

---

## NATIONAL CENTER FOR EDUCATION STATISTICS

---

Statistical Analysis Report

January 1995

---

# Private Schools in the United States: A Statistical Profile, 1990-91

---

U S Department of Education  
Office of Educational Research and Improvement

NCES 95 330

---

# **NATIONAL CENTER FOR EDUCATION STATISTICS**

---

**Statistical Analysis Report**

**January 1995**

---

## **Private Schools in the United States: A Statistical Profile, 1990-91**

Don McLaughlin  
Catherine O'Donnell  
Lynn Ries  
American Institutes for Research

Stephen Broughman, Project Officer  
National Center for Education Statistics

**U.S. Department of Education**

Richard W. Riley

*Secretary*

**Office of Educational Research and Improvement**

Sharon P. Robinson

*Assistant Secretary*

**National Center for Education Statistics**

Emerson J. Elliott

*Commissioner*

**National Center for Education Statistics**

"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

January 1995

Contact:

Stephen Broughman

(202) 219-1744

## Table of Contents

Introduction .....	1
A Context of Diversity .....	1
Schools and Staffing Surveys (SASS) .....	2
Sample of schools .....	3
Categories of schools .....	3
Notes on the interpretation of the survey results .....	4
1 Schools .....	7
Highlights .....	7
Overview of Private Schools and Students .....	8
Characteristics of Private Schools .....	14
Grade ranges .....	14
Tuition .....	16
Size .....	18
School Resources and Programs .....	20
Class size and student/teacher ratio .....	20
Time in session .....	22
Categorical programs .....	24
Libraries .....	27
Boarding .....	27
Summary .....	30
2 Students .....	31
Highlights .....	31
Locations of Private Schools .....	32
Region .....	32
Community type .....	34
Student Variations .....	36
Admission requirements .....	36
Sex .....	39
Race and ethnicity .....	39
Summary .....	43
3 Teachers and Principals .....	45
Highlights .....	45
Characteristics and Qualifications of Teachers .....	46
Education, certification, age, and experience .....	52
Sex and race-ethnicity .....	58
Characteristics and Qualifications of Principals .....	60
Teachers' Roles, Compensation, and Satisfaction .....	66
Teacher Turnover .....	73
Summary .....	80



4	Goals, Expectations, Climate, and Outcomes	81
	Highlights	81
	Educational Goals	82
	Principals' goals	83
	Teachers' goals	86
	School Climate	87
	Student Outcomes	93
	Graduation and college application rates	93
	Years of coursework	95
	Absences	95
	Student performance assessment	98
	Summary	99
5	Schools of Different Types	101
	Catholic Schools	101
	Lutheran Schools	102
	Jewish Schools	103
	Conservative Christian Schools	104
	Episcopal Schools	105
	Friends Schools	105
	Seventh-Day Adventist Schools	106
	Members of NAIS	106
	Military Schools	107
	Montessori Schools	107
	Special Education Schools and Schools for Exceptional Children	108
	Other Private Schools	109
	References	111
	Appendix A: Supporting Tables of Standard Errors	115
	Appendix B: Technical Notes	165
	Index	193

## List of Figures

Figure 1.1--	Percentages of private and public schools that serve different grade levels . . . . .	14
Figure 1.2--	Percentages of private non-Catholic, Catholic, and public schools that are small, medium, and large . . . . .	18
Figure 1.3--	Average class sizes and student/teacher ratios for small, medium, and large public and private schools . . . . .	22
Figure 2.1--	Percentage of private and public schools located in large cities, other urban areas, and small towns and rural areas . . . . .	34
Figure 3.1--	Percentages of grade 7-12 private and public school teachers specializing in different areas . . . . .	51
Figure 3.2--	Percentages of teachers certified in their main assignment field and holding a bachelor's degree, by type of school . . . . .	54
Figure 3.3--	Percentages of schools with some black students, among large and small schools with black teachers and without black teachers . . . . .	58
Figure 3.4--	Average annual base salary and estimated in-kind income for private and public school teachers . . . . .	70
Figure 3.5--	Average ratings by private and public school teachers of their influence over school policies, control over classroom practices, and job satisfaction . . . . .	72
Figure 4.1--	Percentages of principals who rated each of four educational goals most important, in religiously oriented, in special education, and in other nonsectarian private schools, and in public schools . . . . .	83

## List of Tables

Table 1.1--	Number of schools and percentage of schools at each level in 1987-88 and 1990-91, by affiliation . . . . .	9
Table 1.2--	Number of elementary and secondary students in 1987-88 and 1990-91, by grade level and affiliation of school . . . . .	11
Table 1.3--	Percentage of private schools in existence in 1990-91 established prior to dates from 1900 to 1990, by affiliation . . . . .	13
Table 1.4--	Most frequent private school grade ranges in 1990-91, by affiliation . .	15
Table 1.5--	Percentage of private schools charging tuition, percentage allowing tuition reductions, and average tuition in 1987-88 and 1990-91, by level and affiliation . . . . .	17
Table 1.6--	Percentage of schools of different enrollment sizes in 1987-88 and 1990-91, by affiliation . . . . .	19
Table 1.7--	Students per teacher and per classroom in 1987-88 and 1990-91, by affiliation . . . . .	21
Table 1.8--	Average length of school year and day in 1990-91, by affiliation . . . . .	23
Table 1.9--	Percentage of schools offering special services and percentage of students in these schools receiving these services in 1990-91, by affiliation . . . . .	25
Table 1.10--	Percentage of schools with libraries and full-time equivalent (FTE) librarians in 1990-91, by level and affiliation . . . . .	28
Table 1.11--	Percentage of private schools with boarding students in 1987-88 and 1990-91, by affiliation . . . . .	29
Table 2.1--	Number of students in 1987-88 and 1990-91, by region and affiliation .	33
Table 2.2--	Percentage of enrollment in different community types in 1990-91, by affiliation of school . . . . .	35
Table 2.3a--	Percentage of elementary private schools with admission requirements in 1990-91, by affiliation . . . . .	37
Table 2.3b--	Percentage of private schools serving secondary students with admission requirements in 1990-91, by affiliation . . . . .	38

Table 2.4--	Percentage of sex of students and of all-girls, all-boys, and coeducational schools in 1987-88 and 1990-91, by affiliation . . . .	40
Table 2.5--	Percentage of students in different minority groups in 1987-88 and 1990-91, by affiliation . . . . .	41
Table 2.6--	Percentage of schools with different concentrations of minority students in 1987-88 and 1990-91, by affiliation . . . . .	42
Table 3.1--	Number of teachers, of full time equivalent (FTE) teachers, of other staff, and percentage full time as reported by schools in 1990-91, by affiliation . . . . .	47
Table 3.2a--	Percentage distribution of grades K-6 teachers, by main field of assignment in 1990-91 and affiliation . . . . .	49
Table 3.2b--	Percentage distribution of grades 7-12 teachers, by main field of assignment in 1990-91 and affiliation . . . . .	50
Table 3.3--	Percentage of teachers certified and with varying levels of experience in 1987-88 and 1990-91, by affiliation . . . . .	53
Table 3.4--	Percentage of teachers with different highest degree obtained in 1990-91, by affiliation . . . . .	55
Table 3.5--	Percentage of teachers in different age ranges in 1987-88 and 1990-91, by affiliation . . . . .	57
Table 3.6--	Percentage of teachers of different sex, race, and ethnicity in 1987-88 and 1990-91, by affiliation . . . . .	59
Table 3.7--	Principals' experience in teaching and administering, and salary in 1987-88 and 1990-91, by affiliation . . . . .	61
Table 3.8--	Percentage of principals in different age ranges in 1987-88 and 1990-91, by affiliation . . . . .	62
Table 3.9--	Percentage of principals with different highest degree obtained in 1987-88 and 1990-91, by affiliation . . . . .	63
Table 3.10--	Percentage of principals of different sex, race, and ethnicity in 1987-88 and 1990-91, by affiliation . . . . .	65

Table 3.11--	Average teacher ratings on policy and control over teaching practices in 1990-91, by affiliation .....	67
Table 3.12--	Teachers' salaries and satisfaction ratings in 1987-88 and 1990-91, by affiliation .....	69
Table 3.13--	Percentage of teachers reporting different in-kind benefits in 1990-91, by affiliation .....	71
Table 3.14--	Number of teachers who left in 1990-91 in each field of teaching, by affiliation .....	74
Table 3.15--	Number of newly hired teachers in each field of teaching in 1990-91, by affiliation .....	76
Table 3.16--	Average difficulty filling vacancies in each field of teaching in 1990-91, by affiliation .....	78
Table 3.17--	Mean percentage of schools using different strategies to address unfilled vacancies in 1990-91, by affiliation .....	79
Table 4.1--	Percentage of principals rating each of eight educational goals most important in 1990-91, by affiliation .....	84
Table 4.2--	Percentage of teachers rating each of eight educational goals most important in 1990-91, by affiliation .....	85
Table 4.3--	Average principal ratings of school climate in 1987-88 and 1990-91, by affiliation .....	89
Table 4.4--	Average teacher ratings of school climate in 1987-88 and 1990-91, by affiliation .....	90
Table 4.5--	Average percentage of 12th-grade students who were graduated and who applied to college in 1990-91, by affiliation .....	94
Table 4.6--	Average years of academic study required for graduation in private secondary schools in 1990-91, by affiliation .....	96
Table 4.7--	Average percentage of students absent in 1990-91, by affiliation .....	97
Table 4.8--	Mathematics and reading performance in public and private schools in 1992 .....	98

## **Acknowledgments**

The authors wish to thank all those who contributed to the production of this report. Among staff of the J. C. Flanagan Research Center, American Institutes for Research, special mention goes to Thuy Thanh Dao, for her capable production of tables, to Jean Wolman and Shannon Daugherty, for their editorial contributions, to Min Yuan, for her programming assistance, and to Mary Anne Arcilla, for her SASS data management and graphics production.

The NCES project officer was Stephen Broughman of the Education Surveys Division. Dan Kasprzyk, and Marilyn McMillen, of the Education Surveys Division, and Mary Rollefson, of the Data Development Division, reviewed the manuscript through several drafts; and Susan Ahmed, of the Statistical Standards and Methodology Division, provided helpful comments. Outside reviewers representing private schools in America gave especially helpful comments. These include Michelle Doyle and Jack Klenk, of the Office of Private Education, Joyce McCray, of the Council on American Private Education, David Hand, of the Oral Roberts University Educational Fellowship, and Frederick Brigham, of the National Catholic Educational Association.

# **Private Schools in the United States: A Statistical Profile, 1990-91**

## **Introduction**

### **A Context of Diversity**

Diversity and cultural freedom are hallmarks of American society, and in elementary and secondary education, private schools reflect the diversity of religious and cultural heritages in America and contribute to their transmission across the generations. In counterpoint to the universal public education available to children throughout the country by the late 19th century, new immigrants from Europe established private schools in which they could blend the teaching of practical skills and knowledge with the transmission of cultural and religious values. In addition to the large number of Catholic schools, many Lutheran and other Protestant schools were established, as well as nonsectarian college preparatory academies. Both the religiously oriented schools and the nonsectarian schools gave parents distinct choices in the manner of their children's education.

In response to a variety of social forces, the last half of the 20th century has seen increasing diversity in American private schools. Following the second world war, Jewish schools were opened to transmit Jewish culture; Montessori schools have extended their programs beyond preschool to encompass elementary grades; and since 1970, many new Christian schools have been established every year to serve families who wanted their children's education to be strongly founded in Christian beliefs.

Attempts to reform public schools in the United States in the late 1980s looked to private schools for examples of effective education (Talbert 1988). What private schools do is different from what public schools do, but are private schools effective because of differences of values, differences of structure, differences of teachers, or differences in the students who attend the schools? Data on the characteristics of private schools are needed to provide the basis for accurate interpretation of differences between private and public schools and among the many kinds of private schools.

Data on private secondary schools in America have been collected by the federal government since 1890, and data on private elementary schools have been collected since 1930. There were concerns that the early counts of private schools were underestimates; and since the late 1970s, the National Center for Education Statistics (NCES) has developed systematic survey systems for tapping the status of both private and public elementary and secondary education in the United States. In 1980, NCES asked the Statistical Analysis Group in Education to produce a report on *Nonpublic Education of the Nation's Children*, based on surveys in 1976, 1977, and 1978. During the early 1980s, NCES developed a dual

frame approach that combined lists of schools obtained from private school organizations with searches for previously unidentified schools in randomly selected areas. Based on these developments, NCES produced *Private Schools in the United States: A Statistical Profile, with Comparisons to Public Schools*, based on surveys through 1985-86, and *Detailed Characteristics of Private Schools and Staff: 1987-88*, based on the first Schools and Staffing Survey.

In 1989-90, NCES supplemented its universe collection of public school data, the Common Core of Data (CCD), with a Private School Universe Survey (PSS). The PSS includes a complete population survey of elementary and secondary schools in private school directories, plus an "area search" for previously uncounted private schools not in common directories, in a representative sample of counties in the country. That survey was repeated in 1991-92, and its results are summarized in the NCES report: *Private School Universe Survey, 1991-92*.

The present report is based on the Schools and Staffing Surveys (SASS) of 1987-88 and 1990-91, and it is designed to provide a broad picture of private schools in the United States at the beginning of the 1990s. The SASS collects data on only a sample of private schools, but it collects a much richer picture of each participating school than does the universe survey (PSS).

### **Schools and Staffing Surveys (SASS)**

In 1987-88 and 1990-91, NCES conducted the first two in a series of nationally representative sample surveys of public and private schools, their teachers, and their principals. Approximately 10 percent of the nation's elementary and secondary schools were contacted and provided responses to the survey, including 2,459 private schools in 1987-88 and a new, but overlapping, set of 2,620 private schools in 1990-91. At these private schools, 2,436 principals and 6,764 teachers gave information about their backgrounds, school climates, and career plans in 1987-88; and 2,757 principals and 6,642 teachers gave new information in 1990-91 (Gruber, Rohr, and Fondelier 1994).

Through SASS, the nation's educators have provided an illuminating picture of the status of elementary and secondary education. Teachers and principals have shared their rankings of educational goals and perceptions of problems in their schools and have provided a great deal of information about the backgrounds of the professional educators to whom the nation's children are entrusted. This information enables policymakers to counter stereotypes about education through the use of real data in the course of developing policy. While the information does not tell us about any particular school, it provides an important foundation to help educational administrators assess the status of their own schools; for teachers to analyze their own situations, satisfaction, and plans; and for parents to evaluate statements about their children's school.



**Sample of schools.** Private schools were selected for participation in SASS in two different ways. First, a "universe" file of known private schools was assembled. For the 1987-88 survey, this file was obtained from a commercial source (Quality Education Data); for the 1990-91 survey, it was based on the NCES 1989-90 Private School Universe Survey. Most private schools belong to some national group, and NCES consulted with those groups to develop a survey questionnaire that would address informational needs of the private school community. These groups recommended, for example, the importance of reporting statistics separately for the many different kinds of private schools, rather than aggregating private school data into the categories of Catholic and "Other."

Eleven leading private school organizations endorsed the survey, including the American Montessori Society, Christian Schools International, the Council for American Private Education, the Evangelical Lutheran Church in America, the Friends Council on Education, the General Council of Seventh-Day Adventists, the Lutheran Church, Missouri Synod, the National Association of Episcopal Schools, the National Association of Independent Schools (NAIS), the National Catholic Educational Association, and the United States Catholic Conference. Staff of schools belonging to many other groups also contributed their time to the completion of this survey.

Any survey of private elementary and secondary schools in America is faced with the highly decentralized nature of private education in America. Many schools are started by communities that are not immediately concerned about affiliation with a national organization, religious or otherwise, and these schools would not appear on official organization lists until such affiliation is sought. To ensure that these schools are properly represented in national statistics, the Schools and Staffing Survey has included a second sampling component that addresses this problem.

A series of areas, roughly of county size, were randomly selected around the country, and these areas were searched for private schools not on the existing lists. About 400 schools were found, and these were appropriately weighted to represent all those schools that might be found if all areas in the country were searched. Thus, the information provided by the private schools in SASS can be aggregated to be representative of the range of private education in America. All tabulated figures in this report have been weighted to represent the population of private schools serving some grades from 1 to 12 and not operating in a private home.

**Categories of schools.** To summarize the 1987-88 SASS results for 16 categories of private schools, NCES developed a 9-category typology (McMillen and Benson 1991), consisting of 3 types of Catholic schools (parochial, diocesan, and private order), 3 other categories of religiously oriented schools (conservative Christian, nationally affiliated, and unaffiliated), and 3 categories of nonsectarian schools (special education, special emphases, and regular).

In response to recommendations of private school leaders, the present report supplements that typology with an 18-category affiliation typing, including Catholic schools, 4 categories of Lutheran schools, 5 other categories of Christian schools (Episcopal, Friends, Christian Schools International, Association of Christian Schools International [ACSI], and Seventh-Day Adventists), 3 categories of Jewish schools, 4 categories of nonsectarian schools (Montessori, special education, military, NAIS members), and a large and diverse category labeled "other private schools." This finer grain reporting gives a better flavor of the diversity that exists among American private schools.

Between 1987-88 and 1990-91, the categories for reporting private school data were refined. In particular, both Lutheran schools and Jewish schools were aggregated differently. In 1990-91, Hebrew Day schools were aggregated separately from "other" Jewish schools; and Lutheran schools associated with the Wisconsin Synod were aggregated separately from "other" Lutheran schools.<sup>1</sup> Therefore, to interpret the trend data for Jewish schools and Lutheran schools presented in this report accurately, readers must focus on the combinations of these categories. In addition, the nine-category typology definition was under development for the 1987-88 survey and was refined between 1987-88 and 1990-91. Readers may note that for the 1987-88 figures, but not for the 1990-91 figures, the estimates for Catholic schools based on the typology differ slightly from the estimates for Catholic schools based on the affiliation categorization.

**Notes on interpretation of the survey results.** The quality of the data provided by respondents to SASS is quite high—complex yet understandable relations among educational factors emerge from careful analyses of the responses. Nevertheless, not all selected school principals and teachers responded to the survey; and those who did respond did not always answer all the survey questions. To facilitate appropriate interpretation of the data, NCES weighted the respondents' data to represent the responses of similar nonrespondents, and individual missing item responses have been imputed based on relations to other responses, using a standard statistical method.

Many of the tables in this report present both 1987-88 and 1990-91 results, to facilitate the study of trends over the late 1980s. Some tables, however, present only 1990-91 because either there were no systematic patterns of change or the corresponding survey items changed somewhat between the two administrations. Many questions asked in 1990-91 had no counterparts in 1987-88. In other cases, questions were very similar, but the frequencies of answers were different due to changes in wording. For example, in the 1987-88 school survey, some questions about teachers asked for percentages of teachers with particular characteristics, but in 1990-91 the same questions asked for counts of teachers.

---

<sup>1</sup> Specifically, the estimated 287 Hebrew Day schools in 1987-88 represent roughly the same category of schools as the 170 Hebrew Day schools and 289 other Jewish schools in 1990-91; and the 409 Wisconsin Synod Lutheran schools in 1990-91 include most of the 390 "other" Lutheran schools in 1987-88.

Where these differences might affect the interpretations of tables, we have noted the differences in the text.

This is a descriptive report about private schools, their students, their teachers and principals, and the climates and expectations at those schools. The findings from SASS are presented in five sections:

- Characteristics of private schools as units are described—their sizes, ages, student/teacher ratios, tuitions, grade ranges, services, and boarding policies.
- Characteristics of students are described—admission requirements and demographics.
- Characteristics of teachers and principals are described—their degrees, experience, ages, demographics, salaries, satisfaction, and the fields in which new teachers are entering, others are leaving, and vacancies are difficult to fill.
- Educational goals as seen by principals and teachers, their perceptions of the climates of their schools, and absence, graduation, and college application rates are described.
- Descriptive profiles of Catholic, Lutheran, Jewish, conservative Christian, Episcopal, Friends, Seventh-Day Adventist, NAIS, military, Montessori, special education, and other private schools in America are presented in a final section, along with very brief historical summaries. Readers interested in a particular type of private schools can find information about that type of school summarized in this section.

In trying to develop an understanding of private schools, it is important to remember that the data presented in this report are cross-sectional, not longitudinal, and therefore that no cause-effect relations among characteristics of schools can be inferred from these data.

## 1 Schools

### Highlights

- In 1990-91, the Schools and Staffing Survey (SASS) found that there were approximately 24,690 private elementary and secondary schools in the United States, serving an estimated 4,673,878 K-12 students. This estimate, that nearly one-quarter of the schools in the nation are private and 1 in 10 K-12 students is in a private school, is slightly lower than the estimate obtained by SASS in 1987-88 (tables 1.1, 1.2).
- A major difference in structure between public and private schools is that there are virtually no private middle schools, while 15 percent of public schools are middle schools (figure 1.1).
- Many more of the private schools are small. A quarter have fewer than 50 students and only one-fifth have more than 300 students. In contrast, only 3 percent of public schools have fewer than 50 students, and more than two-thirds have more than 300 students (figure 1.2).
- Ages of private schools vary greatly—more than two-thirds of currently operating Jewish schools, ACSI schools, Evangelical Lutheran schools, Montessori schools, and special education schools were established after 1960, whereas more than two-thirds of currently operating Catholic schools, Missouri Synod Lutheran schools, and military schools were established before 1960, one in five before 1900 (table 1.3).
- Only 1 private school in 15 is a boarding school (table 1.11).
- Annual tuitions increased at an average 10 percent annual rate between 1987-88 and 1990-91, to an average of about \$1,800 for elementary schools and \$4,400 for secondary schools (table 1.5).
- Class sizes and student/teacher ratios are much lower at small private schools than at large private schools—for schools of the same size, private schools have slightly higher student/teacher ratios than public schools (figure 1.3).
- Roughly half of all private schools offer remedial reading and remedial mathematics instruction, but few offer special education (other than schools specializing in special education) (table 1.9).

## Overview of Private Schools and Students

There are many different kinds of private schools. Private elementary and secondary schools differ in the grade levels they serve—elementary, secondary, or both combined, and they differ in presence and type of religious orientation and affiliation. Many are of recent origin, but some are very old. As a background to the more detailed picture of private schools that emerges from SASS, this section presents counts of private schools of different types and of the students attending them.

An estimate of 24,690 private elementary and secondary schools in the United States was obtained from the 1990-91 national sample of schools in the Schools and Staffing Survey (SASS), as shown in table 1.1. Counts of schools in table 1.1 have been broken out in two separate but overlapping ways. In the top section of this table, counts are shown for all private schools and all public schools. In the middle section of the table, private schools have been divided into 18 affiliation categories. Each private school is counted once in this section, even if it holds membership in more than one association. In the third section of the table, the same private schools have been presented according to the nine-category typology. Again, each private school is counted once. The last row of the table gives total counts for members of the National Association of Independent Schools (NAIS), including schools also categorized by other affiliations in the upper parts of the table. The bases for these typology and affiliation breakdowns are described in the Technical Notes, and separate descriptions of schools in the different categories are presented as the final section of this report. The 1987-88 typology categories do not exactly match the affiliation categories for that year because the typology was under development during the analysis of the 1987-88 SASS results. For the 1990-91 SASS, these differences were reconciled.

The percentages of private schools of each type and affiliation serving elementary grades (e.g., K-6 or K-8), secondary grades (e.g., 7-12 or 9-12), or combined grades (e.g., K-12) also appear in table 1.1. Among Catholic schools, parochial schools predominantly served elementary grades, and most Private-Order schools served secondary grades. Among other schools, Lutheran schools and Solomon Schechter schools predominantly served elementary grades, and military schools generally served secondary grades. Schools that combined both elementary and secondary levels, which were rare among public schools, were common among private schools and formed the majority of both conservative Christian and special education schools. Recognition of these differences is important because variations in school characteristics such as admissions requirements, tuition levels, class sizes, teacher salaries, and perceptions of student problems vary by grade level, so that tabulated differences between schools of different affiliations may actually be due to differences in grade levels served by the schools.

**Table 1.1-- Number of schools and percentage of schools at each level in 1987-88 and 1990-91, by affiliation**

	Total		Elementary		Secondary		Combined	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	26,807	24,690	63.7	62.6	9.1	9.9	27.3	27.5
Total Public	78,533	79,885	69.2	70.3	24.9	24.7	5.9	5.1
Catholic	9,598	8,731	81.4	82.0	14.8	15.4	3.8	2.7
Episcopal	345	394	68.4	73.5	14.3	12.4	17.3	14.1
Friends	78	56	65.7	52.7	13.6	14.6	20.7	32.7
Seventh-Day Adventist	1,346	1,133	74.1	73.4	4.4	8.2	21.6	18.4
Hebrew Day	287	170	44.8	48.1	22.1	33.7	33.1	18.2
Solomon Schechter	--	52	--	97.8	0.0	0.0	--	2.2
Other Jewish	--	289	--	61.7	--	17.4	--	20.9
Christian Schools Intl	311	408	45.1	51.9	7.5	8.5	47.4	39.7
Assoc of Christn Schls Intl	1,804	1,941	42.0	48.8	5.7	3.7	52.4	47.5
Lutheran, Missouri Synod	1,218	1,010	94.7	93.1	3.5	5.5	1.8	1.4
Lutheran, Wisconsin Synod	--	409	--	93.8	--	5.0	--	1.2
Evangelical Lutheran	--	119	92.4	79.9	--	0.8	--	19.3
Other Lutheran	390	--	95.1	90.6	3.1	--	1.7	--
Montessori	582	747	91.7	87.0	0.7	0.0	7.6	13.0
Schools for								
Exceptional Children	268	317	10.5	2.4	15.8	7.7	73.7	90.0
Natl Assoc of								
Independent Schools (only)	850	933	26.5	29.2	21.4	20.3	52.1	50.5
Military	--	21	0.0	0.0	70.2	79.0	--	21.0
Other Private Schools	9,420	7,888	46.6	41.2	4.2	5.5	49.2	53.3
Catholic	9,527	8,731	81.2	82.0	14.9	15.4	3.9	2.7
Parochial	6,479	5,437	95.5	93.1	3.2	5.2	1.3	1.7
Diocesan	1,945	2,400	70.7	75.2	28.8	22.3	0.5	2.5
Private order	1,103	894	16.1	32.8	59.1	58.3	24.8	8.9
Other religious	12,133	11,476	56.5	53.6	4.2	4.9	39.2	41.4
Conservative Christian	4,165	4,045	28.7	30.9	3.0	2.1	68.4	67.0
Affiliated	4,294	4,262	74.1	69.4	6.6	9.3	19.3	21.3
Unaffiliated	3,674	3,169	67.6	61.4	2.8	2.7	29.6	35.9
Nonsectarian	5,146	4,483	47.9	47.6	9.8	12.0	42.3	40.4
Regular	2,332	1,950	51.3	52.2	10.7	10.4	38.0	37.3
Special emphasis	1,954	1,700	59.7	61.5	10.7	12.8	29.6	25.7
Special education	859	833	11.9	8.4	5.1	14.1	83.0	77.5
All members of NAIS	1,284	1,498	28.6	32.2	25.7	26.2	45.7	41.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

The SASS estimate for private schools in 1990-91 is lower than that obtained from the 1987-88 SASS (26,807 private schools). Most of the estimated drop was in elementary schools: from approximately 17,100 in 1987-88 to approximately 15,400 in 1990-91. The largest decline in those three years, in absolute terms, was among Catholic schools (800 fewer in 1990-91). Nevertheless, in terms of broad categories, the relative proportions of private schools in the different categories have been relatively stable over the latter half of the 1980s. In 1985, 36 percent of private schools were Catholic, and 45 percent were other religiously oriented schools (Benson and McMillen 1991, table 2-4); in 1990, 35 percent of private schools were Catholic, and 46 percent were other religiously oriented schools. In any case, the overall trend does not reflect the experiences of every type of private school, as can be seen from this table. In particular, there may have been increases in elementary schools affiliated with the Episcopal Church, Christian Schools International, and the Association of Christian Schools International, and in Montessori schools, although none of the increases were statistically significant in this sample.<sup>2</sup>

The question of whether the apparent overall decline in numbers of private schools between the two SASS surveys is real or not is difficult to answer. Accurate estimation of the number of private elementary and secondary schools in the United States has long been a problem. In the decade prior to the 1987-88 SASS, NCES surveys provided the basis for a series of estimates of numbers of private schools. In the 1977-78 *Digest of Education Statistics*, an estimate of 18,142 private schools was reported, based on 1970-71 data. McLaughlin and Wise (1980) estimated that there were 20,073 nonpublic schools in 1977-78, and Benson and McMillen (1991, table 2-2) reported survey-based estimates of 24,500 private schools in 1980-81; 27,700 in 1983-84; and 28,000 in 1985-86. The corresponding estimated counts of schools from the national Private School Survey (PSS) of 1989-90 and 1991-92 are 26,712 and 25,998, respectively (Broughman, Gerald, Bynum, and Stoner 1994).

The smaller number of private schools in 1990-91, as compared to 1987-88, is matched by a smaller estimate of students attending private schools, as shown in table 1.2, a drop from 5,218,643 students to 4,673,878 students. The decline in enrollment is somewhat larger than that reported elsewhere.<sup>3</sup>

---

<sup>2</sup> SASS is based on a sample, and the estimates of schools may miss the true number by more than 100. The statistical significance of differences can be judged by comparing them to standard errors, which for statistics presented in tables in this report are contained in Appendix A. For the apparent increases in numbers of the four types of private schools, the values of Student's *t* are 1.12, 1.93, 1.00, and 1.17, values which suggest that the increases are no greater than might occur due to random sampling variation.

<sup>3</sup> According to the 1993 *Digest of Education Statistics*, private school enrollment declined from 5,479,000 to 5,355,000 between 1987 and 1989, and it was projected to decline to 5,199,000 in 1991. These estimates are somewhat larger than those found in SASS because they include all students in private schools serving K-12 students, including prekindergarten students enrolled in those schools. A more comparable source is the PSS, which reported estimates of 4,838,497 students in 1989-90 and 4,889,545 students in 1991-92.

**Table 1.2-- Number of elementary and secondary students in 1987-88 and 1990-91, by grade level and affiliation of school**

	Total		Elementary		Secondary		Combined	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	5,218,643	4,673,878	2,965,004	2,643,252	896,679	887,099	1,356,959	1,143,527
Total Public	39,901,319	40,103,699	23,842,442	25,086,319	14,531,822	13,692,768	1,527,055	1,324,611
Catholic	2,832,992	2,555,932	2,024,748	1,807,129	731,374	679,190	76,870	69,614
Episcopal	84,557	78,484	42,217	41,699	10,910	10,021	31,429	26,764
Friends	19,665	13,697	8,709	3,390	1,849	878	9,107	9,429
Seventh-Day Adventist	80,184	69,716	37,213	31,701	10,024	15,081	32,946	22,934
Hebrew Day	74,691	38,667	35,351	19,216	6,506	11,151	32,834	8,301
Solomon Schechter	--	11,563	--	10,360	0	0	--	1,203
Other Jewish	--	64,086	--	37,118	--	5,975	--	20,992
Christian Schools Intl	93,429	111,509	26,042	36,222	6,826	11,701	60,561	63,586
Assoc of Christn Schls Intl	311,482	310,860	94,716	125,028	23,681	16,756	193,086	169,076
Lutheran, Missouri Synod	189,856	173,579	169,169	156,139	12,330	13,161	8,357	4,279
Lutheran, Wisconsin Synod	--	37,339	--	31,886	--	4,207	--	1,246
Evangelical Lutheran	--	26,086	--	13,393	--	185	--	12,508
Other Lutheran	35,173	--	33,012	--	1,339	--	822	--
Montessori	60,405	44,837	51,964	39,772	423	0	8,018	5,065
Schools for								
Exceptional Children	17,778	26,840	3,740	369	2,202	3,842	11,837	22,629
Natl Assoc of								
Independent Schls (only)	296,098	312,403	46,143	50,729	43,931	50,900	206,024	210,774
Military	--	--	0	0	--	--	--	--
Other Private Schools	1,052,759	783,819	350,657	230,384	39,743	59,265	662,359	494,170
Catholic	2,822,585	2,555,932	2,014,340	1,807,129	731,374	679,190	76,870	69,614
Parochial	1,768,687	1,363,832	1,643,664	1,253,358	96,660	94,372	28,363	16,101
Diocesan	647,277	833,311	336,878	492,246	309,811	323,996	588	17,069
Private order	406,620	358,789	33,798	61,524	324,903	260,822	47,920	36,444
Other religious	1,591,420	1,468,533	689,521	633,591	94,800	122,595	807,099	712,346
Conservative Christian	542,708	546,928	132,014	160,001	29,265	21,076	381,429	365,850
Affiliated	661,266	631,919	387,533	367,768	54,982	81,063	218,751	183,088
Unaffiliated	387,446	289,686	169,974	105,823	10,553	20,456	206,920	163,408
Nonsectarian	804,638	649,414	261,143	202,532	70,505	85,315	472,990	361,567
Regular	494,297	431,748	156,315	127,772	44,074	59,651	293,907	244,326
Special emphasis	244,919	157,972	101,463	69,520	24,103	19,001	119,354	69,450
Special education	65,422	59,694	3,364	5,240	2,328	6,663	59,730	47,791
All members of NAIS	434,734	494,389	77,604	90,423	88,734	124,000	268,396	279,965

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.



The changes in numbers of private schools of different types between 1987-88 and 1990-91 should be viewed in the context of long-term trends in private schools in America. Over the past century, the numbers of schools of different types increased at different times. Although there is no good universal time-series database on private schools, it is informative to examine the median ages of schools surviving to the present. Are many private schools transitory, or do most private schools have a long history? The data in table 1.3 suggest that while overall 12 percent of private schools in existence in 1990-91 were opened during the 1980s, there is significant variation: some types of schools are relatively new, others old. Half or more Catholic schools, Lutheran schools of the Missouri Synod, military schools, Friends schools, and members of the NAIS now in existence have been operating for more than 40 years.<sup>4</sup> On the other hand, most Hebrew schools, evangelical Lutheran schools, members of the ACSI, special education schools, and Montessori schools operating in 1990-91 were established in the period between 1960 to 1990.

The school-age distributions shown in table 1.3 are based on incomplete data: the age information was collected by PSS 1991-92 (Broughman, et al. 1994), and responses to the age question were unavailable for about one-quarter of the SASS 1990-91 sample of schools. Because 80 percent of the schools missing age data were schools found in the SASS area frame search, which would tend to find new schools, it may be the case that a large percentage of schools missing age data were opened in the 1980s. Comparisons of the school counts with age information, in table 1.3, with total school counts, in table 1.1, indicate that the greatest frequencies of missing data were in those categories of schools that also showed the most growth in the 1980s: conservative Christian schools, unaffiliated religiously oriented schools, special emphasis schools, and special education schools. Therefore, the differences in age distributions between different types of schools may be greater than indicated in table 1.3.

The average annual rate of establishment of new schools between 1970 and 1990, excluding those that later closed, can be roughly estimated from table 1.3. Assuming that half to all of the schools missing age data were established during this period, between 450 and 650 new schools were opened each year.<sup>5</sup>

---

<sup>4</sup> The entries for NAIS schools (only) in this and other tables are for the estimated 933 NAIS members that are nonsectarian, and neither military nor Montessori nor special education schools. The 565 NAIS member schools that were Catholic (252), other religiously affiliated (247), military (14), Montessori (13), or special education (39) are counted in those other categories.

<sup>5</sup> This rate may shed light on a possible reason for the smaller numbers of private schools reported by SASS in 1990-91. By design, the 1989-90 PSS served as the list of schools from which the sample of schools to participate in the 1990-91 SASS a year later was selected. The difference between the 1989-90 PSS estimate and the 1990-91 SASS estimate may be a result of the particular timing of the sampling and data collection for SASS in 1990-91—any new schools that opened during 1990 would be uncounted.

**Table 1.3-- Percentage of private schools in existence in 1990-91 established prior to dates from 1900 to 1990, by affiliation**

	Before 1900	Before 1910	Before 1920	Before 1930	Before 1940	Before 1950	Before 1960	Before 1970	Before 1980	(Unknown)
<b>Total Private</b>	<b>11.9</b>	<b>16.7</b>	<b>20.8</b>	<b>28.7</b>	<b>31.7</b>	<b>37.6</b>	<b>52.4</b>	<b>68.9</b>	<b>88.1</b>	<b>26.3</b>
Catholic	17.1	25.5	31.6	46.1	50.5	58.7	78.9	94.3	97.6	8.0
Episcopal	14.3	15.5	16.1	20.8	21.3	28.2	47.9	74.9	91.3	13.9
Friends	44.2	48.3	48.3	48.3	48.3	50.2	54.3	64.4	78.0	2.1
Seventh-Day Adventist	3.8	9.2	15.7	19.5	23.4	26.8	47.4	58.3	62.9	19.2
Hebrew Day	0.0	0.0	0.0	1.0	1.0	13.5	26.7	54.4	90.0	10.4
Solomon Schechter	0.0	0.0	0.0	0.0	0.0	11.0	21.5	47.7	79.1	14.2
Other Jewish	0.7	0.7	0.7	1.9	1.9	13.2	26.1	56.7	74.9	22.1
Christian Schools Intl	4.9	9.2	22.4	29.3	30.7	42.0	52.2	64.3	87.1	23.4
Assoc of Christn Schls Intl	0.0	0.5	0.5	2.4	2.4	5.1	9.5	18.8	65.5	31.3
Lutheran, Missouri Synod	31.8	35.8	40.9	45.8	49.8	57.6	68.7	76.7	88.5	11.1
Lutheran, Wisconsin Synod	28.6	33.2	33.7	39.0	39.9	48.6	55.8	64.8	97.2	9.5
Evangelical Lutheran	8.5	9.4	9.4	11.2	11.2	19.7	31.0	57.9	85.6	6.2
Other Lutheran	--	--	--	--	--	--	--	--	97.8	--
Montessori	0.0	0.3	0.3	0.3	0.3	0.3	4.6	38.5	78.0	43.7
Schools for Exceptional Children	3.8	5.4	6.9	9.5	9.5	11.1	17.0	55.6	92.3	23.1
Natl Assoc of Independent Schools (only)	20.8	26.3	33.7	38.6	47.3	52.9	62.9	74.0	93.5	11.4
Military	73.1	78.4	83.8	89.2	94.6	94.6	94.6	100.0	100.0	0.0
Other Private Schools	1.8	2.2	3.1	4.5	5.5	7.6	18.0	39.5	81.5	51.1
Catholic	17.1	25.5	31.6	46.1	50.5	58.7	78.9	94.3	97.6	8.0
Parochial	16.5	26.7	33.6	48.9	53.2	60.5	80.5	93.5	97.1	8.1
Diocesan	15.8	21.0	26.6	40.4	44.9	53.5	76.4	96.7	98.7	4.3
Private order	24.8	31.5	33.6	44.8	50.0	62.6	75.9	92.4	97.4	17.9
Other religious	7.8	10.0	12.2	14.6	15.9	20.7	32.1	45.3	77.4	36.2
Conservative Christian	0.0	0.7	0.9	2.3	2.5	4.4	7.3	18.0	68.4	40.0
Affiliated	15.0	18.3	22.5	26.1	27.6	34.8	47.5	60.6	81.0	18.6
Unaffiliated	3.8	5.5	6.7	7.4	10.5	14.4	36.8	54.4	83.9	55.0
Nonsectarian	7.8	9.4	12.4	16.0	19.2	21.5	29.9	58.2	88.8	36.4
Regular	13.5	15.9	20.9	26.0	31.4	34.3	41.2	64.2	92.6	25.2
Special emphasis	1.4	2.1	3.2	6.3	7.4	9.5	19.6	43.8	86.4	48.1
Special education	2.6	3.3	3.7	4.0	4.5	5.5	15.3	65.8	81.9	38.9
All members of NAIS	21.1	26.7	32.6	39.6	45.2	50.9	60.2	77.0	94.2	9.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and Private Schools Survey 1991-92.

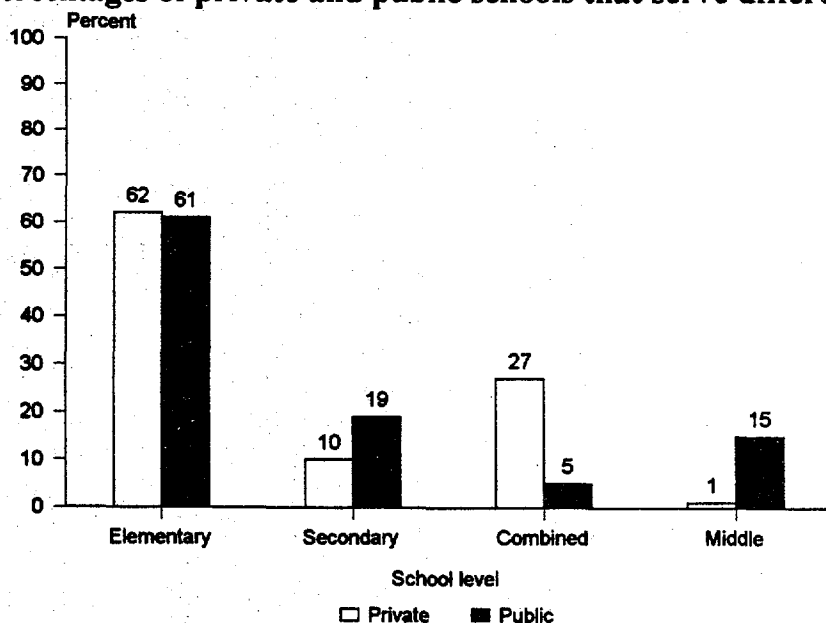
Note: -- Too few cases for a reliable estimate.

Note: Only schools whose ages were known were included in computing the percentages in the first nine columns.

## Characteristics of Private Schools

**Grade ranges.** Unlike public school districts, which generally offer a sequence of separate elementary, middle, and high schools, private schools generally combine middle grades with either primary grades or high school grades or both. There are very few private middle schools: as shown in figure 1.1, fewer than 1 percent of private schools are middle schools, compared to 15 percent of public schools. On the other hand, over one-quarter of private schools combined all grade levels (e.g., K-12 or 1-12) in 1990-91, compared to only 5 percent of public schools. Combined grade-level schools generally are newer and have fewer students per grade (an average of 14, compared to 28 for all private schools).

**Figure 1.1— Percentages of private and public schools that serve different grade levels**



Note: Middle schools are reported as a separate category, but are included with elementary and secondary schools in table 1.1.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (School Questionnaire).

Although elementary, secondary, and combined have roughly the same meaning for all private schools, there are important variations. Although each category of private schools has many different grade ranges, a small number of grade ranges are typical for schools in each affiliation. The three most frequent grade ranges in each affiliation category are shown in table 1.4. By far the most common grade ranges in private schools were K-8 and K-12. Exceptions were schools offering special education, a large percentage of which were ungraded, and Montessori schools, few of which extended beyond sixth grade. Also, many Catholic and other secondary schools served grades 9-12, and other private secondary schools started with grade 7 and 8.

