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 the 2000—2006 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 salient 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 the financial resources available. There are 32 indicators in this section: 12, prepared for this year's volume, appear on the following pages, and all 32, 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 feature of schooling and schools is patterns of coursetaking by students and the standards of performance they are now expected to meet. Four indicators on the Web trace trends over time in the academic level and number of courses that high school students take by graduation using student transcripts.

A second feature is the learning opportunities afforded children. Two new indicators this year examine the early literacy and afterschool activities of youth. Additional indicators on the Web show the availability of advanced-level academic courses and the extent of out-of-field teaching.

School districts and schools have special programs to serve the particular educational needs of special populations. An indicator on the Web shows 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 beyond the assigned 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. An indicator in this volume examines parental choice of charter schools.

Teachers are critical to the learning process in schools. One indicator in the volume shows the extent to which recent college graduates enter teaching.

Another feature of the contexts of elementary and secondary schools is the climate for learning. The climate is shaped by different factors in the school environment, including parent, teacher, and student attitudes, and students' sense of physical security and freedom from violence. Indicators in both of these areas are included in this volume.

The final aspect 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 the decisions are made by citizens through their governments. The Condition of Education describes 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.

Learning Opportunities

Early Literacy Activities

Poor, near-poor, and nonpoor children were more likely to participate in literacy activities in 2005 than in 1993.

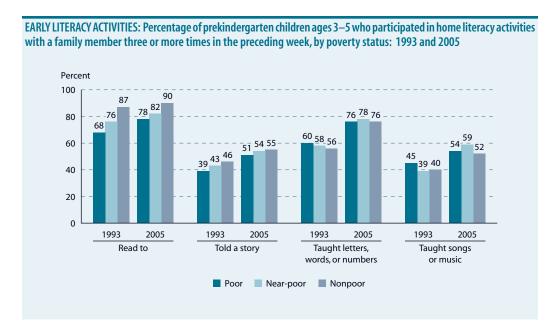
Children whose parents read to them tend to become better readers and perform better in school (Snow, Burns, and Griffin 1998). Other family activities such as telling stories and singing songs also encourage children's acquisition of literacy skills (Moss and Fawcett 1995).

The percentage of prekindergarten children ages 3–5 read to frequently by a family member (i.e., three or more times in the week preceding the survey) increased from 78 percent in 1993 to 86 percent in 2005 (see supplemental table 33-1). There were also increases in the percentage of children whose family members frequently told them a story (from 43 to 54 percent); taught them letters, words, or numbers (from 58 to 77 percent); and taught them songs or music (from 41 to 54 percent).

All children regardless of poverty status were more likely to have an adult read to them frequently in 2005 than in 1993; however, the increase among poor children (from 68 to 78 percent) was greater than the increase among nonpoor children (from 87 to 90 percent).

Despite the greater increase for poor children, nonpoor children were still more likely than poor children to have a family member read to them frequently in 2005 as was also the case in 1993. For example, in 2005, a greater percentage of nonpoor children were read to than poor children (90 vs. 78 percent). However, in 2005, there were no measurable differences found between nonpoor and poor children for the other three home literacy activities.

The percentage of children who engaged in certain literacy activities in 2005 varied by parents' education and race/ethnicity. Children whose parents had at least a high school diploma or equivalent were more likely to be read to and taught letters, words, or numbers than those children whose parents had less than a high school diploma. White children were more likely than Black or Hispanic children to have a family member read to them. However, a greater percentage of Hispanic children than White children were taught songs or music.



NOTE:"Poor" is defined to include those families below the poverty threshold; "near-poor" is defined as 100–199 percent of the poverty threshold; and "nonpoor" is defined as 200 percent or more than the poverty threshold. See supplemental note 1 for more information on poverty

SOURCE: U.S. Department of Education, National Center for Education Statistics, School Readiness Survey of the 1993 National Household Education Surveys Program (NHES) and Early Childhood Program Participation Survey of the 2005 NHES, previously unpublished tabulation (October 2005).

FOR MORE INFORMATION: Supplemental Notes 1,3 Supplemental Table 33-1 Moss and Fawcett 1995 Snow, Burns, and Griffin 1998



Learning Opportunities

Afterschool Activities

In 2005, students in kindergarten through 8th grade from nonpoor families were more likely to participate in afterschool activities than students from poor and near-poor families.

This indicator looks at kindergarten through 8th-grade (grades K-8) students' participation in various afterschool activities in 2005. Parents whose children in grades K-8 currently participate in activities outside of school (either primarily for supervision1 or enrichment) were asked whether their children had participated in a series of specific activities since the beginning of the school year.

In 2005, among all students in grades K-8, some 31 percent participated in sports, 20 percent in religious activities, 18 percent in arts (e.g., music, dance, or painting), 10 percent in scouts, 8 percent in community service, 7 percent in academic activities (e.g., tutoring or mathematics laboratory), and 6 percent in clubs (e.g., yearbook, debate, or book club) (see supplemental table 34-1). Between 2001 and 2005, the percentages of students participating in academic activities, clubs, community service, and sports increased (see supplemental table 34-2).

