

Chapter 1: Schools

Propositions

- ▶ **THE LANDSCAPE OF ELEMENTARY AND SECONDARY SCHOOL ENROLLMENT IN PUBLIC AND PRIVATE SCHOOLS IS CHANGING.**
- ▶ **PUBLIC EDUCATION IS BECOMING INCREASINGLY CONSOLIDATED, WHICH MEANS LESS PARENTAL INVOLVEMENT.**
- ▶ **SMALLER SCHOOLS CAN MAKE A DIFFERENCE.**
- ▶ **HIGH RATES OF STUDENT MOBILITY ARE ONE REASON FOR THE PERSISTENT GAP BETWEEN DISADVANTAGED AND NONDISADVANTAGED STUDENTS.**
- ▶ **STUDENTS IN THE UNITED STATES SPEND MORE HOURS PER YEAR IN THE CLASSROOM THAN THEIR PEERS IN OTHER DEVELOPED COUNTRIES.**
- ▶ **SCHOOL ENVIRONMENT MATTERS.**
- ▶ **SCHOOL VIOLENCE IS ON THE DECLINE.**

Highlights

- ▶ In 2000, approximately 86 percent of students were enrolled in public schools, nearly 11 percent were in private schools, and 3 percent attended school at home.¹
- ▶ Confidence in public schools has declined since the 1970s. In 1973, 58 percent of the public had a “great deal/quite a lot of confidence” in public schools; in 1999, only 36 percent did.²
- ▶ In 2000, there were fewer than 95,000 public elementary and secondary schools; in 1930, there were more than 260,000.³
- ▶ In the 1999–2000 school year, the average public elementary school had 477 students; the average public secondary school, excluding alternative schools, had 785 students.⁴
- ▶ In the 1999–2000 school year, 236 school districts (1.6 percent of districts nationwide) had 25,000 students or more enrolled in their district; these districts account for 32.1 percent of enrollment nationwide.⁵
- ▶ In the 1999–2000 school year, there were more than 35,000 private schools, nearly three times as many as there were in 1930.⁶
- ▶ In 2000, there were more than 2,300 charter schools, enrolling nearly 580,000 students.⁷
- ▶ In 2000, an estimated 61,525 vouchers were used in private schools, accounting for more than 1 percent of private school enrollment.⁸
- ▶ Crime rates in elementary and secondary schools have decreased in recent years. Between 1993 and 1999, the

percentage of students in grades 9 through 12 who reported being victims of crime at school decreased from 10 percent to 8 percent.⁹

▶ In 2000, the average public school had a total of 110 computers, 77 percent of instructional rooms had access to the Internet, and 98 percent of schools had access to the Internet.¹⁰

Overview

Since the mid-19th century, public schools have been the linchpin of the American education system. The vast majority of American children have always been educated in public schools, and they still are. In 2000, more than 86 percent of children were enrolled in the nation's public schools. Public schools have been effective and have contributed significantly to insuring our continued, productive democracy. Most of our country's political, intellectual, business, cultural, and military leaders have come through the ranks of the public schools. Public schools are the primary source of America's human capital, and, according to many economists, our human capital accounts for the greatest share of capital in our economy. Education has become the primary engine for economic growth.

Enrollment trends over the last few decades, however, have changed, reflecting a subtle shift in sentiment toward public education. The bottom line is that parents are voting with their feet—fleeing the cities for better educational opportunities in the suburbs, enrolling their children in private and religious schools, or simply choosing to teach their children themselves.

Not only have new enrollment patterns emerged, but due to growth in the educational system overall, a move to consolidate within the school system has been underway throughout the 20th century. While there were nearly 120,000 school districts in the 1930s, there are now fewer than 15,000 nationwide. The average number of students in a school district has increased dramatically, as the total number of students has increased while the number of districts has declined. The public school system is a behemoth and, in the opinion of some, a faceless

bureaucracy. The distance between parents and school administration has grown. Have parents just thrown up their hands, or are the administrators ensconced in ivory towers? Worse yet, are administrators overly burdened by bureaucracy and government regulations that distract them from their basic mission of teaching?

The romanticized bucolic one-room schools are now a relic—a true rarity in 21st-century America; by the latest count, only 423 survive from the nearly 150,000 in the early part of the 20th century. Today’s schools are much larger and more impersonal. Some say these reasons are why the schools are not doing as good a job as they once did. Schools today are no doubt different than they were 50 years ago. Has this changed schooling in America?

The classrooms—where the teaching and learning take place—have, over the years, remained relatively stable in size. Access to technology, however, has changed—now more than 75 percent of instructional rooms have computers in them. Teaching methodology and theories have evolved and changed, but the structure of the classroom has not changed much.

This chapter reports on the schools—how many there are, their composition, and how they have changed. Although only a fraction of students are enrolled in private and parochial schools, we don’t ignore them—they are important components in the education equation.

PROPOSITION: THE LANDSCAPE OF ELEMENTARY AND SECONDARY SCHOOL ENROLLMENT IN PUBLIC AND PRIVATE SCHOOLS IS CHANGING.

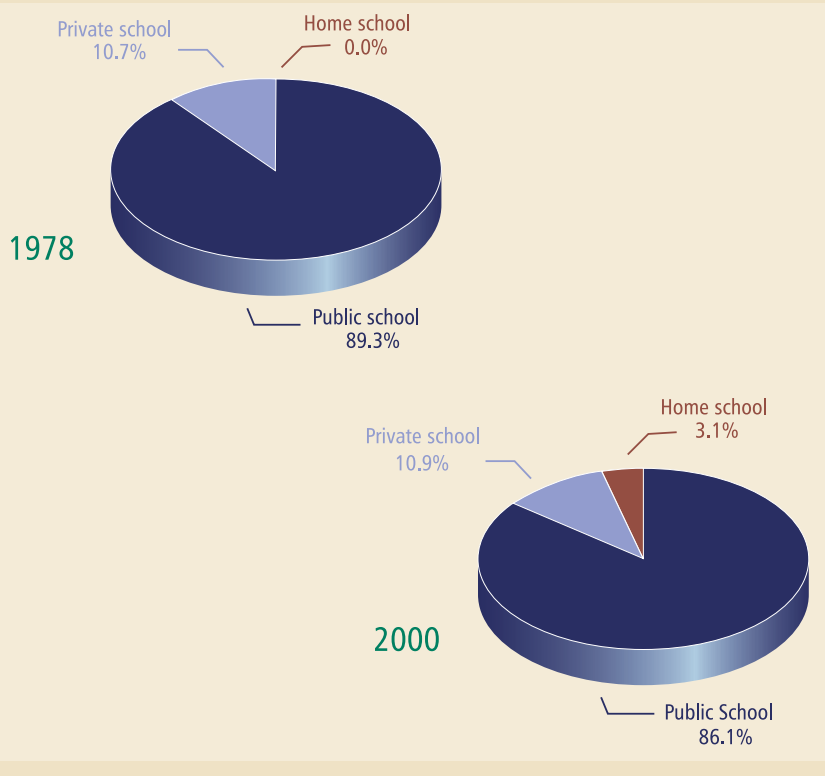
Many have questioned the effectiveness of the current public school system. Recent enrollment and achievement trends suggest that some kind of educational reform is desired, if not required. Enrollment in public elementary and secondary schools grew rapidly during the 1950s and '60s and peaked in 1971, as a result of the “baby boom,” the dramatic increase in births following World War II. From 1971 to 1984, total elementary and secondary school enrollment steadily decreased, reflecting a decline in the school-age population over that period. In 1985, however, enrollment in elementary and secondary schools started increasing, and record enrollment levels were established every year by the late 1990s. By 2000, public school enrollment totaled more than 47 million. Private school enrollment grew more slowly than public school enrollment over this period, from nearly 5.6 million in 1985 to nearly 6.0 million in 2000. (See table 1.1 and figure 1.1.)¹¹

Table 1.1: Elementary and Secondary School Enrollment 1950–2000

Year	Total	Public schools	Private schools	Home education
1950	28,492,000	25,111,000	3,380,000	na
1970	51,257,000	45,894,000	5,363,000	na
1990	46,752,000	41,217,000	5,234,000	301,000
2000	54,804,000	47,160,000	5,944,000	1,700,000

Sources: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 3, p. 12; Home School Legal Defense Association, *Homeschooling Research* (Purcellville, VA: Home School Legal Defense Association, National Center for Home Education), available online at <http://www.hslda.org>.

Figure 1.1: **Total Elementary and Secondary School Enrollment By Type of School, 1978 & 2000**



Sources: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 3, p. 12; Home School Legal Defense Association, *Homeschooling Research* (Purcellville, VA: Home School Legal Defense Association, National Center for Home Education), available online at <http://www.hslda.org>.

Furthermore, the faces that comprise enrollment numbers have changed. In 1976, minorities comprised 24 percent of elementary and secondary school enrollment; in 1999, minorities comprised 38 percent. The most notable distinction among minorities is the growing Hispanic population. The percentage of Hispanic students nearly tripled between 1976 and 1999. (See table 1.2 and figure 1.2.)¹²

Table 1.2: Elementary and Secondary Public School Enrollment

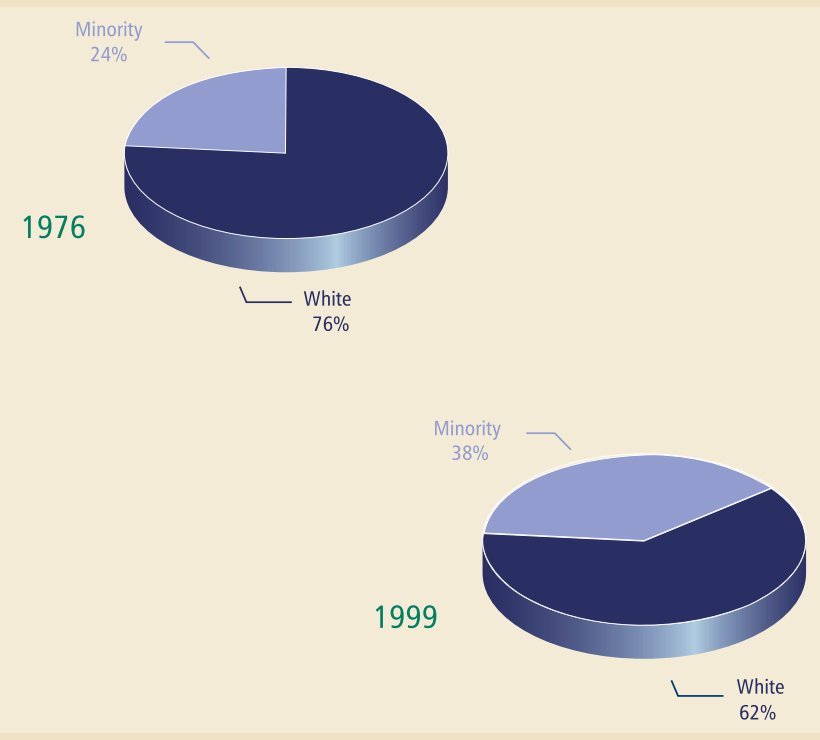
Percentage Minority Students by Race, 1976 & 1999

Race	1976	1999
Black	15.5%	17.2%
Hispanic	6.4	15.6
Asian or Pacific Islander	1.2	4.0
American Indian/Alaskan Native	0.8	1.2
Total	23.9%	38.0%

Source: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 42, p. 58.

Figure 1.2: Elementary and Secondary Public School Enrollment

By Race/Ethnicity, 1976 & 1999



Source: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 42, p. 58.

Enrollment in public and private schools has changed not only in numbers but in composition, as well. Over the last decade, three educational alternatives—home schooling, voucher programs, and charter schools—have emerged, altering the makeup of both public and private schools. (See table 1.3 and figure 1.3.)¹³

- In 1978, 89 percent of elementary and secondary students were enrolled in public schools, 11 percent in private schools, and 0.03 percent in home schools.
- In 2000, 86 percent were enrolled in public schools, 11 percent in private schools, and 3 percent in home schools.¹⁴

Home education surfaced as the largest portion of alternative enrollment.