**Table 1.4-- Most frequent private school grade ranges in 1990-91, by affiliation**

	Most Frequent Range	Percent	Second Most Frequent Range	Percent	Third Most Frequent Range	Percent
Catholic	K-8	58	9-12	24	1-8	6
Episcopal	K-8	24	K-6	18	K-12	18
Friends	K-12	70	K-8	9	K-6	9
Seventh-Day Adventist	K-8	34	9-12	22	1-8	9
Hebrew Day	K-8	35	9-12	24	K-12	19
Solomon Schechter	K-8	61	K-6	21	K-12	10
Other Jewish	K-8	33	K-12	22	K-6	15
Christian Schools Intl	K-12	48	K-8	17	9-12	8
Assoc of Christn Schls Intl	K-12	45	K-8	22	K-6	12
Lutheran, Missouri Synod	K-8	77	K-6	7	9-12	6
Lutheran, Wisconsin Synod	K-8	80	9-12	11	1-8	3
Evangelical Lutheran	K-12	47	K-8	32	K-6	11
Other Lutheran	K-8	95	K-12	2	9-12	2
Montessori	K-6	34	K-5	14	K-3	11
Schools for Exceptional Children	UnG	47	9-12	12	1-12	11
Natl Assoc of Independent Schools (only)	K-12	52	7-12	8	9-12	8
Military	7-12	46	9-12	29	8-12	11
Other Private Schools	K-12	42	K-8	12	K-6	7
Catholic						
Parochial	K-8	76	1-8	6	K-6	6
Diocesan	K-8	49	9-12	36	1-8	5
Private order	9-12	64	K-8	13	K-12	7
Other religious						
Conservative Christian	K-12	53	K-8	16	K-6	8
Affiliated	K-8	42	K-12	22	9-12	9
Unaffiliated	K-12	41	K-8	15	K-6	7
Nonsectarian						
Regular	K-12	43	K-8	13	K-6	10
Special emphasis	K-12	21	K-6	15	UnG	13
Special education	UnG	48	1-12	9	1-6, Ung	5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

**Tuition.** A distinguishing feature of private schools is that they are supported by tuition payments from parents of students as well as by religious and other nongovernment organizations. Tuition payments, along with organizational support, cover the costs of curriculum materials, teachers' compensation, and other operating expenses. Nearly all (94 percent in 1990-91) private schools require tuition payments, although most (86 percent) provide for scholarships or other forms of tuition reduction. As shown in table 1.5, the only noticeable exceptions to the nearly universal requirement for tuition payments were the special education schools, of which only about 70 percent required tuition payments, and the diverse group of "other" schools, of which 86 percent required tuition.

Although private schools are nearly all alike in requiring tuition payments, the amount of the tuition varies dramatically between schools of different types.<sup>6</sup> Tuitions at secondary schools average two to three times those at elementary schools, with tuitions at schools that offer a combined elementary and secondary education (e.g., K-12 schools) an average of these extremes. However, even within levels, there are significant variations.

At one extreme, military schools, NAIS members, special education schools,<sup>7</sup> Episcopal secondary schools, and Friends schools serving secondary grades reported average annual tuitions greater than \$7,000. Catholic and conservative Christian secondary schools, on the other hand, averaged tuitions of less than \$3,000. At the elementary level, Catholic schools, Seventh-Day Adventist schools, and some Lutheran schools averaged less than \$1,300 in annual tuitions, while NAIS members, Friends schools, and Jewish schools averaged more than \$4,000. In any case, these are average tuitions across categories of schools; annual tuition levels range widely from school to school within these categories. For most categories, the standard deviation was more than \$500, and for several it was nearly as large as the average tuition (e.g., among Catholic elementary schools, the largest category, the average tuition was \$1,243, but the standard deviation was \$1,020).

Finally, as can be seen from table 1.5, average annual student tuitions rose in the private school sector between 1987-88 and 1990-91, at an annual rate of 10.3 percent.<sup>8</sup> This is somewhat larger than the 5.2 percent annual increase in median family income, suggesting that private education became somewhat more difficult for typical parents to afford for their children during this period.

---

<sup>6</sup> Tuition estimates in table 1.5 do not include boarding fees.

<sup>7</sup> Unlike other private schools, many special education schools customarily collect payments for services from state public education agencies, which according to the Individuals with Disabilities Act are responsible for providing appropriate education for students with disabilities at no cost to the parents (34 CFR 300.401-402).

<sup>8</sup> The increase of 10.3 percent is "student-weighted"; that is, schools with more students counted correspondingly more in the average. The "school-weighted" average tuition, combining the entire sample of SASS private schools at all levels, was \$2,504 in 1990-91, up from \$1,892 in 1987-88.

**Table 1.5-- Percentage of private schools charging tuition, percentage allowing tuition reductions, and average tuition in 1987-88 and 1990-91, by level and affiliation**

	% Charging Tuition	% Allowing Reductions	Elementary		Average Tuition Secondary		Combined	
	90-91	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	<b>94.5</b>	<b>85.6</b>	<b>\$1,423</b>	<b>\$1,780</b>	<b>\$3,054</b>	<b>\$4,395</b>	<b>\$2,622</b>	<b>\$3,524</b>
Catholic	98.9	94.4	\$981	\$1,243	\$2,026	\$2,878	--	--
Episcopal	100.0	89.3	\$2,615	\$2,686	\$6,088	\$9,368	\$5,022	\$5,503
Friends	100.0	89.9	\$3,379	\$4,093	--	--	\$6,207	\$7,811
Seventh-Day Adventist	98.9	95.2	\$1,069	\$1,280	\$3,075	\$3,557	\$1,553	\$1,989
Hebrew Day	100.0	96.9	\$3,119	\$3,895	\$3,026	\$4,730	\$3,331	--
Solomon Schechter	100.0	95.5	\$3,594	\$4,419	--	--	--	--
Other Jewish	100.0	95.4	--	\$4,200	--	\$4,681	--	\$3,928
Christian Schools Intl	100.0	99.0	\$1,762	\$2,116	\$2,488	\$3,008	\$2,224	\$2,862
Assoc of Christn Schls Intl	99.9	93.7	\$1,427	\$1,866	\$2,483	\$2,831	\$1,532	\$1,827
Lutheran, Missouri Synod	98.1	93.5	\$1,139	\$1,824	--	\$2,912	--	--
Lutheran, Wisconsin Synod	94.5	89.0	--	\$1,020	--	--	--	--
Evangelical Lutheran	96.9	88.8	\$1,293	\$1,795	--	--	--	--
Other Lutheran	92.5	83.8	\$713	\$1,283	--	--	--	--
Montessori	99.4	80.5	\$2,695	\$3,760	--	--	--	\$3,710
Schools for Exceptional Children	70.7	22.3	--	--	--	--	\$6,386	\$12,105
Natl Assoc of Independent Schools (only)	98.7	79.9	\$4,577	\$6,377	\$7,039	\$9,067	\$5,799	\$7,425
Military	100.0	72.5	--	--	\$4,738	\$8,008	--	--
Other Private Schools	86.3	73.5	\$1,977	\$2,034	\$3,929	\$7,235	\$2,217	\$3,094
Catholic	98.9	94.4	\$965	\$1,243	\$2,026	\$2,878	--	--
Parochial	98.6	94.3	\$941	\$1,210	\$1,583	\$2,944	--	--
Diocesan	99.5	97.2	\$922	\$1,213	\$1,777	\$2,364	--	--
Private order	99.0	87.3	--	\$1,995	\$2,369	\$3,378	--	--
Other religious	93.4	86.5	\$1,381	\$1,738	\$3,418	\$4,039	\$1,506	\$2,037
Conservative Christian	95.4	92.0	\$1,338	\$1,797	\$2,635	\$2,848	\$1,268	\$1,707
Affiliated	98.2	93.2	\$1,399	\$1,932	\$3,618	\$4,215	\$2,122	\$2,295
Unaffiliated	84.2	70.6	\$1,377	\$1,326	--	\$4,365	\$1,688	\$2,625
Nonsectarian	89.0	66.3	\$2,974	\$3,748	\$5,657	\$9,625	\$5,227	\$8,010
Regular	94.5	70.3	\$3,061	\$3,438	\$5,745	\$7,891	\$3,669	\$5,289
Special emphasis	93.5	78.5	\$2,849	\$4,005	\$4,801	\$9,277	\$4,281	\$4,986
Special education	66.9	32.0	--	--	--	\$17,906	\$9,467	\$14,248
<b>All members of NAIS</b>	<b>98.9</b>	<b>82.7</b>	<b>\$4,450</b>	<b>\$5,066</b>	<b>\$6,061</b>	<b>\$7,306</b>	<b>\$5,783</b>	<b>\$7,317</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

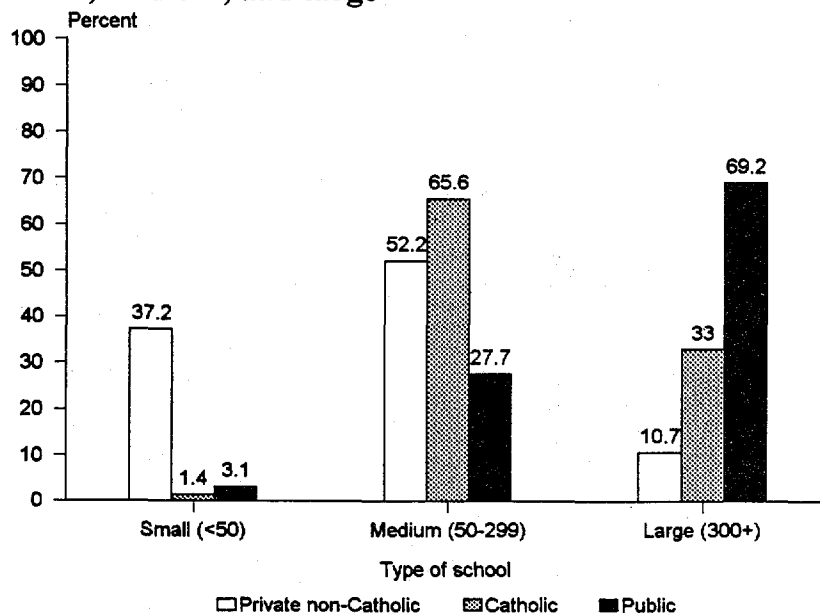
Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Size.** Although there are some large private schools, the size distribution of private schools is quite different from that of public schools. As can be seen in table 1.6, over half of the private schools had fewer than 150 students in 1990-91, compared to one in eight public schools, and nearly one-quarter of the private schools had fewer than 50 students. As shown in figure 1.2, most private schools are quite small, compared to public schools. Catholic schools are midway in size between public schools and other private schools.

Being a small school has advantages and disadvantages. The major advantage is the ease of establishing a school community in which each adult knows each child and each child is familiar with all those around him. The major disadvantage is that the costs of whole-school resources are spread among a smaller number of students. The two sides of the coin are captured by student/teacher ratios (table 1.7 and figure 1.3): the smaller student/teacher ratios found at small schools (about 12 to 1, at both public and private schools with fewer than 150 students, versus 16 to 1 overall, in 1990-91, as reported by Choy, Henke, et al. 1993) mean that smaller class sizes can be maintained and greater attention can be given to each student in small schools, but they also mean that a greater investment is required for each student in those schools.

**Figure 1.2-- Percentages of private non-Catholic, Catholic, and public schools that are small, medium, and large**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (School Questionnaire).

**Table 1.6-- Percentage of schools of different enrollment sizes in 1987-88 and 1990-91, by affiliation**

	< 50		50 - 99		100 - 149		150 - 299		> 300	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	23.8	24.5	16.4	17.0	12.2	11.4	28.3	28.5	19.3	18.6
Total Public	2.6	3.1	3.5	3.9	5.0	5.3	18.3	18.5	70.6	69.2
Catholic	3.0	1.4	6.7	7.0	11.3	11.1	44.3	47.5	34.7	33.0
Episcopal	7.1	14.1	14.4	22.0	20.7	14.7	35.1	29.6	22.6	19.6
Friends	21.1	23.3	11.7	20.9	9.0	7.6	29.2	21.5	29.0	26.6
Seventh-Day Adventist	70.3	70.2	15.1	10.2	4.2	7.8	6.7	8.9	3.7	3.0
Hebrew Day	6.8	7.7	20.4	13.4	7.5	16.5	43.0	35.6	22.3	26.8
Solomon Schechter	0.0	16.2	--	6.7	--	16.4	--	40.4	--	20.2
Other Jewish	--	9.6	--	20.3	--	20.4	--	26.9	--	22.8
Christian Schools Intl	4.7	13.3	19.0	17.5	10.4	16.1	26.7	11.0	39.2	42.0
Assoc of Christn Schls Intl	24.0	23.1	22.9	20.4	9.9	18.1	27.7	26.6	15.6	11.8
Lutheran, Missouri Synod	9.5	6.1	26.7	18.9	20.8	23.7	34.7	38.6	8.5	12.7
Lutheran, Wisconsin Synod	--	30.0	--	36.6	--	17.7	--	13.5	--	2.2
Evangelical Lutheran	--	9.1	--	26.1	--	18.6	--	27.3	--	19.0
Other Lutheran	32.7	--	25.8	--	29.4	--	11.1	--	0.9	--
Montessori	41.8	50.8	27.5	34.2	12.2	10.4	12.3	3.8	6.2	0.8
Schools for										
Exceptional Children	57.3	27.6	24.2	50.7	7.9	11.1	10.7	8.2	0.0	2.4
Natl Assoc of										
Independent Schools (only)	1.6	2.4	15.1	16.3	12.6	9.5	28.6	29.6	42.1	42.2
Military	0.0	0.0	--	5.4	--	--	--	42.6	--	--
Other Private Schools	42.2	48.1	23.1	23.7	12.2	8.2	15.5	13.9	7.0	6.1
Catholic	3.0	1.4	6.6	7.0	11.1	11.1	44.3	47.5	35.0	33.0
Parochial	1.6	1.3	5.9	8.0	12.0	12.8	48.6	51.4	32.0	26.5
Diocesan	2.6	1.7	6.1	5.2	11.3	8.0	44.0	41.7	36.1	43.4
Private order	12.0	1.1	11.8	6.0	5.7	9.1	20.1	39.5	50.4	44.3
Other religious	37.2	39.4	20.7	20.0	13.7	12.2	18.9	18.1	9.5	10.3
Conservative Christian	35.4	36.0	24.0	21.2	11.0	14.1	19.4	18.0	10.3	10.6
Affiliated	25.1	27.2	21.7	21.3	18.3	14.6	23.8	24.4	11.2	12.6
Unaffiliated	53.5	60.2	15.9	16.8	11.3	6.5	12.7	9.9	6.6	6.6
Nonsectarian	30.7	31.3	24.6	28.9	11.0	10.1	20.6	17.8	13.2	11.9
Regular	19.4	20.2	18.9	15.8	12.3	9.7	27.3	31.7	22.1	22.6
Special emphasis	38.2	43.7	27.5	33.6	8.9	10.7	17.3	6.7	8.1	5.3
Special education	44.3	32.4	33.2	50.0	11.9	9.7	9.9	7.7	0.8	0.3
All members of NAIS	2.8	2.7	12.7	14.5	12.4	11.1	29.4	30.9	42.7	40.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.



As table 1.6 indicates, while most public schools had over 300 students, private schools that large were only found frequently among Catholic schools, NAIS members, Friends schools, Jewish schools, military schools, and schools affiliated with Christian Schools International. Fewer than one-quarter of the private schools in any other affiliation category had more than 300 students. At the other extreme, over half of the Seventh-Day Adventist schools, Montessori schools, and religious schools unaffiliated with national organizations had fewer than 50 students each in 1990-91. Many of these schools have such small enrollments and teaching forces that they come into and go out of existence as conditions change. Comparison of the distributions of ages (table 1.3) and sizes (table 1.6) of different groups of schools reveals a clear correlation: schools of types normally larger tend to have been in existence longer ( $r = .25$ , based on the 1991-92 PSS). That correlation can be partially due to a tendency for successful schools to grow through the years, and it can be partially due to a tendency for small schools to close. Examination of the Private School Universe Survey (PSS) schools in existence in 1989-90 indicates that the average 1989-90 enrollment of schools that were still active in 1991-92 was 199, compared to 168 for schools that were not interviewed in 1991-92 because they were closed (or "no private school at this number").

### **School Resources and Programs**

Private schools can also be characterized in terms of resources allocated to instruction. Respondents to SASS provided information on resources, including student/teacher ratios, class sizes, number of hours and days of instruction during a year, categorical programs to provide special services to targeted student populations, libraries, and boarding services.

**Class size and student/teacher ratio.** It is argued that for many students, the most effective learning involves individual interactions with adult teachers. For that reason, other things equal, a student in a classroom with fewer students per teacher has a greater opportunity to learn (e.g., Ferguson 1991; de Baca, et al. 1991). Despite variations among teachers and in learning styles of students, many private schools have pointed to the small ratio of students to teachers as an advantage of private education. Therefore, variations in class sizes and student/teacher ratios, shown in table 1.7, are of interest. These two measures are highly correlated. However, student/teacher ratios are obtained at the school level by counting all teachers and all students, including teachers not teaching in single self-contained classrooms, specialists, and team teachers. Class sizes, on the other hand, are obtained from teachers' counts of the number of children in their classrooms.<sup>9</sup>

---

<sup>9</sup> To avoid bias in the comparison of student/teacher ratios (a school measure) and class sizes (based on teacher responses), both are weighted to represent the average of all schools in the country. If class size data had been weighted to represent the average of all teachers in the country, then they would have represented the situation in large schools more than small schools.

**Table 1.7-- Students per teacher and per classroom in 1987-88 and 1990-91, by affiliation**

	Avg. Student/ Teacher Ratio		Percent Schools w/ Student/Teacher Ratio < 10		Percent Schools w/ Student/Teacher Ratio > 30		Avg. Students per Self-contained Class		Avg. Students per Departmental Class	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	15.8	16.1	21.8	21.4	3.8	3.6	20.7	20.7	20.1	18.9
Total Public	17.5	16.7	5.7	7.8	1.1	0.8	25.7	25.7	23.9	21.8
Catholic	19.5	21.2	4.9	3.3	5.9	7.7	24.1	25.0	23.1	22.0
Episcopal	10.8	13.4	46.9	37.3	0.0	3.0	17.0	18.1	16.8	14.6
Friends	10.4	10.2	53.4	58.9	0.0	0.0	20.5	16.9	13.8	12.4
Seventh-Day Adventist	13.7	12.6	23.3	25.1	0.8	0.0	15.1	15.0	18.3	16.9
Hebrew Day	10.3	14.2	61.1	31.9	0.0	6.2	26.9	20.8	13.4	18.4
Solomon Schechter	9.0	9.8	--	59.6	0.0	0.0	16.6	19.3	--	17.6
Other Jewish	--	14.6	--	32.5	--	4.2	--	19.3	--	15.6
Christian Schools Intl	15.0	15.7	15.9	10.4	0.0	0.8	20.3	19.8	18.3	17.9
Assoc of Christn Schls Intl	14.0	14.9	22.0	17.1	0.6	0.2	18.8	17.2	17.6	15.1
Lutheran, Missouri Synod	18.3	20.0	2.1	0.9	0.5	1.5	22.2	21.7	20.6	19.2
Lutheran, Wisconsin Synod	--	18.0	--	7.6	--	0.6	--	18.3	--	18.8
Evangelical Lutheran	19.0	18.0	--	9.4	--	0.9	21.2	18.2	--	17.3
Other Lutheran	20.3	15.6	2.5	--	0.0	--	21.8	16.3	--	--
Montessori	12.7	13.1	46.9	35.2	2.8	2.9	27.7	20.6	18.3	--
Schools for Exceptional Children	7.2	7.9	82.1	79.4	0.0	0.6	13.3	17.1	8.6	8.7
Natl Assoc of Independent Schools (only)	9.4	9.4	61.3	67.4	0.2	0.8	20.4	21.5	15.2	14.7
Military	9.1	9.7	70.9	67.7	0.0	0.0	--	--	13.0	13.2
Other Private Schools	13.6	12.6	32.6	34.8	4.0	1.7	17.0	16.9	15.6	14.6
Catholic	19.5	21.2	4.9	3.3	5.9	7.7	24.1	25.0	23.2	22.0
Parochial	20.8	21.8	2.0	2.2	7.5	9.6	23.9	24.6	23.8	21.6
Diocesan	18.6	21.2	5.7	2.6	4.1	5.9	25.1	26.1	22.6	23.1
Private order	13.5	17.3	20.2	12.6	0.0	1.3	24.1	24.6	20.9	20.9
Other religious	14.9	14.2	22.0	25.2	3.0	1.4	18.5	17.4	17.9	16.2
Conservative Christian	13.6	13.6	28.6	24.7	2.5	0.7	17.8	16.8	16.5	15.1
Affiliated	15.5	15.6	20.1	17.5	1.7	1.2	19.0	18.5	19.8	17.1
Unaffiliated	15.6	13.1	16.7	36.3	4.9	2.4	18.4	16.1	15.9	15.9
Nonsectarian	11.0	11.3	52.9	46.7	1.5	1.5	18.2	19.2	14.7	13.5
Regular	11.6	12.3	40.3	37.8	0.3	2.3	18.2	19.1	16.0	15.6
Special emphasis	11.1	12.1	54.8	40.9	1.6	1.4	22.8	21.5	15.6	13.0
Special education	9.1	7.2	83.1	79.1	4.8	0.0	10.1	15.6	7.3	8.8
All members of NAIS	10.0	10.5	56.0	56.7	0.1	0.9	21.9	20.7	15.3	15.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

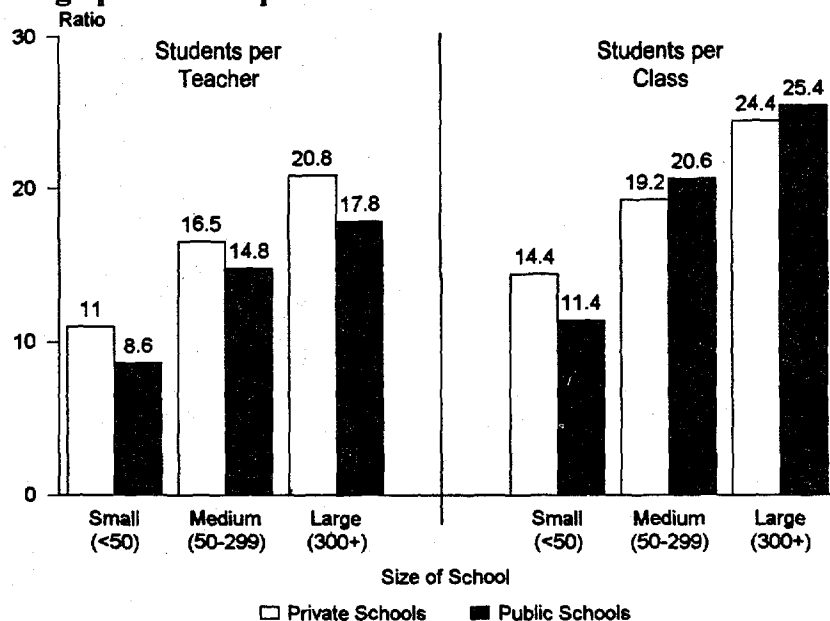
Note: -- Too few cases for a reliable estimate.

Note: Self-contained classes are most frequently taught in elementary grades, departmental classes in secondary grades.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

As shown in figure 1.3, average class sizes and student/teacher ratios vary substantially with school size, and among schools of roughly the same size, there tended to be two to three fewer students per teacher in public schools than in private schools. The fact that, overall, the average student/teacher ratio is smaller for private schools is due to the fact that a much larger percentage of private schools are small. Among schools with more than 50 students, on the other hand, class sizes and student/teacher ratios convey different information for public and private schools: lower student/teacher ratios in public schools are not reflected in lower class sizes in public schools.

**Figure 1.3-- Average class sizes and student/teacher ratios for small, medium, and large public and private schools**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (School Questionnaire).

Class sizes and student/teacher ratios are related to tuition rates. At one extreme, more than half of the schools in some categories have fewer than 10 students per teacher—NAIS members, special education schools, military schools, and Solomon Schechter schools. These schools have annual tuitions that range from \$4,000 upward. At the other extreme, Catholic and Lutheran schools, whose class sizes and student/teacher ratios are not noticeably different from those of public schools, have tuitions typically less than \$1,500.

**Time in session.** The other straightforward method of making more teacher time available to each student is through a longer school day or a longer school year. Responses to SASS questions about the length of the school day (in hours and minutes) and of the school year (in days) are shown in table 1.8. Most types of schools were close to the average of 180 days and 6.5 hours per day. The exceptions were special education schools, with more days per year but slightly fewer hours per day, and Jewish schools and military schools, with slightly longer school days.

**Table 1.8-- Average length of school year and day in 1990-91, by affiliation**

	Days	Hours
	90-91	90-91
Total Private	179.8	6.5
Total Public	179.6	6.4
Catholic	179.1	6.4
Episcopal	178.6	6.9
Friends	174.9	6.7
Seventh-Day Adventist	180.1	6.6
Hebrew Day	180.3	7.7
Solomon Schechter	177.4	6.9
Other Jewish	183.8	7.3
Christian Schools Intl	178.5	6.6
Assoc of Christn Schls Intl	178.9	6.6
Lutheran, Missouri Synod	177.8	6.5
Lutheran, Wisconsin Synod	176.8	6.7
Evangelical Lutheran	178.8	6.4
Other Lutheran	184.7	6.6
Montessori	178.8	6.0
Schools for		
Exceptional Children	186.4	6.0
Natl Assoc of		
Independent Schools (only)	175.7	6.9
Military	178.4	7.2
Other Private Schools	181.5	6.4
Catholic	179.1	6.4
Parochial	178.9	6.4
Diocesan	179.7	6.3
Private order	178.8	6.6
Other religious	178.8	6.6
Conservative Christian	178.9	6.6
Affiliated	179.3	6.7
Unaffiliated	178.1	6.5
Nonsectarian	183.7	6.4
Regular	180.7	6.7
Special emphasis	180.3	6.2
Special education	197.3	5.8
All members of NAIS	176.3	6.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

The uniformity of time in school across categories of schools does not reflect the broad range of extended day or intersession activities that involve the students. As shown in table 1.9, discussed below, about 40 percent of private schools offer after-school programs, compared to 20 percent of public schools. The lack of variability in the averages also fails to reflect the values of some Christian schools where the number of school days per year is limited in order to maximize the time each child spends with his or her family (D. Hand, personal communication).

**Categorical programs.** During the past 30 years, a variety of school-level programs focusing on students with particular instructional needs have received a great deal of attention. Many federal and state programs, such as education for the disadvantaged, special education, and bilingual education, have targeted these categories of students for increased educational investment of resources. Although the selectivity of some private schools may limit the number of their students with needs targeted by federal categorical programs, most private schools did provide some categorical services. The proportions of private schools that provided each of eight kinds of service in 1990-91 are shown in table 1.9, along with the percentages of participating students, at schools that offered the services.

Comparisons of categorical program participation across types of schools can be misleading. By chance, even if students with unusual needs were enrolled in schools at random, small schools would be much more likely than large schools either to have no students with a particular need or to have so few that they could not efficiently offer the services. This effect would be most noticeable for schools with fewer than 50 students; and one-quarter of private schools had fewer than 50 students in 1990-91, compared to 2 percent of public schools.

All of the categorical programs that focused on students with special needs—English as a second language or bilingual instruction, remedial reading or mathematics instruction, diagnostic services, and programs for handicapped students—were reported much more frequently in public than private schools. Nevertheless, these services were provided at substantial numbers of private schools (for example, remedial reading instruction is found in 56 percent of private schools and remedial mathematics in 42 percent of schools). Moreover, in private schools that offer remedial instruction, the proportions of students participating are similar to the proportions in public schools. For example, in public schools providing remedial reading, 13 percent of students participated, compared to 10 percent in private schools; and in public schools providing remedial mathematics, 11 percent of students participated, compared to 9.5 percent in private schools.

Three kinds of services had higher participation rates in private schools than in public schools. At the student level, 18 percent of students in private schools that offered services for gifted students participated in those programs, compared to 8 percent of students in

**Table 1.9-- Percentage of schools offering special services and percentage of students in these schools receiving these services in 1990-91, by affiliation—Continued on next page**

	Total Schools	ESOL		Bilingual		Remedial Reading		Remedial Math	
		% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving
Total Private	24,690	13.2	10.0	5.3	34.8	55.7	10.0	42.4	9.5
Total Public	79,885	40.8	6.6	18.8	12.0	80.7	13.2	60.3	11.2
Catholic	8,731	12.1	6.3	2.2	--	71.1	8.5	50.7	7.7
Episcopal	394	7.6	--	4.4	--	39.9	10.9	32.1	--
Friends	56	17.0	--	0.0	--	57.6	7.5	44.1	6.0
Seventh-Day Adventist	1,133	5.2	--	4.0	--	29.7	11.9	23.7	8.2
Hebrew Day	170	66.6	8.8	28.6	70.2	57.7	6.5	54.9	5.0
Solomon Schechter	52	77.1	6.4	11.2	--	72.6	5.9	53.9	3.2
Other Jewish	289	60.9	19.0	26.2	--	58.2	12.1	48.8	11.2
Christian Schools Intl	408	11.8	--	4.9	--	69.4	5.1	56.0	3.5
Assoc of Christn Schls Intl	1,941	9.8	--	3.6	--	52.7	9.1	44.8	9.5
Lutheran, Missouri Synod	1,010	6.6	--	2.1	--	50.1	6.6	37.6	5.8
Lutheran, Wisconsin Synod	409	1.7	--	0.0	--	64.7	6.3	48.9	3.7
Evangelical Lutheran	119	10.1	--	5.3	--	42.1	10.3	28.0	--
Other Lutheran	--	0.0	--	0.0	--	--	--	--	--
Montessori	747	8.0	--	5.4	--	53.2	12.7	45.0	17.1
Schools for Exceptional Children	317	18.7	--	15.6	--	83.2	65.4	81.4	64.5
Natl Assoc of Independent Schools (only)	933	24.4	9.8	3.4	--	48.8	9.4	32.3	8.4
Military	21	79.0	8.1	0.0	--	37.7	--	--	--
Other Private Schools	7,888	13.8	22.1	8.7	42.5	43.6	16.7	34.8	16.9
Catholic	8,731	12.1	6.3	2.2	--	71.1	8.5	50.7	7.7
Parochial	5,437	13.2	6.6	1.6	--	74.6	9.4	51.3	8.4
Diocesan	2,400	7.9	--	2.3	--	74.0	7.0	57.7	6.8
Private order	894	16.2	--	5.1	--	42.1	9.0	28.8	6.6
Other religious	11,476	13.7	12.4	7.1	44.1	47.0	9.6	37.2	8.2
Conservative Christian	4,045	10.8	--	5.5	--	53.2	10.1	41.3	8.3
Affiliated	4,262	12.5	9.6	6.1	47.0	48.2	7.6	38.3	5.9
Unaffiliated	3,169	19.0	23.3	10.3	--	37.4	13.1	30.4	13.9
Nonsectarian	4,483	14.0	15.1	7.0	32.6	47.7	20.6	39.7	24.6
Regular	1,950	14.6	9.6	6.4	--	34.6	8.5	24.0	8.6
Special emphasis	1,700	14.7	24.5	5.9	--	48.6	21.8	41.4	25.3
Special education	833	11.1	--	10.4	--	76.8	64.3	73.2	67.3
All members of NAIS	1,498	22.5	7.8	3.3	--	48.6	10.0	33.3	8.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Table 1.9-- Percentage of private schools with special services and percentage of students in these schools receiving these services in 1990-91, by affiliation--Continued**

	<u>Special Education</u>		<u>Diagnostic</u>		<u>Gifted</u>		<u>After School Program</u>	
	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving
Total Private	17.4	11.6	42.8	9.9	29.5	18.3	38.9	19.0
Total Public	85.7	7.9	80.4	10.8	74.9	8.5	20.5	10.0
Catholic	15.9	4.2	54.7	5.3	33.0	12.6	38.3	13.4
Episcopal	8.5	--	25.8	15.4	43.2	38.4	70.3	22.3
Friends	18.0	--	41.2	7.4	28.1	36.7	67.3	16.1
Seventh-Day Adventist	9.0	--	22.3	--	15.5	--	16.3	12.8
Hebrew Day	15.7	--	44.5	--	38.3	--	30.2	--
Solomon Schechter	16.4	--	61.3	--	42.6	9.8	59.6	19.0
Other Jewish	25.5	--	45.8	13.6	57.7	14.7	45.8	24.0
Christian Schools Intl	30.4	--	57.4	4.0	42.9	9.8	38.7	17.0
Assoc of Christn Schls Intl	12.5	--	41.9	12.3	24.4	--	42.6	22.4
Lutheran, Missouri Synod	15.0	--	44.9	6.4	24.2	11.3	52.1	27.3
Lutheran, Wisconsin Synod	14.4	--	41.3	4.8	26.7	13.5	12.3	9.9
Evangelical Lutheran	14.8	--	41.2	4.6	32.9	--	70.2	43.3
Other Lutheran	--	--	--	--	--	--	--	--
Montessori	34.8	--	38.7	15.7	36.6	29.2	81.1	53.4
Schools for Exceptional Children	94.3	87.7	96.8	81.4	34.7	--	26.0	--
Natl Assoc of Independent Schools (only)	16.5	--	47.1	9.5	39.2	45.1	47.0	15.6
Military	5.4	--	35.3	--	--	--	0.0	--
Other Private Schools	16.9	26.1	30.1	27.0	25.1	26.8	34.9	25.5
Catholic	15.9	4.2	54.7	5.3	33.0	12.6	38.3	13.4
Parochial	14.7	4.4	58.0	5.4	32.5	9.5	42.8	13.9
Diocesan	18.8	4.2	59.4	5.4	32.4	14.5	32.6	10.5
Private order	14.9	--	22.3	--	37.3	17.6	26.5	21.3
Other religious	12.2	6.7	32.7	10.4	26.1	18.7	32.5	22.6
Conservative Christian	11.6	5.8	39.5	12.5	27.8	12.8	35.0	21.9
Affiliated	12.4	4.0	36.5	7.4	27.4	18.1	38.2	24.3
Unaffiliated	12.8	16.3	19.0	14.7	22.2	28.0	21.6	20.3
Nonsectarian	33.4	35.9	45.2	29.9	31.2	38.1	56.4	26.8
Regular	12.1	6.8	29.4	13.6	35.4	37.1	63.1	21.3
Special emphasis	25.4	17.0	41.8	27.0	33.6	46.5	60.4	36.3
Special education	99.7	89.1	89.1	83.6	16.7	--	32.7	50.1
All members of NAIS	18.3	18.9	41.9	10.6	38.0	38.0	45.2	16.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

public schools with such programs. At the school level, 39 percent of private schools offered afterschool programs, compared to 20 percent of public schools. Finally, although special education services were offered in fewer than a quarter of private schools in general, they were usually provided to nearly all students in private special education schools. In contrast, while most public schools offered special education services, typically fewer than 10 percent of students in a school participated.

**Libraries.** School libraries and media centers and the professionals who staff them play an important role in placing information in the hands of teachers and students (Pickard 1993). As shown in table 1.10, six private schools in seven had libraries in 1990-91; and on average, in schools with libraries, the equivalent of nearly one-half of a full-time staff member's time was allocated to library functions.<sup>10</sup> Nevertheless, the relative frequency of private schools without libraries was three times that of public schools. The main difference is in the elementary schools: 14 percent of private elementary schools lack libraries, compared to 3 percent of public elementary schools. In both public and private sectors, nearly 95 percent of secondary schools and about 85 percent of combined (K-12) schools have libraries. Public combined schools without libraries are, like private schools, much smaller than other schools: their average enrollment is only 113 students.

Among elementary schools, Catholic, Friends, and Hebrew Day schools, like public schools, rarely lacked a library. At the other extreme, more than 30 percent of special education schools for exceptional children lacked libraries. Also at the elementary level, a substantial percentage of Episcopal and Wisconsin Synod Lutheran elementary schools, as well as nonsectarian and unaffiliated religiously oriented elementary schools, carried on without libraries.

Although overall the average full-time equivalent (FTE) librarian allocation was substantially fewer than 1.0, even in schools with libraries, that was not true at the secondary level. Private secondary schools allocated, on average, the equivalent of one full-time staff member to library functions. In fact, among secondary schools, Catholic Private-Order, Catholic diocesan, and NAIS schools allocated significantly more than one FTE for librarians.<sup>11</sup>

**Boarding.** A distinguishing feature of some private schools is the provision of room and board to students. Schools that board students have an all-encompassing contact with a student's daily life. Some argue that this both engenders responsibility and provides opportunity for support of academic and social growth (Kane 1992, 127-139). Only 7 percent of private schools, however, have boarding students, as shown in table 1.11.

---

<sup>10</sup> Corresponding public school data on FTEs are available only at the district level and, therefore, are not commensurate with private school FTE librarian counts.

<sup>11</sup> The value for military schools (1.4) was not statistically significantly greater than 1.0.



**Table 1.10-- Percentage of schools with libraries and full-time equivalent (FTE) librarians in 1990-91, by level and affiliation**

	Total		Elementary		Secondary		Combined	
	Libraries	FTE Librarians	Libraries	FTE Librarians	Libraries	FTE Librarians	Libraries	FTE Librarians
Total Private	86.8	0.4	86.1	0.3	94.1	1.0	85.8	0.5
Total Public	95.8	NA	96.9	NA	94.8	NA	85.4	NA
Catholic	97.1	0.6	96.6	0.5	99.4	1.2	100.0	1.0
Episcopal	75.8	0.8	68.7	0.5	92.6	1.3	97.8	1.9
Friends	94.2	1.2	96.3	0.6	--	--	93.6	2.2
Seventh-Day Adventist	86.5	0.1	83.0	0.1	96.4	--	96.1	--
Hebrew Day	98.5	0.7	100.0	0.6	95.6	0.8	--	--
Solomon Schechter	91.0	1.2	90.8	1.1	--	--	--	--
Other Jewish	84.9	0.5	83.4	0.5	96.8	--	79.1	--
Christian Schools Intl	85.7	0.5	78.1	0.4	86.1	--	95.5	0.7
Assoc of Christn Schls Intl	86.7	0.3	80.1	0.3	100.0	--	92.4	0.3
Lutheran, Missouri Synod	89.2	0.1	88.8	0.1	92.8	0.6	--	--
Lutheran, Wisconsin Synod	71.6	0.0	70.5	0.0	--	--	--	--
Evangelical Lutheran	82.0	0.5	78.5	0.2	--	--	--	--
Other Lutheran	83.9	--	83.9	--	--	--	--	--
Montessori	78.0	0.1	80.4	0.1	--	--	--	--
Schools for Exceptional Children	72.1	0.3	--	--	--	--	73.8	0.2
Natl Assoc of Independent Schools (only)	95.6	1.4	89.3	0.8	98.8	1.4	98.0	1.7
Military	100.0	1.3	--	--	100.0	1.4	--	--
Other Private Schools	76.8	0.3	69.6	0.1	76.1	0.6	82.4	0.3
Catholic	97.1	0.6	96.6	0.5	99.4	1.2	100.0	1.0
Parochial	97.6	0.5	97.4	0.5	100.0	0.9	--	--
Diocesan	96.9	0.7	95.9	0.6	100.0	1.3	--	--
Private order	94.3	1.1	85.4	0.6	98.3	1.3	100.0	1.6
Other religious	82.9	0.3	79.1	0.2	94.6	0.7	86.5	0.4
Conservative Christian	84.0	0.3	79.6	0.3	94.4	--	85.6	0.3
Affiliated	84.7	0.3	83.9	0.2	96.6	0.7	82.2	0.4
Unaffiliated	79.1	0.3	71.4	0.1	85.5	--	91.9	0.5
Nonsectarian	76.8	0.5	71.3	0.2	80.3	0.9	82.2	0.7
Regular	79.7	0.7	64.0	0.3	98.2	1.3	96.5	1.2
Special emphasis	76.8	0.4	79.0	0.2	84.2	0.9	68.0	0.6
Special education	69.7	0.2	--	--	--	--	75.6	0.2
All members of NAIS	95.9	1.3	92.1	0.8	96.7	1.4	98.5	1.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: NA indicates that these estimates are not available at the school level.

**Table 1.11-- Percentage of private schools with boarding students in 1987-88 and 1990-91, by affiliation**

	% Boarding 87-88	% Boarding 90-91
Total Private	5.4	6.6
Catholic	2.9	2.3
Episcopal	9.4	12.8
Friends	11.7	12.8
Seventh-Day Adventist	4.5	7.0
Hebrew Day	10.6	22.3
Solomon Schechter	0.0	0.0
Other Jewish	--	13.9
Christian Schools Intl	0.9	4.3
Assoc of Christn Schls Intl	2.8	1.4
Lutheran, Missouri Synod	0.0	2.2
Lutheran, Wisconsin Synod	--	3.9
Evangelical Lutheran	--	4.8
Other Lutheran	3.2	--
Montessori	2.9	1.9
Schools for Exceptional Children	32.2	56.9
Natl Assoc of Independent Schools (only)	24.0	26.6
Military	100.0	100.0
Other Private Schools	6.7	8.5
Catholic	2.9	2.3
Parochial	0.5	1.3
Diocesan	2.8	1.3
Private order	16.9	10.6
Other religious	3.4	6.3
Conservative Christian	2.2	4.2
Affiliated	3.6	6.3
Unaffiliated	4.6	9.0
Nonsectarian	14.9	16.0
Regular	7.0	9.2
Special emphasis	16.2	10.0
Special education	33.2	44.1
All members of NAIS	25.2	22.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

In only four categories did large percentages of schools offer boarding: all military schools, half of the special education schools, and nearly one-quarter of NAIS members and Hebrew Day schools. A smaller percentage of other Jewish schools, Catholic Private-Order schools, Episcopal schools, and Friends schools provide boarding; and fewer than 10 percent of other schools offer boarding.

## **Summary**

Based on the Schools and Staffing Survey sample, there were roughly 25,000 private elementary and secondary schools in America in 1990-91, serving 4,700,000 students. The major conclusion one reaches from examination of the information on these private schools is that they are varied. Although they are smaller than public schools on average, some private schools have many hundreds of students. There are many very old and many very new private schools, many schools with annual tuitions of more than \$6,000, and many with tuitions less than \$1,500. Finally, although most private schools have a religious affiliation or orientation, there were over 4,000 nonsectarian private schools in 1990-91.

Overall, the picture of private schools drawn by the respondents to the Schools and Staffing Survey creates a context for understanding the role of private elementary and secondary education in America. In the next chapters, this context will provide the basis for interpreting information about the students and teachers who are in these schools. Most private schools are small, most are religiously oriented, and most collect tuition. In these ways they differ from public schools; but most private schools are similar to public schools (especially those of the same size) in student/teacher ratios, libraries, the length of the school day and school year, and in serving primarily nonboarding students. The major structural difference is the prevalence of combined K-12 schools among private schools and of middle schools among public schools.

## 2 Students

Of 44,777,000 children in elementary and secondary schools in America in 1990, slightly fewer than 4,674,000 were in private schools. How different are these private school students from those attending public schools? Attendance at private schools is a matter of personal choice; however, attendance at a private school usually requires tuition payments. Thus, private school students are more likely to be members of families that are both willing and able to invest significant monetary resources in their children's elementary and secondary education, compared to children in public schools.<sup>12</sup> This picture is too simple, however. As found by Darling-Hammond and Kirby (1985) in a study of school choice in Minnesota, many parents invest in their children's education by buying or renting a home in a public school district of their choice. Nevertheless, there is reason to expect that families of private school children might be different from those of public school children. In particular, in many cases they have chosen to integrate schooling with the religious development of their children.

To find out which students in America are attending private schools, it is necessary to determine the locations of the schools and their admission requirements. This information provides a context for interpreting both information on the racial-ethnic distribution of students and on the performance of private school students. Finally, because in the past many private schools enrolled only boys or only girls, the sex distributions of students are of interest.

### Highlights

- Seventy percent of private schools are located in cities or on the fringe of large cities, where they are accessible to urban and suburban students. By comparison, fewer than half of public schools are located in these places (table 2.2).
- There are substantial regional variations among private schools. For example, Catholic schools are more prevalent in the Northeast and Midwest, Lutheran schools in the Midwest, Jewish schools in the Northeast, NAIS members in the East, Seventh-Day Adventist schools in the West, and conservative Christian schools in the South and West (table 2.1).