Rates of participation varied by student and school characteristics in 2005. For example, a greater percentage of students from nonpoor families participated in each of the activities than students from poor and near-poor families (see supplemental table 34-1). Similarly, a greater percentage of students in two-parent households participated in these activities than students in one-parent or guardian-only households with one exception: there was no measurable difference for participation in academic activities.

In terms of student and school characteristics, in 2005 a greater percentage of females than males were involved in arts, clubs, community service, religious activities, and scouts. However, a greater percentage of males than females participated in sports (34 vs. 28 percent). A greater percentage of students in grades 6-8 than students in grades K-2 participated in academic activities (9 vs. 3 percent), arts (19 vs. 15 percent), clubs (9 vs. 2 percent), community service (14 vs. 2 percent), religious activities (23 vs. 15 percent), and sports (34 vs. 26 percent). Furthermore, a greater percentage of students in private schools than students in public schools participated in these specific afterschool activities with the exception of religious activities.

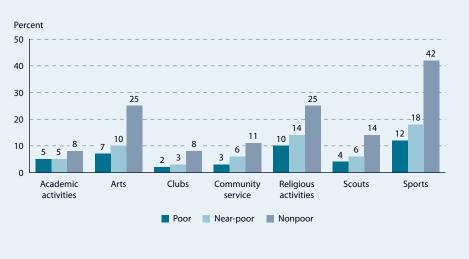
¹ In some cases, children participate in afterschool activities not just for enjoyment or enrichment, but also so that their parents, who are often working, may be assured that they are supervised by adults in a safe setting.

NOTE: "Poor" is defined to include those families below the poverty threshold; "near-poor" is defined as 100-199 percent of the poverty threshold; and "nonpoor" is defined as 200 percent or more than the poverty threshold. See supplemental note 1 for more information on poverty. Homeschooled children are excluded. When asked about their children's participation in various afterschool activities (regularly scheduled at least once a month), parents could respond either "yes" or "no." Shown is the percentage of parents who responded "yes" for each activity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, After-School Programs and Activities Survey of the 2005 National Household Education Surveys Program (NHES), previously unpublished tabulation (October 2005).



FOR MORE INFORMATION: Supplemental Notes 1, 3 Supplemental Tables 34-1, AFTERSCHOOL ACTIVITIES: Percentage of kindergarten through 8th-grade students who participated in various afterschool activities (regularly scheduled at least once a month) since the beginning of the school year, by poverty status: 2005



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 frequently used as a proxy measure for class size, declined from 17.6 students per teacher in 1990 to 16.5 in 2003 for all regular public elementary, secondary, and combined schools (see supplemental table 35-1). The patterns are different, however, when public elementary, secondary, and combined schools are examined separately.

As with all regular public schools, the student/ teacher ratio for regular public elementary schools declined between 1990 and 2003 (from 18.2 to 16.3), with most of the decline occurring after 1995. Generally, elementary schools in each enrollment category showed similar patterns except in the largest schools (1,500 students or greater), where the student/teacher ratio increased from 19.9 to 20.8 students per teacher.

In contrast, student/teacher ratios for all regular public secondary schools increased between 1990 and 1995 (from 16.7 to 17.7) and then declined to 17.0 in 2003. Secondary schools in each enrollment category showed similar patterns.

In regular public combined schools (that include both elementary and secondary grades), student/teacher ratios were about the same in 2003 as in 1990. When examined by enrollment category, the student/teacher ratios for all but the largest schools in 2003 were similar to the ratio in 1990 or had declined. The student/teacher ratio for the largest schools increased from 19.0 in 1990 to 20.8 in 2003.

In every year from 1990 through 2003, 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 2003, regular elementary schools with over 1,500 students enrolled 6.9 more students per teacher, on average, than regular elementary schools with enrollments under 300. During this period, the gap between the student/teacher ratios for the largest and smallest schools grew for elementary (from 3.9 to 6.9) and combined regular public schools (from 8.1 to 9.5).

- ¹ Student/teacher ratios do not provide a direct measure of class size because they are based on the amount of time in full-time equivalents that all teachers in a school spend instructing students. 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.
- ² Regular schools include all schools except special education schools, vocational schools, and alternative schools.

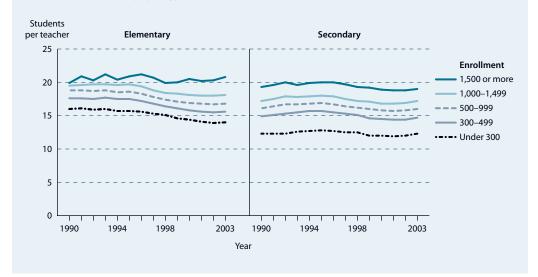
NOTE:The student/teacher ratio is determined by dividing the total number of full-time-equivalent teachers into the total enrollment. This analysis excludes schools that did not report both enrollment and teacher data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, The NCES Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1990–91 through 2003–04, previously unpublished tabulations (July and August 2005).