- In 1990, 0.6 percent of total elementary and secondary school students were home educated.
- In 2000, home-educated students were 3.1 percent of total enrollment, more than five and one-half times as many as in 1990.¹⁵

Furthermore, within the last 10 years, voucher and charter school enrollments have grown considerably and do not appear to be slowing down.¹⁶

- In 1992, the first charter school emerged, with an enrollment of 35 students. In 2000, there were more than 2,300 charter schools, enrolling more than 575,000 students, nearly 1 percent of total elementary and secondary enrollment.
- In 1990, there were 341 public and private vouchers provided, a trivial percentage. In 2000, there were 61,525 vouchers used in private schools. Although very small in the overall scheme, voucher students total more than 1 percent of private school enrollment.¹⁷

Table 1.3: **Elementary and Secondary School Enrollment**
By Type of School, 1900–2000

Total Enrollment						
Year	Total	Public Schools		Private Schools		
		Traditional	Charter	Traditional	Vouchers	Home Education
1900	16,855,000	15,503,000	na	1,352,000	na	na
1910	19,372,000	17,814,000	na	1,558,000	na	na
1920	23,277,000	21,578,000	na	1,699,000	na	na
1930	28,329,000	25,678,000	na	2,651,000	na	na
1940	28,045,000	25,434,000	na	2,611,000	na	na
1950	28,491,000	25,111,000	na	3,380,000	na	na
1960	40,857,000	35,182,000	na	5,675,000	na	na
1970	51,257,000	45,894,000	na	5,363,000	na	na
1980	46,208,000	40,877,000	na	5,331,000	na	na
1985	45,162,000	39,422,000	na	5,557,000	na	183,000
1990	46,752,000	41,217,000	na	5,234,000	341	301,000
1992	48,848,000	42,823,000	na	5,322,000	4,798	703,000
1994	50,834,000	44,111,000	na	5,498,000	18,136	1,225,000
1996	52,600,000	45,611,000	105,100	5,764,000	25,853	1,225,000
1998 ^a	54,375,000	46,857,000	433,797	6,018,000	58,127	1,500,000
2000 ^{a, b}	54,804,000	47,160,000	522,199	5,944,000	61,525	1,700,000

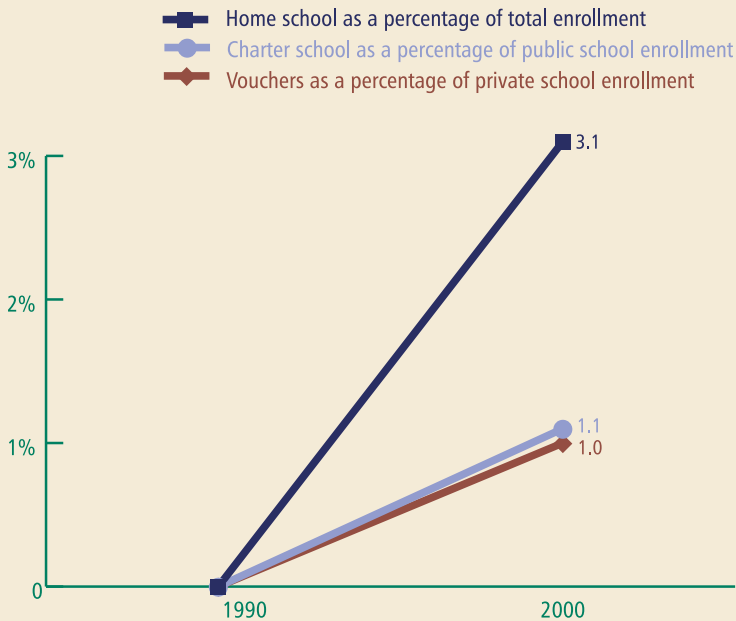
Percentage of Total Enrollment					
Year	Public Schools		Private Schools		
	Traditional	Charter	Traditional	Vouchers	Home Education
1900	91.98%	na	0.08%	na	na
1910	91.96	na	8.04	na	na
1920	92.70	na	7.30	na	na
1930	90.64	na	9.36	na	na
1940	90.69	na	9.31	na	na
1950	88.14	na	11.86	na	na
1960	86.11	na	13.89	na	na
1970	89.54	na	10.46	na	na
1980	88.46	na	11.54	na	na
1985	87.29	na	12.30	na	0.41%
1990	88.16	na	11.20	na	0.64
1992	87.67	na	10.90	0.01%	1.44
1994	86.77	na	10.82	0.04	2.41
1996	86.71	0.20%	10.96	0.05	2.33
1998 ^a	86.17	0.80	11.07	0.11	2.76
2000 ^{a, b}	86.05	0.95	10.85	0.11	3.10

Sources: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 3, p. 12; Center for Education Reform, *Charter School Highlights and Statistics* (Washington, DC: Center for Education Reform, 2000), available online at <http://www.edreform.com>; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth* (Milwaukee, WI: Marquette University, 2000), available online at <http://www.schoolchoiceinfo.org>; Children First America, *The Road to Success: Private Vouchers Helping American Children* (Bentonville, AR: Children First America, 1999); Home School Legal Defense Association, *Homeschooling Research* (Purcellville, VA: Home School Legal Defense Association, National Center for Home Education), available online at <http://www.hsllda.org>.

Notes: a. For 1998 and 2000, traditional public and private school data are projected.


b. Charter school enrollment includes projections of new schools opening in fall 2000, which may vary as much as 10%.

Figure 1.3: **Emerging Education Alternatives**
1990 & 2000



Sources: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 3, p. 12; Center for Education Reform, *Charter School Highlights and Statistics* (Washington, DC: Center for Education Reform, 2000), available online at <http://www.edreform.com>; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth* (Milwaukee, WI: Marquette University, 2000), available online at <http://www.schoolchoiceinfo.org>; Children First America, *The Road to Success: Private Vouchers Helping American Children* (Bentonville, AR: Children First America, 1999); Home School Legal Defense Association, *Homeschooling Research* (Purcellville, VA: Home School Legal Defense Association, National Center for Home Education), available online at <http://www.hsllda.org>.

While the general public appears to be mixed in its opinion regarding alternative educational routes, teachers unions and most education professionals have been quite adamant in their views. They find fault with any alternative that challenges the traditionally defined public school system. Enrollment numbers, however, are telling. The composition of enrollment, and therefore education, is different from how it was just 10 years ago. The changing enrollment patterns persist and may dictate respective adjustments.



**PROPOSITION: PUBLIC EDUCATION
IS BECOMING INCREASINGLY
CONSOLIDATED, WHICH MEANS LESS
PARENTAL INVOLVEMENT.**

Over the past several decades, the public education system has become much more consolidated. If students were strictly economic goods, then the economies of scale associated with consolidation might make sense: more produced, lower cost, and, it is hoped, better quality. Students, however, are not goods to be uniformly manufactured, and the goal of education is not simply to push students through an assembly line process and check them off a list. Students are the future of America, and to this end, how they are educated is as important as, and will have more lasting impact than, a manufactured good.

The trend toward consolidation in the public school system has manifested itself in many ways. Since the early part of the 20th century, the number of public school districts and the number of schools has decreased dramatically. In the 1939–40 school year, there were 117,108 school districts; in the 1999–2000 school year, there were fewer than 15,000. At the same time, the number of public elementary and secondary schools decreased from roughly 260,000 to less than 95,000. Although annual enrollment has fluctuated, mirroring demographic trends, overall public school enrollment nearly doubled in this period, while the number of schools was cut by more than half. The results: The average public school size and the average school district size have gradually increased. In the 1930s, for example, the average enrollment in a public school was approximately 100 students. In the 1999–2000 school year, the average enrollment was more than 500 students. (See table 1.4 and figures 1.4 and 1.5.)¹⁸

Table 1.4: Public School Districts and Public and Private Elementary and Secondary Schools 1929–30—1999–2000

School year	Public school districts ^{a, b}	Public schools ^c			Private schools ^{c, d, e}	
		Schools with elementary grades		Schools with secondary grades	Schools with elementary grades	Schools with secondary grades
		Total	One teacher			
1929-30	na	238,306	149,282	23,930	9,275	3,258
1939-40	117,108	na	113,600	na	11,306	3,568
1949-50	83,718	128,225	59,652	24,542	10,375	3,331
1959-60	40,520	91,853	20,213	25,784	13,574	4,061
1970-71	17,995	65,800	1,815	25,352	14,372	3,770
1980-81	15,912	61,069	921	24,362	16,792	5,678
1989-90	15,367	60,699	630	23,461	na	na
1990-91	15,358	61,340	617	23,460	22,223	8,989
1991-92	15,173	61,739	569	23,248	23,523	9,282
1992-93	15,025	62,225	430	23,220	na	na
1993-94	14,881	62,726	442	23,379	23,543	10,555
1994-95	14,772	63,572	458	23,668	na	na
1995-96	14,766	63,961	474	23,793	25,153	10,942
1996-97	14,841	64,785	487	24,287	na	na
1997-98	14,805	65,859	476	24,802	24,915	10,779
1998-99	14,891	67,183	463	25,797	na	na
1999-2000	14,928	68,173	423	26,407	24,685	10,693

Source: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 89, p. 98.

Notes: a. Includes operating and nonoperating districts.

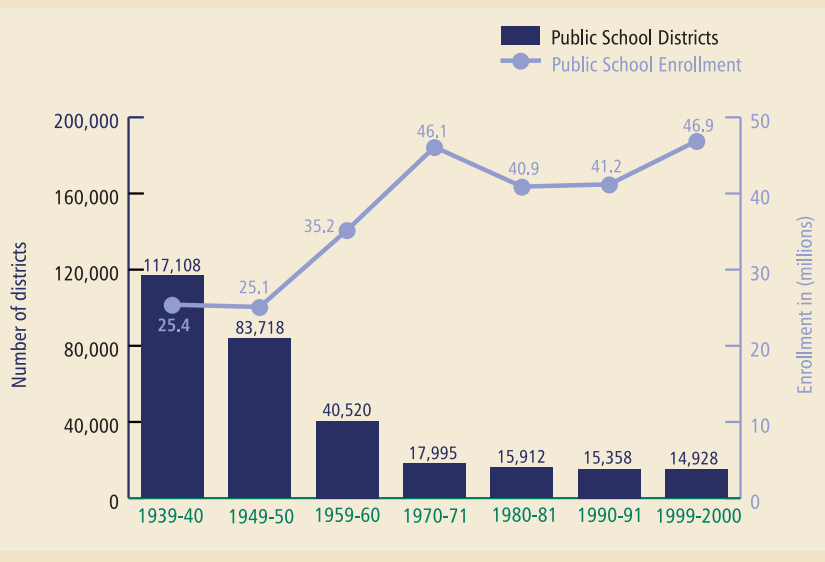
b. Because of expanded survey coverage, all public school district data between 1989 and 2000 are not directly comparable with figures for earlier years.

c. Schools with both elementary and secondary programs are included both under elementary schools and under secondary schools.

d. Data for most years are partly estimated.

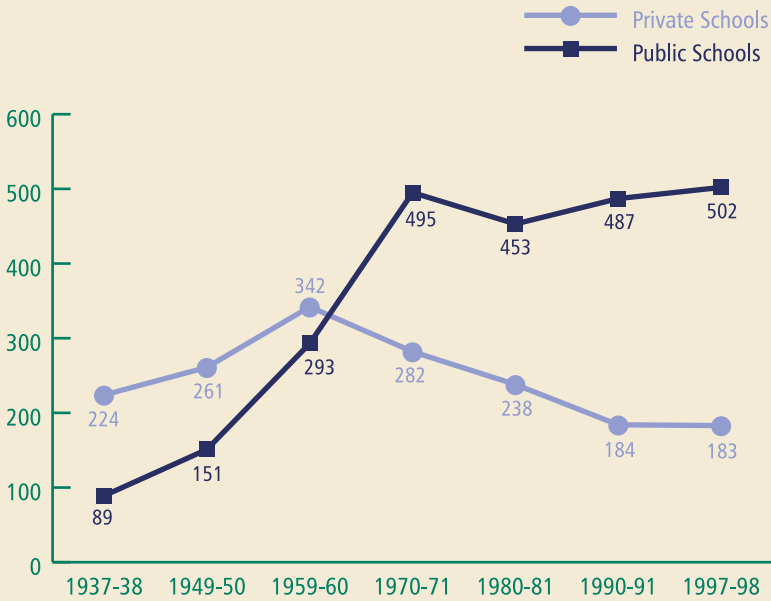
e. All private school data between 1989 and 1994 are from sample surveys and should not be compared directly with data for earlier years.

Figure 1.4: **Number of Public School Districts and Enrollment**
Public School Districts and Enrollment, 1939–40—1999–2000



Source: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), tables 3, 89, pp. 12, 98.

Figure 1.5: **Elementary School Size**
1937–38—1997–98



Source: Thomas D. Snyder, *120 Years of American Education: A Statistical Portrait* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1993).

In just the last 10 years, the percentage of students concentrated in districts with 25,000 students or more has increased dramatically. In the 1988–89 school year, 177 school districts (1.2 percent of districts nationwide) had 25,000 students or more enrolled in their district; these 177 districts accounted for 21.4 percent of total enrollment nationwide. Contrast this with the 1999–2000 school year, when 236 school districts (1.6 percent of districts nationwide) had 25,000 students or more enrolled in their district; this represents 32.1 percent of total enrollment nationwide. (See table 1.5 and figure 1.6.)¹⁹

**Table 1.5: Public School Districts and Enrollment
By Size of District, 1988–89 & 1999–2000**

Enrollment of district	1988–89			1999–2000		
	Number of districts	Percent of districts	Percent of students	Number of districts	Percent of districts	Percent of students
Total	15,376	100.0%	100.0%	14,928	100.0%	100.0%
25,000 or more	177	1.2	21.4	238	1.6	32.1
10,000–24,999	473	3.1	20.6	579	3.9	18.7
5,000– 9,999	924	6.0	17.2	1,036	6.9	15.4
2,500– 4,999	1,907	12.4	17.8	2,068	13.9	15.6
1,000– 2,499	3,529	23.0	15.4	3,457	23.2	12.1
600– 999	1,813	11.8	3.6	1,814	12.2	3.1
300– 599	2,266	14.7	2.5	2,081	13.9	2.0
1– 299	3,984	25.9	1.5	3,298	22.1	1.0
Size not reported ^a	303	2.0	na	357	2.4	na

Source: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 90, p. 98.

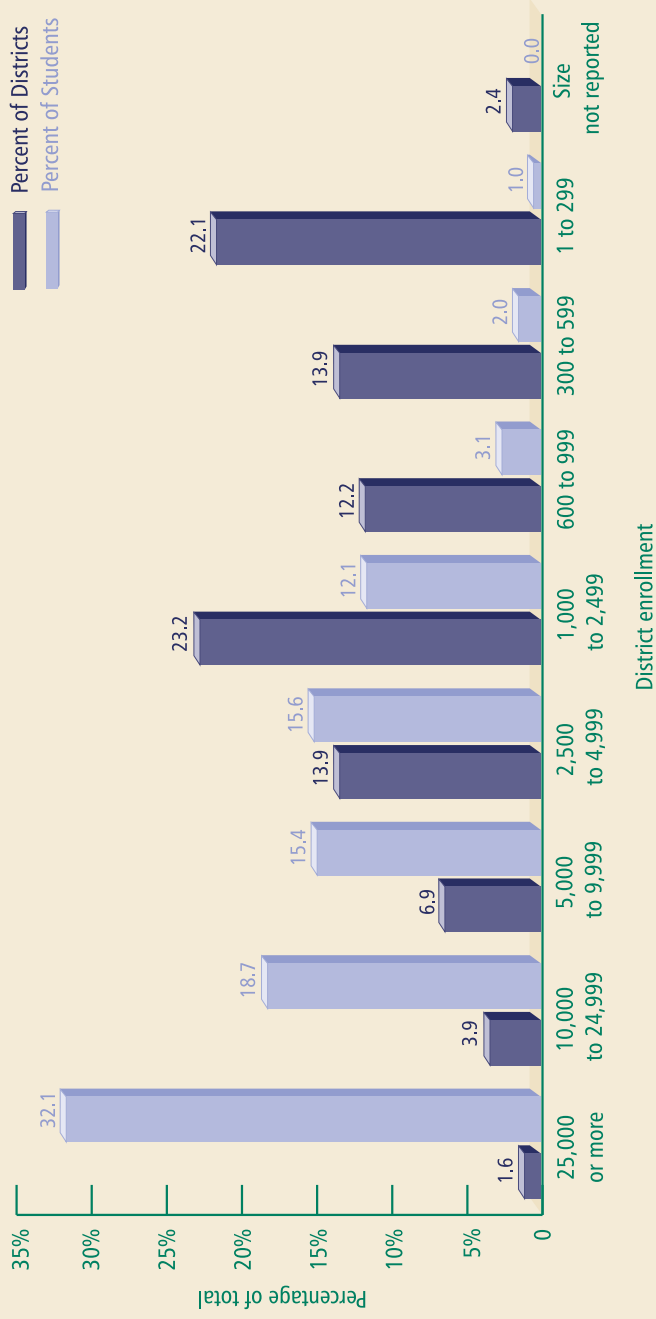
Note: a. Includes school districts reporting enrollment of 0.