---

<sup>12</sup> Coleman and Hoffer (1987) reported, for example, that in 1980, whereas 23 percent of public school family incomes were greater than \$25,000, 37 percent of Catholic school families and 39 percent of other private school families, including 82 percent of families of students at highly selective private schools, had incomes greater than \$25,000. Furthermore, computations based on the NELS:88 Base-Year Parent Survey public use file show that in 1988, the household income of 62 percent of families with an eighth grader in private school was greater than \$35,000, compared to 39 percent of homes with an eighth grader in public school. Finally, computations based on the 1991 National Household Education Survey public use file show that the household income of 47 percent of homes with a child in private school was greater than \$40,000, compared to 29 percent of homes with a child in public school.

- Admission requirements were used at many elementary schools and most schools serving secondary students; but schools of different types had noticeably different preferences for requirements (table 2.3).
- Almost equal numbers of boys and girls attended private schools. Only about 2 percent of private schools were for boys only and about 2 percent were for girls only in 1990-91 (table 2.4).
- In 1990-91, 22 percent of private school students were members of minority groups, compared to 31 percent in public schools, and about 45 percent of private schools had enrollments of at least 10 percent minorities, compared to 54 percent of public schools (table 2.5). In the three years from 1987-88 to 1990-91, the percentage of schools with 10 to 50 percent minority students grew from 26 percent to 32 percent. However, in comparison to public schools, it remains the case that fewer black students attend private schools (table 2.6).

### **Locations of Private Schools**

**Region.** Both public schools and private schools have different histories in different regions of the country, and the role of private schools has varied across regions. As shown in table 2.1, private school enrollment has been roughly similar across four major regions: the Northeast, the Midwest, the South, and the West. Between 1987 and 1990, however, private school enrollments in the West have risen relative to other regions.

Although each category of schools has schools and enrolls students in every region, recognition of regional variation helps to understand the pattern of private education in America.

- Catholic schools enroll two-thirds of the private school students in the Northeast and Midwest, compared to two-fifths in the South and West.
- Friends schools and Jewish schools are located primarily in the Northeast, and NAIS member schools are located primarily in the Northeast and South.
- Lutheran schools are found primarily in the Midwest.
- Seventh-Day Adventist schools and members of the Association for Christian Schools International are most prevalent in the West.
- Other conservative Christian schools are most prevalent in the South, as are other religiously oriented schools.

**Table 2.1-- Number of students in 1987-88 and 1990-91, by region and affiliation**

	Northeast		Midwest		South		West	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	1,470,196	1,222,210	1,504,671	1,372,917	1,427,819	1,239,886	815,956	838,865
Total Public	7,361,395	7,088,770	9,788,209	9,628,828	14,419,748	14,374,189	8,342,616	9,011,913
Catholic	961,735	831,086	1,024,174	904,260	474,390	458,029	372,693	362,557
Episcopal	--	12,167	--	--	55,296	48,249	--	--
Friends	10,443	8,912	--	--	4,378	4,118	--	--
Seventh-Day Adventist	9,369	--	12,374	--	22,294	--	36,147	35,508
Hebrew Day	54,602	26,298	--	--	--	6,708	--	--
Solomon Schechter	--	6,217	--	--	--	--	--	--
Other Jewish	--	37,997	--	7,391	--	9,957	--	8,740
Christian Schools Intl	7,222	--	38,864	40,804	--	--	10,770	22,599
Assoc of Christn Schls Intl	--	--	--	74,962	--	71,688	137,485	134,536
Lutheran, Missouri Synod	--	--	104,034	115,398	36,364	23,463	30,692	29,215
Lutheran, Wisconsin Synod	--	--	--	31,957	--	--	--	4,677
Evangelical Lutheran	--	2,773	--	3,845	--	--	--	6,087
Other Lutheran	--	--	29,134	--	--	--	--	--
Montessori	--	--	--	--	33,167	16,066	--	--
Schools for	--	--	--	--	--	--	--	--
Exceptional Children	--	--	--	--	--	--	--	--
Natl Assoc of	--	--	--	--	--	--	--	--
Independent Schls (only)	108,775	104,340	--	41,579	135,946	113,202	--	53,283
Military	--	--	--	--	--	--	--	--
Other Private Schools	211,484	119,598	192,473	115,954	503,305	406,727	145,497	141,540
Catholic	954,565	831,086	1,023,258	904,260	474,390	458,029	370,371	362,557
Parochial	604,139	433,276	649,378	470,309	289,473	276,478	225,698	183,769
Diocesan	212,639	288,434	274,127	327,638	--	113,756	--	--
Private order	--	109,376	--	106,314	--	--	--	--
Other religious	335,780	220,449	389,491	391,244	558,239	522,391	307,910	334,448
Conservative Christian	72,627	60,864	101,539	107,920	208,481	208,017	160,062	170,127
Affiliated	135,155	111,205	207,874	226,920	206,478	177,780	111,759	116,014
Unaffiliated	127,998	48,381	80,078	56,403	143,280	136,595	36,090	48,308
Nonsectarian	179,851	170,674	91,922	77,413	395,190	259,466	137,675	141,860
Regular	103,727	112,130	--	46,712	276,511	190,651	73,958	82,256
Special emphasis	49,088	35,597	39,029	23,637	98,501	54,286	58,301	44,452
Special education	27,035	22,948	--	--	--	14,529	--	15,152
All members of NAIS	130,770	173,671	--	53,176	208,024	190,181	59,328	77,361

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

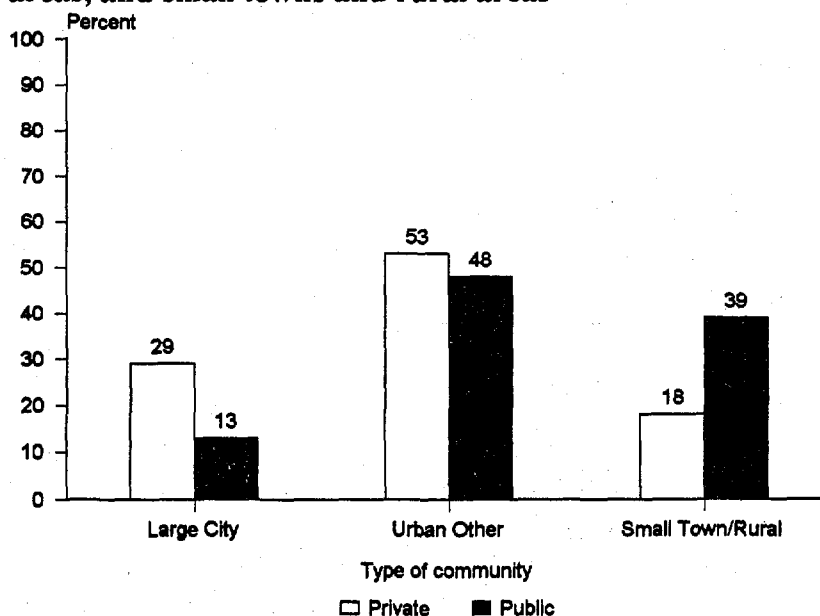
Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Community type.** Public schools are often characterized by the type of community in which they are located, because the students attending these schools live in the same communities. The findings from SASS suggest that private schools, because few offer boarding, also draw most of their students from families within a few miles of their campuses. Therefore, it helps in understanding the roles of private schools to know the kinds of communities in which they are located.

There is an image of private schools as located far from the busy streets of large cities, but in fact, that image applies less to private schools than to public schools. As shown in figure 2.1, nearly one-third of the private schools were in large cities and fewer than 20 percent were in small towns or rural areas in 1990-91, whereas three times as many public schools were in small towns or rural areas as were in large cities.

**Figure 2.1-- Percentage of private and public schools located in large cities, other urban areas, and small towns and rural areas**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (School Questionnaire).

As shown in table 2.2, public schools were more widely dispersed throughout the countryside than private schools. About half of all private school students are enrolled in schools in and around large cities, compared to fewer than one-third of public school students. Only Wisconsin Synod Lutheran students are as likely as public school students to be in rural settings or small towns.

**Table 2.2-- Percentage of enrollment in different community types in 1990-91, by affiliation of school**

	Total	Large City	Urban Mid-Size City	Urban Fringe Large City	Fringe Mid-City	Large Town	Small Town	Rural
Total Private	4,673,878	29.4	19.8	20.8	9.9	2.5	11.1	6.4
Total Public	40,103,699	12.7	16.9	16.8	11.9	2.5	22.2	17.0
Catholic	2,555,932	35.8	19.1	21.9	8.9	2.2	8.7	3.4
Episcopal	78,484	22.8	37.2	16.0	11.1	1.8	7.5	3.6
Friends	13,697	41.2	11.5	26.5	12.6	0.0	7.7	0.5
Seventh-Day Adventist	69,716	13.4	16.8	23.6	16.1	2.2	22.2	5.6
Hebrew Day	38,667	44.5	5.3	31.2	9.2	0.0	0.0	9.8
Solomon Schechter	11,563	42.6	6.4	41.8	6.5	0.0	1.7	1.0
Other Jewish	64,086	59.2	3.4	24.1	5.0	0.0	0.0	8.3
Christian Schools Intl	111,509	18.2	21.1	19.3	20.3	2.9	12.6	5.7
Assoc of Christn Schls Intl	310,860	21.1	20.2	26.9	10.5	5.2	10.8	5.3
Lutheran, Missouri Synod	173,579	19.2	28.2	23.5	5.6	0.1	14.9	8.3
Lutheran, Wisconsin Synod	37,339	8.9	21.7	14.9	5.5	6.7	31.1	11.1
Evangelical Lutheran	26,086	20.3	29.8	18.4	4.2	0.7	26.2	0.3
Other Lutheran	--	--	--	--	--	0.0	--	--
Montessori	44,837	23.6	18.7	32.4	7.0	4.1	5.8	8.5
Schools for Exceptional Children	26,840	34.7	6.7	29.6	4.8	3.7	10.0	10.5
Natl Assoc of Independent Schools (only)	312,403	35.1	19.6	18.0	8.7	2.3	10.7	5.7
Military	--	0.0	--	--	0.0	0.0	--	--
Other Private Schools	783,819	13.5	21.2	13.5	13.8	3.3	18.1	16.6
Catholic	2,555,932	35.8	19.1	21.9	8.9	2.2	8.7	3.4
Parochial	1,363,832	30.2	19.4	21.2	11.0	2.8	11.4	4.1
Diocesan	833,311	39.8	19.6	22.8	6.0	1.8	7.2	2.9
Private order	358,789	48.2	16.5	22.9	7.6	0.6	2.2	2.0
Other religious	1,468,533	19.9	22.6	20.1	10.4	3.1	13.7	10.2
Conservative Christian	546,928	17.6	23.6	21.4	10.8	5.5	10.9	10.2
Affiliated	631,919	20.2	22.9	19.9	12.2	2.0	14.9	7.9
Unaffiliated	289,686	23.4	20.2	17.8	6.0	1.0	16.5	15.0
Nonsectarian	649,414	25.5	16.4	18.0	13.0	2.4	14.7	10.0
Regular	431,748	25.3	16.7	14.7	12.8	2.4	16.7	11.4
Special emphasis	157,972	26.3	15.6	21.7	14.5	2.3	12.1	7.4
Special education	59,694	25.5	16.0	32.4	10.2	2.7	7.2	6.0
All members of NAIS	494,389	33.1	22.6	18.7	9.9	1.8	9.3	4.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.



## Student Variations

**Admission requirements.** By setting criteria for admission, a private school may select a population of students that is differentiated from the overall population. SASS collected information on the percentages of elementary schools (table 2.3a) and of schools serving secondary grades (secondary and combined K-12 schools, table 2.3b<sup>13</sup>) employing each of eight admissions requirements. Most private schools at both elementary and secondary levels employed some requirements for admission of students, most frequently a personal interview. A caution must be noted in interpreting these responses, however. The SASS respondents were not asked to indicate whether, or to what extent, these requirements were used for *selection*, as opposed to *placement*. Furthermore, no information was collected about the proportions of applicants who were admitted to any school (i.e., about selectivity ratios).

There is a clear difference between elementary and secondary schools in the use of admission requirements. Except for religious affiliation, every requirement was used by a larger percentage of schools serving secondary students than of elementary schools. Greater use of admission requirements at the secondary level is not surprising because measurement of children beginning elementary school is very unreliable. Thus, for example, recommendations, which might be based on comparisons of a child to other children, are used by nearly 40 percent of schools serving secondary students, compared to 20 percent of elementary schools.

Four common requirements were used very often by some categories of private schools and substantially less often by others: admission tests, standardized achievement tests, academic record, and recommendations. At the secondary level, a comparison across the nine-category typology of private schools shows that Catholic Private-Order schools used these admission requirements more often than others did. Among other religiously affiliated schools serving secondary students, Episcopal and Friends schools also used these requirements very frequently; and members of NAIS used these requirements frequently at both elementary and secondary levels.

Special education schools, on the other hand, tended not to use these "standard" requirements but based admissions on special student needs and aptitudes. Finally, conservative Christian schools differed from others in that their elementary schools used admission requirements more frequently than other elementary schools, but their combined K-12 schools used admission requirements less frequently than their elementary schools.

---

<sup>13</sup> In table 2.3b, Friends schools, conservative Christian schools, unaffiliated religiously oriented schools, and special education schools are primarily combined K-12; Catholic schools are primarily secondary only; and the other categories are each roughly split between combined and secondary only. See table 1.1 for exact proportions.

**Table 2.3a-- Percentage of elementary private schools with admission requirements in 1990-91, by affiliation**

	Total	Admissions Test	Standardized Achievement Test	Academic Record	Special Needs	Special Aptitudes	Inter- view	Recom- mendations	Religious Affiliation
<b>Total Private</b>	<b>15,445</b>	<b>23.7</b>	<b>18.3</b>	<b>36.2</b>	<b>11.1</b>	<b>4.3</b>	<b>45.4</b>	<b>19.1</b>	<b>21.0</b>
Catholic	7,156	23.4	17.8	40.0	9.5	2.3	40.4	16.0	24.1
Episcopal	290	54.2	39.5	66.6	14.3	21.9	57.5	39.1	7.0
Friends	30	51.5	22.0	44.2	11.6	7.6	74.1	55.8	11.3
Seventh-Day Adventist	832	12.2	8.1	15.5	8.2	0.7	34.6	25.4	9.5
Hebrew Day	82	30.6	29.0	51.1	7.2	5.9	60.3	26.8	66.9
Solomon Schechter	51	60.2	20.7	57.9	13.8	9.2	67.1	37.3	80.9
Other Jewish	179	31.3	14.7	33.3	17.4	2.5	68.8	17.5	47.3
Christian Schools Intl	212	22.7	36.7	55.1	19.2	7.9	78.5	40.3	54.5
Assoc of Christn Schls Intl	947	53.9	29.2	58.3	27.8	12.0	71.7	23.5	25.9
Lutheran, Missouri Synod	940	17.7	22.9	41.0	10.0	0.7	50.8	12.0	9.8
Lutheran, Wisconsin Synod	384	8.2	12.7	21.4	10.8	3.2	43.9	16.0	38.6
Evangelical Lutheran	95	42.2	25.4	54.3	13.3	4.4	62.1	23.1	13.3
Other Lutheran	--	--	--	--	--	0.0	--	0.0	--
Montessori	650	17.5	8.4	25.5	4.6	2.0	49.4	21.4	0.0
Schools for Exceptional Children	--	--	--	--	--	--	--	--	--
Natl Assoc of Independent Schools	272	52.1	62.8	69.8	17.2	29.5	79.7	63.4	0.0
Military	--	--	--	--	--	--	--	--	--
Other Private Schools	3,253	16.4	13.2	21.7	10.2	5.1	40.0	17.4	18.1
Catholic	7,156	23.4	17.8	40.0	9.5	2.3	40.4	16.0	24.1
Parochial	5,059	24.0	15.8	39.8	8.7	1.4	42.6	16.0	23.6
Diocesan	1,804	18.6	19.3	37.4	11.3	3.7	32.1	13.8	24.8
Private order	293	--	--	--	--	--	--	--	--
Other religious	6,154	24.7	18.1	34.2	12.8	5.4	49.1	20.0	24.6
Conservative Christian	1,250	52.6	29.7	55.5	25.0	12.3	72.3	24.7	26.2
Affiliated	2,957	23.1	21.4	37.0	12.1	5.4	52.9	23.1	23.1
Unaffiliated	1,947	9.2	5.5	16.3	5.9	1.0	28.5	12.3	25.8
Nonsectarian	2,135	21.9	21.0	29.4	11.9	7.9	51.3	26.7	0.0
Regular	1,018	29.7	31.2	33.7	13.8	8.4	55.1	32.2	0.0
Special emphasis	1,046	14.2	10.7	25.9	6.0	7.4	46.7	21.7	0.0
Special education	--	--	--	--	--	--	--	--	0.0
All members of NAIS	483	60.0	58.2	74.1	14.4	19.0	77.6	54.7	7.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Table 2.3b-- Percentage of private schools serving secondary students with admission requirements in 1990-91, by affiliation**

	Total	Admissions Test	Standardized Achievement Test	Academic Record	Special Needs	Special Aptitudes	Interview	Recommendations	Religious Affiliation
<b>Total Private</b>	<b>9,246</b>	<b>36.2</b>	<b>29.2</b>	<b>52.9</b>	<b>22.6</b>	<b>11.5</b>	<b>64.4</b>	<b>39.3</b>	<b>17.8</b>
Catholic	1,575	59.1	40.6	76.8	16.9	12.8	54.3	57.8	13.0
Episcopal	104	82.7	59.4	90.2	24.5	21.3	85.6	87.9	6.7
Friends	27	59.7	54.7	96.2	25.2	28.9	91.8	83.0	16.4
Seventh-Day Adventist	301	22.7	40.1	64.2	22.7	14.6	56.0	51.8	20.6
Hebrew Day	88	--	--	73.9	--	--	85.5	--	65.3
Solomon Schechter	--	--	--	--	--	--	--	--	--
Other Jewish	111	36.5	21.2	50.4	18.5	16.3	54.1	47.7	69.9
Christian Schools Intl	196	35.2	44.3	64.2	10.1	7.5	83.4	51.9	47.7
Assoc of Christn Schls Intl	994	27.8	23.2	51.3	12.6	9.5	74.7	23.8	30.2
Lutheran, Missouri Synod	70	--	--	--	--	--	--	--	--
Lutheran, Wisconsin Synod	--	--	--	--	--	--	--	--	--
Evangelical Lutheran	--	--	--	--	--	--	--	--	--
Other Lutheran	--	--	--	--	--	--	--	--	--
Montessori	--	--	--	--	--	--	--	--	0.0
Schools for									
Exceptional Children	310	35.6	38.1	56.8	95.2	38.7	83.0	48.6	0.0
Natl Assoc of									
Independent Schools	661	62.5	54.1	87.5	26.5	29.9	84.2	77.1	3.1
Military	21	51.4	--	94.6	--	16.2	83.8	58.8	0.0
Other Private Schools	4,635	26.5	21.0	38.3	22.6	6.9	60.5	27.4	17.4
Catholic	1,575	59.1	40.6	76.8	16.9	12.8	54.3	57.8	13.0
Parochial	378	34.3	20.5	52.1	17.9	11.6	45.8	28.9	14.4
Diocesan	596	53.4	42.2	76.1	19.6	14.0	47.1	58.2	10.0
Private order	601	80.3	51.6	93.0	13.7	12.2	66.8	75.7	15.0
Other religious	5,323	31.2	24.6	46.9	15.1	7.8	65.8	30.9	27.0
Conservative Christian	2,794	28.7	21.7	40.1	10.7	5.8	67.9	23.9	26.5
Affiliated	1,306	29.6	29.6	53.9	12.8	9.8	64.3	45.0	29.6
Unaffiliated	1,223	38.5	25.6	55.0	27.5	10.3	62.4	31.9	25.4
Nonsectarian	2,348	32.2	32.0	50.5	43.5	19.0	68.1	45.7	0.4
Regular	932	50.8	45.3	68.4	16.6	21.4	72.6	51.5	0.2
Special emphasis	654	20.3	19.6	46.1	29.5	12.2	70.8	43.5	1.0
Special education	762	19.6	26.5	32.4	88.3	21.8	60.3	40.6	0.0
All members of NAIS	1,015	68.5	53.0	88.1	26.5	26.9	82.1	77.7	5.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Sex.** A question of sex equity is whether private schools are equally accessible to girls and boys. Table 2.4 shows the average percentages of private school students who were male, for 1987-88 and 1990-91. With the exception of schools providing special education for exceptional children, private school enrollment was evenly distributed between girls and boys. The imbalance in special education schools (70 percent of whose students were male in 1990-91) is similar to the ratio of special education recipients in public schools in general. For example, in 1985-86, 68 percent of secondary school youth with disabilities were male (SRI 1993).

In the past, many parents have preferred to send their children to all-girl or all-boy schools. To determine the extent to which this practice continues, SASS collected information on the prevalence of schools that serve only one sex. As shown in table 2.4, only 4 percent of private schools were single sex, roughly evenly split between schools for boys and schools for girls. These schools were more prevalent within a few types of private schools: half of the military schools were for boys only, as were nearly one-fifth of Hebrew Day schools, other Jewish schools, and Catholic Private-Order schools; conversely, one-quarter of Catholic Private-Order schools and one-tenth of other Jewish schools were for girls only.

**Race and ethnicity.** Because school desegregation has been an important issue in education for more than 40 years, and because for a period there were alleged to be private "segregation academies" in the South and elsewhere (Devins 1989, Ravitch 1991), information about current minority enrollments and trends in those enrollments are of interest. The percentage enrollment of students in different racial-ethnic groups is shown in table 2.5. The percentage of minority students in private schools was substantial (22 percent), although less than in public schools (31 percent). Nevertheless, the overall percentage of black students in private schools was only half that in public schools in the late 1980s, a continuing legacy of social, economic, and historical forces.

In the perspective of these historical issues, it is interesting to note that a trend for increased minority enrollment in private schools, apparent between 1987-88 and 1990-91, continues a long-term trend to include more minority students in private schools (Benson and McMillen 1991). Whether this trend is the result of schools' efforts to attract minority students, provision of tuition reductions or scholarships to offset economic disparities, increasing percentages of minority families who can afford to pay for private education for their children, or a combination of factors, remains an interesting question, not answered by SASS.

Modest variation in average percentages of minorities across categories of private schools is apparent in table 2.5. Catholic schools were serving greater percentages of Hispanic students than others; and overall, Seventh-Day Adventists appear to have attracted more minorities to their schools than others have: in 1990-91, 40 percent of students in their schools were minorities. Finally, increases in Asian student enrollments in nonsectarian private schools from 1987-88 to 1990-91 can be noted in table 2.5.

**Table 2.4-- Percentage of sex of students and of all-girls, all-boys, and coeducational schools in 1987-88 and 1990-91, by affiliation**

	Average Percent Male		Percent of Schools Co-ed		Percent of Schools All-Girls		Percent of Schools All-Boys	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	50.8	50.3	96.0	95.9	2.0	2.0	2.0	2.1
Total Public	51.3	51.2	99.8	NA	0.1	NA	0.1	NA
Catholic	49.3	48.8	93.6	93.3	3.9	4.1	2.5	2.6
Episcopal	50.6	53.0	89.0	92.6	2.3	3.5	8.7	3.9
Friends	54.0	50.9	100.0	97.9	0.0	2.1	0.0	0.0
Seventh-Day Adventist	49.5	45.7	99.1	95.8	0.9	1.5	0.0	2.7
Hebrew Day	47.6	50.9	65.9	75.3	13.0	5.5	21.1	19.1
Solomon Schechter	51.2	51.3	100.0	100.0	0.0	0.0	0.0	0.0
Other Jewish	--	47.8	--	73.5	--	10.0	--	16.5
Christian Schools Intl	50.2	48.5	100.0	100.0	0.0	0.0	0.0	0.0
Assoc of Christn Schls Intl	49.6	51.1	100.0	100.0	0.0	0.0	0.0	0.0
Lutheran, Missouri Synod	49.5	49.5	100.0	100.0	0.0	0.0	0.0	0.0
Lutheran, Wisconsin Synod	--	50.0	--	100.0	--	0.0	--	0.0
Evangelical Lutheran	46.6	52.1	100.0	100.0	0.0	0.0	0.0	0.0
Other Lutheran	51.7	45.9	100.0	100.0	0.0	0.0	0.0	0.0
Montessori	52.1	50.1	100.0	100.0	0.0	0.0	0.0	0.0
Schools for Exceptional Children	64.8	67.9	95.8	96.9	1.9	0.0	2.3	3.1
Natl Assoc of Independent Schools (only)	53.6	53.4	95.8	86.6	1.5	6.2	2.7	7.3
Military	--	--	--	46.6	0.0	0.0	70.2	53.4
Other Private Schools	52.2	51.3	97.5	98.9	0.9	0.1	1.7	1.0
Catholic	49.2	48.8	93.6	93.3	4.0	4.1	2.5	2.6
Parochial	49.3	48.3	99.7	98.4	0.3	1.5	0.0	0.1
Diocesan	48.4	50.4	95.6	95.6	3.5	2.1	1.0	2.3
Private order	50.8	46.7	53.9	56.3	26.5	25.5	19.6	18.2
Other religious	49.8	49.4	98.0	97.6	0.8	0.7	1.2	1.7
Conservative Christian	49.3	49.9	100.0	98.8	0.0	0.0	0.0	1.2
Affiliated	50.1	49.0	97.1	96.7	1.1	1.5	1.8	1.8
Unaffiliated	50.1	49.4	96.6	97.3	1.5	0.4	1.9	2.3
Nonsectarian	56.0	55.1	96.0	96.5	1.1	1.3	3.0	2.2
Regular	53.5	51.9	97.1	95.4	1.0	2.8	1.8	1.8
Special emphasis	53.9	51.4	96.3	97.1	0.0	0.2	3.7	2.8
Special education	68.5	69.5	91.9	98.1	3.5	0.0	4.5	1.9
All members of NAIS	52.4	52.2	85.3	84.4	7.9	8.5	6.8	7.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: NA These data not collected.

**Table 2.5-- Percentage of students in different minority groups in 1987-88 and 1990-91, by affiliation**

	American Indian		Asian		Hispanic		Black Non-Hispanic		Total Minority	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.5	0.6	3.2	4.1	7.1	8.6	8.1	8.3	18.9	21.7
Total Public	1.1	1.0	2.5	2.9	9.4	11.1	16.3	16.2	29.3	31.2
Catholic	0.4	0.3	3.5	3.4	9.8	12.2	7.7	9.3	21.5	25.2
Episcopal	0.1	0.2	9.0	9.1	2.9	4.2	8.3	9.7	20.4	23.2
Friends	0.1	0.2	4.2	3.8	2.8	2.2	9.0	10.4	16.1	16.7
Seventh-Day Adventist	0.9	0.2	6.0	13.2	11.4	12.5	19.7	14.8	38.0	40.7
Hebrew Day	0.0	0.0	0.1	2.5	2.0	0.7	0.1	0.7	2.2	3.9
Solomon Schechter	0.0	0.0	--	1.1	--	1.9	--	0.4	2.2	3.5
Other Jewish	--	0.0	--	0.2	--	1.6	--	0.4	--	2.2
Christian Schools Intl	0.8	1.5	1.0	2.8	3.4	3.8	3.6	6.0	8.8	14.2
Assoc of Christn Schls Intl	0.3	0.9	3.2	5.1	5.6	6.5	7.0	5.3	16.1	17.7
Lutheran, Missouri Synod	0.1	0.1	2.4	2.4	3.4	3.2	11.9	7.7	17.8	13.4
Lutheran, Wisconsin Synod	--	2.2	--	0.8	--	1.3	--	2.0	--	6.3
Evangelical Lutheran	--	0.3	--	5.8	--	4.5	--	9.8	20.3	20.4
Other Lutheran	0.2	--	0.6	--	1.6	--	2.3	--	4.5	8.3
Montessori	0.3	2.3	5.5	10.8	9.4	4.7	9.1	10.5	24.2	28.3
Schools for										
Exceptional Children	0.0	0.4	1.3	1.9	3.8	7.9	10.7	14.9	15.8	25.1
Natl Assoc of										
Independent Schools (only)	1.2	0.1	4.2	9.1	1.9	2.4	4.2	5.8	11.4	17.5
Military	0.1	--	1.7	4.3	8.1	7.7	8.2	7.6	18.1	19.7
Other Private Schools	0.6	1.7	2.2	3.6	3.7	4.4	9.9	8.1	16.4	17.8
Catholic	0.4	0.3	3.5	3.4	9.8	12.2	7.7	9.3	21.4	25.2
Parochial	0.4	0.3	3.5	3.0	9.9	12.7	8.7	9.7	22.6	25.8
Diocesan	0.4	0.3	2.1	3.0	8.3	11.0	6.3	8.1	17.1	22.5
Private order	0.4	0.3	5.8	6.0	11.7	12.7	5.4	10.2	23.3	29.3
Other religious	0.4	0.9	2.3	4.2	4.0	4.6	7.9	6.3	14.6	15.9
Conservative Christian	0.3	1.4	2.3	4.4	5.1	5.5	6.1	6.6	13.8	18.0
Affiliated	0.5	0.6	2.8	4.0	3.9	4.2	7.4	7.0	14.6	15.8
Unaffiliated	0.3	0.5	1.2	4.1	2.7	3.5	11.4	4.4	15.6	12.4
Nonsectarian	0.9	1.3	4.0	6.7	3.9	3.9	9.6	8.9	18.4	20.8
Regular	0.7	1.6	4.3	7.2	2.5	3.2	7.7	6.8	15.2	18.8
Special emphasis	1.4	0.8	4.1	7.4	5.7	4.2	10.5	10.7	21.7	23.1
Special education	0.4	0.7	0.9	1.4	8.3	8.2	19.9	19.6	29.5	29.9
All members of NAIS	0.8	0.1	5.9	8.7	2.5	3.1	4.9	6.6	14.0	18.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Table 2.6-- Percentage of schools with different concentrations of minority students in 1987-88 and 1990-91, by affiliation**

	None		1 - 10%		11 - 30%		31 - 50%		> 50%	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	20.2	17.9	40.5	36.8	20.0	21.4	6.0	10.6	13.3	13.4
Total Public	7.7	7.0	40.9	39.3	18.9	19.9	11.7	12.9	20.8	20.9
Catholic	10.0	8.5	47.7	45.0	18.7	18.9	5.2	10.4	18.4	17.2
Episcopal	4.5	1.4	45.2	39.2	35.7	33.5	3.1	9.3	11.4	16.6
Friends	1.9	3.9	31.8	19.8	48.7	61.2	10.5	11.3	7.1	3.9
Seventh-Day Adventist	25.2	24.8	14.1	11.4	38.0	26.0	6.1	21.1	16.6	16.8
Hebrew Day	66.4	57.5	28.0	32.4	0.0	7.8	3.5	0.0	2.1	2.2
Solomon Schechter	--	40.4	--	50.6	--	6.7	0.0	0.0	0.0	2.2
Other Jewish	--	50.4	--	31.8	--	15.3	--	2.5	--	0.0
Christian Schools Intl	11.5	6.7	70.6	52.4	11.4	21.9	0.6	1.2	5.9	17.8
Assoc of Christn Schls Intl	16.1	11.6	45.2	38.3	22.3	27.8	6.2	12.9	10.2	9.3
Lutheran, Missouri Synod	17.7	14.2	52.2	48.9	14.6	19.0	4.6	10.0	10.9	7.9
Lutheran, Wisconsin Synod	--	37.4	--	52.8	--	4.8	--	2.5	--	2.5
Evangelical Lutheran	--	3.5	--	41.3	0.0	27.4	--	7.1	--	20.7
Other Lutheran	40.4	--	50.2	--	2.6	--	2.2	0.0	4.6	--
Montessori	5.2	4.3	35.9	23.1	39.5	32.5	6.3	27.5	13.0	12.6
Schools for Exceptional Children	2.4	1.4	28.4	28.8	55.9	46.5	10.6	7.7	2.7	15.6
Natl Assoc of Independent Schools (only)	2.6	0.9	55.7	41.6	30.1	46.8	5.3	5.7	6.3	5.1
Military	0.0	0.0	--	5.4	78.7	78.4	--	16.2	0.0	0.0
Other Private Schools	32.7	31.7	32.5	29.0	16.8	17.4	7.4	9.6	10.6	12.3
Catholic	10.0	8.5	47.7	45.0	18.8	18.9	5.3	10.4	18.2	17.2
Parochial	11.5	9.4	46.3	45.3	17.0	17.7	6.3	11.3	18.8	16.2
Diocesan	6.8	8.4	58.3	50.1	20.2	18.0	1.3	6.1	13.5	17.4
Private order	6.4	3.6	37.7	29.0	26.9	28.1	5.9	15.9	23.0	23.3
Other religious	32.7	29.2	37.1	33.2	17.2	18.6	4.7	9.2	8.3	9.8
Conservative Christian	28.9	17.6	41.2	36.8	18.3	24.3	4.0	9.8	7.6	11.5
Affiliated	24.5	23.9	39.7	37.4	19.5	18.3	6.6	9.1	9.7	11.3
Unaffiliated	46.8	51.1	29.2	22.8	13.3	11.8	3.1	8.7	7.6	5.6
Nonsectarian	9.7	7.4	35.2	30.0	29.0	33.3	10.3	14.3	15.7	15.0
Regular	11.9	9.2	44.4	35.8	22.8	32.4	7.1	10.9	13.8	11.8
Special emphasis	8.8	6.4	30.4	27.0	34.6	37.2	9.7	18.8	16.5	10.6
Special education	6.1	5.0	20.9	22.6	32.9	27.5	20.6	13.4	19.4	31.5
All members of NAIS	2.0	0.9	47.4	41.6	38.7	42.3	5.6	6.9	6.3	8.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

As in public schools, the percentage of minority enrollments varies dramatically between schools. Variations in percentages of minority enrollments are shown in table 2.6. During 1990-91, 18 percent of private schools had no minority students (compared to 7 percent of public schools), and 24 percent had more than 30 percent minority students (compared to 34 percent of public schools). The greater prevalence of private schools without any minority students is partially an artifact of the smaller sizes of private schools: some small schools would be expected by chance to have no minorities, but virtually no large schools would; and nearly one-quarter of private schools had fewer than 50 students, compared to 2 percent of public schools.

On the one hand, more than a third of Jewish schools, Wisconsin Synod Lutheran schools, and religiously oriented but unaffiliated schools had no minority students. On the other hand, nearly all members of NAIS, special education schools, Friends schools, Evangelical Lutheran schools, Catholic Private-Order schools, and Montessori schools had at least some minority students. Overall, there has been a slight but noticeable tendency toward racial-ethnic balance in the distribution of minority students across schools: in the three years from 1987-88 to 1990-91, the overall percentage of private schools with more than 10 percent but fewer than 50 percent minority students rose from 26 to 32 percent of all private schools.

## **Summary**

The types of children attending private elementary and secondary schools in America differ significantly from children in public schools. Because private schools charge tuitions, private school students tend to come from families with the financial resources to purchase an education for their children and with the commitment to make the investment in education with particular goals. That is not to say, of course, that all parents of children in public schools lack either financial resources or commitment to a good education for their children. The difference is in the average, and there is wide variation from that average. Furthermore, there is wide variation among private schools, and many, especially at the elementary level, have low tuitions and attract low-income students.

More than a quarter of private schools require admissions tests, which may limit enrollments in those schools. Private schools are more often than not located in and around large metropolitan centers and are more available to students in those communities. Girls and boys attend private schools in almost equal numbers, and do so predominantly in coeducational settings. Children of all racial and ethnic groups attend private schools in the United States, and the proportions of minority students in private schools continues to rise; however, relative to their numbers in the population, only half as many blacks attend private schools as public schools.



### 3 Teachers and Principals

The quality of education that children receive depends on the quality of their teachers and the quality of the school environment that principals are instrumental in creating. The Schools and Staffing Survey has collected information on individuals who teach in and administer private schools, and these individuals differ from public school teachers and principals in many ways. Similarly, principals and teachers in the different types of private schools differ from each other. They differ by age, years of experience, educational degrees, certification, school roles, educational goals, salaries, job satisfaction, and rates of turnover. In spite of these differences, teaching in public and private schools is very similar in many ways, and many teachers move between private and public teaching jobs during their careers. In order to gain a full understanding of private schools in America, it is necessary to learn about the teachers and principals in those schools.

#### Highlights

- In 1990-91, 356,000 teachers taught in private schools, nearly one-eighth of all elementary and secondary teachers in the country. Staffing differed from public schools: in private schools there were relatively few support staff per teacher (one for every seven teachers, compared to one for every five in public schools); and both teachers and other staff were more likely to be part-time than in public schools (table 3.1).
- The number of special education teachers and vocational education teachers employed in typical private schools is small, but the number of foreign language teachers is relatively high (table 3.2).
- The objective qualifications of private school teachers and principals, on average, are less than those of public school teachers and principals.

Over 30 percent of private school teachers are not certified in the field of their main assignment, compared to 2 percent of public school teachers (table 3.3).

More than 50 percent of private school teachers have fewer than 10 years' experience, compared to fewer than 40 percent of public school teachers (table 3.3).

Six percent of private school teachers do not have a bachelor's degree, compared to fewer than 1 percent of public school teachers;

and 32 percent have at least a master's degree, compared to 47 percent of public school teachers (table 3.5).

Over one-third of private school principals have no degree beyond a bachelor's degree, compared to 2 percent of public school principals (table 3.9).

- Both principals and teachers in private schools are, on average, younger than their public school counterparts (tables 3.4 and 3.8).
- Private school teachers earn base salaries, on average, less than two-thirds of average public school teachers' salaries; and principals earn slightly more than half their public school counterparts' salaries (table 3.12). Private school teachers, on the other hand, are more likely to receive in-kind compensation: 14 percent receive tuition waivers for their children, 11 percent receive free meals, and 8 percent receive college tuition support (table 3.13). Such in-kind compensation is rarely available to public school teachers.
- On all measures of job satisfaction, private school teachers are more satisfied than public school teachers (table 3.12). They feel that they have more influence on school policies and more control over their classroom practices (table 3.11).
- Annual teacher turnover in private schools is at a rate of about 1 in 8, compared to 1 in 12 in public schools (table 3.14); and while most private schools have vacancies, their principals do not generally perceive serious difficulty filling those vacancies (table 3.16). When vacancies are unfilled, both public and private schools most commonly use substitute teachers, but private schools are more likely than public schools to solve the problem by adding to others' teaching loads (table 3.17).

### **Characteristics and Qualifications of Teachers**

In 1990-91, there were 356,000 private school teachers and 2,559,000 public school teachers in the United States. As shown in table 3.1, many private school teachers (18 percent of the total) were part-time teachers, almost double the percentage of part-time teachers among public school teachers (10 percent of the total). Part-time teachers play an especially important role in Jewish schools, where they account for nearly half of all teachers. At the other extreme, teachers at special education schools for exceptional children were rarely less than full-time.

**Table 3.1-- Number of teachers, of full-time equivalent (FTE) teachers, of other staff, and percentage full time as reported by schools in 1990-91, by affiliation**

	FTE Teachers	# Teachers	% Full Time	# Other Staff	% Full Time
Total Private	301,880	356,286	81.7	52,309	62.7
Total Public	2,346,983	2,559,488	89.8	485,321	74.0
Catholic	129,606	149,769	84.6	16,957	61.5
Episcopal	7,011	8,368	79.5	1,030	55.9
Friends	1,431	1,662	78.7	156	61.2
Seventh-Day Adventist	4,660	5,386	81.1	613	51.0
Hebrew Day	3,331	4,799	52.1	453	42.4
Solomon Schechter	1,148	1,525	56.6	257	57.0
Other Jewish	5,189	7,849	51.8	934	58.1
Christian Schools Intl	6,835	7,823	82.7	779	43.3
Assoc of Christn Schls Intl	20,143	23,347	78.5	4,186	36.2
Lutheran, Missouri Synod	8,556	11,445	82.0	1,544	25.5
Lutheran, Wisconsin Synod	2,019	2,449	79.1	196	17.2
Evangelical Lutheran	1,707	1,892	87.4	337	60.0
Other Lutheran	--	--	79.0	--	--
Montessori	3,562	5,152	78.8	3,028	64.2
Schools for					
Exceptional Children	4,021	4,574	93.8	2,548	93.0
Natl Assoc of					
Independent Schools (only)	33,671	39,282	81.7	3,428	68.4
Military	--	--	89.2	46	90.4
Other Private Schools	67,922	79,768	82.1	15,714	71.9
Catholic	129,606	149,769	84.6	16,957	61.5
Parochial	64,623	75,571	84.2	10,333	57.8
Diocesan	41,710	47,371	85.9	4,440	61.1
Private order	23,273	26,826	83.3	2,184	79.9
Other religious	103,723	125,695	77.1	16,995	45.7
Conservative Christian	37,415	43,865	78.6	7,011	44.0
Affiliated	42,483	53,970	73.5	6,252	41.4
Unaffiliated	23,825	27,860	81.6	3,733	56.1
Nonsectarian	68,551	80,822	83.7	18,357	79.5
Regular	40,259	46,990	82.6	5,871	72.3
Special emphasis	18,356	22,796	82.1	5,614	66.1
Special education	9,936	11,036	91.4	6,872	96.6
All members of NAIS	49,772	58,333	81.7	5,311	71.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Survey).

Note: -- Too few cases for a reliable estimate.

Note: Percentages full time are based on responses at the school level. Teachers' responses gave 84.6 percent of private and 91.7 percent of public school teachers as full time in 1990-91 (Choy, Henke, et al. 1993).

In most schools, teachers are supported by librarians and media specialists, teaching aides, and noninstructional personnel. In private schools in 1990-91, there was, on the average, one other such staff for every seven teachers, compared to one other staff for every five teachers in public schools. Thus, in most private schools, teachers had fewer support staff than in public schools. The major exceptions were special education schools, in which more than a third of the staff were in the support categories. In both sectors, other than at special education schools, many of the support staff were part time (one in three in private schools and one in four in public schools).

The distribution of teachers across fields of specialization is an indication of the curricular emphasis of different types of schools. For example, if some schools especially emphasized science, one would expect a greater percentage of their teachers to have assignments specializing in science. Fields of specialization are quite different for teachers who teach in elementary grades and teachers who teach in secondary grades, as shown in tables 3.2a and 3.2b.<sup>14</sup> The distribution of private school teachers across fields of specialization in main assignments was similar to the distribution of public school teachers, but there were significant differences in special education, vocational education, and languages. As shown in figure 3.1, private schools assigned fewer teachers to special education and vocational education, as an aggregate, and more teachers to foreign language instruction. In 1990-91, 11 percent of teachers in both elementary and secondary grades in public schools taught special education, compared to 2 percent and 4 percent, respectively, in private schools.

The availability of science teachers is particularly important because of the important role of science instruction in preparing students to pursue careers in science, engineering, and technology. In 1990-91, the percentages of teachers assigned to teach science in secondary grades were comparable across types of schools. In the case of conservative Christian schools, this represented a significant increase from 1987-88—from 6 percent of their teachers to 13 percent.

---

<sup>14</sup> Teachers who taught in several grades were categorized in this table according to the majority of their classrooms. The substantial percentages of general elementary teachers teaching in Catholic and other religiously oriented secondary schools reflects the structuring of seventh and eighth grades as elementary in many schools.