FOR MORE INFORMATION: Supplemental Note 3 Supplemental Table 35-1



STUDENT/TEACHER RATIO: Student/teacher ratios in regular public elementary and secondary schools, by level and enrollment of school: Fall 1990–2003



School Choice

Parental Choice of Schools

The percentage of children whose parents enrolled them in chosen public schools increased between 1993 and 2003. Differences in parents' choice of public school are related to grade level, region, and race/ethnicity.

Between 1993 and 2003, the percentage of students in grades 1-12 attending a "chosen" public school (a public school other than their assigned public school) increased from 11 to 15 percent, while the percentage attending assigned public schools decreased from 80 to 74 percent (see supplemental table 36-1). The percentages of students attending private schools also increased during this period (0.9 percentage points for private church-related schools and 0.8 percentage points for private not church-related schools); these increases, however, were smaller than the increase in the percentage of students attending chosen public schools. This indicator examines the availability of public school choice programs and the students who attend chosen public schools, as reported by parents.1

When asked whether they could send their child to a chosen public school, the parents of 51 percent of students reported having such a choice (see supplemental table 36-2). Not all students' parents, however, were equally likely to report that they had this choice. For instance, parents of students in grades 9-12 compared with grades 1-5 (54 vs. 50 percent), as well as parents of students in the West compared with those in the Northeast and South (61 vs. 39 and 47 percent, respectively), were more likely to report having choice over their child's public school.

Among students whose parents reported having public school choice, approximately 27 percent attended a chosen public school, while 65 percent attended their assigned school. In addition, students in grades 1-5 were more likely to attend a chosen public school than students in grades 9-12 (30 vs. 25 percent). Black students compared with White or Hispanic students (42 vs. 22 and 27 percent, respectively), as well as students in the South compared with students in the Midwest (30 vs. 22 percent), were more likely to attend chosen public schools.

Another way in which parents can choose schools is to move to a neighborhood so that their children can attend a particular school. In 2003, the parents of 24 percent of students reported that they moved to their current neighborhood so that their children could attend their current school (see supplemental table 36-3).

¹ In some school districts, the child is assigned to a specific school; in others, the parents can choose the school their child will attend. Parents may also be able to choose a school from outside the home district. Estimates in this indicator are based on parents' responses and parents may or may not know whether such choice is available.

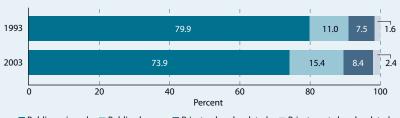
NOTE: Includes homeschooled students enrolled in public or private schools for 9 or more hours per week. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, School Readiness Survey of the 1993 National Household Education Surveys Program (NHES), School Safety and Discipline Survey of the 1993 NHES, and Parent and Family Involvement in Education Survey of the 2003 NHES, previously unpublished tabulations (May 2004).



FOR MORE INFORMATION: Supplemental Note 3 Supplemental Tables 36-1, 36-2,36-3 NCES 2003-031

DIFFERENCES IN PARENTAL CHOICE: Percentage distribution of students in grades 1–12, by type of school: 1993 and 2003



■ Public, assigned ■ Public, chosen ■ Private, church-related ■ Private, not church-related

Type of school	1993	2003	point	Percent change
Public, assigned	79.9	73.9	-6.0	-7.5
Public, chosen	11.0	15.4	4.4	40.0
Private, church-related	7.5	8.4	0.9	12.0
Private, not church-related	1.6	2.4	0.8	50.0

Percentage

Teachers

Elementary/Secondary School Teaching Among Recent College Graduates

Overall, the proportion of bachelor's degree recipients who had taught at the kindergarten through 12th-grade level within a year of graduation or who had prepared to teach but not taught remained steady during the 1990s.

Twelve percent of 1999-2000 bachelor's degree recipients taught in a K-12 school within a year of graduation, up from 10 percent for their 1992-93 counterparts. However, the earlier graduates were more likely than the later ones to have prepared to teach but not taught (5 vs. 3 percent). As a result, the overall proportion who had either taught or prepared to teach but not taught was the same for both cohorts (15 percent).

Among education majors, the 1999–2000 graduates showed a greater inclination than the 1992-93 graduates to teach: 80 percent of education majors graduating in 1999-2000 had either taught within a year or prepared to teach but not taught, compared with 71 percent of their 1992–93 counterparts (see supplemental table 37-1).

Teachers' academic qualifications have been measured using college entrance examination (CEE) scores (SAT or ACT) or grade point averages (GPAs), although both measures have limitations (NCES 2005-161). Not everyone takes a CEE, and even if they do, their scores do not capture their college performance because

score: 1994 and 2001

the tests are taken before students enter college. GPAs measure academic performance in college, but grades are not standardized within or among institutions. The proportion of graduates who had either taught or prepared to teach but not taught increased between 1992-93 and 1999-2000 for those with the lowest CEE scores² (from 18 to 23 percent), but not for those with CEE scores in the middle range (15 to 16 percent) or at the highest level (10 percent in both years). There was no measurable change for graduates at any specific GPA level.