Arguments for consolidation are based on increased efficiency and economies of scale; however, one consequence has been increased distance—further removing parents from those who administer their children’s education. Increasingly, parents, teachers, and students are becoming faces in a crowd. Surveys from the state of Connecticut provide clear examples of the relationship between school consolidation and parental involvement. Between 1988 and 1992, as schools were consolidated (or otherwise grew as a result of reorganization), parental interaction greatly decreased.²⁰ Over this period, parents were

- 12 percent less likely to respond to questionnaires from the school
- 10 percent less likely to participate in parent-teacher organizations
- 10 percent less likely to attend a school open house
- 7 percent less likely to say that their school “communicate[d] well” with them
- 5 percent less likely to check their children’s homework²¹

Figure 1.6: Public School District Enrollment

By Size of School District, 1999–2000



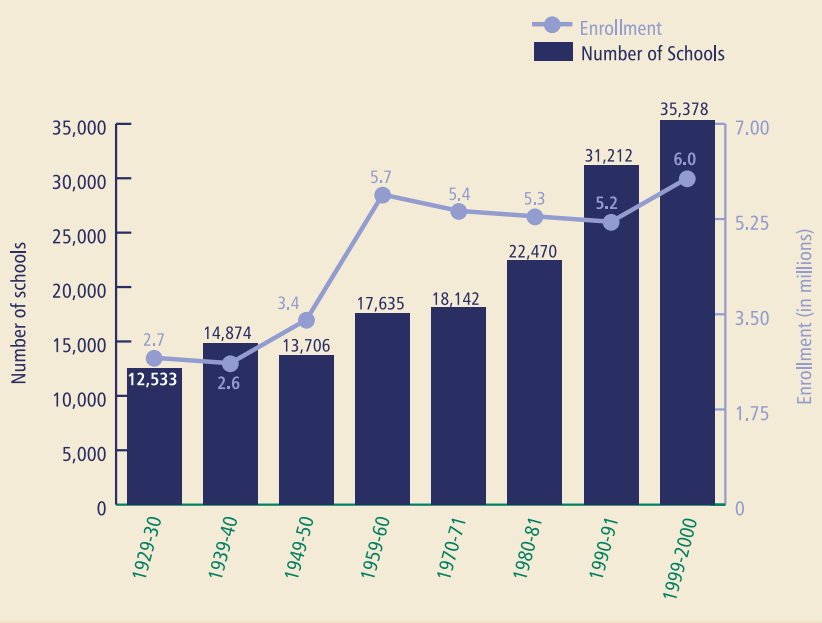
Source: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 90, p. 98.

Clearly, there may be confounding factors, and the study measures the response of different sets of parents, but statistical tests indicate these differences are significant.

If parents—the third leg of the education tripod, which includes students, teachers, and parents—are distancing themselves from the process, a breakdown is inevitable.

The move toward a more consolidated public school system and fewer but larger schools is in stark contrast to private school trends. The number of private elementary and secondary schools has steadily increased: In 1930, there were roughly 12,500 private schools; in 2000, more than 35,000, nearly three times as many. During the same time period, the number of public schools decreased steadily. Over the past 70 years, the ratio of public to private schools has fallen from 20 public schools for every private school to 3 public schools for every private school. (See figures 1.7 and 1.8.)²²

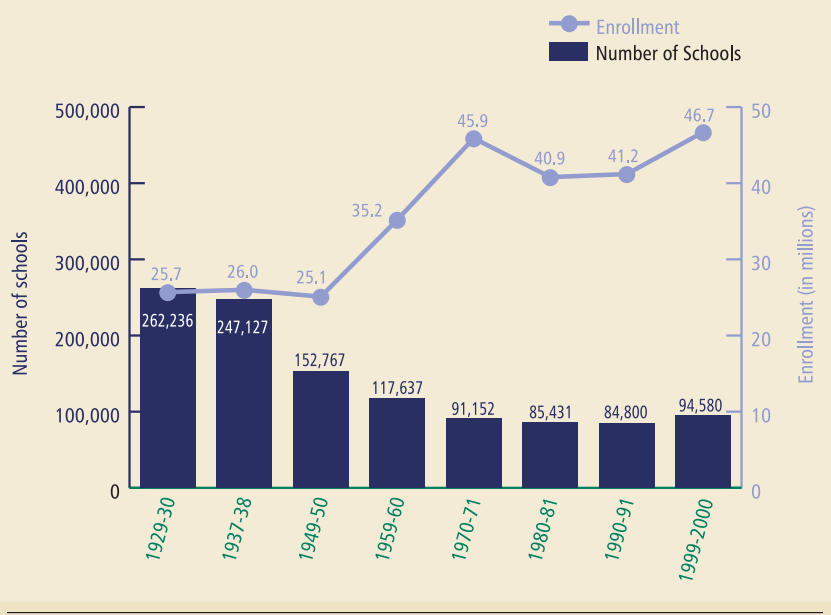
Figure 1.7: **Private School Enrollment**
1929–30—1999–2000



Sources: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 89, p. 98; Thomas D. Snyder, *120 Years of American Education: A Statistical Portrait* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1993).

Evidence points to the family as the most important determinant of a student’s achievement.²³ As the public education system has become more consolidated, the administration and bureaucracy have grown, distancing parents from educational decisions and input. Theoretically, consolidation may be economically viable, but at a high cost to America’s future—America’s children.

Figure 1.8: Public School Enrollment
1929–30—1999–2000



Sources: Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 89, p. 98; Thomas D. Snyder, *120 Years of American Education: A Statistical Portrait* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1993).
Note: Data are not available for the 1939–40 school year.



PROPOSITION: SMALLER SCHOOLS CAN MAKE A DIFFERENCE.

With America's renewed interest in the quality of education following the launch of the Soviets' *Sputnik* in 1957, new ideas for educational improvement proliferated; however, few were effective.²⁴ One little-noticed "improvement" was a more "scientific" approach to education. One piece of evidence was the consolidation of school systems. In the minds of "experts," consolidation meant economies of scale: more efficiency and more effectiveness. The literature at the time reinforced this mind-set. Franklin Keller's 1955 book, *The Comprehensive High School*, recommended consolidation. James Conant's 1959 book, *The American High School*, stated that the small high school was the number one problem in education and that its elimination should be a top priority.²⁵ Entitlement programs and desegregation compliance in the 1960s further contributed to the consolidation movement.²⁶

Research today, however, contradicts the education experts of a few decades earlier. Many experts presumed, for example, that large schools, high schools in particular, offered a more diverse curriculum and more opportunities at a lower cost; there is mounting evidence that neither of these assertions is true. In fact, comprehensive research shows that small schools²⁷ are superior to large schools on most measures and equal to them on the rest.²⁸ A comprehensive review of 103 studies revealed the following several points regarding small schools.²⁹

Academic achievement of students in small schools is at least equal to, and often superior to, that of large schools. A recent study documenting Chicago's small-school "reform" implementation, which included approximately 150 schools, showed improved standardized test scores or average test scores holding steady despite more students taking the test.

There is no research indicating that large schools are superior to small schools in their achievement effects. (See table 1.6.)³⁰

Table 1.6: Academic Performance of Students by School Size
Chicago Public Schools, 1997 & 1999

Type	Schools Number	Percentage of students at or above national norms	
		Reading, 1997	Math, 1999
Small schools	40–45	48.1%	62.4%
Not small	360–390	29.1	44.3

Source: Patricia Wasley, Michelle Fine, Matt Gladden, Nicole E. Holland, Sherry P. King, Esther Mosak, and Linda C. Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago* (New York: Bank Street College of Education, 2000), available online at <http://www.bankstreet.edu/news/releases/smschool.html>.

Marked improvement in achievement among ethnic minority students and students of low socioeconomic status (SES) is evident. A July 1997 study reported that “disadvantaged students in small schools significantly outperformed those in large ones on standardized basic skills tests.” A study by the Consortium on Chicago School Research found that “for both reading and math, small schools produce greater achievement gains than larger schools, holding demographic and teacher characteristics constant.” A study in 2000 showed that small schools helped close the achievement gaps between less affluent students and their wealthier counterparts.³¹

Student attitudes toward school in general and toward particular school subjects are more positive. Consistently, research favors small schools when it comes to student attitudes. Furthermore, research indicates that the attitudes of low-SES and minority students are especially sensitive to school size and benefit greatly from attending smaller schools.³²

Cost-effectiveness is possible. When per-pupil costs are calculated on the number of students who actually graduate from school, rather than on the number attending (in school),

the so-called savings of big schools largely disappears. If a small school attempts to maintain the large-school infrastructure, it will probably not be cost effective.³³

Behavior problems are fewer. Research shows that in every instance, small schools have lower incidence rates of negative social behavior than larger schools. Research linking small schools and behavior has investigated everything from truancy and classroom disruption to vandalism, aggressive behavior, theft, substance abuse, and gang participation.³⁴ For example, according to the U.S. Department of Education, more than half of small-school principals report either minor or no discipline problems, compared to only 14 percent of big-school principals. Schools of 1,000 or more students experience 9 times more violent crime, 3 times more vandalism, and 11 times more weapons incidents as schools with fewer than 300 students.³⁵

Participation in extracurricular activities is at a higher rate and more varied. The degree of satisfaction from participation is much higher among students. This holds true regardless of setting and is most applicable to minority and low-SES students. Furthermore, research has identified an important relationship between extracurricular participation and other desirable outcomes, such as positive attitudes and social behavior.³⁶

Attendance patterns are better. Not only do students have better attendance records, but when secondary students switch from larger to smaller schools, their attendance generally improves. For example, in the previously referenced study documenting Chicago's small-school "reform" implementation, the average number of days missed in core courses per semester (controlling for eighth-grade achievement and demographics) was 13.56 for non-small schools but ranged from 8.09 to 10.45 days missed in small schools.³⁷

Dropout and graduation rates are much better. Nine out of 10 reports reviewed confirmed lower dropout rates for small schools.³⁸

Students are more likely to go to college. In Nebraska, 73 percent of students in districts with fewer than 70 high school students enrolled in postsecondary institutions, compared to 64 percent of those in districts of 600 to 999 high school students. These findings hold even when other variables, such as student attributes or staff characteristics, are taken into account.³⁹


Interpersonal relationships are better. Between students and between students and teachers, relationships were perceived as better.⁴⁰

No reliable relationship exists between school size and curriculum quality.⁴¹ According to some researchers, the allegedly richer curriculum that larger schools offer tends to be made up of additional introductory courses outside core areas, not higher-level courses.⁴²

In a recent Public Agenda poll of high school parents and teachers, 66 percent of the parents and 79 percent of the teachers favored smaller high schools.⁴³

Proposals for small schools have emerged all over the United States. In New York, Chicago, and Philadelphia, more than 300 downsized public schools have opened over the past 15 years.⁴⁴ The popularity of smaller schools as an educational improvement appears to be on the rise; however, consolidation and its effects are still apparent. Approximately 70 percent of American high school students attend schools enrolling more than 1,000 or more students, and nearly 50 percent attend schools enrolling more than 1,500. In the 1937–38 school year, the average size of a secondary public school was approximately 200; in the 1997–98 school year, the average size was 779.⁴⁵ High schools with enrollments of 2,000 and 3,000 students are not uncommon around the nation; New York City has schools with enrollments of more than 5,000.⁴⁶ It is of note that the average size of public high schools varies extensively, depending on the state. For example, Florida's secondary public school average is 1,662; South Dakota's is 173.⁴⁷

In the short run, there may be dollar savings resulting from consolidation. Based on the evidence, however, there are noteworthy and long-standing cost savings when schools are smaller: higher achievement, less violence, fewer discipline problems, and higher attendance and graduation rates. After examining both curriculum quality and cost-effectiveness, researcher Kathleen Cotton stated, “The perceived limitations in the program that small high schools can deliver and their presumed high cost regularly have been cited as justifications for our steady march toward giantism. The research convincingly stamps both of these views as misconceptions.”⁴⁸ Smaller schools produce positive results. America should take notice of the impact smaller schools are making.



PROPOSITION: HIGH RATES OF STUDENT MOBILITY ARE ONE REASON FOR THE PERSISTENT GAP BETWEEN DISADVANTAGED AND NONDISADVANTAGED STUDENTS.