**Table 3.2a-- Percentage distribution of grades K-6 teachers, by main field of assignment in 1990-91 and affiliation**

	Total Number of K-6 Teachers	% Ele- mentary	% Special Education	% Vocational Education	% Science	% Foreign Language	% Mathe- matics	% Social Studies	% Other Specialty
Total Private	193,175	71.6	2.1	0.0	1.3	1.2	2.3	1.5	20.0
Total Public	1,324,154	66.0	10.5	0.1	1.2	0.2	1.9	0.9	19.1
Catholic	71,437	71.2	0.7	0.0	2.0	0.4	3.2	1.8	20.8
Episcopal	2,951	58.6	0.0	0.0	0.8	5.4	2.8	2.5	29.9
Friends	550	62.4	2.9	0.0	0.4	1.2	1.4	0.0	31.7
Seventh-Day Adventist	2,466	87.8	0.0	1.0	0.5	0.0	0.0	0.0	10.7
Hebrew Day	2,107	56.8	6.2	0.0	4.0	6.3	4.1	0.0	22.6
Solomon Schechter	1,199	52.0	1.0	0.0	1.4	7.0	7.8	0.0	30.8
Other Jewish	2,421	60.9	0.0	0.0	2.4	5.4	0.0	1.3	30.0
Christian Schools Intl	4,596	71.6	0.8	0.0	0.3	0.0	0.0	1.3	25.9
Assoc of Christn Schls Intl	14,084	82.4	4.5	0.0	1.5	0.0	0.3	1.0	10.3
Lutheran, Missouri Synod	7,948	88.4	0.7	0.0	1.5	0.4	0.6	0.0	8.5
Lutheran, Wisconsin Synod	1,561	95.6	0.5	0.0	0.5	0.0	0.0	0.0	3.4
Evangelical Lutheran	1,613	75.9	0.3	0.0	0.3	0.2	1.0	0.0	22.3
Other Lutheran	434	89.2	0.0	0.0	1.1	0.0	1.3	0.0	8.4
Montessori	3,816	78.2	0.4	0.0	1.2	2.8	1.3	0.0	16.1
Schools for Exceptional Children	909	--	--	0.0	0.0	0.0	--	--	--
Natl Assoc of Independent Schools (only)	12,395	49.8	1.9	0.0	0.9	3.1	3.6	1.1	39.7
Military	10	--	--	--	--	--	--	--	--
Other Private Schools	42,266	70.4	5.1	0.0	0.8	2.0	2.4	1.9	17.5
Catholic	71,437	71.2	0.7	0.0	2.0	0.4	3.2	1.8	20.8
Parochial	48,658	72.8	0.8	0.0	2.6	0.5	3.3	2.0	17.9
Diocesan	19,023	69.4	0.4	0.0	0.4	0.0	2.1	0.9	26.8
Private order	3,756	59.9	0.2	0.0	1.8	1.3	7.2	2.7	26.8
Other religious	70,337	77.4	1.8	0.0	0.9	1.4	1.2	1.1	16.1
Conservative Christian	24,247	82.0	2.6	0.0	0.9	0.0	0.6	0.8	13.2
Affiliated	32,060	73.5	1.2	0.1	1.1	2.0	2.2	1.1	18.8
Unaffiliated	14,030	78.0	1.6	0.0	0.4	2.7	0.0	2.0	15.3
Nonsectarian	31,036	55.9	7.2	0.0	1.3	2.9	3.3	1.6	27.8
Regular	19,392	59.0	2.1	0.0	0.7	2.3	4.2	1.1	30.8
Special emphasis	9,290	61.5	3.3	0.0	1.2	4.8	2.2	1.8	25.2
Special education	2,354	8.5	65.2	0.0	6.9	0.0	0.3	5.2	13.8
All members of NAIS	17,177	52.2	1.6	0.0	0.8	2.8	3.4	0.9	38.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91.

Note: -- Too few cases for a reliable estimate.

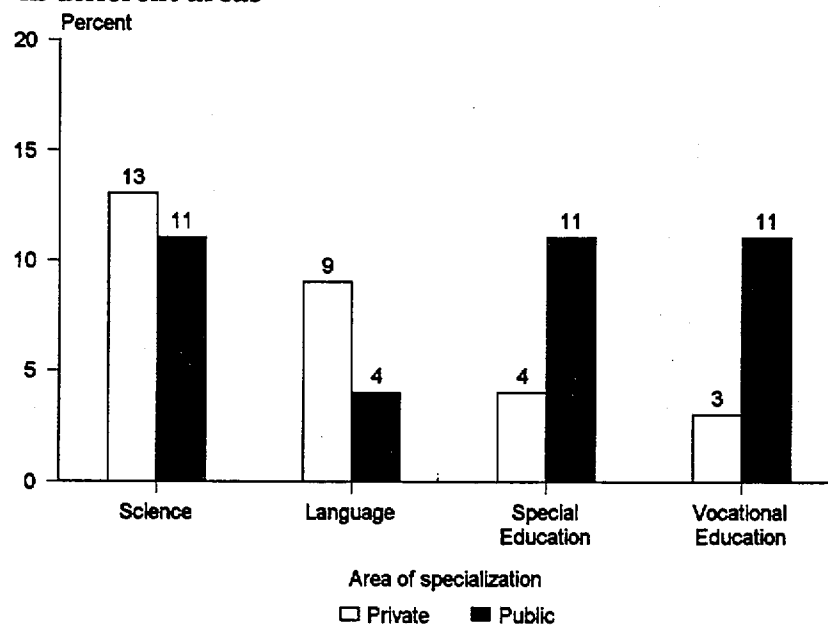
**Table 3.2b-- Percentage distribution of grades 7-12 teachers, by main field of assignment in 1990-91 and affiliation**

	Total Number of 7-12 Teachers	% Ele- mentary	% Special Education	% Vocational Education	% Science	% Foreign Language	% Mathe- matics	% Social Studies	% Other Specialty
Total Private	163,111	4.8	3.9	2.9	12.8	8.7	15.2	11.6	40.1
Total Public	1,235,333	1.1	10.9	10.9	10.8	4.5	11.8	10.6	39.4
Catholic	64,205	3.3	1.0	2.9	13.5	9.4	16.2	11.5	42.2
Episcopal	2,674	2.3	0.0	0.0	11.6	11.8	23.3	7.4	43.6
Friends	901	5.0	1.1	0.0	14.5	17.0	9.1	9.1	44.2
Seventh-Day Adventist	1,451	29.1	0.0	7.5	12.1	2.5	9.7	1.7	37.4
Hebrew Day	1,572	0.0	1.2	0.0	9.6	15.3	10.9	14.0	49.0
Solomon Schechter	442	--	0.0	0.0	--	--	--	--	68.9
Other Jewish	1,263	4.1	0.7	0.0	1.0	13.1	24.1	8.8	48.2
Christian Schools Intl	3,187	7.2	3.5	0.9	10.2	2.1	26.6	6.9	42.6
Assoc of Christn Schls Intl	7,714	2.9	0.8	4.2	8.0	2.4	10.8	13.7	57.2
Lutheran, Missouri Synod	3,218	28.7	1.2	1.6	15.1	3.1	11.4	7.2	31.8
Lutheran, Wisconsin Synod	787	41.5	0.0	3.3	4.6	1.2	5.6	11.6	32.1
Evangelical Lutheran	632	4.9	3.4	0.9	1.6	0.8	19.2	37.0	32.2
Other Lutheran	160	--	0.0	0.0	0.0	--	0.0	0.0	--
Montessori Schools for	185	--	--	--	--	--	--	--	--
Exceptional Children	3,010	2.0	56.0	2.6	1.8	1.6	9.1	8.4	18.3
Natl Assoc of Independent Schools (only)	21,122	0.1	4.1	1.4	12.8	21.0	14.8	9.2	36.6
Military	622	0.0	0.0	2.6	11.2	7.5	25.5	14.3	38.9
Other Private Schools	32,230	7.9	7.3	4.0	16.1	3.6	14.9	13.3	32.8
Catholic	64,205	3.3	1.0	2.9	13.5	9.4	16.2	11.5	42.2
Parochial	19,741	7.1	0.0	2.6	17.2	3.7	18.0	12.9	38.6
Diocesan	22,754	2.7	2.1	3.5	11.2	10.0	18.3	12.4	39.8
Private order	21,711	0.5	0.9	2.6	12.6	13.9	12.2	9.2	48.1
Other religious	45,397	10.6	1.7	2.9	12.2	5.6	14.5	11.2	41.4
Conservative Christian	15,462	11.8	0.6	2.3	13.1	3.5	14.1	9.5	45.2
Affiliated	19,183	10.7	1.1	2.2	11.2	6.8	17.2	9.0	41.8
Unaffiliated	10,753	8.6	4.5	4.9	12.7	6.2	10.3	17.6	35.2
Nonsectarian	36,101	1.1	12.1	2.5	13.1	12.5	15.1	11.5	32.1
Regular	22,351	0.1	1.4	2.8	15.7	17.3	17.1	12.6	32.9
Special emphasis	6,322	4.2	2.7	2.7	10.0	9.9	23.0	9.4	38.0
Special education	7,428	1.2	51.9	1.5	7.9	0.2	2.6	10.0	24.6
All members of NAIS	32,555	0.2	3.7	1.2	12.7	18.0	14.5	9.1	40.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Figure 3.1-- Percentages of grade 7 - 12 private and public school teachers specializing in different areas**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (Teacher Questionnaire).

**Education, certification, age, and experience.** While it is impossible to capture the essential characteristics of "good teachers," certain measurable characteristics of teachers are commonly associated with the quality of experiences a teacher brings to a classroom. These include collegiate and professional degrees earned, certification, and prior years of teaching (Choy, Bobbitt, et al. 1993).

State certification in one's main assignment field plays less of a role in the hiring of private school teachers than it does for public school teachers. The only states that require certification of all private school teachers are Hawaii, Idaho, Iowa, Michigan, and North Dakota. A few other states require certification under certain circumstances.

In 1990-91, as shown in table 3.3, 64.4 percent of private school teachers were certified in their main assignment field, compared to 97.5 percent of public school teachers. There were many variations in this finding, however. Three quarters of teachers at Catholic and NAPSEC member schools (i.e., schools providing special education for exceptional children) were certified in their main field; on the other hand, only slightly more than half of the teachers at other private schools were certified in their main field. This difference reflects a difference in values both between schools and between potential teachers. Many private school boards and principals view the preparation represented by the teacher certification process as only a limited picture of a candidate's potential to teach, whereas the public has supported legal requirements for the certification of public school teachers (Choy, Bobbitt, et al. 1993). Likewise, many aspiring teachers may see teaching at private schools as a more attractive alternative than pursuit of teacher certification, especially in the short term.

Although some private school teachers have a great deal of experience teaching, there are also many new teachers in private schools. As shown in table 3.3, 16 percent of private school teachers had fewer than 3 years' teaching experience in 1990-91, compared to 12 percent of public school teachers. Furthermore, 53 percent of private school teachers had fewer than 10 years' experience, compared to 36 percent for public school teachers. Substantial amounts of movement between public and private teaching markets occur, and it would appear that teachers are more likely to take jobs in private schools early in their careers than late. In 1988, about 9,500 private school teachers transferred to public schools, and about 5,800 teachers transferred from public to private schools (Rollefson 1993). Conservative Christian and other religiously oriented but unaffiliated schools are especially open to new and inexperienced teachers, employing teachers in 1990-91 almost a quarter of whom had less than 3 years' teaching experience and two-thirds of whom had fewer than 10 years' experience. On average, teachers at Catholic Private-Order and Missouri Synod Lutheran schools, at the other extreme, had amounts of teaching experience similar to public school teachers.



**Table 3.3-- Percentage of teachers certified and with varying levels of experience in 1987-88 and 1990-91, by affiliation**

	<u>% Teachers Certified</u>	<u>% Teachers &lt; 3 Yrs.</u>		<u>% Teachers 3 - 9 Yrs.</u>		<u>% Teachers 10 - 20 Yrs.</u>		<u>% Teachers &gt; 20 Yrs.</u>	
	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	64.4	16.5	16.5	38.8	36.9	32.8	33.3	11.5	13.3
Total Public	97.5	10.7	11.6	26.0	24.4	44.3	40.9	18.9	23.1
Catholic	75.9	14.1	14.4	36.3	33.7	34.6	35.0	15.0	16.9
Episcopal	45.8	14.2	11.9	34.5	35.6	36.2	36.7	15.2	15.8
Friends	55.8	10.6	15.7	41.9	27.6	36.1	40.2	10.9	16.5
Seventh-Day Adventist	45.1	10.4	13.6	31.8	27.0	37.2	37.1	20.1	22.3
Hebrew Day	64.0	10.4	13.4	40.9	40.0	34.1	34.3	11.8	12.3
Solomon Schechter	69.8	--	11.2	--	27.7	--	49.6	--	11.4
Other Jewish	52.3	--	17.3	--	43.1	--	31.6	--	8.1
Christian Schools Intl	67.9	13.2	16.7	44.1	38.4	29.9	31.9	12.9	13.0
Assoc of Christn Schls Intl	58.9	24.9	22.0	47.5	44.3	23.7	28.4	3.7	5.3
Lutheran, Missouri Synod	71.5	12.8	11.1	29.3	24.6	39.7	45.2	17.8	19.2
Lutheran, Wisconsin Synod	32.0	--	13.2	--	29.8	--	40.2	--	16.8
Evangelical Lutheran	83.2	--	12.3	--	43.5	--	40.7	--	3.5
Other Lutheran	52.4	18.0	--	39.4	44.1	31.3	--	11.3	--
Montessori	50.9	15.6	19.3	43.4	49.4	35.3	25.6	5.8	5.6
Schools for Exceptional Children	78.3	19.4	21.6	57.8	49.5	17.9	22.8	4.9	6.0
Natl Assoc of Independent Schools (only)	50.2	15.1	13.2	35.1	33.8	38.9	38.0	10.9	15.0
Military	66.1	16.5	19.5	26.4	30.6	37.3	33.5	19.8	16.4
Other Private Schools	55.4	21.2	22.0	43.0	42.6	28.4	27.4	6.3	8.0
Catholic	75.9	14.0	14.4	36.3	33.7	34.6	35.0	15.1	16.9
Parochial	78.9	15.1	16.5	39.4	37.0	31.5	31.8	14.1	14.7
Diocesan	77.3	13.9	13.5	34.4	31.3	37.3	38.0	14.3	17.2
Private order	65.7	10.9	10.0	29.2	29.0	40.7	38.5	19.1	22.5
Other religious	55.9	18.9	18.8	42.1	39.4	30.0	31.6	8.4	10.2
Conservative Christian	49.7	22.8	22.2	52.0	44.7	21.6	28.1	2.6	5.1
Affiliated	60.3	12.8	14.2	36.1	34.3	36.3	37.1	14.4	14.4
Unaffiliated	56.8	24.3	22.6	38.6	40.7	30.8	26.6	6.2	10.0
Nonsectarian	57.4	17.5	16.9	38.7	38.8	33.6	32.7	9.4	11.6
Regular	58.1	16.7	13.3	36.9	34.1	35.6	37.7	10.6	14.9
Special emphasis	41.3	14.3	19.4	38.5	43.4	36.1	28.5	9.1	8.7
Special education	80.6	30.5	27.0	48.6	49.3	16.1	20.3	3.7	3.4
All members of NAIS	52.4	14.1	12.7	34.1	33.9	40.4	37.6	11.4	15.7

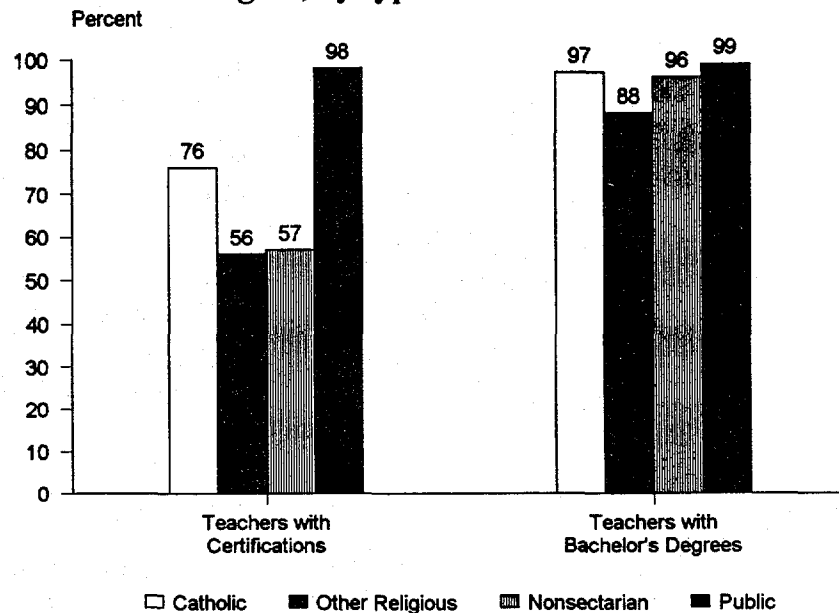
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

As shown in figure 3.2, most Catholic and nearly all public school teachers were certified and held a bachelor's degree. However, only slightly more than half of other religiously oriented private school teachers were certified in their main assignment field; and only seven in eight teachers at other religiously oriented schools had earned a bachelor's degree.

**Figure 3.2-- Percentages of teachers certified in their main assignment field and holding a bachelor's degree, by type of school**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (Teacher Questionnaire).

Although nearly all teachers are expected to be college graduates, some private schools place less importance on collegiate degrees as a criterion for hiring teachers than public schools do. As shown in table 3.4, while there were almost no public school teachers (0.7 percent) without bachelor's degrees, 6 percent of private school teachers had not obtained such a degree. There was substantial variation among types of private schools in the employment of teachers without bachelor's degrees. On the one hand, one-sixth of teachers at conservative Christian and other religiously oriented unaffiliated schools had not obtained bachelor's degrees; on the other hand, fewer than 3 percent of teachers at Catholic schools, Missouri Synod Lutheran schools, Friends schools, NAIS members, military schools, and special education schools had not obtained a degree.

**Table 3.4-- Percentage of teachers with different highest degree obtained in 1990-91, by affiliation**

	Percent less than Bachelor's	Percent Bachelor's	Percent Master's	Percent Ed. Prof.	Percent Doctorate
Total Private	6.4	61.9	27.0	2.9	1.8
Total Public	0.7	51.9	42.1	4.6	0.8
Catholic	2.6	65.1	28.5	2.7	1.1
Episcopal	3.4	48.9	37.5	5.3	4.8
Friends	0.6	42.1	46.1	4.7	6.6
Seventh-Day Adventist	5.0	57.1	36.0	1.0	0.8
Hebrew Day	10.2	45.6	37.2	4.5	2.6
Solomon Schechter	3.3	60.3	32.8	2.4	1.3
Other Jewish	15.3	48.7	27.3	5.9	2.8
Christian Schools Intl	4.8	65.3	28.4	1.4	0.0
Assoc of Christn Schls Intl	13.1	66.4	16.5	2.9	1.1
Lutheran, Missouri Synod	1.5	75.4	21.3	1.9	0.0
Lutheran, Wisconsin Synod	7.0	75.1	16.8	1.2	0.0
Evangelical Lutheran	2.4	56.5	31.3	9.7	0.0
Other Lutheran	7.2	63.5	22.9	5.5	1.0
Montessori	15.1	53.2	14.2	17.5	0.0
Schools for Exceptional Children	0.3	55.5	42.0	0.8	1.4
Natl Assoc of Independent Schools (only)	2.3	50.8	38.2	3.5	5.3
Military	0.0	59.1	32.8	5.0	3.1
Other Private Schools	13.4	62.4	19.8	2.9	1.6
Catholic	2.6	65.1	28.5	2.7	1.1
Parochial	2.6	74.3	20.6	1.8	0.7
Diocesan	3.4	64.8	27.6	2.9	1.4
Private order	1.1	41.0	51.0	5.1	1.8
Other religious	12.0	61.1	23.0	2.6	1.3
Conservative Christian	17.5	62.6	17.3	2.0	0.6
Affiliated	5.6	63.2	27.3	2.6	1.3
Unaffiliated	16.2	54.5	23.3	3.6	2.4
Nonsectarian	3.7	58.0	30.1	4.6	3.6
Regular	2.4	58.8	30.8	4.0	4.0
Special emphasis	8.8	57.1	23.9	6.6	3.6
Special education	1.2	56.3	36.9	4.2	1.4
All members of NAIS	2.1	49.4	39.6	4.2	4.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

There was similar variation with regard to advanced degrees. Nearly 70 percent of private school teachers held no more than a bachelor's degree, whereas nearly half (47.5 percent) of the public school teachers in 1990-91 held some advanced degree. The frequency of advanced degrees ranged from 20 percent of teachers in conservative Christian schools to roughly half of teachers in Catholic Private-Order schools, NAIS member schools, Episcopal schools, and Friends schools.

The difference in years of teaching experience between private and public school teachers is related to the ages of the teachers in these schools. As shown in table 3.5, private school teachers were younger on the average than public school teachers. Six percent of private school teachers were under 25 in 1990-91, compared to only 3 percent of public school teachers; and only 51 percent of private school teachers were over 40, compared to 59 percent of public school teachers. Different types of private schools tended to hire the youngest teachers or retain the oldest teachers. Significantly more (13 percent) of the teachers at conservative Christian schools were under 25 years of age than at other schools; and nearly two-thirds of teachers at special education schools for exceptional children were under 40.

Generally, the average age of both public and private school teachers crept upward during the period from 1987 to 1990, as 8 percent more teachers were over 40 in 1990 than in 1987. This was especially evident at schools that were members of NAIS, where only two in every five teachers were over 40 in 1987, but three in every five were in 1990.

**Table 3.5-- Percentage of teachers in different age ranges in 1987-88 and 1990-91, by affiliation**

	Percent Younger than 25		Percent 25 - 39		Percent 40 - 54		Percent 55 or Older	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	7.0	6.0	49.3	42.8	33.8	40.5	9.9	10.7
Total Public	3.3	2.9	45.7	37.8	42.1	49.7	8.8	9.5
Catholic	6.3	5.8	46.6	40.5	35.2	40.2	11.9	13.5
Episcopal	11.2	3.1	50.1	41.2	33.5	42.6	5.1	13.0
Friends	6.9	4.8	53.0	50.0	34.2	39.4	5.9	5.9
Seventh-Day Adventist	3.6	3.5	41.4	42.0	40.6	42.4	14.4	12.0
Hebrew Day	5.3	5.8	40.5	36.5	44.3	40.4	9.9	17.3
Solomon Schechter	0.4	1.4	52.5	29.4	46.1	54.6	1.0	14.5
Other Jewish	--	6.2	--	47.4	--	40.6	--	5.8
Christian Schools Intl	4.9	13.4	59.0	36.0	31.7	41.0	4.4	9.6
Assoc of Christn Schls Intl	8.2	7.6	61.0	54.0	22.3	33.7	8.4	4.8
Lutheran, Missouri Synod	10.3	6.1	50.9	48.7	33.6	39.4	5.1	5.7
Lutheran, Wisconsin Synod	--	8.6	--	42.2	--	41.4	--	7.9
Evangelical Lutheran	--	3.4	--	40.9	--	52.2	--	3.5
Other Lutheran	8.6	7.3	52.5	57.8	30.5	25.8	8.4	9.1
Montessori	2.8	6.3	49.8	39.2	41.5	50.5	5.9	4.1
Schools for Exceptional Children	13.8	2.8	64.0	62.7	15.5	25.0	6.7	9.5
Natl Assoc of Independent Schools (only)	6.7	2.6	57.5	39.4	29.2	47.4	6.6	10.5
Military	2.6	5.3	50.8	33.7	40.6	46.8	6.0	14.1
Other Private Schools	8.0	8.0	50.5	46.9	32.7	36.7	8.8	8.4
Catholic	6.3	5.8	46.6	40.5	35.2	40.2	12.0	13.5
Parochial	7.0	6.6	48.0	44.2	32.8	35.0	12.2	14.2
Diocesan	7.3	5.3	43.8	40.7	36.7	42.9	12.3	11.0
Private order	2.4	4.2	45.2	30.2	41.3	49.6	11.1	16.0
Other religious	8.4	8.4	52.0	46.0	30.8	38.1	8.8	7.5
Conservative Christian	7.6	10.6	61.1	47.0	25.0	36.7	6.4	5.6
Affiliated	7.8	6.5	47.1	44.6	34.4	40.4	10.7	8.5
Unaffiliated	10.7	8.8	48.4	47.4	32.2	35.6	8.7	8.2
Nonsectarian	6.3	3.0	55.7	44.2	32.2	42.5	5.8	10.3
Regular	4.4	3.0	57.1	41.4	32.3	43.4	6.2	12.3
Special emphasis	6.5	2.4	50.1	42.2	37.4	48.5	6.0	6.9
Special education	15.1	4.3	63.4	59.1	18.1	29.3	3.4	7.2
All members of NAIS	6.5	2.5	56.4	38.4	30.6	47.9	6.5	11.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

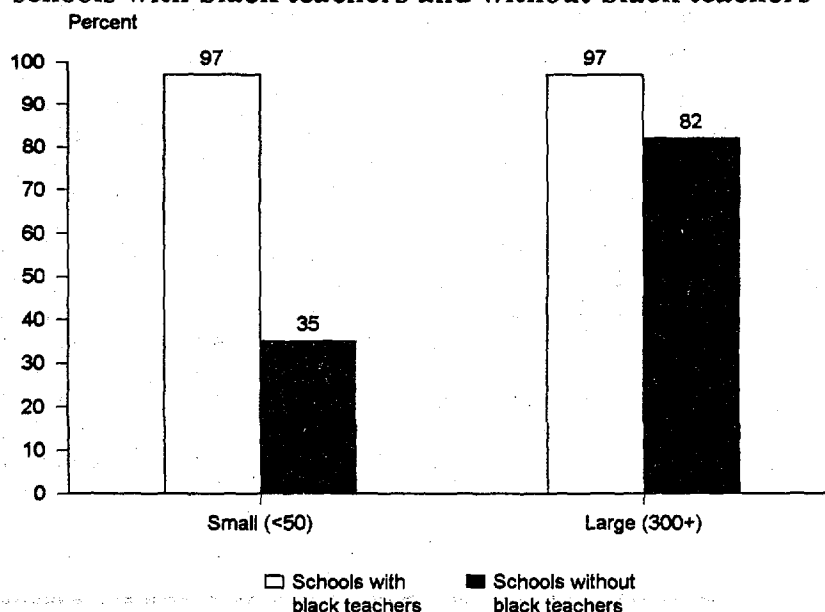
Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Sex and race-ethnicity.** As a career, teaching is not unlike other careers in America, in which there has long been sex stereotyping and in which whites hold a higher proportion of the white-collar professional positions than do minorities. As shown in table 3.6, teaching in both public and private schools is predominantly an occupation held by women. In 1990-91, 77 percent of private school teachers and 72 percent of public school teachers were women. The figure for private schools was virtually unchanged since 1985-86 (Benson and McMillen 1991, 63). The percentage of teachers who are women was greatest at the elementary level—89 percent of elementary private school teachers were women, compared to 56 percent of teachers who taught grades 9-12.

For the most part, the race-ethnic distributions of private school teachers, shown in table 3.6, were comparable to the distributions in public schools. The largest difference was for black teachers, who represented 2.7 percent of private school teachers and 8.3 percent of public school teachers.

With few exceptions in private schools, black teachers taught only in schools where there were also black students. In 97 percent of the private schools with at least one black teacher, there were also black students, whereas in only 64 percent of other private schools were there black students. As shown in figure 3.3, this was not an artifact of school size (i.e., black teachers' greater likelihood of teaching in large schools, where black students would also be more likely to attend).

**Figure 3.3-- Percentages of schools with some black students, among large and small schools with black teachers and without black teachers**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (School Questionnaire).

**Table 3.6-- Percentage of teachers of different sex, race, and ethnicity in 1987-88 and 1990-91, by affiliation**

	% Male		% American Indian		% Asian		% Black Non-Hispanic		% White Non-Hispanic		% Hispanic	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	21.8	22.9	0.9	0.4	1.3	1.5	2.3	2.7	92.8	92.2	2.8	3.3
Total Public	29.5	28.1	1.1	0.8	0.9	1.1	8.2	8.3	87.2	86.5	2.9	3.4
Catholic	16.0	18.6	1.2	0.6	1.2	1.3	2.1	2.6	91.7	91.9	4.1	3.8
Episcopal	22.0	26.0	0.1	1.3	7.6	2.2	2.7	4.8	88.7	86.2	0.9	5.5
Friends	32.8	30.3	0.0	0.0	0.4	0.1	8.2	1.1	91.5	95.3	0.0	3.5
Seventh-Day Adventist	44.7	30.2	0.4	1.3	3.0	5.6	5.5	10.6	84.5	80.1	6.6	2.7
Hebrew Day	24.8	25.1	0.5	0.0	0.0	3.8	1.8	0.0	97.0	93.6	0.7	2.6
Solomon Schechter	9.6	6.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	96.2	0.0	3.8
Other Jewish	--	19.3	--	0.1	--	0.0	--	1.8	--	96.0	--	2.1
Christian Schools Intl	33.1	30.0	0.0	0.7	0.0	1.5	0.6	0.6	96.0	96.1	3.4	1.3
Assoc of Christn Schls Intl	22.0	20.8	0.0	0.6	0.1	2.1	1.0	2.0	97.1	92.7	1.7	2.7
Lutheran, Missouri Synod	29.3	25.1	1.3	0.1	0.1	0.8	0.6	0.2	97.9	98.0	0.1	0.9
Lutheran, Wisconsin Synod	--	43.4	--	0.4	--	0.0	--	0.0	--	98.6	--	1.0
Evangelical Lutheran	--	9.3	0.0	0.4	0.0	0.0	--	1.8	77.2	97.5	0.0	0.4
Other Lutheran	45.3	33.3	1.9	0.0	1.5	0.0	0.0	0.8	95.9	99.2	0.7	0.0
Montessori	4.8	8.9	0.5	1.0	11.1	6.2	5.4	0.0	79.9	89.0	3.5	4.4
Schools for Exceptional Children	26.2	26.3	3.9	0.6	0.0	0.7	1.5	2.4	94.6	88.9	0.0	7.4
Natl Assoc of Independent Schools (only)	33.6	33.9	0.5	0.1	0.4	1.4	0.3	2.5	96.4	92.0	2.5	4.0
Military	80.7	67.7	0.0	2.7	0.0	2.6	0.0	0.0	98.9	92.4	1.1	2.3
Other Private Schools	22.7	25.3	0.3	0.3	0.6	1.6	2.9	3.8	95.0	92.3	1.5	2.2
Catholic	16.1	18.6	1.2	0.6	1.2	1.3	2.1	2.6	91.8	91.9	4.1	3.8
Parochial	9.3	11.4	1.4	0.8	0.9	1.4	2.4	2.6	92.3	91.7	3.3	3.9
Diocesan	22.2	20.9	1.3	0.6	1.1	1.2	2.0	2.0	93.1	92.0	2.5	4.2
Private order	32.0	34.0	0.6	0.2	2.4	1.0	0.8	3.3	88.3	92.4	8.8	3.2
Other religious	24.5	24.1	0.3	0.4	1.0	1.6	2.5	2.2	94.7	93.7	1.7	2.1
Conservative Christian	23.6	25.1	0.2	0.3	0.1	1.9	1.0	1.7	96.7	94.1	2.1	1.9
Affiliated	25.8	24.6	0.5	0.4	2.1	1.6	2.7	2.6	93.5	93.3	1.6	2.2
Unaffiliated	23.4	21.7	0.1	0.5	0.2	1.2	4.3	2.1	94.1	94.0	1.3	2.3
Nonsectarian	28.5	29.9	0.6	0.3	1.1	1.8	1.9	3.8	94.4	90.4	2.0	3.7
Regular	29.3	31.1	0.4	0.3	0.3	2.0	1.4	3.0	96.0	90.7	1.9	4.1
Special emphasis	28.1	28.4	0.7	0.5	3.1	2.0	2.0	5.2	91.5	89.8	2.9	2.5
Special education	26.1	27.3	1.5	0.1	0.0	1.0	4.3	5.1	94.2	89.7	0.0	4.2
All members of NAIS	31.4	31.9	0.3	0.2	1.8	1.6	0.8	2.2	95.1	92.2	2.0	3.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

Nearly all schools with black teachers had some black students, whether the school was small or large, but schools with no black teachers were less likely to have any black students. There were no black students at 65 percent of the small schools (those with fewer than 50 students) without a black teacher. Large schools (those with more than 300 students) with no black teacher were likely (82 percent) to have some black students. However, there were no black students at 18 percent of these large schools, compared to 3 percent of large schools with at least one black teacher.

### **Characteristics and Qualifications of Principals**

At private schools even more than at public schools, principals and headmasters determine the characteristics of their schools, and it is therefore important to be aware of the ways in which principals differ (Kane and Mason 1992). In 1990-91, there were 23,881 private school principals and 78,890 public school principals in the United States. As shown in table 3.7, principals in different types of schools generally had comparable amounts of experience, both as teachers prior to becoming administrators and as principals. On average, a principal had taught for about 10 years, then was principal at another school for 3 years, and finally was principal in his or her current position for 5 or 6 years, a combined total of just under 20 years. The major departure from this average was in Missouri Synod Lutheran Schools, where principals with substantially more experience as principals were employed in 1990-91: an average of about 14 years, after 8 years' teaching.

More principals at private schools, like teachers at those schools, were in the first half of their careers than their public school counterparts. As shown in table 3.8, although private school principals were, on average, slightly older in 1990-91 than in 1987-88, one fourth of private school principals were under 40 years of age in 1990-91, compared to one-seventh of public school principals.

Private schools were less constrained than public schools to employ principals with college degrees, as shown in table 3.9. Whereas virtually no individuals without bachelor's degrees held positions as public school principals in 1990-91, 13 percent of conservative Christian school principals, and 34 percent of unaffiliated, religiously oriented school principals lacked a bachelor's degree.<sup>15</sup> Most public school principals (98 percent in 1990-91) held a degree beyond the bachelor's level, whereas only about two-thirds of all private school principals held a degree beyond the bachelor's level. The size of this disparity varied across types of private schools, however; at military schools, Catholic Private-Order schools, and nonsectarian special education schools, more than 90 percent of the principals did hold advanced degrees.

---

<sup>15</sup> The large value for principals at Montessori schools (16 percent) was not statistically significant.



**Table 3.7-- Principals' experience in teaching and administering, and salary in 1987-88 and 1990-91, by affiliation**

	Number of Principals		Yrs Teaching		Yrs Principal at school		Yrs Principal elsewhere		Salary	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	25,401	23,881	9.7	9.4	5.1	5.5	2.9	3.2	\$18,716	\$25,562
Total Public	77,890	78,890	9.3	10.5	6.2	5.7	3.7	3.6	\$40,809	\$49,603
Catholic	9,211	8,098	14.0	13.7	4.7	4.7	4.0	4.3	\$15,673	\$21,840
Episcopal	315	367	11.1	11.1	4.7	5.8	3.0	3.4	\$32,381	\$38,237
Friends	74	54	8.7	9.9	6.6	5.5	0.8	2.1	\$33,584	\$44,275
Seventh-Day Adventist	1,087	1,027	7.8	6.1	2.9	3.1	3.8	5.7	\$20,576	\$25,613
Hebrew Day	250	134	7.9	8.5	6.0	9.3	4.6	3.6	\$29,688	\$43,624
Solomon Schechter	--	46	--	9.6	--	4.0	--	4.6	\$55,412	\$52,774
Other Jewish	--	252	--	9.6	--	5.7	--	4.4	--	\$42,612
Christian Schools Intl	306	388	7.7	7.6	5.4	4.6	6.4	4.5	\$24,546	\$30,939
Assoc of Christn Schls Intl	1,756	1,741	6.1	7.1	4.2	5.3	2.2	2.2	\$17,528	\$22,131
Lutheran, Missouri Synod	1,162	981	7.9	8.0	7.7	8.0	6.1	6.0	\$24,300	\$29,551
Lutheran, Wisconsin Synod	--	405	--	3.0	--	6.8	--	3.9	--	\$21,627
Evangelical Lutheran	--	105	--	10.5	--	4.9	--	1.5	\$22,332	\$27,139
Other Lutheran	406	--	3.5	--	6.1	6.5	2.5	--	\$18,033	\$18,617
Montessori	524	580	5.7	6.9	8.2	7.8	0.9	0.5	\$17,328	\$28,970
Schools for										
Exceptional Children	244	277	8.3	9.3	7.3	8.3	0.5	1.6	\$35,513	\$44,872
Natl Assoc of										
Independent Schools (only)	759	825	10.7	10.8	6.3	6.2	2.9	2.6	\$40,942	\$59,488
Military	--	17	9.2	9.4	10.7	9.3	--	0.7	\$35,774	\$41,488
Other Private Schools	7,664	6,392	6.5	5.8	5.0	5.8	1.2	1.5	\$17,023	\$22,607
Catholic	9,142	8,098	14.0	13.7	4.7	4.7	4.0	4.3	\$15,724	\$21,840
Parochial	6,337	5,039	14.7	13.6	4.6	4.8	4.5	4.5	\$14,135	\$21,076
Diocesan	1,841	2,238	12.3	13.9	5.0	4.4	2.7	3.7	\$17,780	\$22,320
Private order	964	820	12.8	13.8	5.1	4.9	2.9	4.2	\$22,245	\$25,222
Other religious	10,287	9,862	6.4	6.2	4.7	5.4	2.6	2.9	\$17,986	\$22,738
Conservative Christian	3,939	3,534	5.2	5.8	4.0	5.1	2.0	1.7	\$13,733	\$18,809
Affiliated	4,019	3,868	7.5	7.5	5.5	6.3	3.9	4.2	\$23,236	\$28,523
Unaffiliated	2,329	2,460	6.5	4.9	4.2	4.6	1.2	2.3	\$16,120	\$19,289
Nonsectarian	4,611	3,802	8.4	8.4	6.6	6.9	1.5	1.8	\$26,226	\$40,392
Regular	2,108	1,681	9.8	9.1	6.4	7.1	2.3	2.9	\$26,914	\$43,106
Special emphasis	1,696	1,370	7.4	7.6	6.7	6.5	1.0	0.9	\$23,013	\$35,016
Special education	807	751	6.7	8.3	7.2	7.3	0.8	1.3	\$31,182	\$44,120
All members of NAIS	1,164	1,349	10.9	11.1	6.5	6.0	2.7	2.9	\$39,121	\$52,479

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Table 3.8-- Percentage of principals in different age ranges in 1987-88 and 1990-91, by affiliation**

	Percent Younger than 25		Percent 25 - 39		Percent 40 - 54		Percent 55 or Older	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.4	0.4	29.9	24.9	51.0	53.7	18.7	21.0
Total Public	0.1	0.0	18.6	13.5	63.4	68.6	17.9	17.8
Catholic	0.0	0.0	20.7	18.7	54.1	52.6	25.2	28.7
Episcopal	0.0	0.0	24.7	12.2	56.0	58.6	19.3	29.2
Friends	0.0	0.0	19.7	21.7	57.0	58.7	23.3	19.6
Seventh-Day Adventist	1.3	0.0	35.5	23.5	42.5	60.8	20.6	15.7
Hebrew Day	0.0	1.8	26.2	22.7	59.9	59.6	13.9	15.8
Solomon Schechter	0.0	0.0	--	19.0	--	72.1	--	8.8
Other Jewish	--	0.0	--	18.1	--	59.4	--	22.6
Christian Schools Intl	0.0	0.0	28.7	36.7	62.0	49.6	9.2	13.7
Assoc of Christn Schls Intl	0.0	0.0	36.6	29.9	52.2	56.4	11.3	13.7
Lutheran, Missouri Synod	0.0	0.0	29.4	21.8	55.7	55.3	14.9	22.8
Lutheran, Wisconsin Synod	--	12.2	--	49.1	--	33.1	--	5.6
Evangelical Lutheran	0.0	0.0	--	23.5	--	51.3	--	25.2
Other Lutheran	10.1	0.0	62.9	--	25.9	--	1.1	--
Montessori	1.0	0.0	40.9	32.7	48.5	56.0	9.6	11.4
Schools for Exceptional Children	0.0	0.0	27.1	29.2	59.1	56.8	13.9	14.0
Natl Assoc of Independent Schools (only)	0.0	0.0	15.7	16.9	57.9	65.8	26.4	17.3
Military	0.0	0.0	--	12.1	--	36.4	--	51.5
Other Private Schools	0.3	0.7	39.0	33.5	46.4	49.3	14.2	16.5
Catholic	0.0	0.0	20.7	18.7	54.2	52.6	25.1	28.7
Parochial	0.0	0.0	17.6	20.4	55.1	48.8	27.3	30.8
Diocesan	0.0	0.0	31.7	18.3	48.2	55.3	20.1	26.4
Private order	0.0	0.0	19.9	9.3	59.9	68.2	20.2	22.5
Other religious	0.8	0.9	38.9	30.0	46.3	53.8	14.1	15.3
Conservative Christian	0.2	0.0	41.6	33.7	46.4	52.4	11.8	13.9
Affiliated	0.9	1.3	32.7	24.1	50.7	55.5	15.7	19.1
Unaffiliated	1.4	1.6	45.0	33.8	38.4	53.2	15.2	11.3
Nonsectarian	0.1	0.1	28.7	29.2	54.9	51.3	16.3	19.4
Regular	0.0	0.3	20.0	24.1	55.2	47.6	24.8	28.1
Special emphasis	0.3	0.0	33.6	32.0	58.4	57.5	7.7	10.5
Special education	0.0	0.0	40.8	35.4	46.8	48.1	12.4	16.5
All members of NAIS	0.0	0.0	15.0	15.9	59.5	65.9	25.5	18.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Table 3.9-- Percentage of principals with different highest degree obtained in 1987-88 and 1990-91, by affiliation**

	Percent less than Bachelor's		Percent Bachelor's		Percent Master's		Percent Ed. Prof.		Percent Doctorate	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	5.0	7.3	25.6	26.9	51.2	47.4	12.2	11.5	6.0	6.8
Total Public	0.3	0.0	2.5	1.8	53.3	60.5	35.2	28.2	8.7	9.5
Catholic	0.1	0.0	13.0	15.8	65.6	63.6	19.3	16.5	1.9	4.1
Episcopal	0.5	0.0	27.2	26.3	52.1	46.4	14.5	13.6	5.7	13.8
Friends	1.6	2.0	11.8	21.4	60.6	49.0	18.0	9.9	8.0	17.7
Seventh-Day Adventist	2.3	0.0	42.9	42.7	44.4	44.9	6.2	6.2	4.2	6.2
Hebrew Day	4.6	0.0	11.1	11.7	25.7	37.1	22.3	21.0	36.2	30.2
Solomon Schechter	0.0	0.0	0.0	21.0	--	35.7	--	13.3	--	30.0
Other Jewish	--	6.2	--	20.6	--	45.7	--	15.0	--	12.5
Christian Schools Intl	0.0	2.6	17.4	26.2	73.8	52.2	4.8	16.0	4.0	3.0
Assoc of Christn Schls Intl	13.9	5.7	34.6	37.6	38.8	40.9	3.4	10.5	9.2	5.2
Lutheran, Missouri Synod	0.1	0.1	28.5	21.4	63.3	71.9	4.5	4.8	3.6	1.9
Lutheran, Wisconsin Synod	--	0.0	--	73.8	--	22.7	--	2.7	--	0.7
Evangelical Lutheran	0.0	1.0	--	31.2	--	55.0	--	10.9	--	1.9
Other Lutheran	0.0	--	79.4	--	20.1	--	0.0	--	0.5	0.0
Montessori	5.2	15.7	51.4	35.7	19.1	26.0	22.3	19.9	2.0	2.8
Schools for Exceptional Children	0.6	0.0	4.2	20.0	58.4	59.1	14.1	10.5	22.7	10.4
Natl Assoc of Independent Schools (only)	1.4	0.3	5.1	16.2	60.9	58.9	12.8	7.8	19.9	16.8
Military	0.0	0.0	--	6.1	76.4	42.4	--	--	--	24.2
Other Private Schools	12.0	21.4	34.3	37.2	38.4	26.8	7.8	5.6	7.5	9.1
Catholic	0.1	0.0	12.9	15.8	65.8	63.6	19.2	16.5	1.9	4.1
Parochial	0.2	0.0	11.1	17.6	67.0	65.9	20.8	13.5	1.0	3.0
Diocesan	0.2	0.0	18.7	15.0	66.7	59.2	10.9	20.4	3.6	5.3
Private order	0.0	0.0	13.5	6.5	56.6	61.7	24.9	24.5	5.0	7.2
Other religious	10.6	13.8	36.3	37.2	41.1	36.1	4.3	6.5	7.7	6.5
Conservative Christian	16.7	12.8	36.7	44.6	36.0	29.6	2.1	6.4	8.5	6.6
Affiliated	1.6	1.7	33.8	32.7	49.0	51.1	7.1	8.0	8.4	6.5
Unaffiliated	15.8	34.1	39.9	33.5	36.1	22.0	3.0	4.2	5.2	6.2
Nonsectarian	3.3	6.2	25.6	28.3	44.1	41.7	16.4	11.6	10.5	12.3
Regular	2.2	6.7	28.6	28.4	43.6	42.0	14.5	8.1	11.1	14.7
Special emphasis	6.2	8.8	27.7	38.7	40.1	32.2	16.9	14.0	9.1	6.4
Special education	0.2	0.0	13.7	9.0	53.7	58.5	20.6	14.8	11.8	17.7
All members of NAIS	1.0	0.2	6.6	12.7	61.4	60.6	14.7	11.5	16.4	15.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

Finally, the sex and ethnic distributions of principals add to the picture of private schools in America. First, as shown in table 3.10, about half of the private school principals were men, compared to 70 percent of public school principals. These proportions vary dramatically across categories of private schools, however. Among many categories of private schools, male principals predominated as strongly as in public schools. However, in schools serving elementary grades, Catholic schools, Montessori schools, and special education schools for exceptional children, female principals were the rule. Generally, women as principals were to be found primarily in schools in which women predominated in the teaching force. The average percentage of women among teachers in private schools where the principal was a woman was 89 percent; in schools where the principal was a man, only 70 percent of the teachers were women.