Among 1999-2000 graduates who had taught within a year of graduation, 66 percent taught first in an elementary school, 30 percent in a secondary school, and 4 percent in a combined school (see supplemental table 37-2). To place this in context, 63 percent of all teachers in 1999–2000 taught in elementary schools, 31 percent in secondary schools, and 7 percent in combined schools.3 Teachers with the highest CEE scores were more likely to have taught in a secondary school (48 percent) than were those with scores at the middle and lower levels (32 and 25 percent, respectively) (see supplemental table 37-2).

1 "Prepared to teach" means either that graduates were certified or that they had completed a teacher education program or student teaching assignment but were not vet certified

² Graduates' CFF scores are either the combined SAT score (sum of the SAT verbal and math scores) or the ACT composite score converted to an estimated SAT combined score. The three levels of scores represent the bottom fourth, middle half, and top fourth. Twenty-two percent of 1993 and 31 percent of 2000 bachelor's degree recipients did not have scores.

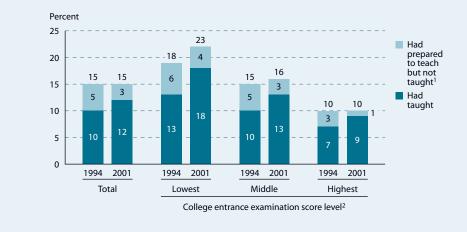
³ U.S. Department of Education, National Center for Education Statistics, 1999-2000 Schools and Staffing Survey (SASS), previously unpublished tabulation (January 2006).

NOTE: "Taught" excludes instructional aides and long- and short-term substitute teachers. See supplemental note 3 for more information on college entrance examination scores, grade point averages, and undergraduate major categories.

SOURCE: Henke, R.R., Peter, K., Li, X., and Geis, S. (2005). Elementary/Secondary School Teaching Among Recent College Graduates: 1994 and 2001 (NCES 2005-161), tables 13 and 14. Data from U.S. Department of Education, National Center for Education Statistics, 1993/94 and 2000/01 Baccalaureate and Beyond Longitudinal Studies (B&B:93/94 and B&B:2000/01).

FOR MORE INFORMATION: Supplemental Note 3 Supplemental Tables 37-1,

NCES 2005-161



TEACHING AMONG RECENT COLLEGE GRADUATES: Percentage of 1992–93 and 1999–2000 bachelor's degree recipients

who had taught in a K-12 school and who had prepared to teach but not taught, by college entrance examination



School Characteristics and Climate

Parents' Attitudes Toward Schools

In 2003, more than half of all children in grades 3–12 had parents who reported that they were "very satisfied" with their child's school, their child's teachers, the school's academic standards, and the school's order and discipline.

In 2003, more than half of all children in grades 3-12 had parents who reported that they were "very satisfied" with each of the following aspects of their child's education: their child's school (58 percent), their child's teachers (59 percent), the school's academic standards (58 percent), and the school's order and discipline (60 percent) (see supplemental table 38-1). Comparisons with comparable data for 1993 show no measurable differences in the parents' reported satisfaction with each of these four aspects of their child's education.

In 2003, a greater percentage of White children in grades 3–12 than Black children had parents who reported being very satisfied with each of the four aspects of their child's education. The percentage of White children with parents who reported being very satisfied with their child's school increased from 57 percent in 1993 to 60 percent in 2003, whereas no measurable differences were found between these years in the percentages of Black and Hispanic children with parents who reported being very satisfied with their child's school.

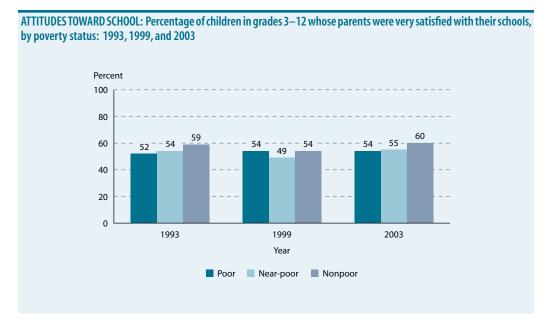
Differences in parental levels of satisfaction with each of these four aspects of their child's education were also found by poverty, grade level, and school type. In 2003, the percentages of children with parents who reported being very satisfied with their child's school, its academic standards, and its order and discipline were higher for those who were categorized as nonpoor than for those categorized as nearpoor or poor. The percentages of children in grades 3-5 with parents who reported being very satisfied with each of the four aspects of their child's education were greater than the percentages of children in grades 6-8 and grades 9-12. In addition, the percentages of children in private schools with parents who reported being very satisfied with each of these four aspects were greater than the percentages of children in public schools, while the percentages of children in chosen public schools were greater than the percentages in assigned public schools.

NOTE: "Near-poor" is defined as 100-199 percent of the poverty threshold; "nonpoor" is defined as 200 percent or more than the poverty threshold. Data include both public and private school students in grades 3-12. When asked how satisfied they were with four aspects of their child's education (their child's school, their child's teachers, the school's academic standards, and the school's order and discipline) parents could respond in four ways:"very satisfied,""somewhat satisfied,""somewhat dissatisfied," or "very dissatisfied." Shown is the percentage of parents who reported being "very satisfied."