The achievement gap between advantaged and disadvantaged children is a constant concern. Although many attribute the gap to inequalities in resources and poor learning environments at home and at school, data from the U.S. General Accounting Office (GAO) indicate that low achievement scores are more often related to high rates of student mobility, that is, of students changing schools frequently. One explanation for this relationship, according to E.D. Hirsch and others, is the curricular inconsistency in the American educational system.⁴⁹

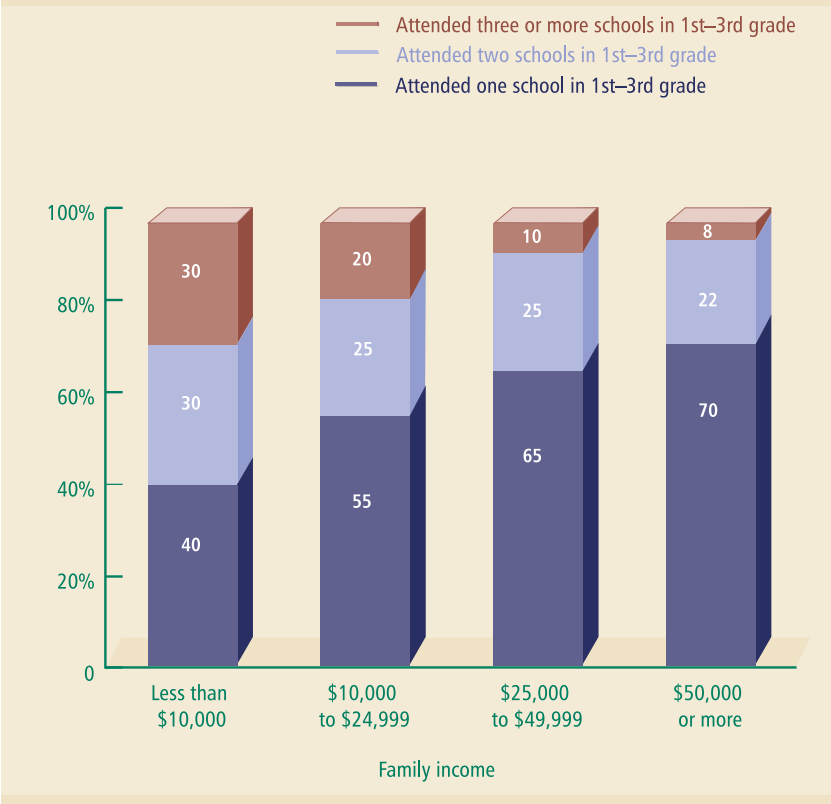
A common measure of mobility is the percentage of students who have transferred in or out of a school in the past school year. Mobility rates typically range between 45 and 80 percent in inner-city schools and between 25 and 40 percent in suburban schools. Children from low-income families or children who attend inner-city schools are more likely than others to change schools frequently, where “changed schools frequently” is defined as third-graders who have changed schools three or more times since the first grade.⁵⁰ According to the 1994 GAO study,

- About 17 percent of all third-graders—more than 500,000—have changed schools frequently.
- More than 24 percent of third-graders have attended two schools since the first grade.
- Of third-graders from low-income families (incomes below \$10,000), 30 percent have changed schools frequently, compared with approximately 10 percent from

families with incomes between \$25,000 and \$50,000 and 8 percent of children in families with incomes of \$50,000 or more. (See figure 1.9.)

- About 25 percent of third-graders in inner-city schools have changed schools frequently, compared with about 15 percent of third-graders in rural or suburban schools.⁵¹

**Figure 1.9: Frequency of School Change
By Family Income, 1994**



Source: U.S. General Accounting Office, *Elementary School Children: Many Change Schools Frequently, Harming Their Education*, report GA 1.13:HEHS-94-45 (GAO/HEHS-94-95) (Washington, DC: U.S. General Accounting Office, 1994).

Studies have shown that high mobility rates and poor academic performance are related, and mobility rates are higher in the inner-city. Of the many factors that contribute to high rates of mobility in inner-city areas, three stand out: family income, population density, and home ownership.

The home environments of children from low-income families are not as stable as those from families with higher incomes. In lower-income families, the rates of illegitimacy, divorce, and single-parent households are higher, and there is a greater dependence on the extended family to provide care and housing for children. This means that low-income children are shuttled from house to house more often than those from high-income families.

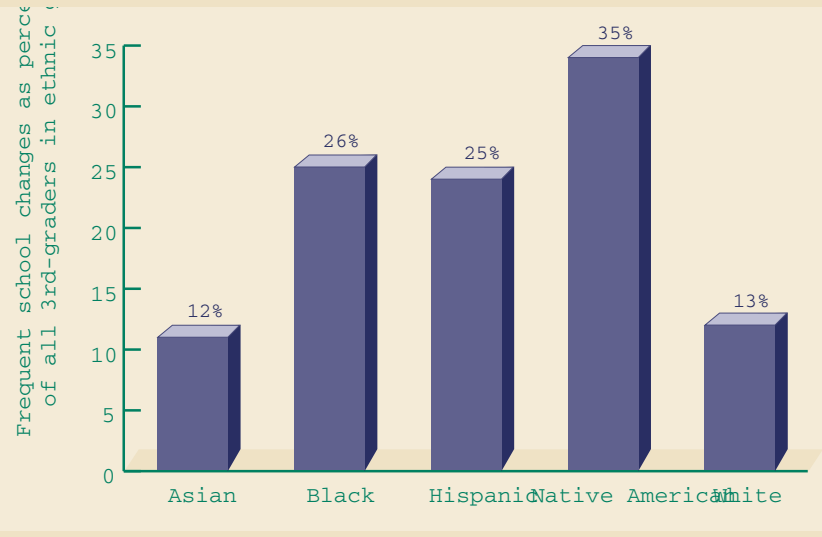
With lower population densities, suburban school districts often cover larger geographic areas than do inner-city districts. Whereas a move within the inner-city almost assuredly requires a change of school, a move of equal distance in a suburban district is much less likely to require a school transfer.⁵²

Home ownership affects school mobility because renters are more common in urban areas, and they tend to move much more frequently than do homeowners. In 1999, 35 percent of renters had moved within the last year, compared with only 8 percent of homeowners.⁵³

Some of the characteristics of students with high mobility rates include these:

- About 40 percent of migrant children change schools frequently.
- White and Asian-American third-grade students change schools at a rate of approximately 12 percent; Hispanic students, 25 percent; black students, 26 percent; and Native American students, 35 percent. (See figure 1.10.)
- Among children with limited English proficiency, about 34 percent change schools frequently.⁵⁴

Figure 1.10: **Likelihood of Frequent School Change**
By Race and Ethnicity, 1994



Source: U.S. General Accounting Office, *Elementary School Children: Many Change Schools Frequently, Harming Their Education*, report GA 1.13:HEHS-94-45 (GAO/HEHS-94-95) (Washington, DC: U.S. General Accounting Office, 1994).

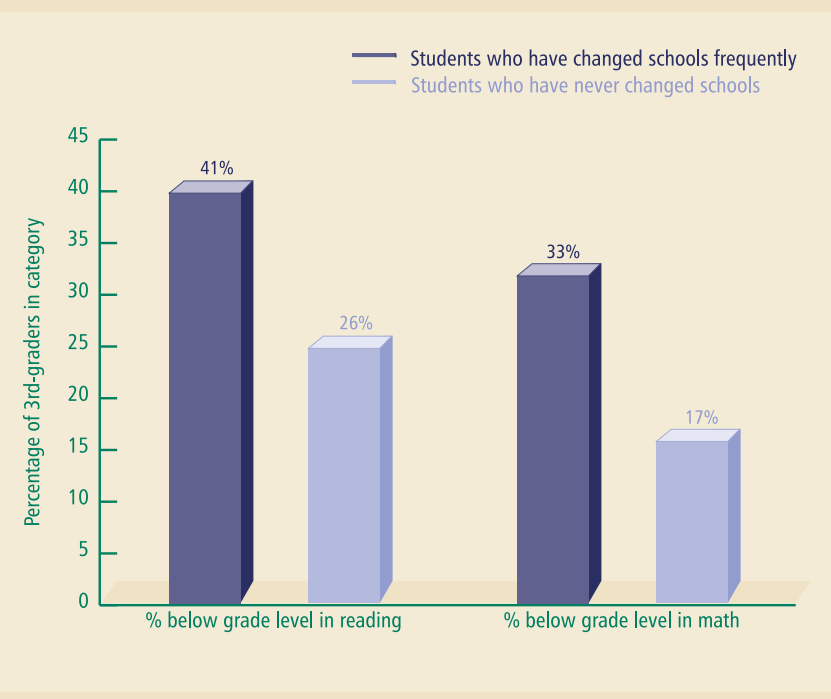
Note: "Frequent" is defined as third-graders who had changed schools three or more times since the 1st grade.

Do high mobility rates matter? Of the nation's third-graders, 41 percent of those who have changed schools frequently are low achievers (below grade level) in reading, compared with 26 percent of third-graders who have never changed schools. Results are similar for math. Thirty-three percent of children who have changed schools frequently perform below grade level, compared with 17 percent of those who have never changed schools. (See figure 1.11.)⁵⁵ In addition,

- Overall, third-graders who have changed schools frequently are two and a half times as likely to repeat a grade as third-graders who have never changed schools (20 versus 8 percent).

- For all income groups, children who have changed schools frequently are more likely to repeat a grade than children who have never changed schools.
- Children who changed schools four or more times by the eighth grade were at least four times more likely to drop out than those who remained in the same school; this is true even after taking into account the socioeconomic status of a child’s family.⁵⁶

Figure 1.11: **Student Mobility Rates and Achievement**
Third-Graders, 1994




Source: U.S. General Accounting Office, *Elementary School Children: Many Change Schools Frequently, Harming Their Education*, report GA 1.13:HEHS-94-45 (GAO/HEHS-94-95) (Washington, DC: U.S. General Accounting Office, 1994).

Note: "Frequent" is defined as third-graders who had changed schools three or more times since the 1st grade.

In grouping children who have changed schools frequently into four income categories, the GAO study found that within each category, children who have changed schools most frequently are more likely to be below grade level in reading and math than those who have never changed schools.

Why do student mobility rates have such a strong effect on performance? Some theorize that the lack of coherency in curricula across the United States, within states, and often between schools in the same district is a major cause. After much research, Herbert Walberg concluded, “Common learning goals, curriculum, and assessment within states (or within an entire nation) ... alleviate the grave learning disabilities faced by children, especially poorly achieving children who move from one district to another with different curricula, assessment, and goals.”⁵⁷

High mobility rates may be inevitable for some subsets of the population. School choice could contribute to a partial solution by breaking the link between a child’s home address and school address, thus allowing students to remain at the same school despite changing residences. Hirsch and other experts argue, however, that what is needed is a strong and coordinated core curriculum to provide a solid, consistent foundation in the basics.⁵⁸ Although a national curriculum may be questionable because of its potential for superceding local control, a well-defined, basic core curriculum would be beneficial. Without a coordinated sequence, too much time is spent repeating certain fundamentals of a student’s education and completely ignoring others. Higher mobility may be inevitable for lower-income and immigrant children, but the combination of choice, local control, clear standards, and a coordinated sequence of study should provide a foundation for closing the achievement gap.



PROPOSITION: STUDENTS IN THE UNITED STATES SPEND MORE HOURS PER YEAR IN THE CLASSROOM THAN THEIR PEERS IN OTHER DEVELOPED COUNTRIES.

Although it is difficult to determine which educational inputs have the greatest impact on student achievement, the amount of time spent learning, whether in school or at home, matters. Lengthening the school day, prolonging the school year, and decreasing class size are a few of the most frequently promoted recommendations for improving student achievement. Although the length of the school day and school year do not determine the quality of education received, they are important inputs to the education production function, and they do signify students' exposure to educational opportunities in the classroom. Time spent out of the classroom on educational endeavors, such as doing homework or other education-enhancing activities, clearly has an impact on achievement, as well.

Among industrialized nations, there are distinct differences in the amount of time spent in instruction because of either school day or school year length. The number of annual classroom hours for 14-year-olds varies greatly between countries, with the United States falling just above the 1994 and 1998 averages of 952 and 944 hours a year, respectively. In 1998, a handful of nations averaged more than 1,000 hours of instruction a year, while England and Sweden reported lows of 720 and 741 hours a year, respectively. (See table 1.7 and figure 1.12.)⁵⁹

**Table 1.7: Hours of Instruction Time per Year
Selected Countries, 1998**

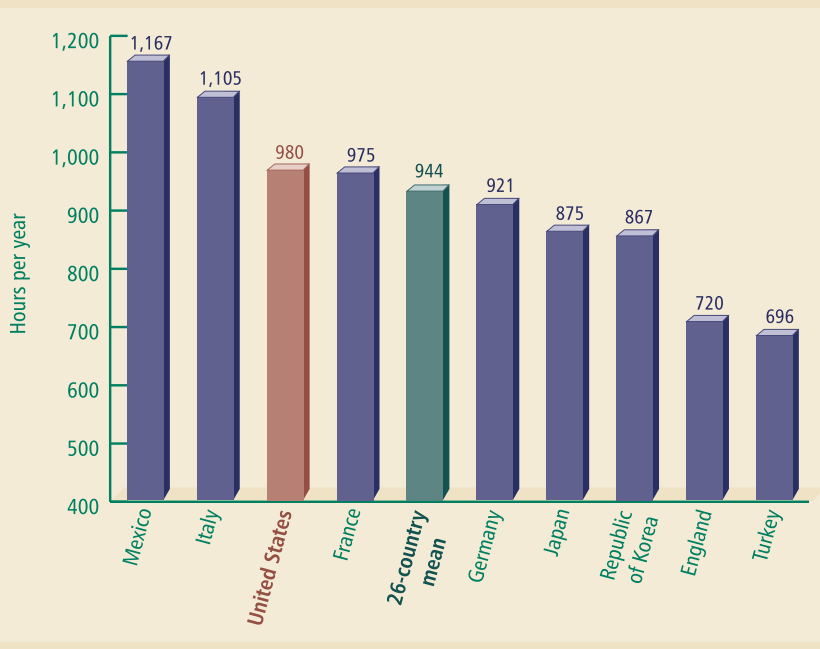
Country	Age			Three-year total
	12	13	14	
Australia	1,022	1,027	1,027	3,076
Austria	987	987	1,048	3,022
Belgium (Flemish)	na	1,067	1,067	na
Belgium (French)	1,048	1,048	1,048	3,145
Czech Republic	782	811	869	2,461
Denmark	840	900	930	2,670
England	720	720	720	2,160
Finland	686	855	855	2,396
France	833	975	975	2,783
Germany	860	921	921	2,702
Greece	1,064	1,064	1,064	3,192
Hungary	780	902	902	2,584
Ireland	957	957	957	2,872
Italy	1,105	1,105	1,105	3,315
Japan	875	875	875	2,625
Rep. of Korea	867	867	867	2,601
Mexico	1,167	1,167	1,167	3,500
Netherlands	1,067	1,067	1,067	3,200
New Zealand	985	988	988	2,961
Norway	770	855	855	2,480
Portugal	878	878	878	2,635
Scotland	975	975	975	2,925
Spain	851	957	957	2,765
Sweden	741	741	741	2,222
Turkey	720	720	696	2,136
United States	na	na	980	na
26-country mean	899	937	944	2,768

Source: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>.