The race-ethnic distributions of principals in public and private schools in 1990-91 were very similar to those of teachers in 1990-91. Black principals, like black teachers, were much rarer in private schools than in public schools, representing 3 percent and 9 percent, respectively. In fact, private schools that appointed a black principal were also much more likely to attract and hire black teachers. The proportion of black teachers in private schools with black principals was 56 percent, compared to 2 percent in schools with a nonblack principal.

**Table 3.10-- Percentage of principals of different sex, race, and ethnicity in 1987-88 and 1990-91, by affiliation**

	% Male		% American Indian		% Asian		% Black		% White		% Hispanic	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	47.8	48.7	0.5	0.6	1.1	0.8	3.0	2.7	93.1	93.7	2.5	2.5
Total Public	75.4	70.0	1.1	0.9	0.6	0.8	8.6	8.6	86.6	85.9	3.2	3.9
Catholic	23.1	22.2	0.3	1.0	0.4	0.0	1.3	1.5	93.9	94.0	4.1	3.8
Episcopal	54.7	35.3	0.0	0.0	3.5	0.3	4.3	8.2	89.5	90.5	6.2	1.0
Friends	53.6	48.6	0.0	0.0	0.0	0.0	3.8	4.0	94.1	96.0	2.0	0.0
Seventh-Day Adventist	54.5	62.4	0.0	0.4	2.3	1.4	8.7	7.9	86.4	88.0	2.6	2.2
Hebrew Day	69.4	85.5	0.0	0.0	0.0	0.0	0.0	0.0	100.0	98.8	0.0	1.2
Solomon Schechter	--	50.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0
Other Jewish	--	59.5	--	0.0	--	0.0	--	0.0	--	99.5	--	0.5
Christian Schools Intl	82.1	68.6	0.0	0.5	0.0	2.1	1.1	0.7	98.4	95.4	0.5	1.3
Assoc of Christn Schls Intl	60.2	68.3	0.4	0.2	1.8	0.1	2.5	1.7	94.5	98.0	0.8	0.0
Lutheran, Missouri Synod	91.9	85.5	0.0	0.0	1.2	0.0	2.3	3.0	96.6	97.0	0.0	0.0
Lutheran, Wisconsin Synod	--	98.1	--	0.0	--	0.0	--	0.0	--	100.0	--	0.0
Evangelical Lutheran	--	45.8	0.0	2.3	0.0	0.0	0.0	3.8	100.0	93.9	0.0	0.0
Other Lutheran	95.5	77.2	1.1	0.0	0.0	0.0	0.0	--	98.9	98.6	0.0	0.0
Montessori	18.7	8.3	0.0	0.8	1.3	5.3	5.7	1.3	91.3	87.7	1.7	5.8
Schools for												
Exceptional Children	41.8	23.3	0.0	0.0	0.0	0.0	0.0	3.6	100.0	95.7	0.0	0.7
Natl Assoc of												
Independent Schools (only)	75.0	68.6	1.7	0.0	1.4	1.5	0.4	0.6	96.6	97.8	1.0	1.1
Military	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	95.5	100.0	--	0.0
Other Private Schools	62.6	65.6	0.9	0.5	1.8	1.2	4.8	3.7	90.8	93.1	2.0	1.7
Catholic	23.1	22.2	0.3	1.0	0.4	0.0	1.2	1.5	93.9	94.0	4.1	3.8
Parochial	14.9	18.4	0.3	1.4	0.6	0.0	0.4	1.4	95.9	94.2	2.8	3.3
Diocesan	38.4	26.3	0.0	0.4	0.0	0.0	3.3	1.4	95.8	93.9	1.0	4.3
Private order	48.4	34.0	0.9	0.0	0.0	0.0	3.0	2.0	77.4	93.0	18.7	4.9
Other religious	70.1	73.0	0.7	0.2	0.9	0.4	3.3	3.5	94.1	95.2	1.1	0.7
Conservative Christian	72.8	77.0	0.8	0.1	0.9	0.3	1.9	2.6	95.2	96.5	1.2	0.5
Affiliated	71.9	74.0	0.1	0.3	1.2	0.4	2.5	4.9	95.3	93.7	1.1	0.8
Unaffiliated	62.2	65.7	1.5	0.2	0.2	0.5	7.1	2.7	90.2	95.7	1.0	0.9
Nonsectarian	49.4	41.2	0.4	0.8	3.2	2.8	5.5	2.5	88.7	91.5	2.9	3.1
Regular	57.3	51.5	0.4	1.9	2.0	3.2	4.1	3.0	92.5	90.7	1.4	2.7
Special emphasis	40.5	34.7	0.7	0.0	6.2	3.4	5.4	1.9	84.5	92.3	4.7	2.7
Special education	47.3	30.3	0.0	0.0	0.0	1.0	9.3	2.4	87.8	91.9	3.0	4.7
All members of NAIS	68.7	60.8	1.1	0.0	1.0	1.0	1.4	3.0	96.2	95.7	0.9	0.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

## Teachers' Roles, Compensation, and Satisfaction

What is it like to be a teacher in a private school? Teachers who responded to SASS gave their impression of the amount of influence they had on school policies and classroom practices, as well as indicators of their job satisfaction and the amount of their compensation. Teachers in private schools generally felt they had more influence on school policies than did public school teachers.<sup>16</sup> As shown in table 3.11, however, these perceptions were particularly strong in two types of schools—Lutheran and Friends. In these schools, significantly more of the teachers than in other schools felt they had a great deal of influence on discipline, in-service training, student grouping, and curriculum-selection policies of their schools.

Generally, teachers felt they had most control over choices of teaching technique, grades, and homework. Teachers in private schools felt they had more control over classroom practices than did public school teachers, but this difference was only noticeable in the areas of selecting content and maintaining discipline. Teachers in Friends schools reported that they had control over classroom practices more than other teachers did.

Based on teachers' reports, not on school salary schedules, average private school teachers' salaries climbed at an annual rate of about 7 percent between 1987-88 and 1990-91. Nevertheless, as shown in table 3.12, the average base salary of private school teachers in 1990-91 was \$18,713, compared to \$30,751 for public school teachers. While much of this difference can be attributed to differences in degrees, certification, and experience, it is nevertheless the case that teachers earn less in private schools than they might in public schools. Many teachers earn extra income, such as by teaching summer school, and among private school teachers in 1990-91 this added an average of 9 percent to their income.

To assess the amount of the difference in public and private school teachers' salaries that is related to qualifications, a simple model was fit to teachers' salaries in 1987-88 and 1990-91. This model assumed that teachers' salaries are, on average, made up of additive components that are determined by their qualifications and by the market for teachers. Although a complete characterization of variation in teachers' salaries is very complex, a simple model will help to understand the relative size of the difference between private school teachers' salaries and public school teachers' salaries. This additive model includes, in addition to the public-private school differential, a measure of education (possession of at least a master's degree), a measure of experience (years teaching), inflation over 3 years, a demographic measure (sex), and a teaching situation measure (departmental versus multiple-subject classroom). Most departmental classrooms were at the secondary level; most self-contained classrooms were at the elementary level. An indicator of whether a

---

<sup>16</sup> Influence and control were assessed on scales from 1 (no influence or control) to 6 (complete influence or control).

**Table 3.11-- Average teacher ratings on policy and control over teaching practices in 1990-91, by affiliation**

	Influence				Classroom Control					
	Disci- pline	In- Service	Group- ing	Curricu- lum	Text- books	Con- tent	Tech- nique	Gra- ding	Disci- pline	Home- work
Total Private	4.4	3.7	3.9	4.3	4.7	5.0	5.6	5.5	5.3	5.4
Total Public	3.7	3.6	3.2	3.6	4.3	4.5	5.4	5.4	4.9	5.4
Catholic	4.3	3.5	4.0	4.1	4.7	4.9	5.6	5.5	5.3	5.5
Episcopal	4.5	3.9	3.9	4.7	5.1	5.3	5.7	5.6	5.3	5.3
Friends	5.0	4.6	4.6	5.4	5.6	5.6	5.8	5.8	5.3	5.8
Seventh-Day Adventist	5.0	3.1	4.3	3.4	3.6	4.4	5.7	5.7	5.4	5.7
Hebrew Day	3.5	3.1	3.5	4.1	4.2	4.8	5.6	5.4	5.3	5.1
Solomon Schechter	4.4	4.1	4.2	4.7	5.0	5.2	5.8	5.5	5.3	5.1
Other Jewish	4.2	3.5	3.7	4.3	4.5	5.0	5.4	5.3	5.1	5.0
Christian Schools Intl	4.2	3.5	3.6	4.4	4.6	4.9	5.5	5.6	5.2	5.4
Assoc of Christn Schls Intl	4.5	3.5	3.6	4.2	4.2	4.6	5.4	5.4	5.2	5.3
Lutheran, Missouri Synod	4.8	4.0	4.2	4.8	4.7	5.1	5.6	5.6	5.3	5.6
Lutheran, Wisconsin Synod	5.1	4.5	4.7	5.3	4.9	5.2	5.7	5.6	5.4	5.7
Evangelical Lutheran	4.6	3.7	4.2	4.8	5.1	5.2	5.7	5.6	5.5	5.8
Other Lutheran	4.9	4.7	4.5	4.7	5.0	5.3	5.6	5.3	5.3	5.6
Montessori	4.9	4.3	4.1	5.1	5.3	5.5	5.4	5.6	5.5	5.5
Schools for Exceptional Children	4.2	4.0	3.7	4.4	5.1	5.1	5.5	5.5	5.0	5.4
Natl Assoc of Independent Schools (only)	4.3	4.1	4.0	4.8	5.4	5.4	5.7	5.6	5.3	5.4
Military	2.4	2.9	2.5	3.7	5.2	5.2	5.6	5.3	4.9	5.2
Other Private Schools	4.3	3.7	3.8	4.3	4.5	4.9	5.4	5.5	5.2	5.4
Catholic	4.3	3.5	4.0	4.1	4.7	4.9	5.6	5.5	5.3	5.5
Parochial	4.4	3.5	4.0	4.0	4.5	4.8	5.6	5.5	5.3	5.4
Diocesan	4.2	3.5	4.0	4.1	4.7	4.9	5.6	5.5	5.2	5.5
Private order	4.2	3.7	3.8	4.5	5.1	5.2	5.7	5.6	5.3	5.7
Other religious	4.4	3.6	3.8	4.3	4.4	4.8	5.5	5.5	5.2	5.4
Conservative Christian	4.4	3.4	3.5	4.0	4.1	4.5	5.4	5.4	5.2	5.3
Affiliated	4.5	3.7	4.0	4.5	4.6	5.0	5.6	5.5	5.3	5.4
Unaffiliated	4.3	3.5	3.9	4.2	4.6	4.9	5.5	5.6	5.3	5.5
Nonsectarian	4.3	4.0	3.9	4.8	5.2	5.3	5.6	5.5	5.3	5.4
Regular	4.2	4.0	3.8	4.8	5.2	5.3	5.6	5.5	5.3	5.4
Special emphasis	4.4	4.3	4.3	5.0	5.3	5.5	5.6	5.5	5.3	5.4
Special education	4.3	3.9	3.9	4.6	5.1	5.2	5.5	5.6	5.2	5.5
All members of NAIS	4.3	4.0	3.9	4.7	5.4	5.4	5.7	5.6	5.3	5.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Ratings are from 1 to 6: 1=none and 6=great deal of influence or complete control.

private school teacher contributed service was also included. The model used, which accounted for about half of the variation in salaries ( $r^2 = .46$ ), added the following salary components to the basic salary of \$10,108, for a female private school teacher in 1987-88 without a master's degree and with no experience, teaching a self-contained class:

- + \$8,983, added for teaching at a public schools;
- + \$4,513, added between 1987-88 and 1990-91;
- + \$4,183, added for 10 years' experience;
- + \$3,883, added for possession of a master's degree;
- + \$1,648, added if male;<sup>17</sup>
- + \$ 294, added if teaching a departmental class.

For example, of two teachers otherwise equal on these factors, if one has a master's degree and the other doesn't, the average amount more that the teacher with the master's degree earns is \$3,883 per year. Thus, instead of the \$12,000 (uncorrected) differential between public and private school teachers' salaries shown in table 3.12, this model estimates a difference of about \$9,000 for teachers who are alike on the other measures included in the model. In addition to the \$9,000 differential, many private school teachers choose to contribute their services, either without pay or with a reduced pay that does not reflect the market, and these teachers report, on average, annual salaries \$5,470 less than other similar private school teachers.

The substantial difference in base salaries between public and private school teachers can be misleading. As shown in table 3.13, many more private school teachers received in-kind benefits than public school teachers. For example, 7 percent received housing support, 11 percent meals, and 14 percent tuition waivers for their children, compared to fewer than 1 percent of public school teachers. Using rough quantitative estimates of the typical prices associated with in-kind income, it is estimated that, on average, private school teachers had about \$1,200 more in-kind benefits, which as shown in figure 3.4, is far less than the differential in base salary.<sup>18</sup>

---

<sup>17</sup> Being male is not to be construed as a "qualification." Other things equal, it suggests the size of the continuing disparity between similarly qualified men's and women's salaries.

<sup>18</sup> The value of each of the in-kind compensations can vary greatly, and no systematic data are available on the distribution of their costs for teachers. The average dollar estimates used in the calculations for the components in 1990-91, based on personal judgments of the authors, are \$4,200 for housing, \$2,400 for meals, \$2,700 for children's tuition waivers, \$2,700 for child care, \$6,000 for college tuition, and \$1,800 for transportation.



**Table 3.12-- Teachers' salaries and satisfaction ratings in 1987-88 and 1990-91, by affiliation**

	Base Salary		Extra Salary		Rating on Teach Again? <sup>1</sup>		Rating on Satisfaction
	87-88	90-91	87-88	90-91	87-88	90-91	90-91
Total Private	\$15,282	\$18,713	\$461	\$1,715	6.8	7.2	8.4
Total Public	\$25,590	\$30,751	\$881	\$1,944	5.3	5.9	7.7
Catholic	\$14,415	\$18,347	\$352	\$1,629	6.7	7.1	8.4
Episcopal	\$17,415	\$21,522	\$174	\$3,503	6.6	6.9	8.7
Friends	\$16,870	\$23,499	\$765	--	7.5	6.8	8.3
Seventh-Day Adventist	\$19,946	\$22,287	\$223	--	6.3	6.2	7.9
Hebrew Day	\$17,383	\$19,273	\$728	--	6.0	6.4	8.3
Solomon Schechter	\$17,769	\$19,354	\$292	--	4.9	6.5	8.4
Other Jewish	--	\$15,911	--	--	--	7.1	8.7
Christian Schools Intl	\$18,026	\$18,293	\$403	\$1,086	6.8	7.9	8.8
Assoc of Christn Schls Intl	\$11,402	\$14,699	\$522	\$1,247	7.9	8.4	8.8
Lutheran, Missouri Synod	\$15,491	\$17,751	\$388	\$1,571	7.0	7.4	8.3
Lutheran, Wisconsin Synod	--	\$17,330	--	--	--	7.5	8.2
Evangelical Lutheran	\$10,988	\$18,734	--	\$1,074	8.9	7.8	8.7
Other Lutheran	\$13,590	\$16,569	\$314	--	7.3	8.8	9.2
Montessori	\$13,998	\$17,251	\$199	--	6.5	6.9	8.6
Schools for							
Exceptional Children	\$18,368	\$24,644	\$929	--	7.0	7.5	8.2
Natl Assoc of							
Independent Schools (only)	\$19,785	\$25,447	\$810	\$1,600	6.4	6.7	8.5
Military	\$16,985	\$21,537	\$944	--	4.4	5.7	7.4
Other Private Schools	\$14,177	\$17,070	\$537	\$1,895	7.0	7.3	8.2
Catholic	\$14,437	\$18,347	\$353	\$1,629	6.7	7.1	8.4
Parochial	\$13,614	\$16,324	\$186	\$1,636	6.9	7.3	8.5
Diocesan	\$14,386	\$17,994	\$454	\$1,363	6.3	7.3	8.4
Private order	\$17,342	\$24,359	\$811	\$1,907	6.7	6.6	8.3
Other religious	\$13,956	\$16,431	\$361	\$1,748	7.3	7.5	8.5
Conservative Christian	\$10,981	\$14,048	\$384	\$1,684	7.8	8.0	8.7
Affiliated	\$16,229	\$18,160	\$355	\$1,898	7.0	7.2	8.4
Unaffiliated	\$13,657	\$16,674	\$339	\$1,371	6.9	7.4	8.3
Nonsectarian	\$18,195	\$23,366	\$806	\$1,782	6.4	6.8	8.3
Regular	\$18,101	\$24,246	\$804	\$1,481	6.1	6.8	8.4
Special emphasis	\$18,424	\$20,648	\$773	\$2,664	6.8	6.6	8.2
Special education	\$18,105	\$23,947	\$906	--	6.7	7.6	8.1
All members of NAIS	\$19,353	\$25,159	\$664	\$1,793	6.4	6.8	8.5

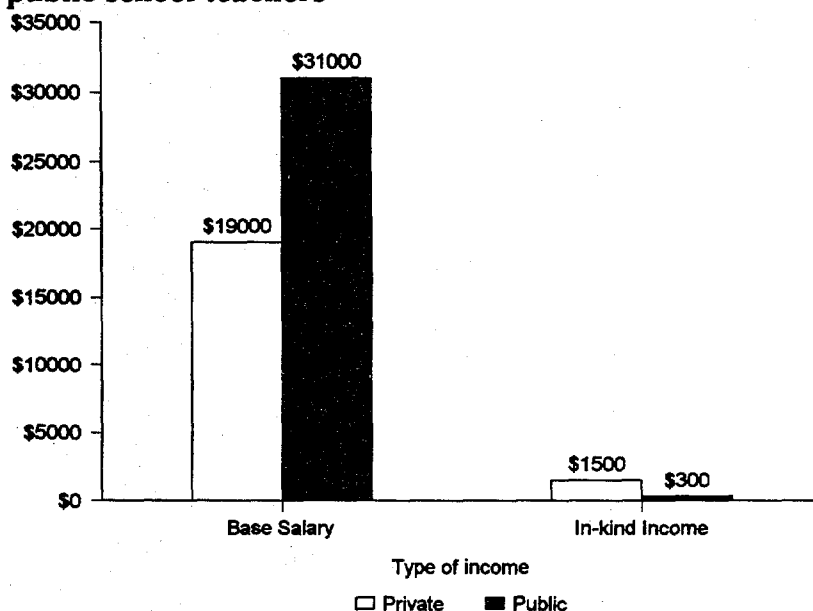
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

<sup>1</sup> This average was based on a five-alternative item, scaled from 0 (certainly would not) to 5 (chances even) to 10 (certainly would).

**Figure 3.4-- Average annual base salary and estimated in-kind income for private and public school teachers**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (Teacher Questionnaire).

Finally, private school teachers rate their school climates as more attractive than do public school teachers (discussed in the following chapter); and this is another form of compensation for their choice to teach in private schools. Overall, the differential loss of compensation for teaching in private schools may well be an order of magnitude smaller, although still substantial, than the uncorrected \$12,000 figure displayed in table 3.12, once differences among the teachers, schools, and students and other sources of compensation are taken into account. Although the benefits would not completely cancel out the salary differential, the greater influence on school policy may contribute to job satisfaction.

Teachers also provided answers to questions about the satisfaction they felt in their jobs, also displayed in table 3.12. On a scale of 0 to 10 of whether they would go into teaching again if they had it to do over,<sup>15</sup> private school teachers averaged 7, compared to between 5 and 6 for public school teachers. On a composite of three questions about satisfaction with teaching (do you like teaching, do you look forward to coming to school each day, does teaching have more advantages than disadvantages), scaled 0 to 10, private school teachers averaged 8.4, compared to 7.7 for public school teachers. Teachers at conservative Christian schools were among the most satisfied, along with teachers in Evangelical and Other Lutheran schools. Teachers in military schools were noticeably less satisfied than other private school teachers.

<sup>15</sup> This scale was derived from answers on an item with four response alternatives for the purpose of comparisons with other attitudinal information collected in SASS.

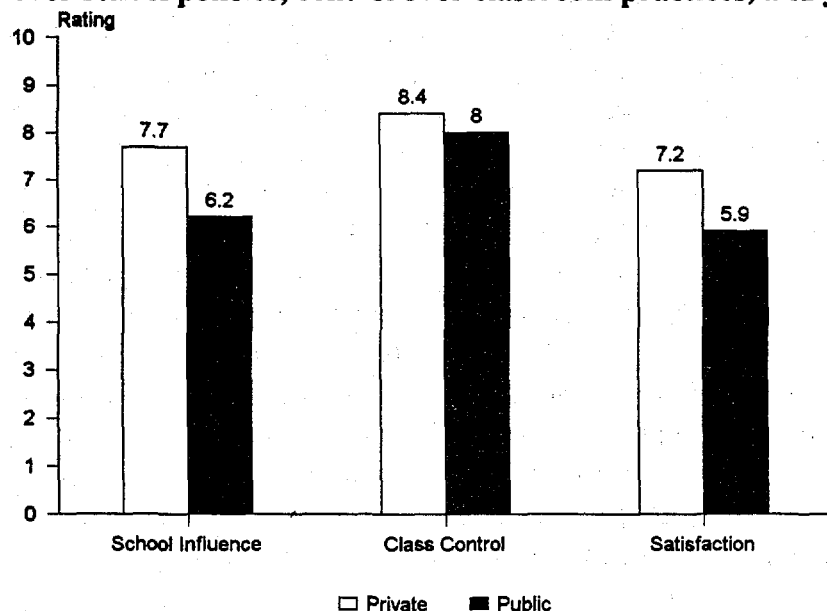
**Table 3.13-- Percentage of teachers reporting different in-kind benefits in 1990-91, by affiliation**

	Housing	Meals	Tuition	Child Care	College	Transport
Total Private	6.9	10.9	13.9	1.7	8.0	3.6
Total Public	0.4	0.3	0.3	0.4	2.9	3.2
Catholic	7.1	8.5	8.1	0.4	6.1	5.0
Episcopal	17.2	30.9	16.6	2.5	9.8	1.1
Friends	4.7	19.7	25.0	5.5	9.9	4.9
Seventh-Day Adventist	8.0	3.0	33.7	1.4	41.8	8.9
Hebrew Day	6.8	12.9	16.5	0.0	0.0	3.5
Solomon Schechter	0.0	0.0	7.9	0.0	7.3	0.0
Other Jewish	4.1	6.3	12.0	6.2	0.3	2.3
Christian Schools Intl	2.8	5.2	23.0	0.1	14.1	1.9
Assoc of Christn Schls Intl	2.2	6.8	26.4	2.9	4.6	3.0
Lutheran, Missouri Synod	16.8	5.2	13.1	3.6	17.9	4.0
Lutheran, Wisconsin Synod	48.2	6.1	5.1	0.3	17.5	9.1
Evangelical Lutheran	1.7	2.7	9.4	1.0	2.2	0.4
Other Lutheran	27.4	0.0	25.1	18.9	19.5	2.1
Montessori	0.7	1.1	22.0	2.8	3.0	1.2
Schools for Exceptional Children	1.1	26.5	2.6	1.9	17.9	4.3
Natl Assoc of Independent Schools (only)	12.4	32.5	17.3	1.3	12.4	3.1
Military	21.7	57.1	12.5	0.0	18.3	1.4
Other Private Schools	3.7	8.4	17.1	2.8	6.8	1.6
Catholic	7.1	8.5	8.1	0.4	6.1	5.0
Parochial	6.1	6.5	8.5	0.3	5.4	3.9
Diocesan	8.6	7.6	7.6	0.7	4.7	7.1
Private order	7.4	15.4	7.6	0.3	10.1	4.2
Other religious	7.5	10.0	21.0	2.9	9.6	3.0
Conservative Christian	4.1	8.6	26.6	4.2	6.5	3.0
Affiliated	10.6	9.9	16.6	2.4	12.4	3.1
Unaffiliated	6.6	12.8	20.9	2.0	8.6	2.8
Nonsectarian	6.4	18.8	13.3	1.5	9.5	1.9
Regular	7.0	22.5	13.3	1.5	9.4	1.5
Special emphasis	6.7	10.8	20.9	1.6	5.7	1.7
Special education	3.7	15.9	0.8	1.1	16.0	3.8
All members of NAIS	11.5	28.6	17.4	1.5	11.9	3.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Putting together the information on the teachers' perceptions of influence and control in the school and their ratings of job satisfaction, as shown in figure 3.5, private school teachers felt that they had more influence on school policies and control over their classroom practices than public school teachers did, and these differences were reflected in answers to job satisfaction questions.

**Figure 3.5-- Average ratings by private and public school teachers of their influence over school policies, control over classroom practices, and job satisfaction**



Note: All measures have been scaled to a range from 0 to 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (Teacher Questionnaire).

## Teacher Turnover

Based on the SASS Survey, in 1990-91 more teachers were hired by schools than left the schools. As shown in tables 3.14 and 3.15, 54,000 newly hired teachers replaced 45,000 teachers who left private schools (either to teach at another public or private school or to quit teaching), and 278,000 newly hired teachers replaced 200,000 teachers who left public schools. That is, in one year there was about a 1-in-8 turnover of private school teachers and 1-in-12 turnover of public school teachers.

Teachers who left teaching were differentiated from teachers who merely moved to a different school. Of the 45,000 private school teachers who left their jobs, only 17,000 left teaching. While a teacher's leaving creates the same burden of replacement on the particular school, no matter what the reason, it is only by leaving teaching altogether (e.g., by retiring or changing careers) that an individual contributes to the need for training new teachers. In table 3.14, the teachers who left teaching are categorized by field of specialization, but in table 3.15, newly hired teachers are counted whether they previously taught elsewhere or not. Therefore, the numbers of newly hired teachers and teachers who left cannot be directly compared in these tables. Nevertheless, a comparison of the breakdown of all teachers by field between private and public schools suggests that the markets are fairly similar—no field stands out as growing particular swiftly or slowly in private schools relative to public schools. On the other hand, comparison of these results with those in table 3.2 indicates a somewhat greater turnover rate among general elementary teachers than others. Although general elementary teachers account for 40 percent of all private school teachers, they represent 50 percent of the teachers who either left teaching or were newly hired by their school.

This similarity in distributions of teachers by field between public and private is corroborated by estimates of the difficulty of attracting teachers to fill vacancies, shown in table 3.16. Respondents indicated on a scale from one ("easy") to four ("could not fill") how difficult it was to fill a vacancy in each field (if there was such a vacancy at the respondent's school). The levels of difficulty associated with scale values of two and three were "somewhat" and "very." Both private and public schools had little difficulty filling vacancies in general elementary or English, but both had noticeable difficulties in special education, science, and languages. Although difficulties are shown for different private school types in table 3.16, caution must be used in interpreting these because of the small numbers of schools with vacancies in any particular field.

**Table 3.14-- Number of teachers who left in 1990-91 in each field of teaching, by affiliation—Continued on next page**

	Total Left School	Total Left Teaching	Field				
			General Elementary	Special Education	English	Mathematics	Physical Sciences
Total Private	44,938	16,920	8,547	673	1,442	1,050	545
Total Public	199,693	63,215	25,334	6,762	5,887	4,253	2,063
Catholic	19,261	6,932	3,377	86	555	517	284
Episcopal	971	331	145	1	36	21	17
Friends	208	48	16	4	3	4	3
Seventh-Day Adventist	688	328	199	0	13	3	8
Hebrew Day	553	110	--	--	--	--	--
Solomon Schechter	146	--	--	--	0	2	2
Other Jewish	773	213	--	0	--	--	--
Christian Schools Intl	955	450	182	5	56	29	22
Assoc of Christn Schls Intl	4,206	1,782	951	0	248	157	50
Lutheran, Missouri Synod	1,341	580	402	11	7	46	5
Lutheran, Wisconsin Synod	195	108	86	0	0	0	1
Evangelical Lutheran	257	90	66	0	0	1	1
Other Lutheran	--	--	--	--	--	--	--
Montessori	589	158	--	0	0	0	0
Schools for Exceptional Children	669	141	--	--	--	0	0
Natl Assoc of Independent Schools (only)	3,767	1,266	407	63	148	11	45
Military	--	--	--	--	--	--	--
Other Private Schools	10,217	4,261	2,391	377	327	129	98
Catholic	19,261	6,932	3,377	86	555	517	284
Parochial	10,852	3,964	2,543	20	308	150	103
Diocesan	5,679	2,071	742	64	116	174	120
Private order	2,729	897	93	1	131	192	61
Other religious	17,191	7,541	4,419	178	673	394	192
Conservative Christian	7,002	3,239	1,783	19	402	228	119
Affiliated	6,189	2,467	1,367	34	195	115	62
Unaffiliated	4,001	1,835	1,269	126	76	51	11
Nonsectarian	8,486	2,448	750	409	214	139	68
Regular	4,450	1,239	453	50	129	95	35
Special emphasis	2,165	846	297	45	70	44	30
Special education	1,872	363	0	313	16	0	3
All members of NAIS	5,657	1,978	559	78	230	230	72

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Table 3.14-- Number of teachers who left in 1990-91 in each field of teaching, by affiliation—Continued**

	Field					
	Biology	English as Second Language	Bilingual Education	Foreign Language	Voc or Tech Education	Other
Total Private	671	9	27	733	239	2,970
Total Public	2,096	385	403	1,890	4,412	12,888
Catholic	330	1	15	264	106	1,396
Episcopal	24	0	0	43	0	43
Friends	4	1	0	1	1	11
Seventh-Day Adventist	2	0	0	7	14	82
Hebrew Day	--	0	0	--	0	--
Solomon Schechter	0	0	0	4	0	5
Other Jewish	--	0	0	--	0	--
Christian Schools Intl	27	0	2	46	7	75
Assoc of Christn Schls Intl	20	0	0	33	27	296
Lutheran, Missouri Synod	3	4	0	23	0	79
Lutheran, Wisconsin Synod	0	0	0	5	0	16
Evangelical Lutheran	8	0	0	10	0	4
Other Lutheran	--	--	--	--	--	--
Montessori	0	0	0	0	0	--
Schools for Exceptional Children	--	0	0	0	0	--
Natl Assoc of Independent Schools (only)	53	2	0	172	0	263
Military	--	--	--	--	--	--
Other Private Schools	177	0	10	97	84	555
Catholic	330	1	15	264	106	1,396
Parochial	113	0	15	39	17	658
Diocesan	144	1	0	121	64	523
Private order	72	0	0	105	26	215
Other religious	213	7	12	242	130	1,065
Conservative Christian	56	0	0	72	94	465
Affiliated	130	5	10	134	24	392
Unaffiliated	26	2	2	36	12	208
Nonsectarian	129	0	0	226	3	509
Regular	55	0	0	145	0	277
Special emphasis	62	0	0	82	3	213
Special education	12	0	0	0	0	19
All members of NAIS	125	3	0	247	24	410

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Table 3.15-- Number of newly hired teachers in each field of teaching in 1990-91, by affiliation—Continued on next page**

	Total New Teachers	Field				
		General Elementary	Special Education	English	Mathematics	Physical Sciences
Total Private	53,721	26,269	2,791	4,439	3,726	2,107
Total Public	277,739	110,138	41,549	20,030	16,599	8,305
Catholic	21,882	11,244	299	1,894	1,519	857
Episcopal	1,206	518	15	99	88	66
Friends	267	98	9	25	20	16
Seventh-Day Adventist	928	505	3	44	69	24
Hebrew Day	672	268	10	68	53	33
Solomon Schechter	194	115	2	4	8	2
Other Jewish	1,195	511	67	64	90	25
Christian Schools Intl	1,087	499	48	121	53	51
Assoc of Christn Schls Intl	5,000	2,725	193	413	467	193
Lutheran, Missouri Synod	1,316	995	9	39	41	44
Lutheran, Wisconsin Synod	292	246	8	4	2	9
Evangelical Lutheran	250	161	16	4	15	2
Other Lutheran	--	--	0	0	--	0
Montessori	813	560	25	26	3	19
Schools for Exceptional Children	624	83	429	8	18	30
Natl Assoc of Independent Schools (only)	4,606	1,251	219	581	456	255
Military	81	4	1	20	--	--
Other Private Schools	13,196	6,404	1,436	1,026	803	475
Catholic	21,882	11,244	299	1,894	1,519	857
Parochial	12,338	7,882	133	909	542	395
Diocesan	6,344	2,866	94	508	464	300
Private order	3,199	496	72	477	513	161
Other religious	21,211	11,372	735	1,537	1,558	757
Conservative Christian	8,447	4,636	396	664	713	270
Affiliated	7,653	3,941	147	538	475	321
Unaffiliated	5,111	2,794	192	335	370	166
Nonsectarian	10,627	3,654	1,757	1,008	648	493
Regular	5,806	2,309	171	625	427	313
Special emphasis	2,968	1,237	136	284	169	158
Special education	1,853	107	1,450	99	52	22
All members of NAIS	6,731	1,721	288	847	702	387

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.



**Table 3.15-- Number of newly hired teachers in each field of teaching in 1990-91, by affiliation—Continued**

	Field					
	Biology	English as Second Language	Bilingual Education	Foreign Language	Voc or Tech Education	Other
Total Private	2,110	332	147	2,492	603	9,275
Total Public	7,767	4,395	3,989	8,054	10,404	47,995
Catholic	947	95	21	850	216	4,120
Episcopal	68	6	0	92	12	246
Friends	13	2	0	21	3	60
Seventh-Day Adventist	65	0	0	22	30	213
Hebrew Day	39	6	8	81	2	109
Solomon Schechter	7	5	0	34	0	14
Other Jewish	30	58	31	116	1	214
Christian Schools Intl	53	12	0	67	11	209
Assoc of Christn Schls Intl	107	16	0	127	80	713
Lutheran, Missouri Synod	22	0	0	54	19	110
Lutheran, Wisconsin Synod	3	0	0	0	0	22
Evangelical Lutheran	10	1	0	14	0	30
Other Lutheran	0	0	0	--	0	--
Montessori	19	0	0	6	0	182
Schools for Exceptional Children	14	0	0	3	18	38
Natl Assoc of Independent Schools (only)	336	66	6	484	3	950
Military	--	2	0	--	2	--
Other Private Schools	371	62	81	507	205	2,012
Catholic	947	95	21	850	216	4,120
Parochial	436	42	0	150	42	1,967
Diocesan	289	9	9	293	139	1,391
Private order	223	44	12	407	36	763
Other religious	697	172	107	992	254	3,292
Conservative Christian	178	29	0	291	133	1,219
Affiliated	360	104	59	485	97	1,264
Unaffiliated	159	39	48	217	24	809
Nonsectarian	466	65	19	651	133	1,862
Regular	314	27	2	493	91	1,052
Special emphasis	135	39	17	139	3	757
Special education	17	0	0	19	38	52
All members of NAIS	468	95	12	741	42	1,460

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Table 3.16-- Average difficulty filling vacancies in each field of teaching in 1990-91, by affiliation**

	% Schools with Vacancies	Diff. General Elem.	Diff. Spec. Education	Diff. English	Diff. Math	Diff. Physical Sciences	Diff. Biol.	Diff. ESOL or Bilingual	Diff. Foreign Lang.	Diff. Voc. Education
Total Private	65.1	1.4	1.9	1.4	1.7	1.9	1.8	1.7	2.0	1.5
Total Public	77.3	1.2	1.9	1.3	1.5	1.7	1.6	2.1	1.9	1.7
Catholic	78.2	1.3	1.8	1.4	1.8	1.9	1.9	2.0	2.0	1.7
Episcopal	77.8	1.7	--	1.2	1.4	1.6	1.4	--	2.0	--
Friends	80.8	1.3	--	1.2	1.7	1.8	1.6	--	1.6	--
Seventh-Day Adventist	38.3	1.6	--	1.6	1.8	1.9	1.8	--	1.3	--
Hebrew Day	66.7	1.7	--	2.0	2.0	2.2	2.4	2.1	1.9	--
Solomon Schechter	86.5	1.4	--	--	--	--	2.0	1.2	1.7	--
Other Jewish	73.4	1.7	1.9	1.7	1.7	2.0	2.1	1.2	1.7	--
Christian Schools Intl	73.8	1.6	1.5	1.7	1.6	2.0	1.7	--	1.8	--
Assoc of Christn Schls Intl	69.4	1.3	1.1	1.6	1.8	1.9	1.8	--	2.3	--
Lutheran, Missouri Synod	65.8	1.4	--	1.3	2.0	2.2	2.3	--	--	--
Lutheran, Wisconsin Synod	20.5	1.1	--	--	--	--	--	--	--	--
Evangelical Lutheran	74.4	1.3	--	1.3	--	--	--	--	2.3	--
Other Lutheran	--	--	--	--	--	--	--	--	--	--
Montessori	44.9	1.7	--	--	--	--	--	--	--	--
Schools for										
Exceptional Children	70.1	1.7	2.4	1.3	1.7	1.7	1.7	--	--	--
Natl Assoc of										
Independent Schools (only)	87.8	1.3	1.8	1.2	1.7	1.7	1.6	1.4	1.6	--
Military	80.9	--	--	--	--	--	--	--	--	--
Other Private Schools	53.0	1.4	2.2	1.5	1.6	1.8	1.9	1.6	2.0	1.4
Catholic	78.2	1.3	1.8	1.4	1.8	1.9	1.9	2.0	2.0	1.7
Parochial	77.5	1.3	1.5	1.5	1.9	1.9	1.9	--	2.1	1.8
Diocesan	76.5	1.3	--	1.2	1.8	2.0	2.1	--	1.9	--
Private order	86.5	1.5	--	1.3	1.6	1.7	1.4	--	1.9	--
Other religious	55.1	1.5	1.6	1.5	1.7	1.9	1.9	1.7	2.0	1.2
Conservative Christian	59.4	1.5	1.3	1.6	1.6	1.8	1.7	2.1	2.3	1.0
Affiliated	57.2	1.5	1.6	1.4	1.7	1.9	1.9	1.4	1.8	1.6
Unaffiliated	46.9	1.3	2.1	1.6	1.9	1.9	2.1	1.2	1.8	--
Nonsectarian	65.1	1.4	2.1	1.3	1.6	1.7	1.7	1.6	1.8	1.7
Regular	72.6	1.2	2.2	1.3	1.6	1.9	1.7	1.3	1.7	--
Special emphasis	53.1	1.6	--	1.3	1.9	1.6	1.8	1.8	1.6	--
Special education	71.7	1.5	2.2	1.2	1.4	1.4	1.4	--	--	2.0
All members of NAIS	87.7	1.3	1.8	1.2	1.6	1.8	1.6	1.5	1.7	1.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: -- Difficulty averages are on a scale of 1 (easy), 2 (somewhat), 3 (very), and 4 (could not fill).

**Table 3.17-- Mean percentage of schools using different strategies to address unfilled vacancies in 1990-91, by affiliation**

	Percent Schools with Unfilled Vacancies	Percent Canceled Courses	Percent Expanded Class Sizes	Percent Added to Others Teaching Loads	Percent Assigned Out of Field Teachers	Percent Used Substitute Teachers	Percent Used Itinerant Teachers	Percent Hired Less Qualified Teachers
Total Private	8.9	9.0	12.9	21.2	24.2	39.3	19.3	22.1
Total Public	12.2	6.2	11.0	7.6	22.5	49.7	7.8	27.2
Catholic	7.3	4.6	4.6	11.9	28.3	54.1	10.4	16.6
Episcopal	23.1	--	--	--	--	--	--	--
Friends	11.9	--	--	--	--	--	--	--
Seventh-Day Adventist	1.6	--	--	--	--	--	--	--
Hebrew Day	3.2	--	--	--	--	--	--	--
Solomon Schechter	16.2	--	--	--	--	--	--	--
Other Jewish	11.9	--	0.0	--	--	--	--	--
Christian Schools Intl	16.2	--	--	--	--	--	--	0.0
Assoc of Christn Schls Intl	12.3	--	--	--	--	--	--	--
Lutheran, Missouri Synod	8.6	0.0	0.0	--	--	--	--	0.0
Lutheran, Wisconsin Synod	1.6	--	--	--	--	--	--	--
Evangelical Lutheran	5.3	--	--	--	--	--	--	--
Other Lutheran	0.0	--	--	--	--	--	--	--
Montessori	7.8	--	--	--	--	--	--	--
Schools for Exceptional Children	21.4	--	--	--	--	81.4	--	--
Natl Assoc of Independent Schools (only)	5.6	--	--	--	--	--	--	--
Military	21.6	--	--	--	--	--	--	--
Other Private Schools	10.2	4.3	22.6	29.5	22.8	32.6	26.3	19.8
Catholic	7.3	4.6	4.6	11.9	28.3	54.1	10.4	16.6
Parochial	8.3	--	--	--	--	52.2	--	--
Diocesan	5.4	--	--	--	--	--	--	--
Private order	6.7	--	--	--	--	--	--	--
Other religious	9.4	13.7	18.5	32.3	23.7	29.0	24.5	21.9
Conservative Christian	12.5	17.2	18.8	37.7	28.5	19.8	18.0	33.8
Affiliated	9.2	11.4	9.2	23.4	20.8	44.7	24.3	8.8
Unaffiliated	5.5	--	--	--	--	--	--	--
Nonsectarian	10.7	4.3	11.3	8.8	20.0	42.5	19.8	30.1
Regular	7.5	0.0	0.0	--	--	--	--	--
Special emphasis	7.0	--	--	--	--	--	--	--
Special education	25.9	4.1	10.4	8.7	9.2	65.0	10.7	34.2
All members of NAIS	5.8	--	--	--	--	--	--	--

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

Schools are responsible for providing courses in important curricular areas, but their plans can be disrupted by teachers' choices to retire or move. In SASS, respondents indicated the methods used at their schools to cover vacancies when a qualified teacher was unavailable. The results, shown in table 3.17, suggest that private schools can and do resort more frequently than public schools (1) to adding to others' teaching loads and (2) to using itinerant teachers.

## Summary

On average, private school teachers tended to be younger and less experienced than public school teachers; fewer of them held advanced degrees; and substantially fewer of them were certified in their main teaching assignment field. Consistent with these differences, private school teachers tended to receive lower salaries; however, more of them received in-kind benefits, such as housing, meals, and tuition waivers for their children, than did public school teachers. Differences between principals in private schools and principals in public schools paralleled those of teachers: principals in private schools tended to be younger and less experienced and to make lower salaries than their public school counterparts. Private school principals were much more likely to be female than were public school principals.