SOURCE: U.S. Department of Education, National Center for Education Statistics, School Safety and Discipline Survey of the 1993 National Household Education Surveys Program (NHES), Parent Survey of the 1999 NHES, and Parent and Family Involvement in Education Survey of the 2003 NHES, previously unpublished tabulation (August 2005).



FOR MORE INFORMATION: Supplemental Notes 1, 3 Supplemental Table 38-1



School Characteristics and Climate

School Violence and Safety

From 1992 through 2003, there was a general decline in the rate at which students ages 12–18 were victims of theft and violent crime at school.

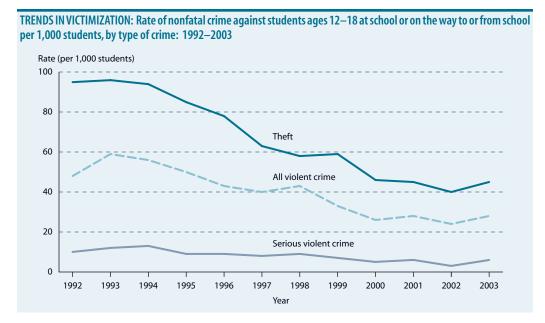
Theft and violence that occur at school¹ can lead to a disruptive and threatening environment, physical injury, and emotional stress, all of which can be obstacles to student achievement (Elliott, Hamburg, and Williams 1998). To measure the prevalence of theft and violence in our nation's schools, this indicator examines nonfatal crime rates per 1,000 students, ages 12–18, from 1992 through 2003. Nonfatal crime includes theft and all violent crime; all violent crime includes serious violent crimes (rape, sexual assault, robbery, and aggravated assault) and simple assault.

From 1992 through 2003, the rate of crime against students at school declined by 53 percent for theft (from 95 to 45 crimes per 1,000 students) and by 42 percent for all violent crime (from 48 to 28 crimes per 1,000 students) (see supplemental table 39-1). There was no measurable change in the total nonfatal rate of crime against students at school from 2002 to 2003. The rates for these crimes, from 1992 through 2003, also decreased for the time when students were away from school. In each of the years observed, the rates for serious violent

crime were lower when students were at school than when they were away from school.

In 2003, a greater percentage of high school-age students (ages 15-18) than middle school-age students (ages 12-14) were victims of crime away from school (see supplemental table 39-2). However, no measurable difference was found between high school-age and middle school-age students in the rates at which they were victims of crime at school. The rates of violent crime at school, especially serious violent crime, were higher for urban students than for suburban students. No measurable difference was found between suburban and urban students in their rates of violent crime away from school. A greater percentage of students from high-income households than students from low-income households² were victims of theft at school.

In 2003, a greater percentage of White and Black students than Hispanic students were victims of theft at school. No measurable difference was found between males and females in the rates at which they were victims of theft at school. However, a greater percentage of males than females were victims of violent crime at school.



¹ "At school" includes inside the school building, on school property, or on the way to and from school.

SOURCE: DeVoe, J.F., Peter, K., Noonan, M., Snyder, T.D., and Baum, K. (2005). *Indicators of School Crime and Safety: 2005* (NCES 2006-001/NCJ 210697), table 2.1. Data from U.S. Department of Justice, Bureau of Justice Statistics, School Crime Supplement (SCS) to the National Crime Victimization Survey (NCVS), 1992–2003.

FOR MORE INFORMATION: Supplemental Notes 1, 3 Supplemental Tables 39–1,

39-2 Elliott, Hamburg, and Williams 1998



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² As defined in this context, high-income households are households with incomes of \$75,000 or more per year.Low-income households are those with incomes of less than \$15,000 per year.

Variations in Expenditures per Student

Between 1989-90 and 2002-03, differences between states accounted for a greater proportion of the variation in instructional expenditures per student among unified public school districts than differences within states.

Although there are a number of measures that can be used to measure the variation in instructional expenditures across school districts, the Theil coefficient was selected because it provides a national measure of differences in instructional expenditures per student that can be decomposed into separate components to measure school district-level variations both between states and within states. A coefficient of zero indicates that there is no variation, and the amount of variation present increases as the Theil coefficient increases in size.

Analysis of instructional expenditures data for grades K through 12 in unified public school districts shows that there is variation across school districts and that the majority of this variation is due to differences between states, rather than differences within states (see supplemental table 40-1). Analysis of these data over time shows that the size of the variation decreased between 1989-90 and 1997-98, and although the variation has increased in size since the late 1990s, it remains lower than that registered in the early 1990s. As was the case for the total variation, when the variations due to between- and within-state differences are considered separately, both components showed decreases between 1989-90 and 1997-98. However, since 1997-98 the trends have changed. The between-state component increased, while the within-state component remained largely unchanged, with the betweenstate variation accounting for 74 percent of the total disparity in 1997-98 and 78 percent in 2002-03. Hence, the increase in the total variation between 1997-98 and 2002-03 was largely due to increases in the variation across states.