Note: The data present the number of hours students are exposed to instructional activities in school. The figures do not include hours spent studying, completing homework, or participating in extracurricular tutoring or additional instruction.

Test scores from the Third International Math and Science Study (TIMSS) and the TIMSS-Repeat provide context and insight when comparing the amount of time spent on instruction in the classroom. Many nations where students spend fewer hours in instruction score higher in math and science than the United States, notably Japan and the Republic of Korea, both of which have significantly higher test scores com-

Figure 1.12: **Instruction Time per Year**
Selected Countries, 14-Year-Olds, 1998



Source: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>.

pared to eighth-grade students in the United States. Moreover, England and Sweden, whose instruction hours are particularly low, score higher than the United States, as well. Although Sweden's total instruction hours are low, the amount of time it devotes to math and science instruction as a percentage of its total time of instruction is quite high. (See tables 1.8 and 1.9 and figures 1.13, 1.14, and 1.15.)⁶⁰

Table 1.8: Instruction Time per Subject
As a Percentage of Total Intended Instruction Time for Students,
Selected Countries, 12- to 14-Year-Olds, 1998

Country	Reading and writing mother tongue	Math	Science	Social studies	Modern foreign languages	Technology	Arts	PE	Religion	Vocational skills	Other	Total compulsory part	Flexible part
Australia	13%	13%	10%	10%	6%	8%	8%	7%	na	na	3%	77%	23%
Austria	12	15	14	12	10	6	12	11	6%	na	na	100	na
Belgium (Fl.)	13	13	3	6	14	6	3	6	6	na	na	70	30
Belgium (Fr.)	15	14	7	11	12	2	2	8	6	na	7	82	18
Czech Republic	14	14	13	18	11	na	9	7	na	4%	5	94	6
Denmark	20	13	12	11	10	na	9	7	3	na	3	90	10
England	12	12	14	11	11	12	10	8	4	1	5	100	na
Finland	18	11	10	10	9	na	6	8	4	na	22	100	na
France	17	14	12	13	11	7	8	11	na	na	na	93	7
Germany	14	13	11	11	21	na	9	9	na	na	8	95	5
Greece	12	11	10	10	15	5	6	8	6	1	16	100	na
Hungary	13	13	13	10	10	na	6	6	na	3	3	78	22
Ireland	23	12	9	19	na	na	na	5	7	na	2	77	23
Italy	23	10	10	14	11	9	13	7	3	na	na	100	na
Japan	14	12	11	12	13	8	11	10	na	na	8	100	na
Rep. of Korea	14	12	12	11	12	5	10	9	na	4	6	93	7
Mexico	14	14	19	18	9	9	6	6	na	3	3	100	na
Netherlands	10	10	8	11	14	5	7	9	na	na	3	78	22
New Zealand	18	16	14	14	4	8	4	11	na	5	na	93	7
Norway	16	13	9	11	16	na	8	10	7	na	10	100	na
Portugal	13	13	15	17	10	na	10	10	3	na	10	100	na
Scotland	10	10	10	10	10	10	10	5	5	na	na	80	20
Spain	19	12	11	11	8	5	14	9	na	na	2	90	10
Sweden	22	14	12	13	12	na	7	7	na	4	na	93	7
Turkey	17	13	10	7	13	na	3	3	7	10	17	99	na
United States	17	16	14	12	7	3	7	12	1	5	7	100	na
26-country mean	15	13	11	12	11	5	8	8	3	2	5	92	8

Source: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>.

Note: The data present the number of hours students are exposed to instructional activities in school. The figures do not include hours spent studying, completing homework, or participating in extracurricular tutoring or additional instruction.

Table 1.9: Intended Instruction Time per Year in Mathematics and Science

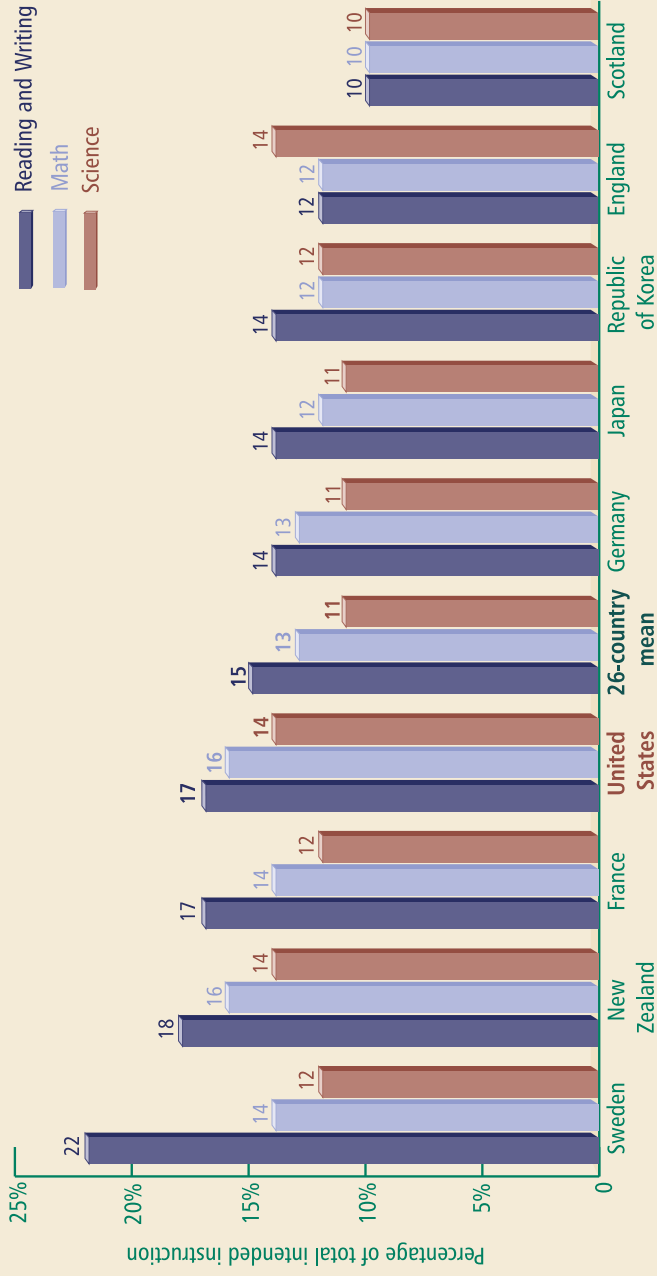
Selected Countries, 14-Year-Olds, 1998

Country	Hours
Australia	232
Austria	370
Belgium (Fl.)	167
Belgium (Fr.)	247
Czech Republic	261
Denmark	240
England	217
Finland	177
France	257
Germany	229
Greece	274
Hungary	250
Ireland	200
Italy	221
Japan	223
Rep. of Korea	204
Mexico	367
Netherlands	200
New Zealand	320
Norway	171
Portugal	198
Scotland	195
Spain	198
Sweden	189
Turkey	168
United States	295
26-country mean	233

Source: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>.

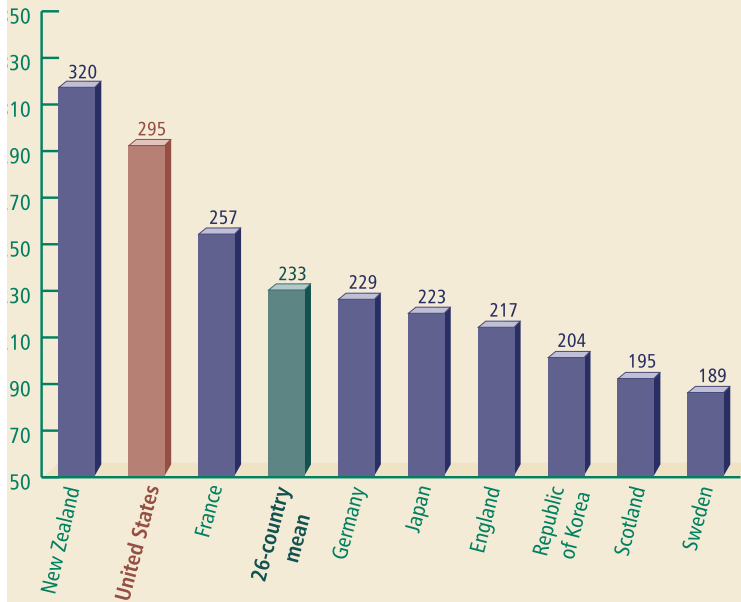
Note: The data present the number of hours students are exposed to instructional activities in school. The figures do not include hours spent studying, completing homework, or participating in extracurricular tutoring or additional instruction.

Figure 1.13: Instruction Time per Subject
Selected Countries, 12- to 14-Year-Olds, 1998



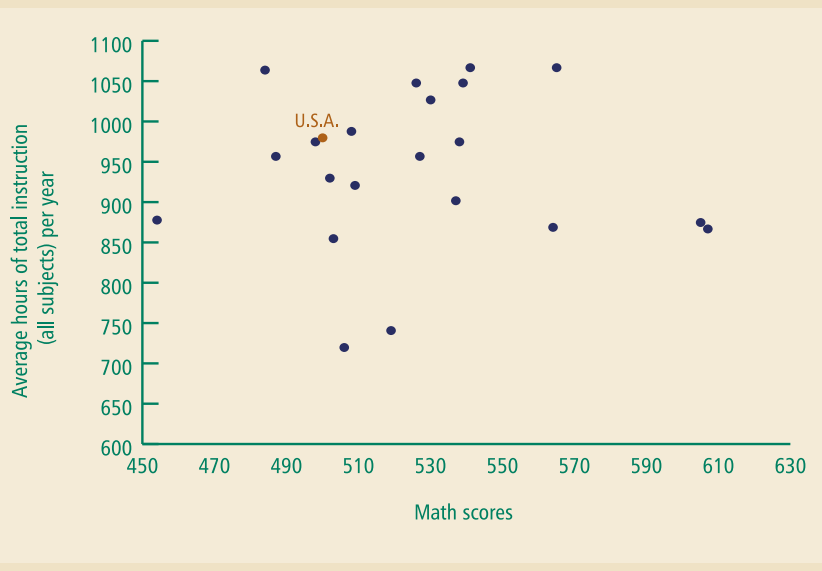
Source: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/eis/edu/EAG98/list.htm>.

Figure 1.14: **Instruction Time in Math and Science**
Selected Countries, 14-Year-Olds, 1998



Source: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>.

Figure 1.15: **Instruction Time and Math Scores**
Selected Countries, 8th-Graders or 14-Year-Olds



Sources: Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>; Harold W. Stevenson, "A TIMSS Primer: Lessons and Implications for U.S. Education," *Fordham Report* (Washington, DC: Thomas B. Fordham Foundation) 2, no. 7 (July 1998).

Data on the quantity of instruction hours dedicated to particular subjects provide information on how much time students spend learning different subjects, but they do not reveal anything about the use of the time. Classroom practices and curricula determine the way that educational information is presented. In addition, even if a nation dedicates a high percentage of instruction time toward given subjects, percentage is only half of the equation. If total instruction time for all subjects is low, students may still receive an insufficient amount of instruction in a particular subject.

While it is difficult to provide convincing evidence of the direct relationship between the number of hours received in instruction and test scores, there is one classroom activity that

has a negative effect on test scores. According to a report published by the National Center for Education Statistics (NCES), students in countries who work more frequently in groups achieve at a lower level than those who worked less frequently in groups. For the United States, this is significant. In 1994, 49 percent of U.S. students worked problems in groups, a percentage of students similar to or higher than all other countries compared, except Spain. Interestingly, Spanish and American students scored at the same level as or below their peers in other nations. Although group work is certainly not the sole contributor to lower rankings, its impact should not go unmentioned.⁶¹

Furthermore, according to Geoffrey Borman, researchers have consistently documented “summer slide,” or the depreciation of skills and habits and the deterioration of acquired knowledge during the summer months. This requires teachers to undertake extensive review when students return from a long summer vacation. This is important to note because while the U.S.’s number of instruction hours is well above the mean, its number of instruction days is not. Countries like Japan and Korea, two nations who clearly outperform the U.S., have fewer instruction hours per year but have a significantly higher number of school days each year. On average, the traditional U.S. public school year is 180 days; Japan and Korea’s school years last between 220 and 225 days. In addition, most students from Asian countries do more homework and attend more private tutorials, in comparison to students in the United States. Comparing instructional time and test scores clearly illustrates that classroom time is important, but it is not everything.⁶²



PROPOSITION: SCHOOL ENVIRONMENT MATTERS.