Despite lower salaries, there were advantages to teaching in private schools. Private school teachers, on average, felt that they had more influence and control over school policies and their own teaching styles than public school teachers, and their responses to questions relating to job satisfaction were more likely to be favorable than those of public school teachers. Although private school teachers turned over at a rate of one-in-eight per year, most schools did not have serious difficulties hiring teachers in any area.

#### **4 Goals, Expectations, Climate, and Outcomes**

Although information on programs offered, teachers, and students is useful, it does not completely capture the important characteristics of private schools. The Schools and Staffing Survey collected companion data on school teachers' and principals' ratings of educational goals and of the seriousness of different problems in the schools. These data, along with data on requirements for graduation, reflect other aspects of private school variation. Information from SASS about individual student outcomes of private education is limited to graduation and college application rates. In other surveys, the National Center for Education Statistics has collected data on the achievement levels of students in private schools; however, unlike the Schools and Staffing Survey, those data are based on many fewer private schools and therefore do not support the same level of display of differences among private schools of different types.

##### **Highlights**

- The principals' most important educational goals differ between types of school: religious development in religiously oriented schools; excellence and self-esteem in most nonsectarian private schools; literacy and self-esteem in private special education schools; and literacy in public schools (table 4.1 and figure 4.1).
- Teachers' and principals' perceptions of school climate are that it is better in private schools, especially with respect to substance abuse, pregnancy, dropping out, having a sense of community, and respect for both teachers and students (table 4.3 and table 4.4).
- Although course requirements for graduation are fairly similar across schools, private secondary schools require more years of foreign language for graduation: Episcopal schools, Friends schools, Jewish schools, Catholic Private-Order schools, and NAIS schools require 2 years or more of foreign language. At public schools, the average requirement for foreign language is less than a semester (table 4.6).
- Three-quarters of 12th-grade students in private schools apply to college, compared to half of the 12th graders at public schools. In Catholic schools the figure is 90 percent, and in NAIS schools it is 95 percent (table 4.5).

## Educational Goals

From a list of eight educational goal areas, over 2,000 representative private school principals and 6,000 representative private school teachers chose those they considered most important, second in importance, and third in importance. The eight goal areas were:

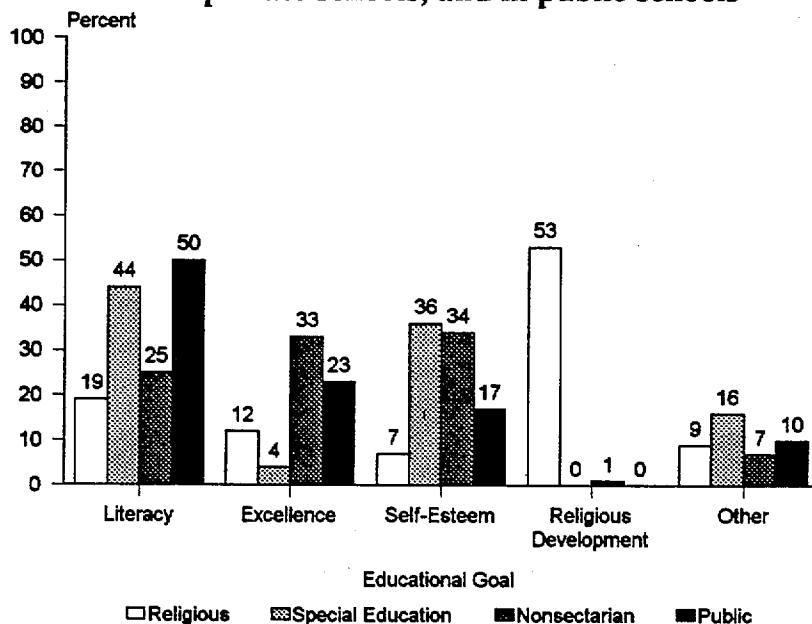
- Building basic literacy skills (reading, mathematics, writing, speaking)
- Encouraging academic excellence
- Promoting occupational or vocational skills
- Promoting good work habits and self-discipline
- Promoting personal growth (self-esteem, self-knowledge, and so forth)
- Promoting human relations skills
- Promoting specific moral values
- Fostering religious or spiritual development

Interpreting principals' and teachers' ratings of most important educational goals is difficult because it is difficult for educators to choose among such goals: one can imagine that most would say all or nearly all of these goals are important. While the "most important" goal differentiates schools, they share multiple goals and are much more alike than they would be if that goal were their *only* educational goal.

As shown in figure 4.1, religious development was the major goal perceived by principals in religiously oriented schools, and development of basic literacy skills was the major goal in public schools and private special education schools. Other nonsectarian private schools were broadly split between fostering growth in self-esteem and self-awareness, promoting academic excellence, and developing basic literacy skills.

As shown in tables 4.1 and 4.2, principals and teachers in private schools of different types differed greatly on the relative importance of these goals. These tables show the percentages of "most important" ratings for each of the eight goals, but respondents also ranked second and third goals, which were included in the analyses of the survey.

**Figure 4.1-- Percentages of principals who rated each of four educational goals most important, in religiously oriented, in special education, and in other nonsectarian private schools, and in public schools**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1990-91 (Administrator Questionnaire).

**Principals' goals.** The major difference between types of schools was the importance of religious development as an educational goal. In half or more of Catholic and other religiously affiliated schools, principals ranked religious development as the most important goal, compared to 1 percent or fewer in nonsectarian private schools. This differentiation extended to the second and third ranked goals (not shown in the tables), too: 80 percent of principals in religiously affiliated schools placed religious development among the top three goal areas, compared to fewer than 10 percent in the nonsectarian schools. The importance of religious development was noted most strongly among principals in Lutheran schools other than Evangelical Lutheran schools. Generally, among principals in religiously oriented schools, those with national affiliations were more likely than those at unaffiliated schools to rank religious development as the first educational priority. At religiously oriented but unaffiliated schools, only two-fifths of principals placed religious development as the top goal, compared to nearly three-fifths of principals at affiliated religiously oriented schools.

**Table 4.1-- Percentage of principals rating each of eight educational goals most important in 1990-91, by affiliation**

	Literacy	Excellence	Vocational Skills	Discipline	Growth Esteem	Social Skills	Moral Values	Religious Development <sup>1</sup>
Total Private	19.9	15.3	0.2	3.1	12.1	0.6	4.5	44.2
Total Public	50.4	22.9	0.9	6.5	17.3	1.2	0.6	0.2
Catholic	14.8	14.1	0.0	2.7	10.1	0.6	6.2	51.6
Episcopal	29.9	41.6	0.0	2.1	19.8	0.0	2.0	4.7
Friends	17.9	25.4	0.0	2.0	39.2	1.8	2.0	11.8
Seventh-Day Adventist	12.8	2.2	1.0	3.2	3.8	0.5	7.8	68.6
Hebrew Day	20.4	15.0	0.0	8.5	9.1	0.0	12.1	34.8
Solomon Schechter	21.3	31.2	0.0	2.2	23.2	2.2	8.8	11.1
Other Jewish	29.0	20.8	0.0	2.3	18.5	0.9	2.3	26.2
Christian Schools Intl	22.1	16.6	0.0	1.2	0.8	0.0	0.9	58.3
Assoc of Christn Schls Intl	18.8	9.6	0.0	0.9	1.9	0.0	1.3	67.5
Lutheran, Missouri Synod	12.2	5.8	0.0	0.0	2.9	0.6	1.9	76.6
Lutheran, Wisconsin Synod	1.4	0.0	0.0	0.0	0.0	0.0	0.0	98.6
Evangelical Lutheran	29.2	26.2	0.0	1.0	6.8	1.8	1.0	34.0
Other Lutheran	--	0.0	0.0	0.0	0.0	0.0	0.0	95.5
Montessori	21.1	24.9	0.0	13.3	39.8	0.4	0.2	0.2
Schools for Exceptional Children	67.2	3.7	2.0	6.8	14.9	4.9	0.5	0.0
Natl Assoc of Independent Schools (only)	18.3	43.6	0.2	6.8	27.4	1.1	1.6	0.9
Military	24.2	63.9	0.0	6.1	5.8	0.0	0.0	0.0
Other Private Schools	28.5	16.5	0.5	2.9	15.9	0.9	3.8	30.9
Catholic	14.8	14.1	0.0	2.7	10.1	0.6	6.2	51.6
Parochial	14.3	10.5	0.0	2.1	10.1	0.9	6.6	55.5
Diocesan	16.5	17.9	0.0	4.5	8.9	0.0	5.6	46.5
Private order	13.0	25.5	0.0	1.4	13.4	0.0	5.6	41.1
Other religious	21.5	11.5	0.1	2.0	5.0	0.4	4.0	55.4
Conservative Christian	19.5	9.7	0.0	0.8	1.0	0.0	5.2	63.8
Affiliated	19.2	11.1	0.0	2.0	6.1	0.4	3.2	58.0
Unaffiliated	27.9	14.8	0.4	3.6	9.1	1.0	3.7	39.4
Nonsectarian	28.9	27.3	1.0	6.0	34.2	1.5	0.6	0.5
Regular	24.8	37.1	0.1	3.1	31.1	1.4	1.3	1.1
Special emphasis	25.6	27.8	0.0	9.2	37.1	0.2	0.0	0.1
Special education	44.0	4.3	5.0	6.6	35.9	4.1	0.2	0.0
All members of NAIS	18.0	38.2	0.4	5.0	25.4	0.8	1.8	10.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

Note: -- Too few cases for a reliable estimate.

<sup>1</sup> For public schools, this goal was replaced by "multicultural awareness."



**Table 4.2-- Percentage of teachers rating each of eight educational goals most important in 1990-91, by affiliation**

	Literacy	Excellence	Vocational Skills	Discipline	Growth Esteem	Social Skills	Moral Values	Religious Development <sup>1</sup>
Total Private	32.4	13.0	0.2	8.9	19.7	1.4	3.1	21.2
Total Public	49.9	11.1	1.9	13.2	20.4	1.6	1.4	0.5
Catholic	34.4	13.0	0.4	9.2	21.5	1.2	4.2	16.3
Episcopal	30.8	22.6	0.0	12.4	26.4	1.6	1.6	4.6
Friends	20.1	15.9	0.0	15.1	39.1	6.6	0.5	2.8
Seventh-Day Adventist	24.5	5.3	0.0	2.5	9.7	1.5	4.6	51.8
Hebrew Day	24.5	14.7	0.3	11.5	34.9	2.4	1.6	10.0
Solomon Schechter	34.7	8.0	0.0	15.3	30.9	0.8	2.3	8.0
Other Jewish	26.8	17.1	0.0	12.3	23.8	3.6	4.1	12.2
Christian Schools Intl	27.5	15.4	0.0	5.9	5.8	0.2	1.0	44.1
Assoc of Christn Schls Intl	25.6	7.2	0.0	4.5	3.2	1.1	3.0	55.5
Lutheran, Missouri Synod	17.5	5.5	0.0	4.2	8.3	0.6	2.8	61.2
Lutheran, Wisconsin Synod	7.0	1.8	0.0	0.0	0.3	0.3	1.6	88.9
Evangelical Lutheran	46.1	23.5	0.0	2.7	18.8	0.3	1.0	7.6
Other Lutheran	18.5	0.0	0.0	11.2	5.0	0.8	1.5	63.0
Montessori	27.9	10.6	0.0	11.2	46.4	2.8	1.0	0.0
Schools for Exceptional Children	34.1	4.9	3.1	10.0	41.4	6.0	0.0	0.5
Natl Assoc of Independent Schools (only)	30.0	21.3	0.0	10.6	30.7	1.9	3.2	2.2
Military	36.9	17.5	1.9	15.1	10.1	1.4	6.9	10.3
Other Private Schools	34.5	12.7	0.3	8.5	16.4	1.5	1.7	24.4
Catholic	34.4	13.0	0.4	9.2	21.5	1.2	4.2	16.3
Parochial	38.4	9.8	0.4	8.5	21.4	1.0	3.9	16.6
Diocesan	32.5	12.8	0.6	10.4	21.4	1.2	4.7	16.3
Private order	26.5	21.9	0.0	8.9	21.8	1.7	4.0	15.1
Other religious	27.6	11.0	0.2	6.2	11.4	1.2	2.3	40.1
Conservative Christian	25.1	7.6	0.2	4.1	4.1	1.1	2.5	55.4
Affiliated	27.4	12.6	0.0	7.8	15.3	1.1	1.9	34.0
Unaffiliated	32.0	13.3	0.4	6.2	15.2	1.6	2.9	28.4
Nonsectarian	34.0	17.3	0.3	11.8	30.5	2.4	2.1	1.6
Regular	34.6	22.1	0.1	10.1	25.8	2.1	2.8	2.5
Special emphasis	34.1	12.0	0.1	14.2	36.8	1.0	1.5	0.3
Special education	31.4	5.4	1.3	15.5	40.7	5.5	0.0	0.2
All members of NAIS	28.6	22.1	0.3	9.1	29.7	2.1	2.9	5.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

<sup>1</sup> For public schools, this goal was replaced by "multicultural awareness."

By comparison, most principals at nonsectarian schools placed importance on promoting self-esteem and self-knowledge, including it among the three most important goals. Over 30 percent of nonsectarian school principals ranked this goal as first in importance, compared to fewer than 10 percent of principals at religiously oriented schools. In an exception to this pattern, principals in Friends schools held goals more similar to nonsectarian schools than to other religiously oriented schools.

At few schools did principals rank self-discipline as the top goal; however, focus on self-discipline was characteristic of some schools.<sup>20</sup>

Focus on excellence was characteristic of other schools. In particular, principals at Episcopal schools, NAIS members, and military schools felt it to be most important to encourage academic excellence.

Among the three categories of Jewish schools, principals at Solomon Schechter schools emphasized religious development less and academic excellence more than in other Jewish schools.

The pattern of goals reported by principals in schools providing special education for exceptional children were quite different from the patterns in other schools. A much larger percentage of these principals than others viewed literacy as most important. Also, although not shown in the table, more viewed self-discipline as second in importance; and more than 10 percent viewed vocational skills and 10 percent viewed social skills as among their three most important educational goals.

**Teachers' goals.** It is not surprising that teachers shared educational goals similar to those of the principals at their schools. One can gather an understanding of the dynamics at schools by studying the *differences* between their goals. Although the data in tables 4.1 and 4.2 generally reflect the similarity of goals between teachers and principals, the averages for teachers are more evenly balanced across the goals, probably because teachers in a school represent a variety of perspectives. For example, in Catholic schools, teachers were less likely than principals to place religious development at the top of the list. Teachers in military schools were less likely than principals to view academic excellence as the most important goal.

Among Jewish schools, teachers in Hebrew day schools were more likely than principals to view development of self-esteem as important. Finally, in schools providing special education for exceptional children, teachers were more likely than principals to place emphasis on personal growth and students' self-esteem, rather than literacy.

---

<sup>20</sup> The figure for principals in Montessori schools (13 percent), which serve very young children, was not statistically significantly greater than the average private school.

## **School Climate**

In addition to ranking the importance of educational goals, teachers and principals in schools responded to several dozen opinion items concerning the seriousness of different problems in the school and the context of teaching in the school. Many of the items were related to each other; and based on a factor analysis of the items, 12 factors were identified. Ten of these factors are based on teacher data and 6 on principal data, including 4 on which both principal and teacher perspectives are available. The following names have been applied to the factors, but they should be interpreted in terms of the items on which they were based. In particular, the correlation of responses on alcohol and drug abuse, pregnancy, and dropping out led to their inclusion in a single factor, somewhat generically labeled as "basic standards" because they represent a minimum Americans want for all schools and without which providing an education is very difficult.

- **Basic Standards:** Lack of serious problems with drug abuse, alcohol, pregnancy, and dropouts
- **Community:** Lack of serious problems stemming from poverty, racial tension, and cultural conflict
- **Involvement:** Academic challenge, parent involvement, and absence of apathy
- **Behavior Standards:** Systematic enforcement of agreed upon discipline policy and student behavioral standards
- **Attendance:** Lack of serious tardiness and absence problems
- **Respect for Teachers:** Lack of serious problems with physical and verbal abuse and disrespect of teachers
- **Respect for Students:** Belief that students are capable of learning and do not have attitudes and habits that reduce their learning potential
- **Respect for Property:** Lack of vandalism and theft
- **Teachers' Influence on School Policy:** Grouping students, discipline, curriculum, and in-service topics
- **Teachers' Classroom Control:** Selecting topics, materials, techniques, and homework, and evaluating and disciplining students
- **Teachers' Satisfaction with Teaching**
- **Assistance for New Teachers:** Methods, curriculum, discipline, and adjustment

These factors were constructed from survey responses to four- and five-alternative items. In some cases the response options ranged from "strongly agree" to "strongly disagree," in other cases from "no (influence or control)" to "complete (influence or control)." Learning climate items were phrased as problems, with options ranging from "not a problem" to "serious." Details are provided in Appendix B. Each factor is the simple average of the responses given by teachers on the two to five survey items indicating the factor. For comparability, however, they were rescaled from 0 to 10, a "10" indicating a teacher's or principal's selection of the most extreme positive category of each item contributing to the factor, and a "0" indicating the most negative response on each item. A "5" would indicate that just as many respondents reported a serious problem as reported no problem.

Principals' and teachers' perceptions of climate are displayed in tables 4.3 and 4.4. These tables should not be overinterpreted as objective records of actual problems. For example, one teacher's concerns about a factor (e.g., attendance) may be heightened by a school policy focusing on that factor; and as a result, teachers in that school might call a particular event a more serious problem than would teachers at another school.<sup>21</sup>

The strongest generalization of teachers' and principals' perceptions is that they are similar across all types of private schools and are noticeably more positive than are average perceptions in public schools. Nearly all private school respondents rated their schools high on the basic standards of avoidance of problems with alcohol, drugs, pregnancy, and dropouts. Nevertheless, not all perceptions in private school climates were "perfect": problems were noted by some respondents in areas like community (poverty, racial tension, and cultural conflict), attendance and tardiness, respect for students, and student apathy.

The largest difference between teachers' and principals' perceptions was teachers' more frequent recognition of student behaviors that directly affected teachers' safety and security. This factor, labeled "respect for teachers," combined five correlated items, including physical conflicts and weapons possession among students as well as physical and verbal abuse of teachers and disrespect for teachers.

---

<sup>21</sup> To avoid bias in comparison between teachers' and principals' ratings of climate, both sets of ratings are weighted to represent the average of all schools in the country.

**Table 4.3-- Average principal ratings of school climate in 1987-88 and 1990-91, by affiliation**

	Basic Standards		Respect for Teachers		Community		Attendance		Involvement		Respect for Property	
	87-88	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91	87-88	90-91
Total Private	9.7	9.5	9.3	9.2	.	8.7	8.1	8.2	.	8.1	9.1	9.1
Total Public	8.8	8.6	8.6	8.5	.	7.0	6.7	6.9	.	6.4	8.2	8.2
Catholic	9.7	9.6	9.3	9.4	.	8.4	8.1	8.2	.	8.1	9.0	9.1
Episcopal	9.7	9.6	9.5	9.4	.	8.8	8.3	8.3	.	9.1	9.0	9.1
Friends	9.6	9.3	9.3	9.5	.	8.9	8.1	8.6	.	9.1	8.5	8.6
Seventh-Day Adventist	9.8	9.7	9.3	8.9	.	8.4	8.1	7.9	.	7.5	9.1	8.9
Hebrew Day	9.7	9.5	9.4	9.0	.	9.1	7.6	7.5	.	8.6	9.1	9.0
Solomon Schechter	10.0	9.7	9.7	9.6	.	9.7	8.1	8.6	.	8.8	9.1	9.4
Other Jewish	--	9.8	--	9.2	.	9.3	--	7.9	.	8.6	--	9.3
Christian Schools Intl	9.4	9.5	9.3	9.5	.	8.8	8.4	8.3	.	7.7	8.5	9.0
Assoc of Christn Schls Intl	9.7	9.8	9.5	9.5	.	9.3	8.0	8.0	.	8.1	9.1	9.4
Lutheran, Missouri Synod	9.9	9.8	9.3	9.3	.	8.8	8.7	8.5	.	7.9	9.3	9.1
Lutheran, Wisconsin Synod	--	9.8	--	9.3	.	9.0	--	8.9	.	7.7	--	9.2
Evangelical Lutheran	10.0	9.8	9.2	9.3	.	8.9	8.0	8.4	.	8.2	10.0	9.2
Other Lutheran	9.9	9.4	9.5	9.1	.	8.8	8.7	8.3	.	8.5	9.3	9.1
Montessori	10.0	9.7	9.6	9.6	.	9.3	8.1	8.1	.	9.1	9.6	9.3
Schools for												
Exceptional Children	9.1	9.2	8.2	6.7	.	7.2	7.9	8.0	.	6.4	8.3	7.8
Natl Assoc of												
Independent Schools (only)	9.5	9.0	9.5	9.5	.	9.0	8.5	8.6	.	9.1	8.5	8.9
Military	8.7	8.5	9.1	9.0	.	8.8	8.6	9.3	.	7.2	7.4	7.1
Other Private Schools	9.6	9.4	9.2	9.1	.	8.9	7.9	8.2	.	8.1	9.2	9.1
Catholic	9.7	9.6	9.3	9.4	.	8.4	8.1	8.2	.	8.1	9.0	9.1
Parochial	9.9	9.8	9.3	9.4	.	8.4	8.3	8.3	.	8.0	9.1	9.2
Diocesan	9.4	9.5	9.3	9.4	.	8.5	8.0	8.3	.	8.4	8.8	9.1
Private order	9.2	8.8	9.5	9.5	.	8.3	7.5	7.8	.	8.1	8.6	8.7
Other religious	9.7	9.7	9.4	9.3	.	9.0	8.1	8.3	.	8.1	9.2	9.2
Conservative Christian	9.7	9.7	9.5	9.3	.	9.1	8.1	8.1	.	8.1	9.2	9.3
Affiliated	9.8	9.7	9.4	9.3	.	8.9	8.3	8.3	.	8.0	9.2	9.1
Unaffiliated	9.6	9.7	9.3	9.2	.	9.1	8.0	8.4	.	8.2	9.2	9.3
Nonsectarian	9.5	9.1	9.1	8.9	.	8.6	8.0	8.0	.	8.3	8.9	8.8
Regular	9.7	9.3	9.5	9.4	.	9.2	7.9	8.2	.	8.7	8.9	9.0
Special emphasis	9.6	9.3	9.4	9.3	.	9.0	8.2	8.1	.	8.7	9.3	9.2
Special education	9.1	8.5	7.3	7.0	.	6.9	7.7	7.5	.	6.9	8.1	7.9
All members of NAIS	9.5	9.0	9.5	9.5	.	8.9	8.4	8.5	.	8.9	8.5	8.8

<sup>1</sup>Information not available for 1987-88. (0 = Serious Problems, 10 = No Problems)

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Administrator Questionnaire).

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Table 4.4-- Average teacher ratings of school climate in 1987-88 and 1990-91, by affiliation—Continued on next page**

	Basic Standards		Respect for Teachers		Community		Attendance		Respect for Students	
	87-88	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91	87-88	90-91	87-88	90-91
Total Private	9.3	9.3	9.1	8.7	.	8.6	8.3	8.2	--	7.7
Total Public	7.9	7.9	8.1	7.5	.	6.5	7.1	7.0	--	6.4
Catholic	9.3	9.2	9.0	8.7	.	8.3	8.4	8.3	.	7.7
Episcopal	9.2	9.3	9.4	9.0	.	9.1	8.5	8.2	.	8.1
Friends	9.1	9.0	9.2	8.9	.	8.4	8.2	8.2	.	8.0
Seventh-Day Adventist	9.7	9.5	9.1	8.6	.	8.5	8.0	8.0	.	6.9
Hebrew Day	10.0	9.8	9.4	8.6	.	9.1	7.8	7.8	.	7.7
Solomon Schechter	10.0	9.6	9.4	8.7	.	9.7	8.3	8.8	.	8.0
Other Jewish	--	9.6	--	8.7	.	9.2	--	7.8	.	7.4
Christian Schools Intl	9.3	9.2	9.3	8.8	.	8.4	8.3	8.3	.	7.7
Assoc of Christn Schls Intl	9.6	9.4	9.1	8.9	.	8.8	7.9	8.1	.	7.8
Lutheran, Missouri Synod	9.7	9.5	9.0	8.7	.	8.8	8.7	8.6	.	7.8
Lutheran, Wisconsin Synod	--	9.6	--	8.8	.	9.0	--	9.0	.	8.0
Evangelical Lutheran	9.9	9.4	9.3	8.6	.	8.9	8.8	8.5	.	7.8
Other Lutheran	9.7	9.8	9.2	9.2	.	9.3	8.8	8.7	.	8.4
Montessori	10.0	9.9	9.4	9.0	.	9.6	8.2	8.4	.	7.9
Schools for										
Exceptional Children	8.4	8.2	7.9	6.9	.	6.7	7.9	7.4	.	6.2
Natl Assoc of										
Independent Schools (only)	8.2	8.7	9.1	8.8	.	8.7	7.8	8.2	.	7.8
Military	6.5	6.5	8.0	7.5	.	7.4	--	7.1	.	5.7
Other Private Schools	9.4	9.2	9.0	8.6	.	8.7	8.2	8.0	.	7.7
Catholic	9.3	9.2	9.0	8.7	.	8.3	8.4	8.3	.	7.7
Parochial	9.6	9.5	9.1	8.7	.	8.4	8.6	8.4	.	7.7
Diocesan	8.8	9.0	9.0	8.6	.	8.2	8.1	8.2	.	7.9
Private order	8.1	8.3	9.0	8.8	.	8.0	7.5	7.5	.	7.7
Other religious	9.7	9.5	9.3	8.9	.	8.9	8.3	8.2	.	7.8
Conservative Christian	9.8	9.4	9.3	8.9	.	8.7	8.1	8.0	.	7.8
Affiliated	9.7	9.5	9.2	8.8	.	8.9	8.4	8.4	.	7.6
Unaffiliated	9.7	9.6	9.4	9.0	.	9.2	8.4	8.3	.	7.9
Nonsectarian	8.7	8.8	8.6	8.2	.	8.3	7.9	7.8	.	7.4
Regular	8.7	8.8	9.0	8.7	.	8.8	7.7	7.9	.	7.8
Special emphasis	9.1	9.3	9.1	8.8	.	9.1	8.2	8.1	.	7.8
Special education	8.0	8.0	6.9	6.2	.	6.0	7.8	7.3	.	6.1
All members of NAIS	8.2	8.6	9.2	8.8	.	8.5	7.8	8.1	.	7.7

<sup>1</sup>Information not available for 1987-88.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

**Table 4.4-- Average teacher ratings of school climate in 1987-88 and 1990-91, by affiliation—Continued**

	Teachers' Influence School Policy		Teachers' Classroom Control		Behavior Standards		Teachers' Satisfaction w Teaching		Assistance for New Teachers	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91
Total Private	6.6	6.5	8.6	8.8	7.9	8.1	7.7	8.0	.	7.4
Total Public	5.5	5.8	8.0	8.6	7.0	7.2	6.6	7.2	.	6.6
Catholic	6.3	6.4	8.5	8.9	7.8	7.9	7.6	8.0	.	7.3
Episcopal	7.2	7.2	9.0	8.9	7.4	7.7	7.0	7.6	.	7.6
Friends	7.8	8.0	9.0	9.2	7.7	8.0	7.9	7.5	.	7.0
Seventh-Day Adventist	5.5	5.2	8.4	9.3	8.2	8.7	7.6	7.1	.	7.7
Hebrew Day	5.9	5.7	8.4	8.7	6.6	7.3	6.5	7.7	.	6.7
Solomon Schechter	5.6	7.3	9.0	8.3	6.2	7.5	6.2	7.3	.	7.2
Other Jewish	--	6.7	--	8.6	--	7.9	--	7.8	.	7.0
Christian Schools Intl	6.9	6.8	8.7	8.9	7.8	8.5	7.9	8.3	.	7.6
Assoc of Christn Schls Intl	6.4	6.0	8.5	8.6	8.2	8.5	8.5	8.7	.	7.5
Lutheran, Missouri Synod	7.3	7.2	8.9	9.1	7.6	7.7	7.8	8.1	.	6.7
Lutheran, Wisconsin Synod	--	8.0	--	9.2	--	8.6	--	8.0	.	7.8
Evangelical Lutheran	6.7	7.2	8.1	9.0	8.4	8.5	8.5	8.5	.	7.6
Other Lutheran	8.1	8.2	9.0	9.2	8.1	8.9	8.2	9.0	.	8.3
Montessori	7.6	7.7	9.0	9.0	8.6	7.9	7.5	8.4	.	7.2
Schools for Exceptional Children	7.8	7.2	8.7	8.8	8.5	7.5	7.6	8.4	.	7.3
Natl Assoc of Independent Schools (only)	7.0	7.5	8.8	8.9	6.7	7.6	7.2	7.4	.	6.8
Military	4.4	5.5	8.8	8.4	6.0	6.2	6.0	7.1	.	5.0
Other Private Schools	6.7	6.3	8.6	8.7	8.3	8.5	7.9	7.9	.	7.7
Catholic	6.3	6.4	8.5	8.9	7.8	7.9	7.6	8.0	.	7.3
Parochial	6.3	6.3	8.4	8.9	7.9	8.0	7.7	8.1	.	7.3
Diocesan	6.3	6.4	8.7	8.8	7.7	7.8	7.6	8.0	.	7.3
Private order	6.5	6.9	8.8	9.1	7.5	7.8	7.5	7.7	.	7.3
Other religious	6.5	6.2	8.6	8.8	8.1	8.5	8.1	8.0	.	7.6
Conservative Christian	6.4	5.7	8.4	8.5	8.3	8.5	8.6	8.2	.	7.7
Affiliated	6.7	6.7	8.7	9.0	7.8	8.2	7.8	7.9	.	7.4
Unaffiliated	6.5	6.3	8.5	8.9	8.3	8.9	8.2	8.1	.	7.8
Nonsectarian	7.1	7.3	8.8	8.9	7.9	7.8	7.2	7.8	.	7.1
Regular	6.7	7.0	8.8	8.9	7.5	7.8	6.9	7.6	.	7.0
Special emphasis	7.6	7.8	9.0	8.9	8.3	7.8	7.3	7.8	.	7.5
Special education	7.0	7.3	8.4	8.9	8.4	7.8	7.6	8.1	.	6.8
All members of NAIS	7.0	7.2	8.8	8.8	6.8	7.4	7.2	7.4	.	6.8

<sup>1</sup>Information not available for 1987-88.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91.

Note: -- Too few cases for a reliable estimate.

Note: Because the nine-category typology was under development in 1987-88, the 1987-88 figures may not match the affiliation categories.

Teachers in special education schools for exceptional children and in military schools were more likely to indicate serious problems than teachers in other schools. These two types of schools, more than other private schools, may be attracting and serving more students with problems, and a noticeable percentage of teachers and principals at these schools were concerned about basic standards of behavior, whether it involved substance abuse, pregnancy, or dropout avoidance. Teachers and principals at special education schools were also more concerned than others about physical and verbal abuse; about poverty, racial tensions, and cultural conflicts; and about students' apathy, poor attitudes, and potential. Also, at military schools, teachers and principals were more concerned about discipline, vandalism, and poor student attitudes than were others. Teachers at military schools also perceived less assistance for newly hired teachers and were less satisfied with teaching than teachers at any other type of private school.

Most attitudinal responses on the private school survey were clustered at the positive end of the scale. However, certain categories of schools stood out as having the most positive average perceptions of various kinds:

- Teachers at ACSI schools and Other Lutheran schools liked teaching the most.
- Teachers at Friends schools and Wisconsin Synod and Other Lutheran schools felt they had the most influence on school policies.
- Solomon Schechter school staff perceived the least poverty and cultural conflict in the school community.

Although these average ratings are representative of private school teachers and principals in the United States, the picture they provide of the diversity of climates in private schools is filtered through the perceptions of school staff. Different staff in the same school often gave different ratings of the climate in their school. Nevertheless, these perceptions provide a useful foundation for understanding attitudes in different schools and changes in schools in the future.



## Student Outcomes

No picture of schools is complete without indicators of student outcomes. In the context of diversity of students and goals, it would be inappropriate to select one outcome to indicate effectiveness. Nevertheless, objective measures exist for school "productivity." The Schools and Staffing Survey has collected information on graduation rate, college application rate, and years of coursework in various areas required for graduation. It also has collected information on student absence rate, an indicator of educational problems for students. NCES has also collected standardized performance assessment data, through the National Assessment of Educational Progress (NAEP); however, those data are based on a much smaller national sample and can only be reported for major categories of private schools—Catholic schools and other schools.

**Graduation and college application rates.** Among high schools, graduation rate is a useful indicator of the extent to which a school is achieving its purpose of preparing tomorrow's citizens. Among private schools, graduation rates are especially important because, unlike public schools, they generally must attract students' parents, and part of that attraction can be the expectation of graduation and preparation for college entry.

Graduation rates are usually measured as a percentage of 12th graders, and as a result, they do not take into account students who fail to reach 12th grade. With this caution, graduation rates and college application rates, as percentages of 12th graders, are displayed in table 4.5. Although some differences can be seen between 1987-88 and 1990-91, there were few substantial differences in these measures. Nearly all 12th graders in private schools were graduated: only 4 percent of private school 12th graders were not graduated, compared to 6 or 7 percent of public school 12th graders.<sup>22</sup>

College application rates offer another facet of student outcomes, although they are affected not only by schools' preparation of students but also by parents' ability to invest in their children's continuing education. Thus, it is not surprising that more private school students applied to colleges than public school students. Nevertheless, the difference is large: approximately three-fourths of private school 12th graders applied to college, compared to about half of public school 12th graders.

Although the average college application rate was substantially higher than for public schools for all categories of private schools other than special education schools, there were noticeable variations among private schools. On average, students at Catholic, Episcopal, and Friends schools, as well as at NAIS member schools, were more likely to apply to college than students at other private secondary schools.

---

<sup>22</sup> The graduation rate at nonsectarian special education schools (80 percent) was not statistically significantly less than the average rate for private schools serving 12th graders.

**Table 4.5-- Average percentage of 12th-grade students who were graduated and who applied to college in 1990-91, by affiliation**

	Graduate	Applied to College
Total Private	95.9	75.7
Total Public	93.4	53.2
Catholic	98.9	89.9
Episcopal	98.5	95.0
Friends	95.1	89.5
Seventh-Day Adventist	96.4	81.1
Hebrew Day	95.5	84.7
Solomon Schechter	--	--
Other Jewish	97.5	76.5
Christian Schools Intl	99.8	82.6
Assoc of Christn Schls Intl	97.4	68.8
Lutheran, Missouri Synod	95.7	83.5
Lutheran, Wisconsin Synod	--	--
Evangelical Lutheran	--	--
Other Lutheran	--	--
Montessori	--	--
Schools for		
Exceptional Children	95.7	56.2
Natl Assoc of		
Independent Schools (only)	98.6	96.7
Military	97.1	87.4
Other Private Schools	93.1	65.9
Catholic	98.9	89.9
Parochial	99.0	87.8
Diocesan	98.6	88.8
Private order	99.1	91.9
Other religious	96.5	69.1
Conservative Christian	96.3	64.7
Affiliated	97.0	78.2
Unaffiliated	96.6	69.5
Nonsectarian	91.6	78.6
Regular	96.5	92.1
Special emphasis	96.0	79.7
Special education	79.8	51.7
All members of NAIS	98.4	95.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Years of coursework.** Schools with 12th grades can also be characterized by the number of years of academic coursework they require of students for graduation. As can be seen in table 4.6, nearly all private schools require full-time (i.e., 4 years') participation in English courses,<sup>23</sup> but there is more variation in other subjects. Most private schools require 3 years of mathematics and social studies, although Seventh-Day Adventist schools typically only required 2 years of each. A majority of Hebrew day schools required 4 years of social studies. For science, there was a nearly even split between schools requiring 2 or fewer years and schools requiring 3 or 4 years.

There was greater variation among types of private schools in foreign language and computer literacy requirements than in other requirements. Special education schools rarely required foreign language courses, and most of the Protestant denominational schools required no more than 1 year. However, Episcopal and Friends schools joined Jewish schools, Catholic Private-Order schools, and NAIS members in generally requiring at least 2 years of work in foreign language, and many of these schools required 3 and 4 years. For computers, about half of the private schools required some coursework and half did not.

Course requirements for graduation, graduation rates, and college application rates are meaningful only for schools serving secondary students. At earlier grades, the primary student outcome is readiness for the next grade, measured as scholastic achievement. By design, to limit reporting burden, student achievement measures were not collected by SASS.<sup>24</sup> The only objective outcome measure collected in the SASS that applies to all schools is the percentage of students absent each day.

**Absences.** Excessive absence from school has been found to be a precursor of other scholastic problems, such as poor grades and dropping out, so attention to this measure is warranted. The data displayed in table 4.7 indicate that about 5 percent of private school students were absent on a typical day, compared to 6 percent of public school students. Generally, variation across types of schools was not great. The most notable deviations were among Montessori schools (10 percent in 1990-91) and military schools (2 percent in 1990-91). Absence rates varied greatly among Montessori schools, and the overall high average in the sample was not statistically significantly different from the averages for other schools. The low average absence rate at military schools is probably related to the prevalence of boarding at these schools.

---

<sup>23</sup> The numbers of years are based on a 9th- to 12th-grade secondary curriculum. Responses from the relatively small number of schools that indicated that their survey responses reflected a 3-year program were multiplied by four thirds for comparability.

<sup>24</sup> The National Center for Education Statistics collects student achievement data in other survey programs, including the National Educational Longitudinal Studies and the National Assessment of Educational Progress.

**Table 4.6-- Average years of academic study required for graduation in private secondary schools in 1990-91, by affiliation**

	English	Math	Computers	Social Studies	Science	Language
Total Private	3.8	2.9	0.6	3.2	2.5	1.1
Total Public	3.8	2.4	0.3	2.9	2.1	0.3
Catholic	4.0	2.8	0.5	3.1	2.5	1.5
Episcopal	4.0	3.3	0.6	3.0	2.7	2.7
Friends	4.0	2.9	0.2	2.6	2.4	2.0
Seventh-Day Adventist	3.9	2.2	0.7	2.3	2.3	0.5
Hebrew Day	4.0	3.1	--	3.7	2.7	3.4
Solomon Schechter	--	--	--	--	--	--
Other Jewish	3.6	2.8	0.8	3.0	2.2	2.5
Christian Schools Intl	3.9	2.7	0.3	3.4	2.3	0.9
Assoc of Christn Schls Intl	3.5	2.5	0.3	3.1	2.4	0.8
Lutheran, Missouri Synod	4.0	2.5	--	3.1	2.4	--
Lutheran, Wisconsin Synod	--	--	--	--	--	--
Evangelical Lutheran	--	--	--	--	--	--
Other Lutheran	--	--	--	--	--	--
Montessori	--	--	--	--	--	--
Schools for Exceptional Children	3.9	3.0	1.0	3.0	2.9	0.3
Natl Assoc of Independent Schools (only)	4.0	3.2	0.6	2.9	2.6	2.4
Military	4.0	3.0	0.6	3.2	2.7	1.0
Other Private Schools	3.8	2.9	0.6	3.3	2.6	0.8
Catholic	4.0	2.8	0.5	3.1	2.5	1.5
Parochial	3.9	2.6	0.6	3.0	2.4	0.8
Diocesan	4.0	2.7	0.4	3.2	2.4	1.3
Private order	4.0	3.0	0.6	3.1	2.5	2.1
Other religious	3.8	2.8	0.5	3.2	2.5	0.9
Conservative Christian	3.7	2.8	0.5	3.2	2.5	0.6
Affiliated	3.9	2.9	0.5	3.3	2.7	1.4
Unaffiliated	3.9	2.9	0.6	3.2	2.7	1.1
Nonsectarian	3.8	2.9	0.6	3.0	2.5	1.3
Regular	3.9	3.1	0.6	3.1	2.6	2.0
Special emphasis	3.6	2.9	0.6	2.9	2.2	1.4
Special education	3.8	2.7	0.6	3.1	2.5	0.2
All members of NAIS	4.0	3.1	0.6	3.0	2.6	2.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Table 4.7-- Average percentage of students absent in 1990-91, by affiliation**

Average % of Students Absent	
Total Private	4.8
Total Public	6.1
Catholic	4.3
Episcopal	4.3
Friends	5.3
Seventh-Day Adventist	4.3
Hebrew Day	5.7
Solomon Schechter	6.6
Other Jewish	5.2
Christian Schools Intl	5.0
Assoc of Christn Schls Intl	4.7
Lutheran, Missouri Synod	4.5
Lutheran, Wisconsin Synod	3.5
Evangelical Lutheran	4.7
Other Lutheran	--
Montessori	10.0
Schools for	
Exceptional Children	4.0
Natl Assoc of	
Independent Schools (only)	4.5
Military	1.9
Other Private Schools	5.1
Catholic	4.3
Parochial	4.2
Diocesan	4.6
Private order	4.4
Other religious	4.5
Conservative Christian	4.7
Affiliated	5.0
Unaffiliated	3.6
Nonsectarian	6.5
Regular	5.0
Special emphasis	8.3
Special education	6.5
All members of NAIS	4.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91.

Note: -- Too few cases for a reliable estimate.

**Student performance assessment.** Finally, there is the issue of student achievement scores. NCES has administered NAEP, "the Nation's Report Card," at a small, representative sample of private schools. These assessments are very carefully controlled and offer the only nationally representative measure of school performance. Although data from NAEP are not released for individual schools or students who participate, these data provide a measure of schools in the nation as a whole.

As shown in table 4.8, the average NAEP reading and mathematics performance scores of students in private schools were higher than those of public school students.<sup>25</sup> In reading and, at 12th grade, in mathematics, the differences amounted to approximately one-half of a standard deviation (for example, a student performing at the 50th percentile relative to private school students would be at the 70th percentile relative to public school students). At 4th and 8th grades, the differences in mathematics were somewhat smaller.

These differences may reflect both the admission requirements of many private schools and the scholastic culture and orientation created by and in private schools. Many private schools attract bright students, and private school teachers are less likely to perceive that their instruction is interrupted by problems of abuse, apathy, and absence. Private schools offer attractive alternative environments for learning, and their students achieve higher performance scores.

**Table 4.8-- Mathematics and reading performance in public and private schools in 1992**

	Grade 4		Grade 8		Grade 12	
	Reading	Math	Reading	Math	Reading	Math
Catholic	230	227	275	277	306	310
Other Private	236	226	283	284	308	319
Public	216	217	258	266	289	297

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1992 Assessments in Reading and Mathematics.

<sup>25</sup> NAEP proficiency scores are scaled from 0 to 500, with a mean, across grades, of 250 and a standard deviation, across grades, of 50 points. The within-grade standard deviations are between 30 and 40 points.

## Summary

Principals' and teachers' indications of their most important educational goals characterized the different types of schools. When asked to identify the single most important goal, religiously oriented schools identified the religious development of their students most frequently, nonsectarian schools identified academic excellence and the growth of self-esteem, special education schools identified literacy and the growth of self-esteem, and public schools identified literacy.

Perceptions of the climate and problems at schools had not changed greatly between 1987-88 and 1990-91—private school teachers and principals continued to rate their schools more positively than public school teachers rated their schools on factors ranging from respect for teachers and students and a sense of community to absence of problems related to drugs, vandalism, apathy, and attendance.

As measured in a separate survey, academic performance was higher at private schools than public schools. Although 12th-grade graduation requirements were generally similar to public schools, particular categories of private schools required significantly more foreign language study prior to graduation, and college application rates were substantially higher from private schools than public schools.

