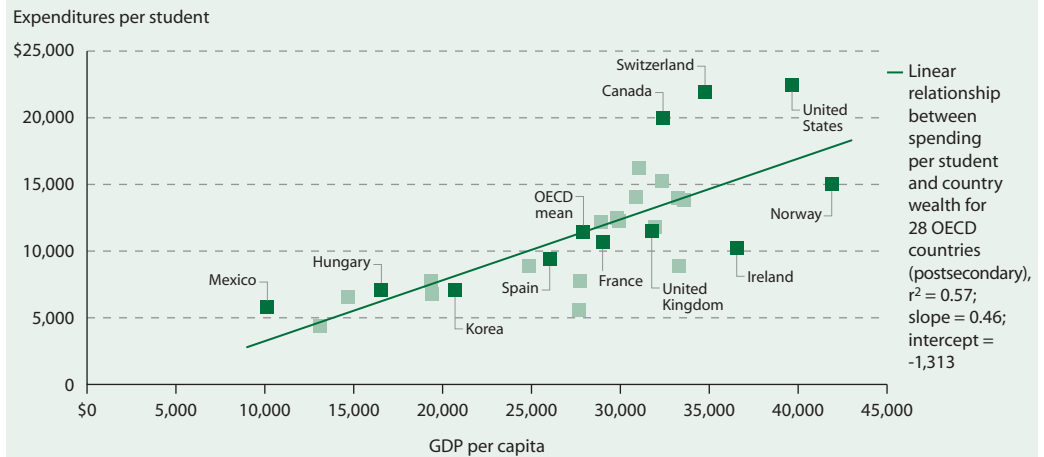
In 2004, expenditures per student for the United States were \$9,368 at the combined elementary and secondary level, which was 42 percent higher than the average of \$6,604 for the member countries of the Organization for Economic Cooperation and Development (OECD) reporting data (see supplemental table 38-1). At the postsecondary level, U.S. expenditures per student were \$22,476, which was nearly twice as high as the OECD average of \$11,418. Expenditures per student varied widely across the OECD countries, ranging from \$1,262 in Turkey to \$15,157 in Luxembourg at the combined elementary and secondary level, and from \$4,412 in Poland to \$21,966 in Switzerland and \$22,476 in the United States at the postsecondary level.

A country's wealth (defined as GDP per capita) was positively associated with expenditures per student on education. Among the OECD countries reporting data in 2004, the countries that spent the highest percentage of their GDP on total education expenditures¹ were Iceland (8.0 percent), the United States (7.4 percent), Korea (7.2 percent), and Denmark (7.2 percent). Looking at education expenditures by level, the United States spent 4.1 percent of its GDP on elementary and secondary education, higher than the average of 3.8 percent for all OECD countries reporting data. Compared with the United States, 12 countries spent a higher percentage of their GDP on elementary and secondary education, and 16 countries spent a lower proportion on education. Iceland (5.4 percent) spent the highest percentage of GDP. At the postsecondary level, 2.9 percent of the GDP of the United States was spent on education, higher than the average of 1.4 percent for all OECD countries reporting data. The United States also spent a greater percentage of its GDP on postsecondary education than any other OECD countries reporting data.

EXPENDITURES FOR EDUCATION: Annual expenditures per student, by GDP per capita for elementary and secondary education in selected OECD countries: 2004



EXPENDITURES FOR EDUCATION: Annual expenditures per student, by GDP per capita for postsecondary education in selected OECD countries: 2004

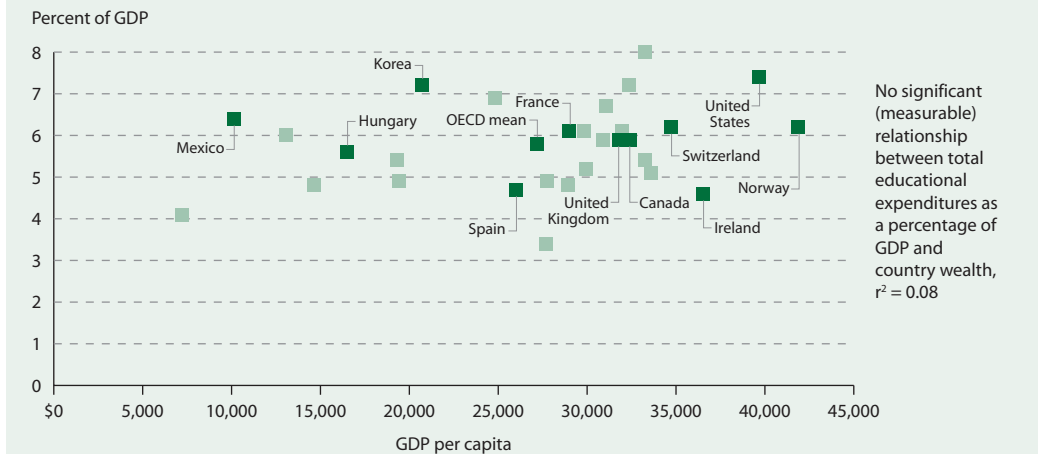


¹ Total education expenditures include expenditures at the elementary/secondary, postsecondary, and postsecondary nontertiary levels.

NOTE: 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). Within-country 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 (30 for first graph; 28 for second graph; 29 for third graph).

SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2007). *Education at a Glance: OECD Indicators, 2007*, tables B1.1b, B2.1, and X2.1.

EXPENDITURES FOR EDUCATION: Annual total education expenditures as a percentage of GDP, by GDP per capita in selected OECD countries: 2004



FOR MORE INFORMATION:
Supplemental Notes 5, 6
Supplemental Table 38-1