Clearly, elementary and secondary education is designed to provide children with the academic knowledge and skills they need to function successfully in society and to prepare them to pursue further education, enter the workforce, and be responsible, active citizens. Research indicates that the quality of the school environment, including the overall culture and atmosphere of the school, affects student learning.⁶³

Teacher quality, curriculum effectiveness, and resource quantity are often given the most consideration in discussions regarding enhancing achievement. One easily overlooked and hard-to-quantify component is school environment—specifically, peer-to-peer interaction. While at school, students spend the majority of their time with, and interact primarily with, fellow students; what their peers do, in and out of the classroom, matters. Evidence indicates that regardless of race, ethnicity, and socioeconomic status, a positive disciplinary environment is directly linked to high achievement in high school.⁶⁴

In an ideal educational environment, students would be completely focused on enhancing their studies. At the extreme, drug and alcohol use and teen pregnancy keep students from attending school; and, at a minimum, students tend to be more easily distracted and less able to focus on their studies. Moreover, according to recent studies, approximately one-half of all classroom time is taken up with activities other than instruction, and discipline problems are responsible for a significant portion of this lost time.⁶⁵

What are students doing today? According to Phi Delta Kappa’s “Annual . . . Gallup Poll of the Public’s Attitudes toward the Public Schools,” which surveyed a sample of adults 18 years and older, many disciplinary problems facing public schools—drug use, alcohol, teenage pregnancy, and cigarette

smoking—have actually declined over time, but concern regarding the general “lack of discipline” remains. While the percentage of those concerned regarding discipline has declined over time, it is consistently ranked as a top concern; in 2001, it tied for first. (See table 1.10.)⁶⁶

**Table 1.10: Public’s Perception of Public Schools
Selected Problems, 1980–2001**

Problems	1980	1990	2001
Lack of discipline	26%	19%	15%
Use of drugs	14	38	9
Drinking/alcoholism	2	4	na

Source: Lowell C. Rose and Alec M. Gallup, “The 33rd Annual Phi Delta Kappa/Gallup Poll of the Public’s Attitudes toward the Public Schools,” *Phi Delta Kappan* 83, no. 1 (September 2001), available online at <http://www.pdkintl.org/kappan/kimages/kpoll83.pdf>.
Note: Selected responses to question asking for the “biggest problems with which the public schools of your community must deal.”

Drugs

Drug use by adolescents can have serious immediate as well as long-term health and social consequences. Drug use contributes to crime and decreased economic productivity, and requires a disproportionate share of health care services for those affected.⁶⁷

After a short decline in reported drug use between 1980 and 1990, drug use marched upward again in the late 1990s, although not reaching the level reported in 1980.

- In 2001, 26 percent of twelfth-graders reported using illicit drugs in the previous 30 days, as did 23 percent of tenth-graders and 12 percent of eighth-graders.

- The percentage of students in each grade level reporting illicit drug use in the past 30 days increased substantially between 1992 and 1996, from 14 percent to 25 percent for twelfth-graders, from 11 to 23 percent for tenth-graders, and from 7 to 15 percent for eighth-graders. Since 1996, rates have remained relatively stable. (See table 1.11 and figure 1.16.)⁶⁸

**Table 1.11: Illicit Drug Use by Students
By Grade, Gender, and Race, 1980–2001**

Characteristic	1980 ^a	1990	1995	1996	1997	1998	1999	2000	2001
8th-graders									
Total	na	na	12.4%	14.6%	12.9%	12.1%	12.2%	11.9%	11.7%
Male	na	na	12.7	14.6	13.3	11.9	12.6	12.0	13.2
Female	na	na	11.9	14.1	12.3	11.9	11.7	11.3	9.9
White	na	na	18.9	13.2	13.7	12.4	11.3	11.2	11.2
Black	na	na	9.1	10.5	10.8	10.2	11.1	10.8	9.6
Hispanic ^b	na	na	16.7	16.5	15.9	15.9	17.0	15.2	15.0
10th-graders									
Total	na	na	20.2	23.2	23.0	21.5	22.1	22.5	22.7
Male	na	na	21.1	24.3	24.8	22.5	23.7	25.4	24.9
Female	na	na	19.0	21.9	21.0	20.5	20.4	19.5	20.5
White	na	na	19.7	22.4	23.8	23.1	22.6	23.0	23.4
Black	na	na	15.5	17.0	17.7	16.4	15.8	17.0	17.6
Hispanic ^b	na	na	20.6	22.5	24.2	24.2	23.8	23.7	23.3
12th-graders									
Total	37.2	17.2	23.8	24.6	26.2	25.6	25.9	24.9	25.7
Male	39.6	18.9	26.8	27.5	28.7	29.1	28.6	27.5	28.4
Female	34.3	15.2	20.4	21.2	23.2	21.6	22.7	22.1	22.6
White	38.8	20.5	23.8	24.8	26.4	27.5	27.0	25.9	26.5
Black	28.8	9.0	18.3	19.7	20.0	19.4	20.2	20.3	18.7
Hispanic ^b	33.1	13.9	21.4	22.6	23.9	24.1	24.4	27.4	25.3

Source: Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002* (Washington, DC: U.S. Government Printing Office, 2002), available online at <http://www.childstats.gov/americaschildren/>.

Notes: Students who reported using illicit drugs in the previous 30 days.

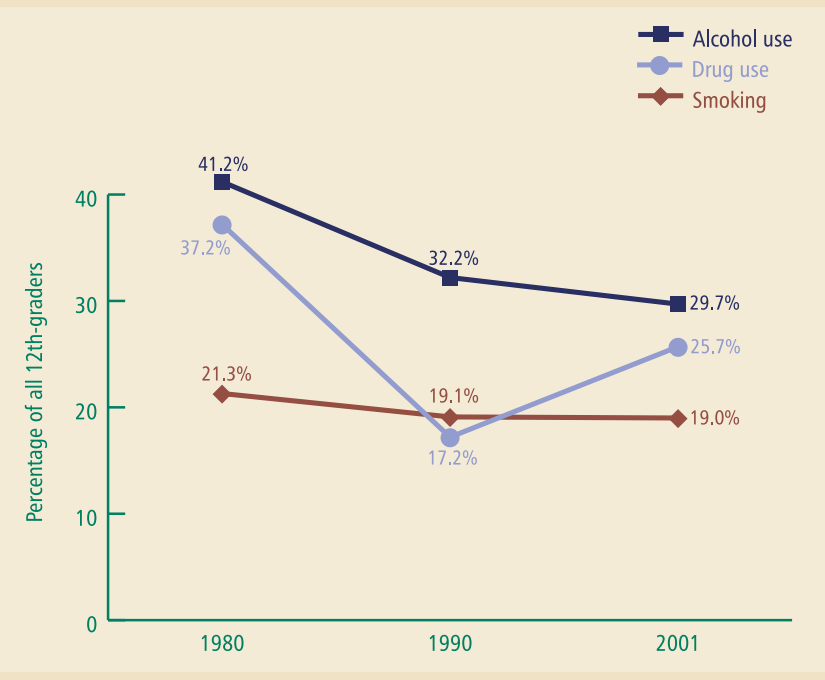
Estimates for race and Hispanic origin represent the mean of the specified year and the previous year.

Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

a. Beginning in 1982, the question about stimulant use (i.e., amphetamines) was revised to get respondents to exclude the inappropriate reporting of nonprescription stimulants. The prevalence rate dropped slightly as a result of this methodological change.

b. Persons of Hispanic origin may be of any race.

Figure 1.16: **Student Behavior**
12th-Graders, 1980–2001



Source: Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002* (Washington, DC: U.S. Government Printing Office, 2002), available online at <http://www.childstats.gov/americaschildren/>.

Note: Smoking students are 12th-graders who reported smoking cigarettes daily in the previous 30 days. Alcohol use is defined as having 5 or more drinks in a row in the previous 2 weeks. Drug use is defined as using illicit drugs in the previous 30 days.

Comparing boys' and girls' use patterns, boys are more likely to use drugs. The race and ethnic differences are not as marked. Blacks use less drugs at all three measurement points, and white students show the greatest prevalence for use at younger ages. The difference between whites and Hispanics is not as clear. At younger ages, Hispanics are more likely to use drugs, but for twelfth-grade students, drug use is more common among white students than Hispanics.⁶⁹

Alcohol

Alcohol use among adolescents is linked to a host of problems, including motor vehicle crashes and deaths, difficulties in school and the workplace, fighting, and breaking the law. In addition, heavy drinking by youths (having five or more drinks in a row at some point in the previous 2 weeks) is associated with higher levels of illicit drug use.⁷⁰

- In 2001, 30 percent of twelfth-graders, 25 percent of tenth-graders, and 13 percent of eighth-graders reported heavy drinking.
- The reported percentage of regular drinking (having an alcoholic beverage on more than two occasions in the previous 30 days) has increased slightly among eighth-graders, from 9.1 percent in 1991 to 11.6 percent in 1996, and remained relatively constant among tenth-graders during the same time period. Among twelfth-graders, however, the percentage decreased noticeably over time, from 49.9 percent in 1980 to 30.6 percent in 1996, then remaining relatively constant throughout the late 1990s.
- Among twelfth-graders, rates of heavy drinking fell from a high of 41.2 percent in 1980 to 27.5 percent in 1993. Between 1993 and 1997, rates edged up modestly, from 27.5 percent in 1993 to 31.3 percent. But by 2001, they had leveled off to 29.7 percent. (See table 1.12 and figure 1.16.)⁷¹

Among tenth- and twelfth-graders, males are more likely to drink heavily than are females. In 2001, 36 percent of twelfth-grade males reported heavy drinking, compared to 24 percent of twelfth-grade females. Twenty-nine percent of tenth-grade males, compared to 21 percent of females, reported heavy drinking. Furthermore, heavy drinking is much more common

**Table 1.12: Alcohol Consumption by Students
By Grade, Gender, and Race, 1980–2001**

Characteristic	1980	1990	1995	1996	1997	1998	1999	2000	2001
8th-graders									
Subtotal	na	na	14.5%	15.6%	14.5%	13.7%	15.2%	14.1%	13.2%
Male	na	na	15.1	16.5	15.3	14.4	16.4	14.4	13.7
Female	na	na	13.9	14.5	13.5	12.7	13.9	13.6	12.4
White	na	na	13.9	15.1	15.1	14.1	14.3	14.9	13.8
Black	na	na	10.8	10.4	10.4	9.0	9.9	0.1	9.0
Hispanic ^a	na	na	22.0	21.0	20.7	20.4	20.9	19.1	17.6
10th-graders									
Subtotal	na	na	24.0	24.8	25.1	24.3	25.6	26.2	24.9
Male	na	na	26.3	27.2	28.6	26.7	29.7	29.8	28.6
Female	na	na	21.5	22.3	21.7	22.2	21.8	22.5	21.4
White	na	na	25.4	26.2	26.9	27.0	27.2	28.1	27.4
Black	na	na	13.3	12.2	12.7	12.8	12.7	12.9	12.6
Hispanic ^a	na	na	26.8	29.6	27.5	26.3	27.5	28.3	27.7
12th-graders									
Subtotal	41.2%	32.2%	29.8	30.2	31.3	31.5	30.8	30.0	29.7
Male	52.1	39.1	36.9	37.0	37.9	39.2	38.1	36.7	36.0
Female	30.5	24.4	23.0	23.5	24.4	24.0	23.6	23.5	23.7
White	44.3	36.6	32.3	33.4	35.1	36.4	35.7	34.6	34.5
Black	17.7	14.4	14.9	15.3	13.4	12.3	12.3	11.5	11.8
Hispanic ^a	33.1	25.6	26.6	27.1	27.6	28.1	29.3	31.0	28.4

Source: Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002* (Washington, DC: U.S. Government Printing Office, 2002), available online at <http://www.childstats.gov/americaschildren/>.

Notes: Students who reported having five or more alcoholic drinks in a row in the previous 2 weeks. Estimates for race and Hispanic origin represent the mean of the specified year and the previous year.

Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.
a. Persons of Hispanic origin may be of any race.

among Hispanic and white secondary school students than among their black counterparts. For example, among twelfth-grade students, 12 percent of blacks reported heavy drinking, compared to 35 percent of whites and 28 percent of Hispanics.⁷²

Sexual Experience and Pregnancy

Sexual experience and, particularly, age at first intercourse represent critical indicators of the risk of pregnancy and sexually transmitted diseases. Trends over the past several decades show that increasing proportions of teens are sexually experienced, defined as ever having had sexual intercourse. The birth rate for teenagers, however, peaked in 1995 and has consistently declined through 2000.⁷³

- In the mid-1990s, 37 percent of ninth-grade students reported having had sexual intercourse. This percentage rose with each grade and reached 66 percent by the twelfth grade.
- The United States has the highest teenage pregnancy rate of all developed countries. About 1 million teenagers become pregnant each year, nearly 1 in 10 teenage girls ages 15–19.
- The estimated teen pregnancy rate in 1996 was 98.7 per 1,000 women age 15–19, down 15 percent from its high point of 116.5 in 1991. The 1996 rate was the lowest since 1976.
- The birth rate for teenagers in 1998 was 51.1 live births per 1,000 women age 15–19, 2 percent lower than the rate in 1997, and 18 percent lower than in 1991. (See table 1.13.)
- Specifically, birth rates have dropped sharply for black teenagers (age 15–19) since 1991, declining overall by 26 percent, from 115.5 per 1,000 live births to 85.3, lower than any year since 1960 when data first became available.

**Table 1.13: Birthrates for Unmarried Women
By Age of Mother, 1980–2000**

Age of mother	1980	1990	1995	1996	1997	1998	1999	2000
15–17	20.6	29.6	30.5	29.0	28.2	27.0	25.5	24.4
18–19	39.0	60.7	67.6	65.9	65.2	64.5	63.3	62.9
20–24	40.9	65.1	70.3	70.7	71.0	72.3	72.9	74.5
25–29	34.0	56.0	56.1	56.8	56.2	58.4	60.2	62.2
30–34	21.1	37.6	39.6	41.1	39.0	39.1	39.3	40.7
35–39	9.7	17.3	19.5	20.1	19.0	19.0	19.3	20.0
40–44	2.6	3.6	4.7	4.8	4.6	4.6	4.6	5.0
Total 15–44	29.4	43.8	45.1	44.8	28.2	44.3	44.4	45.2

Source: Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America’s Children: Key National Indicators of Well-Being, 2002* (Washington, DC: U.S. Government Printing Office, 2002), available online at <http://www.childstats.gov/americaschildren/>.