The picture of private elementary and secondary education in America that is drawn from the Schools and Staffing Survey is one of diversity of values and strategies within the pursuit of academic development goals. The survey does not answer, in itself, why some schools are more effective than others, but the information provided by the thousands of teachers and school administrators who responded help to identify the dimensions of private school diversity. To find out what makes each school, public or private, effective, educational researchers must explore its particular pattern of goals, programs, teachers, and students.

## **5 Schools of Different Types**

The previous sections of this report present a great deal of information about private schools in America but only begin to convey the multidimensional variations among these schools. To promote a clearer understanding of the diversity among these schools, this final section provides descriptive profiles of private schools within 12 categories. These categories include schools in the 18 school types reported separately in the tables in sections 1 through 4. Results reported here that are based on SASS are taken from the first four sections of this report.

### **Catholic Schools**

The largest system of nonpublic schools in the United States is operated by the Roman Catholic Church. The majority of Catholic schools are parochial schools, associated with particular parishes, and many others are diocesan, associated with a diocese. Ninety-five percent of parochial schools and 75 percent of diocesan schools serve elementary grades (K-8); and about half of Private-Order schools serve secondary grades (9-12). Average tuition at parochial schools was about \$1,000 in 1990, while tuition at Private-Order schools averaged about \$3,000.

Catholics first opened their own schools in this country in response to a Protestant-dominated public school system (Cooper 1988) and to preserve their cultural heritage (Baker 1992). By 1920, there were 8,100 Catholic schools in the United States (U.S. Department of Education 1992), and the number steadily increased until 1964-65, when there were 13,200 Catholic schools. By 1991, the number of Catholic schools had declined to 8,700, although the National Catholic Educational Association reported a turn-around in the early 1990s (Lawton 1994, 5). The declines of the 1970s and 1980s are significant, not only for what they tell us about changes in the Catholic community, but also for their impact on private school statistics generally (Cooper 1988, 20). The largest declines were in the Midwest and Northeast, where two-thirds of private school students were in Catholic schools. In these regions, there were 12 to 14 percent fewer Catholic school students in 1990, compared to 1987. In the South and West, where Catholic schools enroll 40 percent of the private school students, the loss was only 3 percent over the same time period.

Many teachers and principals in Catholic schools are closely associated with the church. Principals take a leading role in setting school goals, a majority setting religious development of students as their most important educational goal, while teachers spread their focus more broadly on a number of goals, in addition to religious development, including building basic literacy skills and promoting personal development and self-esteem.



In many ways, Catholic schools are more similar to public schools than to other religiously oriented private schools. They are the largest private schools; they enroll substantial percentages of minority children; most have remedial reading or mathematics services; 97 percent of their teachers have at least bachelor's degrees and three quarters are certified; and almost all of them have libraries and most have librarians. An important difference is that only slightly more than half of the Private-Order Catholic schools are coeducational.

### **Lutheran Schools**

Lutherans, who have come to the United States from Sweden, Norway, Germany, Holland, and Austria, established their own church schools as early as 1600 (Beck 1963). Founded on the teachings of Martin Luther, who insisted that Christians learn to read, not only for religious reasons, but for civic and economic ones as well, these schools sought to create "able, learned, wise and upright cultivated citizens" (Martin Luther, quoted in Stillhorn 1963). Today, most Lutheran schools are in the Midwest and are associated with either the Missouri Synod or the Wisconsin Synod. In addition to 1,400 schools associated with these two synods, there are about 100 Evangelical Lutheran schools and 100 other Lutheran schools in the United States. The great majority of Lutheran schools serve elementary grades only.

Both the Missouri and Wisconsin Synods have supported schools that are among the oldest religiously oriented schools in the country. About 30 percent of currently operating Lutheran schools were in existence at the turn of the century. Growth since that time has been consistent yet slow until the 1970s when the Wisconsin Synod increased their schools by 32 percent. In the most recent decade, however, fewer new Wisconsin Synod schools have opened. Other Lutheran schools have enjoyed 2 decades of rapid growth; 22 percent of the currently existing schools opened in the 1950s, while almost 50 percent opened in the 1970s. Currently operating Evangelical Lutheran schools were established primarily in the 1960s and 1970s. This remarkable rate of growth has slowed in recent years with only 15 percent of the current schools opening in the last 10 years.

Lutheran principals and teachers are among the most experienced in all private schools; on average, Lutheran teachers feel that they have more influence in deciding school policies than other teachers do. Most Lutheran school principals and teachers agree that fostering the religious development of their students is their primary goal (77 and 61 percent of Missouri Synod principals and teachers, 99 and 89 percent of Wisconsin Synod principals and teachers, and 95 and 63 percent of other Lutheran school principals and teachers).

Lutheran school staff also gave strong support to goals of encouraging academic excellence and building basic literacy skills, especially Evangelical Lutheran principals and

teachers. While 34 percent of the principals in Evangelical Lutheran schools agree that fostering religious development is their most important goal, teachers were more likely to select building basic literacy skills (59 percent) and encouraging academic skills (55 percent) among their top three goals.

### **Jewish Schools**

Jewish schools, which are located primarily in the Northeast, can be divided roughly into Orthodox, Conservative (also called Solomon Schechter Schools after the former president of the Jewish Theological Seminary, who discovered the "Damascus Document" in 1897, setting the stage for the discovery and interpretation of the Dead Sea scrolls), Reform, and community day schools that serve all denominations. The first day school was opened by a synagogue in 1731 (Cooper 1988, 23). However, only about one eighth of the currently operating Jewish schools were established before 1950, and over half have been established since 1960.

Jewish schools tend to be larger than other private schools, and they are among the most likely to have libraries. At the secondary level, they require 4 years of social studies and 2 years of foreign language, on average, which is more than most other schools. As a group, they have more achievement requirements for admission than many other religiously oriented schools. Solomon Schechter schools have unusually low student/teacher ratios,

In some ways Jewish schools are among the private schools most different from public schools. One in 6 Jewish schools is for boys only, and 1 in 12 is for girls only. Jewish schools exemplify a paradox in the concept of "minority" students that also affects other schools. Although Jews are a religious minority, representing less than 3 percent of the population in a predominantly Christian country, many Jewish schools do not have other, commonly identified minority (black, Hispanic, American Indian, or Asian) students.

Principals and teachers in Jewish schools agree, for the most part, on their top three educational goals. Teachers place most importance on academic goals such as building basic literacy skills, encouraging academic excellence, and promoting good work habits and self-discipline. Principals, more than teachers, indicated that fostering the religious development of their students was a top goal. Promoting personal growth and self-esteem also received strong support from Jewish principals, as well as the academic goals selected by their teachers. Among teachers, substance abuse, poverty, and cultural conflict were rarely perceived as a serious problem.

## Conservative Christian Schools

During the 1970s and 1980s, the fastest growing segment of the private school sector was the conservative Christian school movement. In 1990, there were over 4,000 conservative Christian schools in the United States, more than 80 percent of which were established after 1970. A large number of these schools belonged to the Association of Christian Schools International (ACSI); and over 1,000 were affiliated with the American Association of Christian Schools (AACS). Others are affiliated with Accelerated Christian Education or the Oral Roberts Educational Fellowship. Many unaffiliated schools, as well as some schools with other church affiliations, also indicated that they are conservative Christian schools. For example, about 30 percent of the schools that belong to Christian Schools International (CSI) were conservative Christian schools in 1990. CSI (formerly the National Union of Christian Schools) is an affiliation of Calvinist and other private Christian schools (Cooper 1988, 30-1).

The growth of conservative Christian schools is a result of cultural forces in America. As Parsons (1987, 178-9) has described, the 1960s brought a number of political and societal changes that encouraged interest in Christian schools. Supreme Court rulings on prayer and Bible-reading in public schools ended two symbols of cultural Protestantism. Many parents concerned with the values and subjects taught in public schools have looked to conservative Christian schools as a way of transmitting their educational values to their children. They remember textbooks portraying the traditional family, parents active and involved in their children's school, the school day beginning with a Bible verse and prayer.

More conservative Christian schools are in the South than elsewhere; however, large numbers of ACSI schools are in the West. The majority of these schools combine both elementary and secondary grades; and they tend to operate inexpensively, hiring teachers who are young (10 percent under 25 years of age) and less experienced (23 percent with fewer than 3 years' experience) and who lack advanced degrees (17 percent of teachers and 13 percent of principals do not have a bachelor's degree). They charge lower tuitions than the average and pay lower teacher salaries, but their teachers are among the most satisfied with their jobs.

Conservative Christian schools place great emphasis on religious development. In the 1990-91 survey, principals (64 percent) and teachers (55 percent) chose fostering religious development as their top goal. Among the top three goals, principals and teachers also agree on the importance of building basic literacy skills and encouraging academic excellence. Although these schools have placed less emphasis than others on science, the percentage of their teachers whose specialty is science rose from 2.7 percent to 5.7 percent between 1987 and 1990. They place less emphasis on preparation for college than other private schools (65 percent of their 12th graders applied to college, compared to 76 percent for all private schools), but this is greater than the 53 percent average for public schools.

## **Episcopal Schools**

Episcopal schools, which are located primarily in the South and Northeast, are best known for offering local, parent-controlled, highly academic programs with a large percentage of non-Episcopal students (Cooper 1988, 27). There was slow growth of Episcopal schools until the 1940s. Seventy-five percent of currently operating Episcopal schools were established after 1950.

Episcopal schools charge higher-than-average tuitions and have greater-than-average admissions requirements, and their principals identify academic excellence as the top priority more often than others. Although religious development of students is important in these schools, it does not have the primacy that it does in most religiously affiliated schools. Pursuit of academic excellence has a greater priority, which is, perhaps, reflected by the fact that Episcopal secondary schools are among the minority that require 2 years of a foreign language for graduation.

## **Friends Schools**

The Society of Friends founded some of the first private schools in the nation; William Penn chartered Friends Select school in 1689 (Cooper 1988, 28). While over 45 percent of the currently existing Friends schools opened before the turn of the century, growth virtually stood still until the 1950s, when 55 percent of the existing schools had opened. In 1990, 56 Friends schools were operating.

Friends schools generally have high standards and resources, and on average, their tuitions are more than double the average private school tuition. Friends schools more frequently require admissions tests than other schools. Essentially all Friends schools have libraries; virtually all their teachers have college degrees; and they offer student/teacher ratios of about 10:1. As an indicator of their academic orientation, Friends schools generally required 2 years' foreign language coursework for graduation.

Friends schools focus on human interactions. For example, teachers at Friends schools were most likely of any teachers to report that they had influence over school policies and control over classroom practices. Furthermore, principals at Friends schools saw development of self-esteem and self-awareness as the top priority more than those at other schools, and they placed less emphasis on religious development than other religiously oriented schools. Human interactions involved cultural diversity, as the majority of Friends schools had 10 to 30 percent minority enrollments.

## Seventh-Day Adventist Schools

Seventh-Day Adventists opened their first U.S. schools in 1852 (Cooper 1988, 24). Nevertheless, 37 percent of currently operating Seventh-Day Adventist schools were established in the 1980s, the largest percentage of any of the categories of private schools in this report; and based on SASS estimates, most of these new schools opened in the early 1980s: there was a small decline in numbers of Seventh-Day Adventist schools from 1987-88 to 1990-91.

As a group, Seventh-Day Adventist schools are different from other private schools in several ways. In addition to being new, most Seventh-Day Adventist schools are small (fewer than 50 students). Most Seventh-Day Adventist schools are in the West; and a larger percentage of their students are minorities (40 percent in 1990-91). Finally, although principals of these schools had goals similar to other religiously oriented schools (69 percent viewed religious development as the most important educational goal), fewer than any other group chose academic excellence as the top educational goal (2 percent).

## Members of NAIS

The member schools of the National Association of Independent Schools (NAIS) include both religiously affiliated as well as nonsectarian schools (Kane 1991); in this report, the religiously affiliated NAIS members have been grouped with other religious schools. In 1990-91, there were 1,024 nonsectarian members of NAIS, along with 252 Catholic schools and 247 other religiously affiliated schools.<sup>26</sup> NAIS members, most of which are in the Northeast and South, are known primarily for their academic excellence and their ability to place their students in prestigious colleges (Cooper 1988, 25).

NAIS members generally require test scores for admissions and charge high tuitions. At least half of all teachers and principals hold college degrees beyond a bachelor's. Most schools have full-time librarians, and maintain low student/teacher ratios (averaging less than 10:1). Principals at NAIS members place a priority on academic excellence; and according to teachers, they give their teachers a large degree of control over classroom practices.

Approximately 20 percent of the currently existing NAIS member schools were founded before the turn of the century, and a few trace their origins to more than a century earlier. These well-known boarding schools make up a small but important segment (25 percent) of all NAIS members. Like many other types of private schools, the NAIS

---

<sup>26</sup> Thirty-nine of the nonsectarian NAIS members were also members of NAPSEC (special education), 14 were military schools, and 13 were Montessori schools, leaving 933 reported here as "independent" schools.

members saw an increase in number during the 1960s and 1970s, and a decline in growth in the last 10 years.

Overall, the makeup of NAIS schools has greatly changed over the years: from boarding to day schools, and from single-sex to coeducational (Cooper 1988, 25). About half of NAIS member schools are combined elementary and secondary schools. Nearly all (more than 99 percent) NAIS members had at least some minority students in 1990-91, and 15 percent had more than 30 percent minorities.

### **Military Schools**

Currently operating military schools are among the oldest private schools in the United States. By the turn of the century, 73 percent of all current military schools had opened their doors. Since the 1960s, it appears that many of these academies have either closed or gone "civilian," dropping many of the trappings of military life (Cooper 1988, 30). In 1990-91, there were estimated to be only 21 military schools in operation.

All of the military schools operating in 1990-91 were secondary-level boarding schools, and half were for boys only. They tended to be large, relative to other private schools, but they maintained among the lowest student/teacher ratios. Almost all of their teachers had at least bachelor's degrees, and almost all of their principals held advanced degrees. In addition, they tended to have at least one full-time librarian. Most required high tuitions, and their principals set lofty goals for their students. Most (64 percent) principals considered the encouragement of academic excellence as their top goal. Another 24 percent thought building basic literacy skills to be most important.

Teachers at military schools were among the least satisfied with their jobs. This may be due to the frequency with which they perceived serious problems among their students—poor attitudes, substance abuse, and dropping out. Whether these perceptions reflect problems that would worry other teachers or merely the high standards that these teachers set is not clear.

### **Montessori Schools**

Based on the philosophy and practices of Maria Montessori, these schools have been established in substantial numbers since 1960 and grew from an estimated 582 in 1987-88 to 757 schools in 1990-91. In 1990-91, many, but not all, are members of the American Montessori Society. Montessori schools began primarily as preschool programs and have expanded into the primary and elementary grades (Cooper 1988, 32).

Most Montessori schools are small, with fewer than 50 students (other than prekindergarten students). Nearly all have some minority students. Their principals, who are usually women, are perceived by their teachers as giving control of classroom practices to teachers. Many principals in Montessori schools (15 percent) had not received bachelor's degrees. Many principals (40 percent) place top priority on the development of self-esteem and self-awareness, but more than at other schools, they also focus on self-discipline.

### **Special Education Schools and Schools for Exceptional Children**

During the past 30 years, concerns have grown about the special educational needs of children with disabilities and children who are gifted. The belief that these children can benefit significantly from special education programs has led to the growth of independent private schools to address these needs. Many of these schools are members of the National Association of Private Schools for Exceptional Children (NAPSEC).

Private special education schools were relatively rare until the 1960s. Before that time, only 17 percent of currently operating special education schools were in existence. The 1960s and 1970s were boom years for these schools, when roughly 50 percent of existing schools were established. Another 20 percent of currently operating special education schools were established in the 1980s.

Although one-third of these schools did not charge tuition in 1990-91, tuitions at the other special education schools were generally the highest of any private schools. About half of the special education schools were boarding schools; the great majority of their teachers were full-time (97 percent), certified (72 percent), and college graduates (99 percent); and all of their principals held advanced degrees. On average, they maintained student/teacher ratios of 7:1, the lowest of any reported category of private school. Although most special education schools served students of different ages, about 50 percent did not assign children to specific grade levels.

Special education schools play a significant role in helping children whose needs are not adequately served by traditional schools. "Changes in federal laws and state/local regulations have greatly increased the demands for private schools for children with special intellectual, physical and emotional problems. If the local public schools cannot supply an appropriate school for a special needs child, the family under Public Law 94-142 and other legislation may seek placement in a private, specialized school, even in another state. With public support, then, many of these schools are privately run but publicly financed. ... Since they are heavily subsidized, they are an interesting model of total state support, useful perhaps to policymakers and others interested in state-private school relations" (Cooper 1988, 29).

These schools serve a very different population from other private schools. About 70 percent of their students are male and 20 percent are black. In 1990-91, their teachers more frequently reported that drugs, verbal and physical abuse, ethnic conflict, theft and vandalism, attendance, and apathy were problems at their schools than did teachers at other private schools—in fact, these climate measures were similar to the averages for public schools. Forty-four percent of principals in general, and 67 percent at NAPSEC member schools in particular, believed the development of literacy skills to be the most important educational goal, citing promoting growth of self-esteem and self-awareness next most frequently.

### **Other Private Schools**

In 1990-91, over 4,000 private schools were estimated to belong to none of the types of schools discussed in this section. Many different private schools, generally of recent origin, have been combined in this last category. Included in the "other" category are Greek Orthodox schools, Mennonite schools, and nonsectarian "alternative schools."

This category of schools contains a wide variety of both religiously oriented and nonsectarian schools, and attempts to understand their goals and climates in the average would be misleading. Nevertheless, a large percentage of schools in this category are small, with relatively young and inexperienced teachers and principals.



## References

- Baker, D.P. 1992. "The Politics of American Catholic School Expansion, 1870-1930," in *The Political Construction of Education*. Ed. B. Fuller and R. Rubinson. New York: Praeger.
- Beck, W.M. 1963. *Lutheran Elementary Schools in the United States*. St. Louis, MO: Concordia Publishing House.
- Benson, P. and McMillen, M. 1991. *Private Schools in the United States: A Statistical Profile with Comparisons to Public Schools*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 91-054.
- Broughman, S., Gerald, E., Bynum, L.T., and Stoner, K. 1994. *Private School Universe Survey, 1991-92*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 94-350.
- Choy, S.P., Bobbitt, S.A., Henke, R.R., Medrich, E.A., Horn, L., and Lieberman, J. 1993. *America's Teachers: Profile of a Profession*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 93-025.
- Choy, S.P., Henke, R.R., Alt, M.N., Medrich, E.A., and Bobbitt, S.A. 1993. *Schools and Staffing in the United States: A Statistical Profile, 1990-91*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 93-146.
- Chubb, J. and Moe, T. 1990. *Politics, Markets, and America's Schools*. Washington, D.C.: Brookings Institution.
- Coleman, J.S. and Hoffer, T. 1987. *Public and Private High Schools: The Impact of Communities*. New York: Basic Books, Inc.
- Cooper, B.S. 1988. "The Changing Universe of U.S. Private Schools," in *Comparing Public and Private Schools, Volume I: Institutions and Organizations*. Ed. T. James and H.M. Levin. Philadelphia, PA: The Falmer Press, Taylor and Francis, Inc.
- Darling-Hammond, L. and Kirby, S.N. 1985. *Tuition Tax Deductions and Parent School Choice: A Case Study of Minnesota*. Santa Monica, CA: Rand Corporation.

- de Baca, M., Rinaldi, C., Billig, S., and Kinnison, B. 1991. "Santo Domingo School: A Rural Schoolwide Project Success." *Educational Evaluation and Policy Analysis*, 13: 363-368.
- Devins, N.E., ed. 1989. "Introduction: Private Schools and Public Values," in *Public Values, Private Schools*. Philadelphia, PA: The Falmer Press, Taylor & Francis Inc.
- Ferguson, R.F. 1991. "Competitive Salaries, Teacher Quality, and Student Performance." *Research Bulletin*. Cambridge, MA: Malcolm Wiener Center for Social Policy.
- Gruber, K.J., Rohr, C.L., and Fondelier, S.E. 1994. *1990-91 Schools and Staffing Survey: Data File User's Manual: Volume I: Survey Documentation*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 93-144-I.
- Hand, D.B. Oral Roberts University Educational Fellowship. Personal communication.
- James, T. and Levin, H.M., ed. 1988. *Comparing Public and Private Schools, Volume 1: Institutions and Organizations*. Philadelphia, PA: The Falmer Press, Taylor & Francis Inc.
- Kane, P.R. Spring 1991. "What Is an Independent School?" *Teachers College Record*, 92(3).
- Kane, P.R., ed. 1992. *Independent Schools, Independent Thinkers*. San Francisco, CA: Jossey-Bass.
- Kane, P.R. and Mason, J.B. 1992. "The Role of Administrators" in *Independent Schools, Independent Thinkers*. Ed. P.R. Kane. San Francisco, CA: Jossey-Bass.
- Lawton, M. 1994. "Catholic Schools Record Increase in Enrollment for 2nd Straight Year." *Education Week*, XIII(29).
- Luther, M. Letters to the mayors and councilmen of all German cities in behalf of Christian schools, 1524, in Stillhorn, A.C. 1963. *Schools of the Lutheran Church, Missouri Synod*. St. Louis, MO: Concordia Publishing House.
- McLaughlin, D.H. and Wise, L.L. 1980. *Nonpublic Education of the Nation's Children*. SAGE Technical Report No. 9. Palo Alto, CA: American Institutes for Research.
- McMillen, M.M. and Benson, P. 1991. *Diversity in Private Schools*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 92-082.

- McMillen, M.M., Rollefson, M., and Benson, P. 1991. *Detailed Characteristics of Private Schools and Staff: 1987-88*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 92-079.
- Parsons, P.F. 1987. *Inside America's Christian Schools*. Macon, GA: Mercer University Press.
- Pickard, P.W. Winter 1993. "The Instructional Consultant Role of the School Library Media Specialist." *School Library Media Quarterly*, 21(2): 115-21.
- Ravitch, D. 1992. "The Role of Private Schools in American Education," in *Independent Schools, Independent Thinkers*. Ed. P.R. Kane. San Francisco, CA: Jossey-Bass. Reprinted with permission from *Teachers College Record*, 92(3).
- Rollefson, M. 1993. *Teacher Supply in the United States: Sources of Newly Hired Teachers in Public and Private Schools*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Publication No. NCES 93-424.
- SRI International. December 1993. Action seminar: The transition experiences of young people with disabilities: Implications for policy and programs, briefing materials. Menlo Park, CA: SRI International.
- Talbert, J.E. 1988. "Conditions of Public and Private School Organization and Notions of Effective Schools," in *Comparing Public and Private Schools, Volume I: Institutions and Organizations*. Ed. T. James and H.M. Levin. Philadelphia, PA: The Falmer Press, Taylor and Francis Inc.
- U.S. Department of Education. 1992. *Digest of Education Statistics 1992*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Publication No. NCES 92-097.

**Appendix A**  
**Tables of Standard Errors**

**Table A1.1- Standard errors for number of schools and percentage of schools at each level in 1987-88 and 1990-91, by affiliation**

	Total		Elementary		Secondary		Combined	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	<b>836.32</b>	<b>430.12</b>	<b>1.37</b>	<b>0.86</b>	<b>0.59</b>	<b>0.48</b>	<b>1.26</b>	<b>0.86</b>
Catholic	233.31	102.29	1.42	0.60	0.84	0.50	0.93	0.44
Episcopal	30.64	60.65	4.57	4.60	3.42	3.51	2.94	3.72
Friends	10.90	0.00	5.12	0.00	2.04	0.00	3.09	0.00
Seventh-Day Adventist	107.85	51.62	3.97	4.19	1.18	1.98	3.64	3.57
Hebrew Day	37.04	16.38	7.04	6.31	5.76	5.99	8.05	3.85
Solomon Schechter	--	6.44	--	0.27	0.00	0.00	--	0.27
Other Jewish	--	22.63	--	5.59	--	3.85	--	4.50
Christian Schools Intl	49.48	49.76	7.61	6.71	1.53	2.04	8.69	6.66
Assoc of Christn Schls Intl	206.29	201.54	6.18	4.79	2.01	1.24	5.98	5.01
Lutheran, Missouri Synod	60.71	53.10	1.46	0.78	1.13	0.70	1.03	0.43
Lutheran, Wisconsin Synod	--	32.54	--	1.32	--	1.27	--	0.23
Evangelical Lutheran	--	15.22	7.97	9.17	--	0.11	--	9.28
Other Lutheran	79.42	--	2.80	6.30	2.28	--	1.83	--
Montessori	117.78	105.99	3.84	3.60	0.69	0.00	3.86	3.60
Schools for Exceptional Children	65.32	69.46	6.67	1.48	11.72	3.36	12.14	3.99
Natl Assoc of Independent Schools (only)	60.68	64.43	5.01	4.03	3.67	2.36	4.47	3.99
Military	--	3.16	0.00	0.00	11.57	3.28	--	3.28
Other Private Schools	747.25	391.02	3.60	2.53	0.73	1.12	3.55	2.64
Catholic	233.30	102.29	1.43	0.60	0.85	0.50	0.94	0.44
Parochial	200.61	174.77	0.73	0.94	0.64	0.75	0.53	0.58
Diocesan	170.09	145.27	3.39	2.29	3.46	2.18	0.49	0.37
Private order	155.85	70.28	5.51	4.75	5.76	4.66	5.76	2.69
Other religious	668.37	374.16	2.63	1.60	0.58	0.41	2.53	1.67
Conservative Christian	340.17	232.80	3.49	2.61	0.90	0.65	3.58	2.78
Affiliated	203.34	168.44	2.10	2.61	0.79	1.14	1.92	2.49
Unaffiliated	563.57	285.93	5.95	4.84	1.32	0.56	5.57	4.66
Nonsectarian	373.50	249.50	4.06	2.54	1.73	1.84	4.04	1.93
Regular	305.69	132.01	7.32	3.65	2.71	1.61	6.48	3.40
Special emphasis	210.29	185.11	4.91	4.63	2.89	3.60	4.45	4.11
Special education	113.94	100.25	4.88	3.59	3.94	5.05	5.94	4.65
<b>All members of NAIS</b>	<b>84.08</b>	<b>96.07</b>	<b>3.54</b>	<b>3.49</b>	<b>3.14</b>	<b>2.44</b>	<b>3.27</b>	<b>2.96</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A1.2- Standard errors for number of elementary and secondary students in 1987-88 and 1990-91, by grade level and affiliation of school**

	Total		Elementary		Secondary		Combined	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	<b>111,360.00</b>	<b>84,806.43</b>	<b>53,331.43</b>	<b>58,045.54</b>	<b>42,372.76</b>	<b>37,777.88</b>	<b>77,071.08</b>	<b>60,759.87</b>
Catholic	67,216.28	64,290.13	43,515.48	50,651.35	40,682.37	36,807.09	21,053.96	15,029.86
Episcopal	9,096.34	7,600.73	5,581.84	6,188.56	2,819.62	3,034.77	7,007.31	4,562.07
Friends	4,254.57	0.00	4,254.57	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	7,159.41	7,935.30	5,864.34	5,798.65	2,406.08	2,143.28	6,642.36	4,618.81
Hebrew Day	10,787.20	6,556.66	7,553.45	3,310.26	2,680.46	3,891.16	7,830.48	3,918.28
Solomon Schechter	.	614.40	.	614.40	0.00	0.00	.	0.00
Other Jewish	.	7,773.03	.	6,984.19	.	1,455.06	.	5,019.6
Christian Schools Intl	16,849.06	16,704.57	2,419.50	5,448.52	983.47	5,102.79	16,837.05	12,397.81
Assoc of Christn Schls Intl	36,514.64	36,817.38	16,125.13	17,619.64	8,689.74	4,630.50	30,079.25	30,420.07
Lutheran, Missouri Synod	11,950.62	13,662.73	10,630.59	13,325.86	4,485.30	1,994.07	5,832.08	1,854.44
Lutheran, Wisconsin Synod	.	2,350.12	.	2,207.90	.	778.39	.	43.88
Evangelical Lutheran	.	9,031.02	.	1,080.02	.	0.00	.	8,760.76
Other Lutheran	5,583.07	.	5,588.69	.	920.82	.	821.94	.
Montessori	9,995.94	5,923.31	9,618.20	5,818.99	423.47	0.00	3,237.47	1,068.80
Schools for								
Exceptional Children	4,448.01	3,886.60	2,768.20	178.75	1,650.02	1,870.58	2,642.84	3,661.56
Natl Assoc of								
Independent Schls (only)	27,214.46	24,078.64	12,079.73	11,827.96	8,032.49	7,473.46	23,499.18	22,580.12
Military	1,540.03	.	0.00	0.00	.	.	0.00	0.00
Other Private Schools	63,068.06	40,335.12	26,474.91	21,544.95	6,815.54	10,947.98	57,617.32	31,939.71
Catholic	68,127.83	64,290.13	45,152.90	50,651.35	40,682.37	36,807.09	21,053.96	15,029.86
Parochial	54,622.35	61,106.48	54,565.13	59,722.16	23,508.07	17,422.10	12,996.65	5,642.58
Diocesan	64,043.11	56,387.62	36,911.42	43,305.69	45,357.86	28,960.13	587.50	6,551.86
Private order	41,083.05	25,511.56	11,700.78	13,804.44	35,511.77	20,778.05	16,264.14	12,717.08
Other religious	67,654.34	65,821.21	29,071.48	29,861.90	12,356.33	11,232.57	62,857.43	52,887.03
Conservative Christian	40,235.21	42,000.29	17,264.42	18,931.02	8,679.06	5,587.44	37,019.24	39,425.74
Affiliated	39,854.20	31,122.70	14,196.20	18,409.36	8,305.72	11,083.95	31,029.96	20,299.60
Unaffiliated	36,002.49	29,288.81	20,086.38	13,012.15	3,336.05	5,486.23	35,573.35	23,605.08
Nonsectarian	47,318.97	34,385.05	28,527.18	17,857.54	9,570.69	9,773.73	44,076.37	30,450.96
Regular	40,947.37	25,606.39	23,382.36	16,154.25	6,886.88	7,354.12	36,516.21	23,733.40
Special emphasis	32,321.30	19,104.51	14,949.36	8,473.14	6,010.18	5,678.07	28,538.02	15,464.25
Special education	12,546.06	7,414.25	1,457.42	3,331.28	1,656.97	2,589.46	11,922.81	5,220.00
<b>All members of NAIS</b>	<b>31,241.99</b>	<b>30,963.24</b>	<b>13,311.79</b>	<b>15,063.03</b>	<b>14,580.64</b>	<b>18,014.29</b>	<b>25,301.96</b>	<b>28,500.39</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A1.3- Standard errors for percentage of private schools in existence in 1990-91 established prior to dates from 1900 to 1990, by affiliation**

	Before 1900	Before 1910	Before 1920	Before 1930	Before 1940	Before 1950	Before 1960	Before 1970	Before 1980	(Unknown)
Total Private	0.89	1.05	1.07	1.14	1.17	1.21	1.35	1.24	0.84	1.29
Catholic	1.84	2.10	2.07	2.07	2.17	2.22	1.70	1.00	0.62	1.09
Episcopal	3.99	4.22	4.29	4.95	5.06	4.80	6.00	7.92	5.92	5.56
Friends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	1.92	3.06	3.87	3.99	4.59	4.90	7.98	7.45	7.48	6.23
Hebrew Day	0.00	0.00	0.00	1.08	1.08	6.45	8.66	9.93	4.67	4.89
Solomon Schechter	0.00	0.00	0.00	0.00	0.00	10.59	9.37	6.50	2.68	5.02
Other Jewish	0.40	0.40	0.40	1.40	1.40	4.28	4.84	7.43	7.93	5.81
Christian Schools Intl	1.96	3.09	4.88	5.51	5.46	6.42	6.62	6.99	4.53	6.56
Assoc of Christn Schls Intl	0.00	0.54	0.54	1.48	1.48	2.54	3.58	5.31	6.42	5.63
Lutheran, Missouri Synod	4.66	4.89	5.02	4.77	4.33	4.58	4.15	5.03	3.28	3.62
Lutheran, Wisconsin Synod	4.28	4.21	4.23	4.42	4.49	4.57	4.42	4.89	1.65	5.62
Evangelical Lutheran	1.21	1.33	1.33	2.23	2.23	3.10	4.51	6.98	2.84	1.97
Other Lutheran	--	--	--	--	--	--	--	--	0.98	--
Montessori	0.00	0.07	0.07	0.07	0.07	0.07	3.11	6.56	7.55	6.93
Schools for										
Exceptional Children	1.68	2.17	2.64	4.31	4.31	4.68	6.28	12.98	3.00	12.10
Natl Assoc of										
Independent Schools (only)	2.66	2.86	3.40	3.58	3.62	4.34	3.83	4.17	3.66	3.40
Military	4.20	3.36	2.52	1.68	0.84	0.84	0.84	0.00	0.00	0.00
Other Private Schools	0.51	0.60	0.77	0.95	1.15	1.66	3.03	3.58	2.84	2.83
Catholic	1.84	2.10	2.07	2.07	2.17	2.22	1.70	1.00	0.62	1.09
Parochial	1.95	2.50	2.74	2.78	3.02	3.07	2.18	1.37	0.87	1.52
Diocesan	3.43	3.95	3.85	4.16	4.41	4.20	3.74	1.59	0.78	1.69
Private order	4.51	4.85	4.77	4.77	4.72	4.83	5.27	2.92	1.49	4.55
Other religious	0.71	0.81	0.95	1.05	1.09	1.08	2.05	2.33	1.89	1.95
Conservative Christian	0.00	0.51	0.52	0.98	0.98	1.51	2.07	3.49	4.74	3.12
Affiliated	1.40	1.56	2.01	2.19	2.06	1.99	2.66	2.94	2.20	2.48
Unaffiliated	1.33	1.52	1.72	1.74	2.42	3.00	5.68	5.95	4.06	5.26
Nonsectarian	1.05	1.14	1.71	1.98	1.95	2.17	3.10	3.45	2.36	3.37
Regular	1.93	2.13	3.01	3.56	3.61	3.93	4.19	5.08	3.09	4.00
Special emphasis	0.65	0.79	1.21	1.99	2.03	2.25	4.32	7.37	4.17	4.94
Special education	0.88	1.07	1.18	1.23	1.46	1.63	4.63	8.77	7.45	6.12
All members of NAIS	2.27	2.45	2.46	3.10	2.93	3.22	2.87	2.70	2.37	2.32

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire) and Private Schools Survey 1991-92.

**Table A1.4- Standard errors for most frequent private school grade ranges in 1990-91, by affiliation**

---

Standard errors were not computed for frequencies of individual grade ranges.



**Table A1.5- Standard errors for percentage of private schools charging tuition, percentage allowing tuition reductions, and average tuition in 1987-88 and 1990-91, by level and affiliation**

	% Charging Tuition	% Allowing Reductions	Elementary		Average Tuition Secondary		Combined	
	90-91	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	1.09	1.37	\$34.30	\$48.93	\$144.42	\$210.35	\$156.15	\$188.47
Catholic	0.43	0.79	\$34.98	\$41.44	\$87.14	\$214.42	--	--
Episcopal	0.00	3.84	\$294.21	\$239.96	\$795.55	\$809.78	\$489.37	\$406.25
Friends	0.00	0.00	\$361.93	\$0.00	--	--	\$0.00	\$0.00
Seventh-Day Adventist	1.13	2.50	\$44.86	\$122.80	\$128.52	\$138.06	\$166.58	\$303.20
Hebrew Day	0.00	2.56	\$279.60	\$368.47	\$286.26	\$309.72	\$397.19	--
Solomon Schechter	0.00	0.54	\$263.66	\$120.63	--	--	--	--
Other Jewish	0.00	2.80	--	\$281.33	--	\$190.78	--	\$676.99
Christian Schools Intl	0.00	0.67	\$62.74	\$109.28	\$231.47	\$227.48	\$121.84	\$300.87
Assoc of Christn Schls Intl	0.01	2.91	\$44.96	\$130.61	\$391.89	\$363.35	\$66.75	\$108.12
Lutheran, Missouri Synod	1.07	2.82	\$40.39	\$249.29	--	\$89.54	--	--
Lutheran, Wisconsin Synod	1.93	2.68	--	\$34.56	--	--	--	--
Evangelical Lutheran	2.19	5.29	\$127.76	\$9.64	--	--	--	--
Other Lutheran	5.73	8.05	\$103.80	\$173.21	--	--	--	--
Montessori Schools for	0.62	5.21	\$209.57	\$81.27	--	--	--	\$457.72
Exceptional Children	11.28	10.01	--	--	--	--	\$1,614.24	\$1,079.12
Natl Assoc of Independent Schools (only)	0.86	3.25	\$291.28	\$644.62	\$495.26	\$524.65	\$303.60	\$287.27
Military	0.00	8.61	--	--	\$58.43	\$698.67	--	--
Other Private Schools	3.21	3.42	\$128.98	\$133.75	\$498.45	\$1,212.93	\$200.41	\$272.31
Catholic	0.43	0.79	\$31.30	\$41.44	\$87.14	\$214.42	--	--
Parochial	0.64	1.12	\$36.57	\$54.32	\$196.42	\$824.63	--	--
Diocesan	0.46	1.18	\$44.73	\$61.07	\$83.99	\$91.11	--	--
Private order	0.98	3.93	--	\$269.83	\$171.55	\$275.78	--	--
Other religious	2.16	2.59	\$51.06	\$77.93	\$163.99	\$264.81	\$61.74	\$141.00
Conservative Christian	2.22	3.06	\$56.30	\$92.14	\$318.38	\$303.10	\$41.92	\$162.47
Affiliated	0.62	1.19	\$49.40	\$98.67	\$145.12	\$341.87	\$184.70	\$182.01
Unaffiliated	5.80	6.78	\$163.15	\$122.78	--	\$750.37	\$175.74	\$469.00
Nonsectarian	1.60	2.60	\$147.50	\$167.27	\$534.15	\$639.05	\$435.98	\$447.75
Regular	1.84	3.81	\$232.43	\$209.87	\$577.08	\$614.82	\$443.07	\$265.49
Special emphasis	2.14	3.37	\$166.87	\$261.64	\$870.59	\$1,270.58	\$455.12	\$436.06
Special education	6.18	5.57	--	--	--	\$2,610.77	\$960.68	\$1,335.01
All members of NAIS	0.59	2.52	\$356.77	\$530.20	\$317.24	\$455.57	\$228.17	\$257.93

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A1.6- Standard errors for percentage of schools of different enrollment sizes in 1987-88 and 1990-91, by affiliation**

	< 50		50 - 99		100 - 149		150 - 299		> 300	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	1.91	1.29	1.03	1.11	0.78	0.66	1.42	0.95	0.95	0.96
Catholic	0.92	0.57	1.21	1.05	1.22	1.33	1.86	2.33	1.61	2.25
Episcopal	3.53	2.30	5.13	7.76	4.87	3.95	4.57	5.63	3.33	4.39
Friends	3.47	0.00	1.74	0.00	1.34	0.00	6.11	0.00	8.88	0.00
Seventh-Day Adventist	3.63	5.24	2.86	3.31	1.44	3.10	1.78	2.29	1.46	0.93
Hebrew Day	3.27	4.09	7.05	6.19	4.38	5.96	8.24	6.49	6.54	6.97
Solomon Schechter	0.00	8.66	--	0.81	--	4.99	--	5.15	--	2.44
Other Jewish	--	5.64	--	4.05	--	4.65	--	4.77	--	4.20
Christian Schools Intl	2.50	6.41	5.28	6.37	3.26	4.38	10.87	3.66	8.07	7.00
Assoc of Christn Schls Intl	6.30	5.51	6.27	4.27	2.72	3.98	4.50	4.59	2.77	2.43
Lutheran, Missouri Synod	3.21	2.94	4.03	5.97	3.25	4.66	4.20	6.86	1.91	2.63
Lutheran, Wisconsin Synod	--	6.03	--	4.57	--	3.43	--	3.10	--	1.16
Evangelical Lutheran	--	2.23	--	3.84	--	1.98	--	3.78	--	9.23
Other Lutheran	13.99	--	8.21	--	9.20	--	5.04	--	1.04	--
Montessori	11.59	6.75	7.25	7.09	4.15	3.16	6.17	1.48	2.30	0.63
Schools for										
Exceptional Children	10.42	11.52	8.60	12.49	3.33	5.11	6.53	3.68	0.00	1.43
Natl Assoc of										
Independent Schools (only)	1.12	1.66	4.54	3.62	4.23	2.70	5.21	3.73	4.30	4.08
Military	0.00	0.00	--	0.84	--	--	--	6.64	--	--
Other Private Schools	4.23	3.46	2.57	2.31	1.97	1.25	2.41	1.44	1.04	0.79
Catholic	0.93	0.57	1.20	1.05	1.22	1.33	1.90	2.33	1.60	2.25
Parochial	0.71	0.74	1.34	1.67	1.45	1.92	2.27	2.94	2.12	2.47
Diocesan	1.69	1.28	2.62	2.11	3.03	2.55	4.07	4.51	3.76	4.08
Private order	5.96	0.98	6.05	3.08	2.16	2.51	6.09	5.50	7.28	4.86
Other religious	3.42	2.17	1.86	1.80	1.49	0.98	1.83	1.26	0.96	0.83
Conservative Christian	4.83	3.40	3.57	2.75	1.81	2.48	2.95	2.70	1.55	1.59
Affiliated	1.94	2.83	2.22	2.19	2.04	1.66	1.61	2.27	1.28	1.36
Unaffiliated	8.10	5.50	4.07	3.96	3.66	1.75	3.76	1.98	1.42	1.75
Nonsectarian	2.31	3.22	2.45	2.79	1.94	1.50	3.11	2.00	1.62	1.24
Regular	5.72	4.19	4.25	3.25	2.96	1.98	6.01	3.60	3.75	2.34
Special emphasis	5.14	5.66	4.31	4.63	2.39	3.10	3.43	1.79	2.14	1.18
Special education	7.10	7.06	7.82	8.07	5.00	3.90	4.92	2.86	0.60	0.20
All members of NAIS	1.84	1.19	3.30	2.89	2.94	1.98	4.04	2.95	3.91	3.07

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A1.7- Standard errors for students per teacher and per classroom in 1987-88 and 1990-91, by affiliation**

	Avg. Student/ Teacher Ratio		Percent Schools w Student/Teacher Ratio < 10		Percent Schools w Student/Teacher Ratio > 30		Avg. Students per Self-contained Class		Avg. Students per Departmental Class	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.22	0.20	1.34	1.15	0.47	0.46	0.42	0.27	0.32	0.27
Catholic	0.26	0.43	0.81	0.61	0.74	1.11	0.52	0.48	0.37	0.35
Episcopal	0.44	0.72	6.38	6.32	0.00	1.84	0.70	1.66	1.31	0.68
Friends	1.13	0.00	7.84	0.00	0.00	0.00	1.04	0.00	0.08	0.00
Seventh-Day Adventist	0.47	0.60	3.86	4.91	0.84	0.00	0.72	1.01	1.50	1.28
Hebrew Day	0.96	1.24	7.72	8.67	0.00	4.23	4.21	1.33	1.21	1.06
Solomon Schechter	1.00	0.36	--	4.87	0.00	0.00	2.55	0.00	--	0.00
Other Jewish	--	1.89	--	4.67	--	2.11	--	1.24	--	0.97
Christian Schools Intl	0.87	0.58	11.65	4.05	0.00	0.82	1.07	1.09	1.00	1.68
Assoc of Christn Schls Intl	0.62	0.64	5.70	5.21	0.63	0.19	1.16	0.77	1.18	0.84
Lutheran, Missouri Synod	0.41	0.46	1.27	0.72	0.47	1.13	0.75	1.34	0.93	1.17
Lutheran, Wisconsin Synod	--	0.81	--	5.96	--	0.64	--	1.19	--	1.21
Evangelical Lutheran	2.35	0.54	--	3.08	--	0.12	2.39	0.47	--	1.05
Other Lutheran	0.89	2.46	1.97	--	0.00	--	1.42	2.52	--	--
Montessori	0.95	1.24	11.06	9.91	1.65	2.09	4.76	1.36	2.25	--
Schools for Exceptional Children	0.82	0.70	12.25	11.05	0.00	0.74	2.59	4.30	0.84	0.72
Natl Assoc of Independent Schools (only)	0.33	0.32	4.38	3.97	0.21	0.61	1.63	1.48	0.87	0.68
Military	0.79	0.22	11.27	5.04	0.00	0.00	--	--	1.77	0.48
Other Private Schools	0.42	0.34	2.99	2.76	1.27	0.85	0.69	0.59	0.96	0.46
Catholic	0.26	0.43	0.82	0.61	0.74	1.11	0.53	0.48	0.37	0.35
Parochial	0.28	0.61	0.68	0.84	1.14	1.75	0.49	0.51	0.47	0.51
Diocesan	0.65	0.71	2.14	0.69	1.87	1.58	0.83	1.02	0.95	0.79
Private order	0.55	1.39	4.25	3.37	0.00	0.95	4.60	2.35	0.93	0.64
Other religious	0.32	0.22	2.05	2.12	1.00	0.59	0.53	0.41	0.65	0.36
Conservative Christian	0.51	0.44	3.63	4.19	1.77	0.61	1.02	0.81	0.87	0.68
Affiliated	0.49	0.26	2.29	1.82	1.15	0.39	0.45	0.44	1.06	0.51
Unaffiliated	0.60	0.57	4.10	3.48	2.21	1.91	1.38	0.88	1.08	0.80
Nonsectarian	0.47	0.36	3.07	2.90	0.87	0.63	1.07	0.95	0.80	0.44
Regular	0.42	0.38	5.13	3.24	0.27	1.09	0.70	0.96	0.99	0.57
Special emphasis	0.48	0.65	4.35	5.83	0.68	0.96	1.99	1.54	1.46	0.82
Special education	2.18	0.49	7.40	6.56	4.68	0.00	0.91	3.02	0.70	0.72
All members of NAIS	0.24	0.41	3.79	3.02	0.14	0.54	2.03	0.95	0.64	0.55

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A1.8- Standard errors for average length of school year and day in 1990-91, by affiliation**

	Days	Hours
	90-91	90-91
<b>Total Private</b>	<b>0.43</b>	<b>0.02</b>
Catholic	0.26	0.03
Episcopal	1.20	0.05
Friends	0.00	0.00
Seventh-Day Adventist	0.65	0.06
Hebrew Day	0.81	0.14
Solomon Schechter	0.64	0.06
Other Jewish	2.42	0.13
Christian Schools Intl	0.28	0.07
Assoc of Christn Schls Intl	0.68	0.05
Lutheran, Missouri Synod	0.54	0.06
Lutheran, Wisconsin Synod	0.46	0.05
Evangelical Lutheran	0.26	0.04
Other Lutheran	8.42	0.14
Montessori	1.09	0.10
Schools for Exceptional Children	4.09	0.09
Natl Assoc of Independent Schools (only)	0.72	0.11
Military	0.40	0.14
Other Private Schools	1.19	0.04
Catholic	0.26	0.03
Parochial	0.21	0.03
Diocesan	0.76	0.05
Private order	0.63	0.07
Other religious	0.73	0.03
Conservative Christian	0.75	0.04
Affiliated	0.56	0.03
Unaffiliated	2.11	0.06
Nonsectarian	1.14	0.06
Regular	1.97	0.06
Special emphasis	1.31	0.09
Special education	2.79	0.11
<b>All members of NAIS</b>	<b>0.47</b>	<b>0.08</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 (School Questionnaire).