Changes in the variation in instructional expenditures over time may reflect differences across school districts in the trends in the amount of services or goods purchased, such as the number of classroom teachers hired. However, they may also be attributed to differences in the trends in the costs of items purchased, such as teacher salaries. The variations in the trends in the amounts of services or goods purchased may, in part, reflect various state litigation and school finance reform efforts.

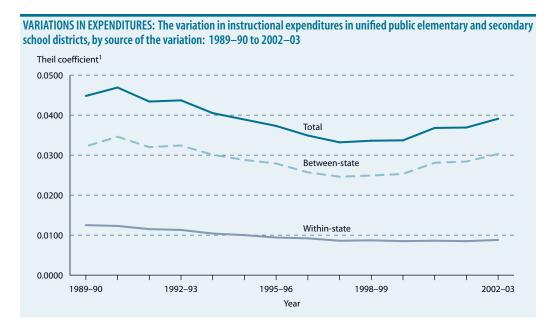
¹ The Theil coefficient measures dispersion for groups within a set (i.e., states within the country) and indicates relative dispersion and any variations that may exist among them. See supplemental note 11 for more information.

NOTE: Public elementary and secondary unified districts are those districts that serve both elementary and secondary grades. In 2002, approximately 72 percent of all school districts were unified school districts.

SOURCE: U.S. Department of Education, National Center for Education Statistics, The NCES Common Core of Data (CCD), "Longitudinal School District Fiscal-Non-Fiscal File, School Year 1989-90 to 1999-2000, Fiscal Year (FY) 1990 to 2000" and "School District Finance Survey (Form F-33)," 2000-01 to 2002-03, previously unpublished tabulation (October 2005).



FOR MORE INFORMATION: Supplemental Notes 3, 11 Supplemental Table 40-1 NCES 2000-020 NCES 2001-323 Murray, Evans, and Schwab 1998



Public Elementary and Secondary Expenditures by District Poverty

Total expenditures per student in 2002–03 were highest in the most affluent school districts and next highest in the least affluent school districts.

Expenditures per student in public elementary and secondary schools vary by the level of poverty in a district. For example, in 2002-03 total expenditures per student were highest in low-poverty districts (\$10,768), next highest in high-poverty districts (\$10,191), and lowest in middle-poverty districts (\$8,839) (see supplemental table 41-1).1 District poverty was determined by ranking school districts by the percentage of related children ages 5-17 from all district families with an income below the poverty threshold, and then dividing these districts into five categories with equal proportions of the total enrollment. The low-poverty district category consists of the 20 percent of students in districts with the lowest percentages of poor school-age children. Conversely, the high-poverty district category consists of the 20 percent of students in districts with the highest percentages of poor school-age children.

Between 1995–96 and 2002–03, total expenditures per student increased by 23 percent in constant dollars, from \$7,847 to \$9,630. Total expenditures per student increased the most for the high-poverty districts (26 percent) and

the middle high-poverty districts (25 percent). Expenditures in the other three categories increased between 20 and 22 percent.

Current expenditures, which include instructional, administrative, and operation and maintenance expenditures, followed a similar pattern as total expenditures. The low-poverty and high-poverty districts had the highest current expenditures per student in 2002-03 (see supplemental table 41-2). However, unlike total expenditures, the high-poverty districts had the highest current expenditures per student (\$8,780), followed by the low-poverty districts (\$8,663). As with total expenditures per student, middle-poverty districts had the lowest current expenditures per student (\$7,364). Current expenditures per student increased at a slower rate than did total expenditures between 1995-96 and 2002-03 (20 vs. 23 percent). As with total expenditures per student, current expenditures per student increased the most for the high-poverty districts (25 percent) and the middle high-poverty districts (23 percent). Current expenditures in the other three categories increased between 16 and 20 percent.

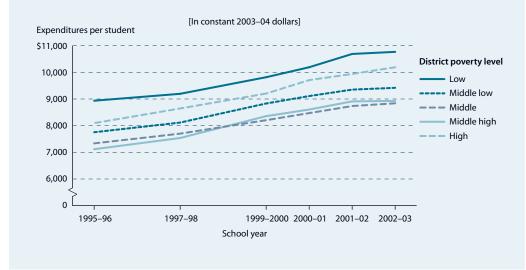
¹Total expenditures include all expenditures allocable to per student costs—current expenditures for regular school programs, capital outlay, and interest on school debt. All expenditures in this indicator are in constant 2003–04 dollars. The Consumer Price Index (CPI) was used to adjust expenditures into constant dollars. See *supplemental note 11* for information on the CPI and classifications of expenditures.

NOTE: See supplemental note 1 for further information on poverty. Regular districts include elementary/secondary combined districts and separate elementary or secondary districts. They exclude Department of Defense districts, Bureau of Indian Affairs districts, most charter school districts, educational service agencies, special education districts. and vocational districts.

SOURCE: U.S. Department of Commerce, Census Bureau, "Small Area Income & Poverty Estimates," 1995–96, 1997–98, and 1999–2000 to 2002–03; and U.S. Department of Education, National Center for Education Statistics, The NCES Common Core of Data (CCD), "School District Finance Survey (Form F-33)," 1995–96, 1997–98, and 1999–2000 to 2002–03, previously unpublished tabulation (September 2005).