Note: Live births per 1,000 unmarried women.

Race and ethnicity differences are distinct. Black students are more likely than white and Hispanic students to have had their first sexual experience while still in high school. In 1995, 49 percent of both male and female white students reported having had sexual intercourse, 62 percent of male Hispanic students and 53 percent of Hispanic female students, and 81 percent of black male students and 67 percent of black female students.⁷⁴

Cigarette Smoking

The Centers for Disease Control and Prevention estimates that one in five deaths is caused by tobacco use. Youthful smoking can have severe, lifelong consequences because a large portion of those who start smoking in adolescence will continue to smoke as adults. Furthermore, youth who smoke are also more likely to use illicit drugs and to drink more heavily than their peers who do not smoke. Rates of daily smoking peaked in 1996 for eighth- and tenth-graders (between 1991 and 2001) and in 1997 for twelfth-graders (between 1980 and 2001). Among eighth- and tenth-graders, daily smoking declined steadily between 1996 and 2001. It is no surprise that as children get older, so does the prevalence of smoking. In 2001, 5 percent of eighth-graders, 12 percent of tenth-graders, and 19 percent of twelfth-graders reported smoking cigarettes daily in the previous 30 days.⁷⁵

Rates of smoking differ substantially between racial and ethnic groups. White students have the highest rates of smoking, followed by Hispanics and then blacks. In 2001, 24 percent of white twelfth-graders reported daily smoking, compared with 12 percent of Hispanics and 8 percent of blacks. There is little difference, however, in the prevalence of smoking between males and females, with the exception of blacks. In grades 9 through 12, black males are more likely than black females to smoke. (See table 1.14 and figure 1.16.)⁷⁶

While data show overall improvement when it comes to high-risk behavior among students, there is consistent concern regarding the general disciplinary environment in the classroom.

**Table 1.14: Cigarette Smoking by Students
By Grade, Gender, and Race, 1980–2001**

Characteristic	1980	1990	1995	1996	1997	1998	1999	2000	2001
8th-graders									
Subtotal	na	na	9.3%	10.4%	9.0%	8.8%	8.1%	7.4%	5.5%
Male	na	na	9.2	10.5	9.0	8.1	7.4	7.0	5.9
Female	na	na	9.2	10.1	8.7	9.0	8.4	7.5	4.9
White	na	na	10.5	11.7	11.4	10.4	9.7	9.0	7.5
Black	na	na	2.8	3.2	3.7	3.8	3.8	3.2	2.8
Hispanic ^a	na	na	9.2	8.0	8.1	8.4	8.5	7.1	5.0
10th-graders									
Subtotal	na	na	16.3	18.3	18.0	15.8	15.9	14.0	12.2
Male	na	na	16.3	18.1	17.2	14.7	15.6	13.7	12.4
Female	na	na	16.1	18.6	18.5	16.8	15.9	14.1	11.9
White	na	na	17.6	20.0	21.4	20.3	19.1	17.7	15.5
Black	na	na	4.7	5.1	5.6	5.8	5.3	5.2	5.2
Hispanic ^a	na	na	9.9	11.6	10.8	9.4	9.1	8.8	7.4
12th-graders									
Subtotal	21.3%	19.1%	21.6	22.2	24.6	22.4	23.1	20.6	19.0
Male	18.5	18.6	21.7	22.2	24.8	22.7	23.6	20.9	18.4
Female	23.5	19.3	20.8	21.8	23.6	21.5	22.2	19.7	18.9
White	23.9	21.8	23.9	25.4	27.8	28.3	26.9	25.7	23.8
Black	17.4	5.8	6.1	7.0	7.2	7.4	7.7	8.0	7.5
Hispanic ^a	12.8	10.9	11.6	12.9	14.0	13.6	14.0	15.7	12.0

Source: Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002* (Washington, DC: U.S. Government Printing Office, 2002), available online at <http://www.childstats.gov/americaschildren/>.

Notes: Percentage of students who reported smoking cigarettes daily in the previous 30 years. Estimates for race and Hispanic origin represent the mean of the specified year and the previous year.

Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

a. Persons of Hispanic origin may be of any race.



PROPOSITION: SCHOOL VIOLENCE IS ON THE DECLINE.

For some time, violence in our schools has been a concern. Highly publicized and extremely violent school shootings in the 1990s (Columbine, Jonesboro, and so on) further heightened fears. Schools should be houses of learning, not of fear; however, without a safe environment, teachers cannot teach and students cannot learn. The seventh goal of the National Education Goals states that by the year 2000, “all schools in America will be free of drugs and violence and the unauthorized presence of firearms and alcohol, and offer a disciplined environment that is conducive to learning.”⁷⁷ In response to this goal, Congress passed the Safe and Drug-Free Schools and Communities Act of 1994, which provides for support of drug and violence prevention programs. Although school crime has not been extirpated, rates are decreasing.

Students

In 1999, students age twelve through eighteen were victims of about 2.5 million crimes at school. In the same year, these students were victims of about 186,000 serious violent crimes (defined as rape, sexual assault, robbery, and aggravated assault) at school. In the 1990s, however, counter to popular perception, the total nonfatal crime rate for young people generally declined.⁷⁸

- Between 1995 and 1999, the percentage of students who reported being victims of crime at school decreased from

10 percent to 8 percent, dropping from 11 to 8 percent among seventh-graders, 11 to 8 percent among eighth-graders, and 12 to 9 percent among ninth-graders.

- Between 1993 and 1998, the number of nonfatal crimes against students ages 12 through 18 occurring at school or on the way to or from school decreased by 40.6 percent, from 155 crimes to 92 per 1,000 students.
- In 1993, white children were much more likely to be victims of crime. By 1998, black children were the most likely victims. (See table 1.15 and figure 1.17.)⁷⁹

Table 1.15: Nonfatal Crimes against Students 1993 & 1999

Characteristic	Total crimes		Theft		Violent ^a		Serious violent ^a	
	1993	1999	1993	1999	1993	1999	1993	1999
Gender								
Male	171	98	101	62	70	37	14	8
Female	137	85	91	57	46	28	11	6
Age								
12–14	190	120	111	74	79	46	16	11
15–18	125	70	83	48	42	23	9	4
Ethnicity^b								
White	170	98	106	64	63	34	11	6
Black	128	106	76	63	52	43	22	14
Hispanic	118	62	68	40	50	21	9	6
Other	99	77	70	52	29	26	6 ^c	5 ^c
Overall	155	92	96	59	59	33	12	7

Source: P. Kaufman, X. Chen, S.P. Choy, K. Peter, S.A. Ruddy, A.K. Miller, J.K. Fleury, K.A. Chandler, M.G. Planty, and M.R. Rand, *Indicators of School Crime and Safety: 2001*, reports NCES 2002-113, NCJ-190075 (Washington, DC: U.S. Departments of Education and Justice, 2001), available online at <http://www.ojp.usdoj.gov/bjs/pub/pdf/iscs.pdf>.

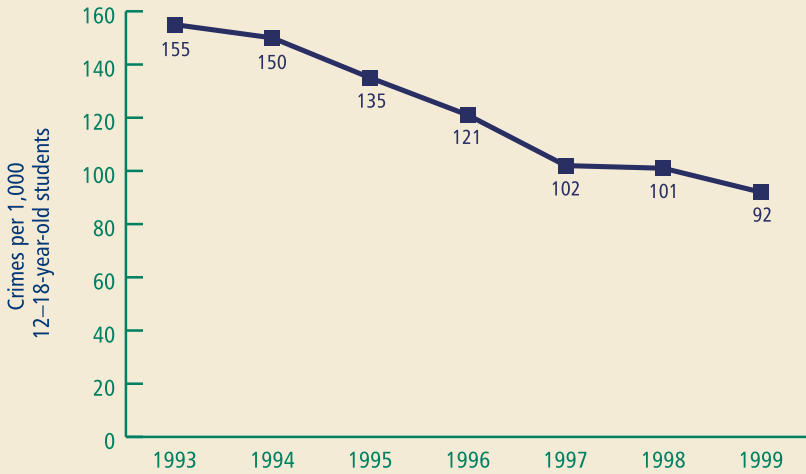
Notes: Rate per 1,000 students, at or on the way to school.

a. "Serious violent" crimes are also included under "violent" crimes.

b. "Hispanic" does not overlap into the three other groups.

c. Estimate based on fewer than 10 cases.

Figure 1.17: **Nonfatal Crimes**
Ages 12–18, 1993–99



Source: P. Kaufman, X. Chen, S.P. Choy, K. Peter, S.A. Ruddy, A.K. Miller, J.K. Fleury, K.A. Chandler, M.G. Planty, and M.R. Rand, *Indicators of School Crime and Safety: 2001*, reports NCES 2002-113, NCJ-190075 (Washington, DC: U.S. Departments of Education and Justice, 2001), available online at <http://www.ojp.usdoj.gov/bjs/pub/pdf/iscs.pdf>.

Note: Crimes committed against students at or on the way to school.

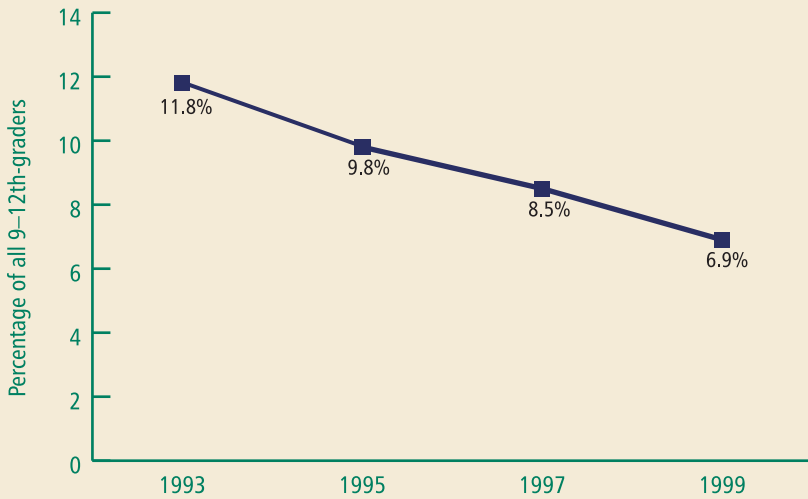
Although concerns regarding school violence are well-founded, in 1999, school-age children were more than twice as likely to be victims of serious crime away from school as at school. The publicity surrounding the most deadly incidents at school, such as Columbine, belies the true conditions at most schools—violence and crime rates are down.⁸⁰

School Environment

As crime has decreased, students' confidence in the security of the school environment has increased. Between 1995 and 1999, the percentage of students ages 12 through 18 who reported being fearful of being attacked or harmed at school decreased from 9 percent to 5 percent. During the same time period, the percentage of students fearing they would be attacked while traveling to and from school fell from 7 percent to 4 percent.⁸¹

- Between 1993 and 1999, the percentage of students in grades 9 through 12 who reported carrying a weapon on school property within the previous 30 days fell from 12 percent to 7 percent, a 42 percent reduction. (See figure 1.18.)
- Between 1995 and 1999, the percentage of students ages 12 through 18 who avoided one or more places at school for fear of their own safety decreased from 9 percent to 5 percent.
- Between 1995 and 1999, the percentage of students who reported that street gangs were present at their schools decreased by more than more than 40 percent, from 29 percent to 17 percent. (See figure 1.19.)⁸²

Figure 1.18: **Students Carrying Weapons**
Grades 9–12, 1993–99

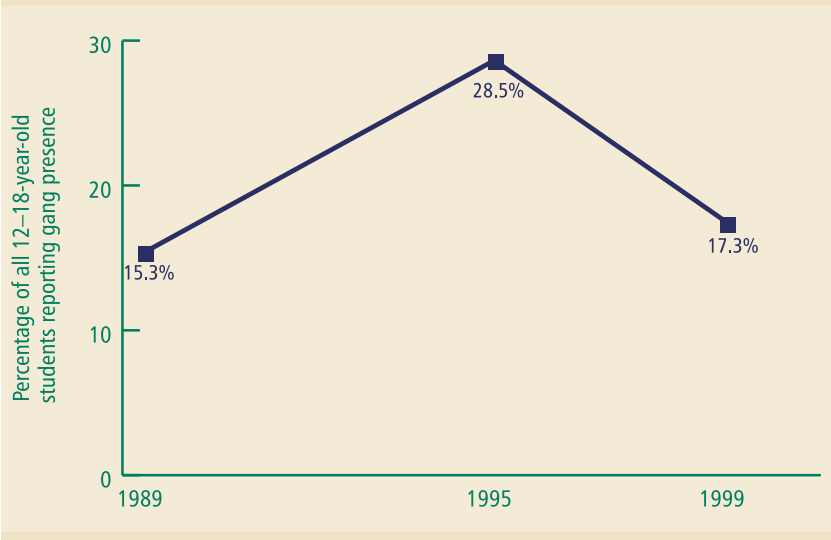


Source: P. Kaufman, X. Chen, S.P. Choy, K. Peter, S.A. Ruddy, A.K. Miller, J.K. Fleury, K.A. Chandler, M.G. Planty, and M.R. Rand, *Indicators of School Crime and Safety: 2001*, reports NCES 2002-113, NCJ-190075 (Washington, DC: U.S. Departments of Education and Justice, 2001), available online at <http://www.ojp.usdoj.gov/bjs/pub/pdf/iscs.pdf>.

Note: Students who reported carrying a weapon at least once within the previous 30 days.

The data all indicate that the students' perception of school has improved, as has their environment. What has led to this change? The national nonfatal crime rate per 100,000 of the population decreased by 15.8 percent between 1993 and 1998.⁸³ In addition, school programs have been established to help reduce crime and increase student awareness of drugs, gangs, and risky behavior and situations. For example, according to a 1995–96 National Center for Education Statistics (NCES) Survey on School Violence, 78 percent of public schools reported having some type of formal violence-prevention or violence-reduction program or effort. Furthermore, 50 percent of public schools with violence-prevention programs

Figure 1.19: **Gang Presence**
Ages 12–18, 1989–99



Source: P. Kaufman, X. Chen, S.P. Choy, K. Peter, S.A. Ruddy, A.K. Miller, J.K. Fleury, K.A. Chandler, M.G. Planty, and M.R. Rand, *Indicators of School Crime and Safety: 2001*, reports NCES 2002-113, NCJ-190075 (Washington, DC: U.S. Departments of Education and Justice, 2001), available online at <http://www.ojp.usdoj.gov/bjs/pub/pdf/iscs.pdf>.

Note: Students age 12–18 who reported that street gangs were present at school within the previous 6 months.

indicated that all or almost all of their students participated in these programs.⁸⁴

There is no argument that a safe school is a better school. During the 1990s, crime awareness and prevention programs in schools proliferated, and there was an overall decline in crime in the United States. It remains to be seen which had a greater effect on the decline in violence in U.S. schools. This germinates a larger question: What is the tradeoff with the time spent on prevention programs? These programs may contribute to providing a better environment for education, but at the cost of time taken from core learning. Was the decline in school violence a reflection of changes in society, or did the increase in

the number of crime awareness programs and get-tough, zero-tolerance policies in schools contribute to safer schools? The jury is out. No doubt interventionist activities in the schools take time away from teaching, but they may contribute to a more positive educational environment.

▶ CHAPTER NOTES

1. Thomas D. Snyder, ed., *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2002), table 3, p. 12; Center for Education Reform, *Charter School Highlights and Statistics* (Washington, DC: Center for Education Reform, 2000), available online at <http://www.edreform.com>; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth* (Milwaukee, WI: Marquette University, 2000), available online at <http://www.schoolchoiceinfo.org>; Children First America, *The Road to Success: Private Vouchers Helping American Children* (Bentonville, AR: Children First America, 1999); Home School Legal Defense Association, *Homeschooling Research* (Purcellville, VA: Home School Legal Defense Association, National Center for Home Education), available online at <http://www.hslda.org>.
2. Public Agenda Online, *Education: People's Chief Concerns* (New York, NY: Public Agenda Online), available online at <http://www.publicagenda.org>.
3. Snyder, *Digest of Education Statistics, 2001*, table 89, p. 98. Note: Schools with both elementary and secondary programs are included under elementary schools and also under secondary schools.
4. *Ibid.*, table 96, p. 120.
5. *Ibid.*, table 90, p. 98.
6. Snyder, *Digest of Education Statistics, 2001*, table 89, p. 98. Note: Schools with both elementary and secondary programs are included under elementary schools and also under secondary schools.
7. Snyder, *Digest of Education Statistics, 2001*, table 89, p. 98; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth*; Children First America, *The Road to Success: Private Vouchers Helping American Children*.
8. Snyder, *Digest of Education Statistics, 2001*, table 89, p. 98; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth*; Children First America, *The Road to Success: Private Vouchers Helping American Children*.
9. P. Kaufman, X. Chen, S.P. Choy, K. Peter, S.A. Ruddy, A.K. Miller, J.K. Fleury, K.A. Chandler, M.G. Planty, and M.R. Rand, *Indicators of School Crime and Safety: 2001*, reports NCES 2002-113, NCJ-190075

- (Washington, DC: U.S. Departments of Education and Justice, 2001), available online at <http://www.ojp.usdoj.gov/bjs/pub/pdf/iscs.pdf>.
10. Snyder, *Digest of Education Statistics, 2001*, table 421, p. 493.
 11. Snyder, *Digest of Education Statistics, 2001*, table 3, p. 12.
 12. Snyder, *Digest of Education Statistics, 2001*, table 42, p.58.
 13. Snyder, *Digest of Education Statistics, 2001*, table 3, p. 12; Center for Education Reform, *Charter School Highlights and Statistics*; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth*; Children First America, *The Road to Success: Private Vouchers Helping American Children*; Home School Legal Defense Association, *Homeschooling Research*.
 14. Ibid.
 15. Ibid.
 16. Snyder, *Digest of Education Statistics, 2001*, table 3, p. 12; Center for Education Reform, *Charter School Highlights and Statistics*; Marquette University, Institute for the Transformation of Learning, Office of Research, *School Choice Enrollment Growth*; Children First America, *The Road to Success: Private Vouchers Helping American Children*.
 17. Ibid.
 18. Snyder, *Digest of Education Statistics, 2001*, tables 89, 90, 96, pp. 98, 120.
 19. Ibid., tables 89, 90, 96, pp. 98, 120.
 20. Caroline M. Hoxby, "If Families Matter Most, Where Do Schools Come In?" in *A Primer on America's Schools*, ed. Terry M. Moe (Stanford, CA: Hoover Institution Press, 2001), pp. 89–123.
 21. Ibid.
 22. Snyder, *Digest of Education Statistics, 2001*, table 89, p. 98.
 23. Hoxby, "If Families Matter Most, Where Do Schools Come In?"
 24. Kathleen Cotton, *School Size, School Climate, and Student Performance*, School Improvement Research Series, Close-up #20 (Portland, OR: Northwest Regional Educational Laboratory, 1996), available online at <http://www.nwrel.org/scpd/sirs/10/c020.html>.
 25. Interestingly, Conant's idea of a large school was approximately 300–400 students, which would be considered a small school today.
 26. Cotton, *School Size, School Climate, and Student Performance*.
 27. While there is no single definition of a "small school," some research has indicated that 300–400 students at the elementary level and 400–800 students at the secondary level is appropriate.

28. Cotton, *School Size, School Climate, and Student Performance*; Roger Ehrich, *The Impact of School Size*, available online at <http://pixel.cs.vt.edu/edu/size.html>; Mary Anne Raywid, *Current Literature on Small Schools*, ERIC Digest EDO-RC-98-8 (Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools, 1999), available online at <http://www.ael.org/eric/digests/edorc988.htm>; William Ayers, Gerald Bracey, and Greg Smith, *The Ultimate Education Reform? Make Schools Smaller* (Milwaukee, WI: University of Wisconsin-Milwaukee, School of Education, Center for Education Research, Analysis, and Innovation, 2000), available online at <http://www.uwm.edu/Dept/CERAI/documents/archives/00/cerai-00-35.htm>.
29. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Patricia Wasley, Michelle Fine, Matt Gladden, Nicole E. Holland, Sherry P. King, Esther Mosak, and Linda C. Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago* (New York: Bank Street College of Education, 2000), available online at <http://www.bankstreet.edu/news/releases/smschool.html>; Wisconsin Education Association Council, *School Size, Great Schools Issue Paper* (Madison, WI: Wisconsin Education Association Council), available online at <http://www.weac.org/GreatSchools/Issuepapers/schoolsize.htm>.
30. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Wasley, Fine, Gladden, Holland, King, Mosak, and Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago*; Wisconsin Education Association Council, *School Size*.
31. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Wasley, Fine, Gladden, Holland, King, Mosak, and Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago*; Wisconsin Education Association Council, *School Size*.
32. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Wasley, Fine, Gladden, Holland, King, Mosak, and Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago*; Wisconsin Education Association Council, *School Size*.

33. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Wasley, Fine, Gladden, Holland, King, Mosak, and Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago*; Wisconsin Education Association Council, *School Size*.
34. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Wasley, Fine, Gladden, Holland, King, Mosak, and Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago*; Wisconsin Education Association Council, *School Size*.
35. Stacy Mitchell, "The Answer Is Smaller Schools," *Michigan Education Report*, winter (15 February, 2002), available online at <http://mackinac.org/pubs/mer/article.asp?ID=4074>.
36. Cotton, *School Size, School Climate, and Student Performance*; Ehrich, *The Impact of School Size*; Raywid, *Current Literature on Small Schools*; Ayers, Bracey, and Smith, *The Ultimate Education Reform? Make Schools Smaller*; Wasley, Fine, Gladden, Holland, King, Mosak, and Powell, *Small Schools: Great Strides: A Study of New Small Schools in Chicago*; Wisconsin Education Association Council, *School Size*.
37. Ibid.
38. Ibid.
39. Mitchell, "The Answer Is Smaller Schools."
40. Ibid.
41. Ibid.
42. Cotton, *School Size, School Climate, and Student Performance*.
43. Tom Gregory, *Breaking Up Large High Schools: Five Common (and Understandable) Errors of Execution*, ERIC Digest EDO-RC-01-6 (Charleston, WV: Eric Clearinghouse on Rural Education and Small Schools, 2001), available online at <http://www.ael.org/eric/digest/edorc01-6.htm>.
44. Debra Viadero, "Research on Chicago High Schools Finds Benefits in Smaller Size," *Education Week* 19, no. 42 (12 July, 2000), p. 12, available online at <http://www.edweek.org/ew/ewstory.cfm?slug=42small.h19>; Allie Shah, "As New Schools Get Bigger, Report Argues Smaller Is Better" (*Minneapolis–St. Paul, Minnesota*) *Star Tribune* (10 September, 2001), available online at http://www.startribune.com/viewers/qview.php?slug=SKUL10&template=print_a.

45. Excluding special education schools, vocational schools, and alternative schools.
46. Wisconsin Education Association Council, *School Size*.
47. U.S. Department of Education, "Public Secondary Schools, by Grade Span and Average School Size, by State: 1997-98" (Washington, DC: U.S. Department of Education, National Center for Education Statistics), table 102, available online at <http://www.nces.ed.gov>.
48. Cotton, *School Size, School Climate, and Student Performance*.
49. E.D. Hirsch, Jr., "Curriculum and Competence," in *A Primer on America's Schools*, ed. Terry M. Moe (Stanford, CA: Hoover Institution Press, 2001), pp. 185-204; Deborah Cohen, "Moving Images," *Education Week* (3 August, 1994), available online at http://www.edweek.org/ew/ewstory.cfm?slug_40mobile.h13.
50. U.S. General Accounting Office, *Elementary School Children: Many Change Schools Frequently, Harming Their Education*, report GA 1.13:HEHS-94-45 (GAO/HEHS-94-95) (Washington, DC: U.S. General Accounting Office, 1994).
51. Ibid.
52. U.S. Census Bureau, American Housing Survey Branch, "Table 2-1. Introductory Characteristics—Occupied Units," in *American Housing Survey for the United States: 1999* (Washington, DC: U.S. Census Bureau, 2000), available online at <http://www.census.gov/hhes/www/housing/ahs/ahs99/tab21.html>.
53. Ibid.
54. U.S. General Accounting Office, *Elementary School Children: Many Change Schools Frequently, Harming Their Education*.
55. Ibid.
56. Ibid.
57. Hirsch, "Curriculum and Competence."
58. Ibid.
59. Organisation for Economic Co-operation and Development, Education Database (Paris: Organisation for Economic Co-operation and Development, 2003), updated from year to year, available online at <http://www.oecd.org/els/edu/EAG98/list.htm>. Note: The data present the number of hours students are exposed to instructional activities in school. The figures do not include hours spent studying, completing homework, or participating in extracurricular tutoring or additional instruction.
60. Ibid.

61. Marianne Perie, Joel D. Sherman, Gabriele Phillips, and Matthew Riggan, *Elementary and Secondary Education: An International Perspective*, report NCES 2000-033 (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000), p. 70.
62. *Ibid.*, pp. 19, 117, 118.
63. Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2000* (Washington, DC: U.S. Government Printing Office, 2000), available online at <http://www.childstats.gov>.
64. *Ibid.*
65. Kathleen Cotton, *Schoolwide and Classroom Discipline*, School Improvement Research Series. Close-up #9 (Portland, OR: Northwest Regional Educational Laboratory, 1990), available online at <http://www.nwrel.org/scpd/sirs/5/cu9.html>.
66. Lowell C. Rose and Alec M. Gallup, "The 33rd Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," *Phi Delta Kappan* 83, no. 1 (September 2001), available online at <http://www.pdkintl.org/kappan/kimages/kpoll83.pdf>.
67. Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002* (Washington, DC: U.S. Government Printing Office, 2002), available online at <http://www.childstats.gov/americaschildren/>; Child Trends, Inc., Donald J. Hernandez, and Kathryn Darke, *Trends in the Well-Being of America's Children & Youth: 1998* (Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 1999), available online at <http://aspe.hhs.gov/hsp/98trends/trends98.htm>.
68. Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002*; Child Trends, Inc., Hernandez, and Darke, *Trends in the Well-Being of America's Children & Youth: 1998*.
69. *Ibid.*
70. *Ibid.*
71. Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002*; Child Trends, Inc., Hernandez,

- and Darke, *Trends in the Well-Being of America's Children & Youth: 1998*.
72. Ibid.
 73. Centers for Disease Control and Prevention, "Teen Pregnancy" (Atlanta, GA: Centers for Disease Control and Prevention, 2002), available online at <http://www.cdc.gov>.
 74. Federal Interagency Forum on Child and Family Statistics, Writing Subcommittee of the Reporting Committee, *America's Children: Key National Indicators of Well-Being, 2002*; Child Trends, Inc., Hernandez, and Darke, *Trends in the Well-Being of America's Children & Youth: 1998*.
 75. Ibid.
 76. Ibid.
 77. National Center for Education Statistics, *Violence and Discipline Problems in U.S. Public Schools: 1996-97: Executive Summary* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1998), available online at <http://nces.ed.gov/pubs98/violence/98030001.html>.
 78. Kaufman, Chen, Choy, Peter, Ruddy, Miller, Fleury, Chandler, Planty, and Rand, *Indicators of School Crime and Safety: 2001*.
 79. Ibid.
 80. Ibid.
 81. Kaufman, Chen, Choy, Peter, Ruddy, Miller, Fleury, Chandler, Planty, and Rand, *Indicators of School Crime and Safety: 2001*.
 82. Ibid.
 83. U.S. Census Bureau, *Statistical Abstract of the United States: 2000* (Washington, DC: U.S. Census Bureau, 2001), available online at <http://www.census.gov/prod/www/statistical-abstract-us.html>.
 84. National Center for Education Statistics, *Violence and Discipline Problems in U.S. Public Schools: 1996-97*.