FOR MORE INFORMATION: Supplemental Notes 1,3,11 Supplemental Tables 41-1, 41-2





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Expenditures in Public Elementary and Secondary Schools by Expenditure Category

Expenditures per student rose 25 percent in constant dollars from 1989–90 to 2002–03, with capital expenditures increasing the fastest.

This indicator examines expenditures per student in fall enrollment in public elementary and secondary schools, in constant dollars, by major expenditure category and region between 1989–90 and 2002–03. Total expenditures include all expenditures made by school districts (including direct support for and on behalf of school districts). They include current expenditures, such as instruction, administration, operation and maintenance, and capital outlay and interest on school debt. Total expenditures per student are calculated by dividing total fall enrollment into total expenditures.

Total expenditures per student rose 25 percent in constant dollars, from \$7,692 in 1989-90 to \$9,644 in 2002-03. This rate of increase in total expenditures was not evenly distributed among the major categories of expenditures (see supplemental table 42-1). Among the five major categories of expenditures, spending on capital outlay and interest increased the most between these years (64 percent). In contrast, instructional expenditures increased 23 percent and spending on administration and on operation and maintenance each increased 7 percent.

In 2002-03, some 52 percent of the \$9,644 spent on students in public elementary and secondary schools went toward instructional expenditures such as teacher salaries and benefits (see supplemental table 42-2). About 13 percent went toward capital expenditures, 8 percent toward operation and maintenance, 7 percent toward administration, and 20 percent toward other items, including transportation, food services, and student support.

Looking at total expenditures per student by region in 2002–03 reveals that expenditures per student were highest in the Northeast, followed by the Midwest, West, and South. This regional pattern held true for each major expenditure category except capital expenditures, which were highest in the Midwest (see supplemental table 42-1). A higher percentage of total expenditures went toward instruction in the Northeast (57 percent) than in the other regions (50 to 52 percent). However, in the Northeast, a smaller percentage of total expenditures (10 percent) went toward capital expenditures than in the other regions (14 to 15 percent) (see supplemental table 42-2).

¹ Other expenditures include funds for student support, instructional staff, student transportation, other support services, food services, and enterprise operations, all of which are components of current expenditures. Also included in other expenditures are funds for adult education, community colleges, private school programs funded by local and state education agencies, and community services.

NOTE: Detail may not sum to totals because of rounding. Expenditures have been adjusted for the effects of inflation using the Consumer Price Index (CPI) and are in constant 2003-04 dollars. See supplemental note 11 for information about this index and about classifications of expenditures for elementary and secondary education. See supplemental note 1 for information on regional categorizations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, The NCES Common Core of Data (CCD), "National Public Education Financial Survey," 1989-90 to 2002-03, previously unpublished tabulation (July 2005).



FOR MORE INFORMATION: Supplemental Notes 1, 3, 11 Supplemental Tables 42-1,

EXPENDITURES BY CATEGORY: Percentage distribution of total expenditures in public elementary and secondary schools, by expenditure category: 1989–90 and 2002–03



International Comparisons of Expenditures for Education

Wealthy countries generally spend more per student on education than countries with lower gross domestic product (GDP) per capita. They also generally tend to spend a larger proportion of their GDP per capita on education than less wealthy countries.

Two measures used to compare countries' investment in education are expenditures per student (expressed in absolute terms) from both public and private sources and total 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.

In 2002, expenditures per student for the United States were \$8,556 at the combined elementary and secondary level, which was higher than the average of \$6,134 for the member countries of the Organization for Economic Cooperation and Development (OECD) reporting data (see supplemental table 43-1). At the postsecondary level, the U.S. expenditures per student were \$20,545, higher than the OECD average of \$10,641. Expenditures per student varied widely across the OECD countries, ranging from \$1,587 (Mexico) to \$12,361 (Luxembourg) at the combined elementary and secondary level and from \$4,731 (Greece) to \$23,714 (Switzerland) at the postsecondary level.

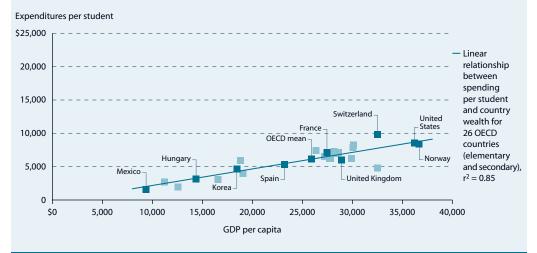
A country's wealth (defined as GDP per capita) was positively associated with expenditures per student on education at the elementary/secondary and postsecondary levels. For example, a \$10,000 change in GDP per capita resulted in a 40 percent increase in the aver-

age expenditure per student at the elementary and secondary level and a 45 percent increase in the average expenditure per student at the postsecondary level.

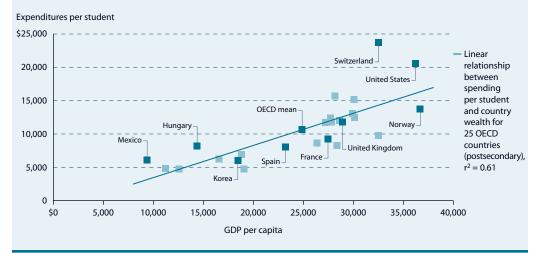
A country's wealth was also positively associated with the proportion of total GDP devoted to total education expenditures. For example, a \$10,000 change in GDP per capita resulted in one-half of a percentage point increase in the average proportion of total GDP devoted to total education expenditures.

In 2002, the United States spent the highest percentage of its GDP on total education expenditures (6.7 percent) among the OECD countries reporting data. 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, 10 countries spent a higher percentage of their GDP on elementary and secondary education, led by Iceland at 5.5 percent. At the postsecondary level, 2.6 percent of the GDP of the United States was spent on education expenditures, higher than the average of 1.4 percent for all OECD countries reporting data. The United States spent a greater percentage of its GDP on postsecondary education than did all other OECD countries reporting data.

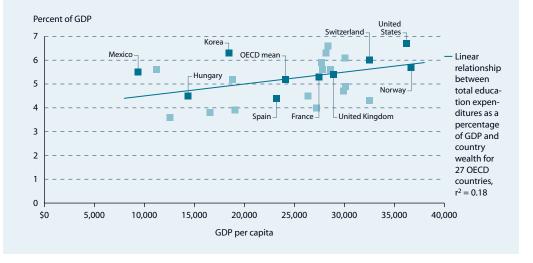




EXPENDITURES FOR EDUCATION: Annual expenditures per student in relation to GDP per capita for postsecondary education in selected OECD countries: 2002



EXPENDITURES FOR EDUCATION: Annual total education expenditures as a percentage of GDP, by GDP per capita in selected OECD countries: 2002



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. Canada, Germany, Luxembourg, New Zealand, and Turkey are not included due to missing data on expenditures per student. The OECD average for GDP per capita for each figure is based on the number of countries with data available (26 for first figure; 25 for second figure; 27 for third figure).

SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2005). Education at a Glance: OECD Indicators, 2005, tables B1.1, B2.1c, and X2.1. Data from OECD Education Database, previously unpublished tabulation (August 2005).



FOR MORE INFORMATION: Supplemental Note 6 Supplemental Table 43-1

Changes in Sources of Public School Revenue

The proportion of total public school revenue from property taxes declined in both the Midwest and Northeast from 1989–90 to 2002–03, while the proportion grew in the South and West.

From 1989-90 to 2002-03, total elementary and secondary public school revenues increased 47 percent in constant dollars. During this period, the total amount from each revenue source (federal, state, and local) increased (see supplemental table 44-1), 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). Thus the proportion of total revenue for public elementary and secondary education from local sources declined, from 47 percent in 1989-90 to 43 percent in 2002-03 (see supplemental table 44-2), while the proportion of total revenue flowing to public schools from both federal and state sources increased between these years.

Although total revenues for elementary and secondary public schools increased in each region, different regional patterns of change in the distribution of public school revenues are evident. The Midwest experienced the largest decreases in the proportion of total revenue from local sources: local funding there dropped from 55 percent of all revenue for public elementary and secondary education in 1989–90 to 43 percent in

by region and revenue source: 1989–90 to 2002–03

Midwest

Northeast

Percent

2002–03. Declines in the proportion of property tax revenue accounted for most of this decrease. The Northeast also experienced declines in the proportion of revenue from local sources. In both regions, there were increases in the proportion of total revenue from federal and state sources.

The South and West during this period experienced little change (less than 1 percentage point) in the proportion of total revenue from local sources. However, the proportion of funding from property tax revenues in the South increased from 27 percent in 1989–90 to 31 percent in 2002–03, while it increased from 24 to 25 percent in the West. In both the South and the West, the proportion of revenue from state sources decreased and the proportion from federal sources increased.

In 2002–03, as in earlier years, the Northeast relied to a greater degree on property tax revenues than the other regions. The difference in their reliance on property tax revenues between the Northeast and the Midwest was greater in 2002–03 than in 1989–90. Conversely, the differences between the Northeast and the other two regions were greater in 1989–90 than in 2002–03.

West

¹ There was a decline in the property tax in Michigan from 1993–94 to 1994–95. During that period, the proportion of total revenue from property taxes fell from 59 to 21 percent in Michigan and from 46 to 39 percent for all the Midwest.

NOTE: Detail may not sum to totals because of rounding. 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, The NCES Common Core of Data (CCD), "National Public Education Financial Survey," 1989—90 to 2002—03, previously unpublished tabulation (July 2005).

FOR MORE INFORMATION: Supplemental Notes 1, 3, 11 Supplemental Tables 44-1, 44-7



CHANGES IN REVENUE SOURCES: Percentage distribution of total revenue for public elementary and secondary schools,

South

60
40
40
20
1990 1994 1998 2003 1990 1994 1998 2003 1990 1994 1998 2003
1990 1994 1998 2003 1990 1994 1998 2003

School year ending

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