**Table A1.9- Standard errors for percentage of schools offering special services and percentage of students in these schools receiving these services in 1990-91, by affiliation—Continued on next page**

	Total Schools	ESOL		Bilingual		Remedial Reading		Remedial Math	
		% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving
<b>Total Private</b>	<b>430.12</b>	<b>1.08</b>	<b>1.51</b>	<b>0.62</b>	<b>5.71</b>	<b>1.31</b>	<b>0.49</b>	<b>1.33</b>	<b>0.54</b>
Catholic	102.29	1.54	1.80	0.66	--	1.81	0.65	1.88	0.68
Episcopal	60.65	2.67	--	2.57	--	6.62	3.48	7.22	--
Friends	0.00	0.00	--	0.00	--	0.00	0.00	0.00	0.00
Seventh-Day Adventist	51.62	2.88	--	2.91	--	5.89	3.91	5.95	4.25
Hebrew Day	16.38	6.49	2.09	7.31	14.00	7.83	0.67	7.59	0.45
Solomon Schechter	6.44	8.05	0.34	1.35	--	7.66	0.08	6.44	0.04
Other Jewish	22.63	6.72	5.95	5.05	--	7.05	3.41	6.87	3.97
Christian Schools Intl	49.76	4.85	--	3.39	--	7.26	0.64	7.18	0.49
Assoc of Christn Schls Intl	201.54	3.57	--	2.25	--	5.47	2.14	5.34	3.18
Lutheran, Missouri Synod	53.10	2.49	--	1.76	--	5.47	0.95	4.92	1.09
Lutheran, Wisconsin Synod	32.54	1.04	--	0.00	--	4.75	0.42	5.17	0.44
Evangelical Lutheran	15.22	2.38	--	0.70	--	4.81	2.61	3.70	--
Other Lutheran	--	0.00	--	0.00	--	--	--	--	--
Montessori	105.99	2.36	--	4.06	--	6.71	2.88	7.78	8.46
Schools for Exceptional Children	69.46	12.18	--	12.17	--	5.97	10.30	6.76	10.72
Natl Assoc of Independent Schools (only)	64.43	3.29	3.29	1.17	--	3.61	1.44	3.99	1.42
Military	3.16	3.28	0.84	0.00	--	5.88	--	--	--
Other Private Schools	391.02	2.52	5.94	1.64	10.56	3.55	2.10	2.93	2.55
Catholic	102.29	1.54	1.80	0.66	--	1.81	0.65	1.88	0.68
Parochial	174.77	1.86	2.42	0.81	--	2.43	0.72	2.34	0.75
Diocesan	145.27	2.07	--	1.25	--	3.84	0.97	3.90	1.25
Private order	70.28	4.63	--	2.42	--	7.07	1.93	6.31	1.38
Other religious	374.16	1.86	2.51	1.17	7.70	2.38	0.79	2.29	0.91
Conservative Christian	232.80	2.64	--	1.69	--	3.92	1.45	3.35	1.80
Affiliated	168.44	1.40	2.16	1.19	8.85	2.54	0.62	2.55	0.59
Unaffiliated	285.93	5.28	8.24	2.77	--	3.65	2.35	3.93	3.01
Nonsectarian	249.50	1.63	4.39	1.37	7.53	2.47	2.01	2.43	2.62
Regular	132.01	2.28	4.14	2.04	--	4.16	1.53	3.68	1.81
Special emphasis	185.11	3.56	11.20	2.11	--	5.21	6.01	5.05	7.51
Special education	100.25	4.12	--	4.41	--	5.96	6.64	6.83	6.86
<b>All members of NAIS</b>	<b>96.07</b>	<b>2.70</b>	<b>2.30</b>	<b>0.88</b>	<b>--</b>	<b>3.01</b>	<b>1.26</b>	<b>3.40</b>	<b>1.45</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A1.9- Standard errors for percentage of schools offering special services and percentage of students in these schools receiving these services in 1990-91, by affiliation—Continued**

	<u>Special Education</u>		<u>Diagnostic</u>		<u>Gifted</u>		<u>After School Program</u>	
	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving	% Schls Offering	% Stdnts Receiving
Total Private	0.92	0.94	1.54	0.57	1.19	0.85	1.31	0.66
Catholic	1.43	0.74	1.88	0.49	1.69	0.91	1.81	0.76
Episcopal	3.19	--	5.24	5.79	5.32	5.56	4.05	1.92
Friends	0.00	--	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	4.44	--	6.28	--	5.06	--	4.78	2.51
Hebrew Day	3.89	--	7.51	--	6.65	--	6.75	--
Solomon Schechter	4.99	--	6.80	--	5.35	0.66	4.87	1.92
Other Jewish	7.14	--	6.45	2.74	6.50	4.63	6.02	2.83
Christian Schools Intl	5.71	--	6.64	0.61	6.48	3.46	6.81	5.07
Assoc of Christn Schls Intl	3.51	--	6.20	3.30	5.23	--	5.98	2.90
Lutheran, Missouri Synod	4.61	--	4.29	1.33	3.35	1.59	4.33	2.09
Lutheran, Wisconsin Synod	5.79	--	5.47	1.38	4.64	4.00	3.36	1.59
Evangelical Lutheran	3.42	--	6.59	4.09	6.60	--	3.78	18.96
Other Lutheran	--	--	--	--	--	--	--	--
Montessori	6.62	--	10.60	3.21	7.15	4.95	8.35	4.88
Schools for								
Exceptional Children	3.20	6.17	2.21	7.51	12.06	--	11.32	--
Natl Assoc of								
Independent Schools (only)	3.41	--	4.31	1.08	4.51	5.35	5.06	2.06
Military	0.84	--	6.38	--	--	--	0.00	--
Other Private Schools	1.66	3.05	3.29	3.52	2.22	3.49	2.91	2.04
Catholic	1.43	0.74	1.88	0.49	1.69	0.91	1.81	0.76
Parochial	1.87	1.10	2.75	0.60	2.34	0.84	2.39	0.92
Diocesan	3.21	0.90	3.86	1.18	3.02	1.89	3.65	1.29
Private order	4.03	--	3.80	--	5.17	2.26	4.74	4.17
Other religious	1.28	1.29	2.41	1.04	1.98	1.90	2.01	1.15
Conservative Christian	2.48	2.09	4.71	2.32	3.53	2.41	3.06	1.66
Affiliated	1.77	0.51	2.50	1.01	1.78	1.24	2.67	1.91
Unaffiliated	2.99	5.80	3.57	3.81	4.02	6.22	3.98	2.42
Nonsectarian	2.56	2.96	2.73	2.39	2.41	3.95	3.42	2.15
Regular	2.45	0.88	2.92	3.00	3.91	4.88	3.82	2.29
Special emphasis	4.22	5.87	5.40	6.27	4.58	7.78	7.05	4.18
Special education	0.04	4.50	4.48	4.49	4.46	--	7.31	8.21
All members of NAIS	2.71	3.91	3.15	1.07	2.77	3.58	3.79	1.39

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A1.10- Standard errors for percentage of schools with libraries and full-time equivalent (FTE) librarians in private schools in 1990-91, by level and affiliation**

	Total Libraries	Total FTE Librarians	Elementary Libraries	Elementary FTE Librarians	Secondary Libraries	Secondary FTE Librarians	Combined Libraries	Combined FTE Librarians
Total Private	0.91	0.01	1.15	0.01	1.72	0.05	1.96	0.03
Catholic	0.78	0.02	0.92	0.03	0.65	0.04	0.00	0.13
Episcopal	8.08	0.13	9.69	0.09	7.64	0.19	0.55	0.27
Friends	0.00	0.00	0.00	0.00	--	--	0.00	0.00
Seventh-Day Adventist	4.47	0.03	6.00	0.02	3.86	--	3.97	--
Hebrew Day	1.49	0.09	0.00	0.12	5.18	0.10	--	--
Solomon Schechter	1.08	0.39	1.13	0.41	--	--	--	--
Other Jewish	6.06	0.08	8.67	0.11	2.00	--	12.99	--
Christian Schools Intl	6.13	0.08	10.27	0.10	13.77	--	4.74	0.16
Assoc of Christn Schls Intl	3.37	0.05	5.59	0.06	0.00	--	3.93	0.07
Lutheran, Missouri Synod	3.42	0.02	3.67	0.02	6.85	0.06	--	--
Lutheran, Wisconsin Synod	6.61	0.01	6.97	0.01	--	--	--	--
Evangelical Lutheran	2.96	0.13	2.38	0.02	--	--	--	--
Other Lutheran	8.19	--	9.29	--	--	--	--	--
Montessori	5.13	0.03	4.68	0.04	--	--	--	--
Schools for Exceptional Children	11.27	0.11	--	--	--	--	12.82	0.11
Natl Assoc of Independent Schools (only)	2.33	0.10	8.15	0.18	1.25	0.15	1.72	0.14
Military	0.00	0.14	--	--	0.00	0.17	--	--
Other Private Schools	2.42	0.03	4.27	0.02	8.31	0.22	2.80	0.04
Catholic	0.78	0.02	0.92	0.03	0.65	0.04	0.00	0.13
Parochial	1.04	0.03	1.13	0.03	0.00	0.11	--	--
Diocesan	1.57	0.06	2.10	0.07	0.00	0.07	--	--
Private order	3.13	0.06	10.12	0.09	1.68	0.08	0.00	0.24
Other religious	1.84	0.02	2.37	0.02	2.24	0.06	2.72	0.04
Conservative Christian	3.10	0.03	4.73	0.05	5.52	--	3.81	0.03
Affiliated	2.23	0.03	2.13	0.02	1.38	0.06	6.38	0.09
Unaffiliated	4.31	0.05	6.27	0.02	11.07	--	4.18	0.11
Nonsectarian	2.57	0.05	4.24	0.04	6.17	0.19	3.98	0.07
Regular	3.87	0.06	6.61	0.06	1.04	0.17	2.36	0.10
Special emphasis	4.02	0.08	3.89	0.05	7.64	0.44	12.75	0.14
Special education	6.10	0.05	--	--	--	--	5.97	0.06
All members of NAIS	1.60	0.07	4.89	0.10	1.42	0.09	1.30	0.11

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A1.11- Standard errors for percentage of private schools with boarding students in 1987-88 and 1990-91, by affiliation**

	% Boarding 87-88	% Boarding 90-91
Total Private	0.55	0.57
Catholic	0.56	0.53
Episcopal	2.88	3.45
Friends	1.76	0.00
Seventh-Day Adventist	1.50	1.67
Hebrew Day	3.76	7.36
Solomon Schechter	0.00	0.00
Other Jewish	--	3.24
Christian Schools Intl	0.74	3.23
Assoc of Christn Schls Intl	1.71	0.92
Lutheran, Missouri Synod	0.00	1.52
Lutheran, Wisconsin Synod	--	1.28
Evangelical Lutheran	--	2.20
Other Lutheran	2.35	--
Montessori	2.55	1.27
Schools for		
Exceptional Children	9.62	12.74
Natl Assoc of		
Independent Schools (only)	3.69	3.41
Military	0.00	0.00
Other Private Schools	1.20	1.54
Catholic	0.56	0.53
Parochial	0.28	0.73
Diocesan	1.68	0.93
Private order	4.67	4.20
Other religious	0.68	0.83
Conservative Christian	0.97	1.52
Affiliated	0.61	0.72
Unaffiliated	1.80	2.53
Nonsectarian	2.12	2.60
Regular	1.76	1.46
Special emphasis	3.78	2.98
Special education	6.00	8.04
All members of NAIS	2.76	2.34

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).



**Table A2.1- Standard errors for number of students in 1987-88 and 1990-91, by region and affiliation**

	Northeast		Midwest		South		West	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	<b>63,510</b>	<b>41,023</b>	<b>48,338</b>	<b>48,561</b>	<b>75,561</b>	<b>43,210</b>	<b>37,061</b>	<b>33,307</b>
Catholic	43,691	32,084	31,818	34,683	35,248	23,363	18,175	18,500
Episcopal	--	2,426	--	--	5,127	4,596	--	--
Friends	1,129	0	--	--	74	0	--	--
Seventh-Day Adventist	1,500	--	2,133	--	4,518	--	5,568	4,865
Hebrew Day	9,637	6,324	--	--	--	1,031	--	--
Solomon Schechter	--	411	--	--	--	--	--	--
Other Jewish	--	7,768	--	1,435	--	1,409	--	1,500
Christian Schools Intl	1,250	--	3,989	8,040	--	--	1,726	3,974
Assoc of Christn Schls Intl	--	--	--	18,835	--	16,775	18,334	21,758
Lutheran, Missouri Synod	--	--	6,268	10,573	5,380	4,401	4,745	3,067
Lutheran, Wisconsin Synod	--	--	--	2,202	--	--	--	774
Evangelical Lutheran	--	203	--	431	--	--	--	1,006
Other Lutheran	--	--	4,913	--	--	--	--	--
Montessori	--	--	--	--	8,992	2,900	--	--
Schools for	--	--	--	--	--	--	--	--
Exceptional Children	--	--	--	--	--	--	--	--
Natl Assoc of	--	--	--	--	--	--	--	--
Independent Schools (only)	16,849	11,144	--	7,085	20,771	15,942	--	8,406
Military	--	--	--	--	--	--	--	--
Other Private Schools	31,889	14,505	26,593	21,702	50,630	31,339	18,115	17,394
Catholic	44,584	32,084	31,787	34,683	35,248	23,363	18,586	18,500
Parochial	34,568	29,275	30,974	38,898	23,306	20,348	21,717	18,734
Diocesan	36,414	29,027	32,667	37,522	--	18,266	--	--
Private order	--	16,967	--	16,212	--	--	--	--
Other religious	38,096	18,109	23,264	28,657	49,371	33,417	26,656	27,020
Conservative Christian	14,602	13,177	15,893	17,307	29,235	25,932	19,881	22,463
Affiliated	11,975	9,053	10,471	15,566	28,578	17,232	11,993	9,488
Unaffiliated	32,849	9,109	16,909	11,482	23,931	22,358	7,297	13,476
Nonsectarian	17,451	15,419	16,987	10,666	42,759	22,458	16,515	15,953
Regular	13,951	10,384	--	10,631	38,993	18,493	12,608	11,291
Special emphasis	13,785	8,463	13,130	4,830	22,563	10,892	11,525	8,797
Special education	5,799	3,174	--	--	--	4,110	--	4,119
<b>All members of NAIS</b>	<b>17,467</b>	<b>15,223</b>	<b>--</b>	<b>9,317</b>	<b>22,619</b>	<b>25,903</b>	<b>11,258</b>	<b>10,067</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A2.2- Standard errors for percentage of enrollment in different community types in 1990-91, by affiliation of school**

	Total	Large City	Urban Mid-Size City	Urban Fringe Large City	Fringe Mid-City	Large Town	Small Town	Rural
<b>Total Private</b>	<b>84,806.43</b>	<b>1.17</b>	<b>1.02</b>	<b>0.87</b>	<b>0.66</b>	<b>0.40</b>	<b>0.68</b>	<b>0.76</b>
Catholic	64,290.13	1.84	1.36	1.38	1.06	0.59	0.96	0.74
Episcopal	7,600.73	4.12	3.98	4.23	3.05	1.79	2.81	2.15
Friends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	7,935.30	4.70	5.77	7.83	5.08	1.42	5.79	2.10
Hebrew Day	6,556.66	8.76	2.98	9.45	4.95	0.00	0.00	8.43
Solomon Schechter	614.40	2.97	0.33	2.17	0.34	0.00	0.09	0.05
Other Jewish	7,773.03	7.02	1.51	7.75	2.19	0.00	0.00	4.08
Christian Schools Intl	16,704.57	6.16	6.01	5.79	6.15	2.21	3.23	2.30
Assoc of Christn Schls Intl	36,817.38	4.37	5.28	5.59	3.50	2.12	4.16	1.84
Lutheran, Missouri Synod	13,662.73	4.38	4.39	5.16	2.31	0.09	4.21	3.64
Lutheran, Wisconsin Synod	2,350.12	2.27	4.91	3.42	1.91	2.87	5.22	2.94
Evangelical Lutheran	9,031.02	9.37	18.26	9.45	1.97	0.34	19.36	0.13
Other Lutheran	--	--	--	--	--	0.00	--	--
Montessori Schools for	5,923.31	5.66	5.15	6.78	2.73	4.16	3.65	4.34
Exceptional Children	3,886.60	7.42	2.29	9.36	1.53	2.90	6.40	7.89
Natl Assoc of Independent Schools (only)	24,078.64	3.97	3.36	2.98	2.50	1.59	2.62	1.52
Military	--	0.00	--	--	0.00	0.00	--	--
Other Private Schools	40,335.12	2.17	2.76	2.14	2.18	0.91	2.23	2.43
Catholic	64,290.13	1.84	1.36	1.38	1.06	0.59	0.96	0.74
Parochial	61,106.48	2.98	2.11	2.30	1.56	0.93	1.58	0.93
Diocesan	56,387.62	3.96	2.93	3.51	1.82	1.09	1.72	1.13
Private order	25,511.56	4.27	3.25	4.70	2.80	0.59	1.08	0.99
Other religious	65,821.21	1.36	1.83	1.98	1.37	0.76	1.27	1.39
Conservative Christian	42,000.29	3.00	4.10	3.94	2.58	1.69	2.49	1.74
Affiliated	31,122.70	1.72	2.38	2.19	1.78	0.72	1.88	1.42
Unaffiliated	29,288.81	4.17	3.95	3.85	1.81	0.66	3.38	3.37
Nonsectarian	34,385.05	2.94	2.24	2.10	2.51	1.00	2.22	2.28
Regular	25,606.39	3.93	3.04	2.41	3.58	1.33	3.06	2.94
Special emphasis	19,104.51	4.77	3.80	3.78	4.67	1.68	3.50	3.16
Special education	7,414.25	6.17	4.26	6.54	3.91	1.72	2.46	3.86
<b>All members of NAIS</b>	<b>30,963.24</b>	<b>3.18</b>	<b>3.03</b>	<b>2.78</b>	<b>2.42</b>	<b>1.05</b>	<b>1.66</b>	<b>1.04</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A2.3a- Standard errors for percentage of elementary private schools with admission requirements in 1990-91, by affiliation**

	Total	Admissions Test	Standardized Achievement Test	Academic Record	Special Needs	Special Aptitudes	Inter- view	Recom- mendations	Other
<b>Total Private</b>	<b>365.16</b>	<b>1.47</b>	<b>1.34</b>	<b>1.27</b>	<b>1.08</b>	<b>0.56</b>	<b>1.67</b>	<b>1.20</b>	<b>1.41</b>
Catholic	105.45	2.01	1.96	2.02	1.26	0.70	2.13	1.78	2.01
Episcopal	60.69	15.99	13.80	17.41	8.68	10.48	16.23	14.22	2.70
Friends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	75.49	4.87	4.67	5.94	4.59	0.77	8.60	7.93	4.15
Hebrew Day	11.52	9.00	9.11	10.63	5.26	4.80	8.68	8.80	10.35
Solomon Schechter	6.44	5.82	2.55	5.81	1.70	1.13	5.36	7.05	5.09
Other Jewish	23.52	8.36	8.17	10.01	8.64	2.53	7.71	5.65	8.35
Christian Schools Intl	34.39	7.01	9.46	7.90	6.30	5.13	6.89	9.90	10.22
Assoc of Christn Schls Intl	105.94	7.48	7.07	7.00	7.82	5.30	6.96	6.74	7.41
Lutheran, Missouri Synod	54.50	4.70	5.16	5.07	3.18	0.69	4.94	5.94	2.48
Lutheran, Wisconsin Synod	32.64	2.63	3.46	4.71	2.82	1.71	5.65	3.60	5.26
Evangelical Lutheran	4.45	2.34	1.93	2.45	0.62	0.21	2.48	2.09	2.09
Other Lutheran	--	--	--	--	--	0.00	--	0.00	--
Montessori	103.03	9.56	3.97	9.41	2.14	1.58	9.38	9.51	0.00
Schools for									
Exceptional Children	--	--	--	--	--	--	--	--	--
Natl Assoc of									
Independent Schools (only)	50.44	14.89	11.58	11.32	8.25	11.84	10.06	9.72	0.00
Military	--	--	--	--	--	--	--	--	--
Other Private Schools	271.91	3.01	3.13	3.23	2.87	1.95	4.95	2.89	4.45
Catholic	105.45	2.01	1.96	2.02	1.26	0.70	2.13	1.78	2.01
Parochial	163.19	2.25	2.40	2.64	1.62	0.62	3.16	2.34	2.62
Diocesan	146.71	3.82	3.71	4.19	3.06	1.80	3.89	3.31	3.75
Private order	57.57	--	--	--	--	--	--	--	--
Other religious	271.05	2.04	2.22	2.13	2.13	1.13	2.92	2.29	2.16
Conservative Christian	120.02	6.81	5.57	6.14	5.99	3.93	5.51	5.78	5.91
Affiliated	151.46	2.35	2.77	3.04	2.35	1.62	2.84	3.46	2.08
Unaffiliated	254.62	3.14	2.14	4.17	3.56	1.19	6.83	3.60	5.61
Nonsectarian	190.49	4.36	3.37	4.44	2.23	1.88	4.35	4.66	0.00
Regular	116.11	6.71	6.97	6.03	4.63	3.66	6.95	5.93	0.00
Special emphasis	145.08	6.49	4.37	7.39	2.50	3.41	7.48	6.80	0.00
Special education	--	--	--	--	--	--	--	--	0.00
<b>All members of NAIS</b>	<b>74.54</b>	<b>10.64</b>	<b>7.91</b>	<b>8.45</b>	<b>5.62</b>	<b>8.08</b>	<b>7.63</b>	<b>8.19</b>	<b>3.50</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A2.3b- Standard errors for percentage of private schools serving secondary students with admission requirements in 1990-91, by affiliation**

	Total	Admissions Test	Standardized Achievement Test	Academic Record	Special Needs	Special Aptitudes	Inter- view	Recom- mendations	Other
<b>Total Private</b>	<b>249.53</b>	<b>1.71</b>	<b>1.88</b>	<b>2.62</b>	<b>1.92</b>	<b>1.02</b>	<b>2.18</b>	<b>1.92</b>	<b>1.41</b>
Catholic	52.86	2.82	3.27	3.73	3.21	3.16	3.92	3.75	2.57
Episcopal	9.61	4.94	8.85	4.51	5.94	4.85	8.47	5.85	3.48
Friends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	40.52	7.91	9.71	6.40	5.25	6.02	9.15	10.43	6.66
Hebrew Day	14.99	--	--	11.89	--	--	6.99	--	11.26
Solomon Schechter	--	--	--	--	--	--	--	--	--
Other Jewish	16.84	9.95	8.27	10.09	4.64	5.15	9.87	8.96	9.02
Christian Schools Intl	39.52	10.73	11.12	10.41	4.15	4.66	8.00	11.10	10.01
Assoc of Christn Schls Intl	158.56	6.43	7.54	10.40	4.67	4.70	9.64	5.44	7.20
Lutheran, Missouri Synod	6.48	--	--	--	--	--	--	--	--
Lutheran, Wisconsin Synod	--	--	--	--	--	--	--	--	--
Evangelical Lutheran	--	--	--	--	--	--	--	--	--
Other Lutheran	--	--	--	--	--	--	--	--	--
Montessori Schools for	--	--	--	--	--	--	--	--	0.00
Exceptional Children	69.41	13.04	12.01	12.48	2.66	12.94	6.97	12.31	0.00
Natl Assoc of									
Independent Schools (only)	37.30	4.19	4.81	2.34	4.26	4.22	3.32	3.37	1.29
Military	3.16	6.85	--	0.84	--	2.52	2.52	9.16	0.00
Other Private Schools	282.42	2.97	2.54	3.65	3.10	1.48	3.33	3.14	2.22
Catholic	52.86	2.82	3.27	3.73	3.21	3.16	3.92	3.75	2.57
Parochial	54.46	6.96	5.65	10.47	7.70	7.06	9.76	7.72	6.58
Diocesan	42.75	4.80	6.40	4.11	4.28	4.72	5.21	6.50	3.34
Private order	47.73	3.35	5.10	2.82	4.37	3.85	5.50	4.62	4.39
Other religious	252.87	2.61	2.98	3.38	2.04	1.40	3.35	2.74	2.42
Conservative Christian	201.07	4.05	3.60	4.79	2.37	2.11	5.14	3.58	3.67
Affiliated	126.35	3.80	4.61	5.27	2.26	2.11	5.67	5.69	4.34
Unaffiliated	167.59	6.86	6.12	6.88	6.76	3.67	6.68	6.05	5.89
Nonsectarian	139.44	3.53	2.48	3.86	3.00	2.31	3.08	3.53	0.19
Regular	75.81	5.00	4.33	4.60	3.23	3.35	4.26	4.68	0.24
Special emphasis	99.78	4.65	4.60	7.62	7.53	3.96	5.93	7.58	0.62
Special education	98.63	7.85	5.84	6.90	5.05	5.56	6.53	6.95	0.00
All members of NAIS	56.12	2.86	3.75	1.82	3.39	3.20	3.04	2.37	1.34

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A2.4- Standard errors for percentage of sex of students and of all-girls, all-boys, and coeducational schools in 1987-88 and 1990-91, by affiliation**

	<u>Average Percent Male</u>		<u>Percent of Schools Co-ed</u>		<u>Percent of Schools All-Girls</u>		<u>Percent of Schools All-Boys</u>	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.32	0.31	0.39	0.39	0.33	0.24	0.29	0.30
Catholic	0.33	0.38	0.85	0.50	0.75	0.55	0.60	0.38
Episcopal	1.31	3.24	3.66	3.04	1.71	2.15	3.68	2.02
Friends	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	1.13	3.03	0.88	3.14	0.88	1.58	0.00	2.65
Hebrew Day	1.45	0.58	6.71	7.05	4.45	2.54	6.21	6.48
Solomon Schechter	1.11	1.41	0.00	0.00	0.00	0.00	0.00	0.00
Other Jewish	--	3.44	--	4.37	--	2.92	--	3.79
Christian Schools Intl	0.53	0.89	0.00	0.00	0.00	0.00	0.00	0.00
Assoc of Christn Schls Intl	1.39	1.31	0.00	0.00	0.00	0.00	0.00	0.00
Lutheran, Missouri Synod	0.42	0.67	0.00	0.00	0.00	0.00	0.00	0.00
Lutheran, Wisconsin Synod	--	1.25	--	0.00	--	0.00	--	0.00
Evangelical Lutheran	1.12	0.72	0.00	0.00	0.00	0.00	0.00	0.00
Other Lutheran	0.80	3.42	0.00	0.00	0.00	0.00	0.00	0.00
Montessori	0.70	1.20	0.00	0.00	0.00	0.00	0.00	0.00
Schools for Exceptional Children	3.03	3.05	2.66	2.39	1.98	0.00	1.59	2.39
Natl Assoc of Independent Schools (only)	0.87	0.89	1.82	3.16	1.09	1.43	1.40	2.99
Military	--	--	--	8.32	0.00	0.00	11.58	8.32
Other Private Schools	0.70	0.50	0.67	0.53	0.34	0.05	0.62	0.53
Catholic	0.33	0.38	0.85	0.50	0.75	0.55	0.60	0.38
Parochial	0.29	0.50	0.27	0.50	0.27	0.47	0.00	0.13
Diocesan	0.40	0.48	1.46	1.22	1.58	0.87	0.72	0.95
Private order	2.91	1.78	9.06	4.16	6.77	4.00	5.72	3.32
Other religious	0.54	0.54	0.29	0.51	0.19	0.20	0.25	0.47
Conservative Christian	0.87	0.85	0.00	0.99	0.00	0.01	0.00	0.99
Affiliated	0.52	0.67	0.59	0.62	0.38	0.52	0.52	0.36
Unaffiliated	1.28	1.24	1.10	1.10	0.56	0.17	0.85	1.08
Nonsectarian	0.61	0.67	1.03	0.75	0.59	0.31	0.87	0.67
Regular	0.64	0.67	1.03	0.92	0.64	0.74	0.83	0.52
Special emphasis	1.06	1.17	1.94	1.50	0.00	0.10	1.94	1.50
Special education	1.88	1.86	2.58	1.13	3.05	0.00	2.29	1.13
All members of NAIS	0.83	0.88	3.12	2.70	2.58	1.71	1.80	2.22

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A2.5- Standard errors for percentage of students in different minority groups in 1987-88 and 1990-91, by affiliation**

	<u>American Indian</u>		<u>Asian</u>		<u>Hispanic</u>		<u>Black Non-Hispanic</u>		<u>Total Minority</u>	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	0.11	0.18	0.29	0.26	0.67	0.53	0.50	0.56	0.77	0.85
Catholic	0.13	0.07	0.41	0.30	0.98	0.84	0.71	0.92	1.06	1.28
Episcopal	0.04	0.06	4.66	1.32	0.92	0.78	2.53	2.80	4.65	3.34
Friends	0.02	0.00	0.30	0.00	0.62	0.00	2.20	0.00	1.92	0.00
Seventh-Day Adventist	0.32	0.06	1.23	3.89	2.60	1.42	3.26	2.61	3.47	4.56
Hebrew Day	0.00	0.00	0.04	1.35	1.33	0.21	0.04	0.66	1.33	1.57
Solomon Schechter	0.00	0.00	--	0.05	--	0.11	--	0.08	3.57	0.09
Other Jewish	--	0.00	--	0.11	--	0.36	--	0.13	--	0.54
Christian Schools Intl	0.09	1.09	0.18	0.87	2.09	0.88	0.96	1.64	2.42	2.92
Assoc of Christn Schls Intl	0.06	0.28	0.46	1.14	0.89	1.55	1.73	1.34	2.29	2.34
Lutheran, Missouri Synod	0.04	0.04	0.38	0.64	0.92	0.37	3.45	2.18	3.64	2.43
Lutheran, Wisconsin Synod	--	0.96	--	0.15	--	0.42	--	0.85	--	1.15
Evangelical Lutheran	--	0.13	--	2.55	--	1.56	--	4.07	15.61	7.51
Other Lutheran	0.15	--	0.16	--	0.72	--	1.79	--	2.03	5.68
Montessori Schools for	0.11	1.60	0.60	2.54	4.56	0.83	1.93	2.58	5.50	3.31
Exceptional Children	0.02	0.17	0.29	0.74	0.93	1.81	2.44	2.66	3.04	3.97
Natl Assoc of Independent Schools (only)	1.03	0.02	0.55	1.54	0.26	0.26	0.45	0.72	1.44	1.86
Military	0.02	--	0.05	0.80	1.31	1.25	0.44	0.28	0.94	2.21
Other Private Schools	0.32	0.93	0.45	0.61	0.63	0.52	1.99	0.97	2.05	1.59
Catholic	0.13	0.07	0.41	0.30	0.98	0.84	0.70	0.92	1.07	1.28
Parochial	0.18	0.11	0.49	0.47	0.87	1.33	1.05	1.30	1.33	1.93
Diocesan	0.18	0.07	0.62	0.51	2.48	1.43	1.19	1.75	2.86	2.41
Private order	0.34	0.11	1.79	1.23	3.47	2.09	1.12	2.37	2.64	2.65
Other religious	0.13	0.26	0.29	0.44	0.37	0.49	0.92	0.61	1.03	0.94
Conservative Christian	0.04	0.54	0.27	0.84	0.65	0.98	1.12	1.08	1.51	1.74
Affiliated	0.30	0.28	0.66	0.46	0.55	0.56	1.10	1.04	1.42	1.46
Unaffiliated	0.09	0.12	0.25	1.38	0.56	0.73	3.78	0.79	3.92	2.07
Nonsectarian	0.50	0.99	0.60	0.81	0.77	0.36	1.18	0.75	1.52	1.38
Regular	0.58	1.48	0.85	1.17	0.43	0.48	1.60	0.66	1.98	1.89
Special emphasis	1.18	0.46	0.72	1.05	1.69	0.52	2.48	2.22	3.53	2.56
Special education	0.18	0.19	0.41	0.30	2.11	1.25	2.09	2.68	2.32	3.26
<b>All members of NAIS</b>	0.69	0.02	1.16	1.22	0.29	0.35	0.47	0.68	1.56	1.57

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A2.6- Standard errors for percentage of schools with different concentrations of minority students in 1987-88 and 1990-91, by affiliation**

	None		1 - 10%		11 - 30%		31 - 50%		> 50%	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	2.07	1.27	1.61	1.19	1.10	1.20	0.64	0.88	1.11	1.04
Catholic	0.92	1.23	1.64	1.83	1.60	1.60	0.94	1.13	1.86	1.72
Episcopal	3.14	1.39	5.39	5.53	4.88	9.66	1.80	3.72	3.73	6.83
Friends	0.28	0.00	8.60	0.00	6.96	0.00	1.57	0.00	1.06	0.00
Seventh-Day Adventist	3.64	8.20	3.55	4.15	4.85	5.18	2.08	5.24	3.33	4.99
Hebrew Day	7.01	7.92	6.69	6.76	0.00	4.94	2.60	0.00	2.12	1.67
Solomon Schechter	--	4.87	--	5.96	--	0.81	0.00	0.00	0.00	0.27
Other Jewish	--	5.17	--	4.94	--	2.90	--	2.50	--	0.00
Christian Schools Intl	3.75	2.73	5.54	7.38	3.00	4.82	0.60	0.92	3.01	6.93
Assoc of Christn Schls Intl	6.35	4.29	5.83	5.45	5.60	5.54	2.58	4.66	3.74	2.51
Lutheran, Missouri Synod	4.03	4.22	3.90	4.44	2.72	3.32	1.28	2.73	2.59	3.04
Lutheran, Wisconsin Synod	--	5.34	--	5.35	--	1.75	--	1.51	--	1.38
Evangelical Lutheran	--	0.47	--	6.05	0.00	4.70	--	1.31	--	3.62
Other Lutheran	10.37	--	10.49	--	1.99	--	2.48	0.00	3.24	--
Montessori	3.21	2.60	10.53	5.64	8.88	7.92	2.84	8.44	6.73	3.53
Schools for										
Exceptional Children	1.98	0.83	11.03	11.37	11.52	12.83	6.62	4.01	1.35	8.25
Natl Assoc of										
Independent Schools (only)	1.44	0.47	5.60	4.65	4.47	5.03	2.40	1.46	3.53	2.48
Military	0.00	0.00	--	0.84	8.25	3.36	--	2.52	0.00	0.00
Other Private Schools	4.65	3.25	3.17	2.42	2.04	2.22	1.56	1.69	1.78	1.83
Catholic	0.92	1.23	1.66	1.83	1.62	1.60	0.95	1.13	1.88	1.72
Parochial	1.07	1.73	1.71	2.53	1.81	2.21	1.21	1.66	1.80	2.25
Diocesan	2.10	2.49	4.07	3.72	3.97	2.99	0.71	1.61	3.36	3.13
Private order	5.39	2.10	7.40	4.16	6.07	4.38	2.79	3.57	8.86	4.21
Other religious	3.60	2.29	2.71	1.76	1.64	1.72	1.01	1.15	1.06	1.43
Conservative Christian	4.66	4.33	3.87	3.43	3.03	3.25	1.44	2.50	1.95	2.80
Affiliated	2.13	2.45	2.60	2.34	1.72	2.06	1.96	1.89	1.35	1.99
Unaffiliated	8.82	5.26	5.78	4.29	3.92	2.29	1.77	2.16	2.40	1.68
Nonsectarian	2.53	1.73	2.69	2.67	2.72	3.18	1.92	2.50	2.25	2.17
Regular	4.82	2.88	5.19	3.61	3.56	4.11	2.37	2.44	3.75	2.70
Special emphasis	2.69	2.59	4.80	4.99	4.49	5.39	3.27	4.77	3.94	2.64
Special education	2.41	2.95	5.95	6.64	6.88	4.73	5.13	3.83	5.29	6.88
All members of NAIS	0.94	0.36	4.58	3.77	3.59	3.76	1.92	1.50	2.51	2.22

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A3.1- Standard errors for number of teachers, of full-time equivalent (FTE) teachers, of other staff, and percentage full time as reported by schools in 1990-91, by affiliation**

	FTE Teachers	# Teachers	% Full Time	# Other Staff	% Full Time
Total Private	6,390.53	7,155.95	0.43	1,910.63	1.60
Catholic	3,026.17	3,216.48	0.71	799.52	2.69
Episcopal	738.41	841.47	1.87	109.46	5.17
Friends	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	421.35	501.22	2.10	101.58	10.29
Hebrew Day	687.85	808.05	6.46	88.35	7.61
Solomon Schechter	79.11	99.89	1.48	22.00	3.64
Other Jewish	633.57	773.86	3.44	136.78	6.31
Christian Schools Intl	1,021.94	1,137.28	1.54	129.72	8.08
Assoc of Christn Schls Intl	2,277.77	2,606.29	2.00	711.36	7.39
Lutheran, Missouri Synod	574.21	1,580.54	2.06	206.02	7.29
Lutheran, Wisconsin Synod	126.09	235.32	3.55	54.49	10.83
Evangelical Lutheran	673.60	682.21	6.13	57.11	6.97
Other Lutheran	--	--	8.66	--	--
Montessori	567.49	737.93	2.42	456.75	4.72
Schools for Exceptional Children	655.53	780.53	2.01	563.11	5.13
Natl Assoc of Independent Schools (only)	2,289.33	2,563.55	1.16	505.11	4.72
Military	--	--	2.85	5.90	1.25
Other Private Schools	4,554.70	5,251.38	0.95	1,517.05	3.26
Catholic	3,026.17	3,216.48	0.71	799.52	2.69
Parochial	2,579.58	2,922.48	0.86	628.92	3.24
Diocesan	2,530.46	2,913.67	0.95	481.10	4.91
Private order	1,725.64	1,871.44	2.31	357.18	5.84
Other religious	4,232.39	4,655.43	0.77	922.98	2.11
Conservative Christian	2,623.71	3,021.86	1.43	807.39	5.09
Affiliated	2,011.03	2,656.67	0.88	400.64	2.09
Unaffiliated	2,316.87	2,575.64	1.48	507.36	5.07
Nonsectarian	4,866.03	5,649.75	0.78	1,634.64	2.17
Regular	2,253.15	2,530.15	1.03	871.21	4.65
Special emphasis	3,837.22	4,392.82	2.17	918.43	5.50
Special education	1,209.37	1,360.36	1.81	1,074.21	1.06
All members of NAIS	2,833.76	3,196.04	1.28	571.84	3.55

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).



**Table A3.2a- Standard errors for percentage distribution of grades K-6 teachers, by main field of assignment in 1990-91 and affiliation**

	Total Number of K-6 Teachers	% Ele- mentary	% Special Education	% Vocational Education	% Science	% Foreign Language	% Mathe- matics	% Social Studies	% Other Specialty
<b>Total Private</b>	<b>4,373.37</b>	<b>0.89</b>	<b>0.43</b>	<b>0.02</b>	<b>0.19</b>	<b>0.25</b>	<b>0.30</b>	<b>0.21</b>	<b>0.78</b>
Catholic	2,547.31	1.46	0.41	0.00	0.42	0.23	0.49	0.39	1.12
Episcopal	673.12	6.79	0.00	0.00	0.87	2.99	2.12	1.90	5.58
Friends	209.91	9.19	2.20	0.00	0.65	1.31	1.43	0.00	9.25
Seventh-Day Adventist	436.74	3.05	0.00	1.19	0.49	0.00	0.00	0.00	3.67
Hebrew Day	511.17	8.68	3.89	0.00	4.82	4.17	2.93	0.00	6.10
Solomon Schechter	298.90	4.35	1.40	0.00	1.49	4.20	1.62	0.00	4.91
Other Jewish	420.12	5.47	0.00	0.00	0.66	2.42	0.00	0.90	5.54
Christian Schools Intl	880.58	6.07	0.62	0.00	0.33	0.00	0.00	1.13	6.24
Assoc of Christn Schls Intl	2,098.17	3.90	2.30	0.00	1.07	0.00	0.38	0.99	2.56
Lutheran, Missouri Synod	1,086.61	2.47	0.56	0.00	1.05	0.30	0.62	0.00	2.29
Lutheran, Wisconsin Synod	169.17	1.43	0.48	0.00	0.52	0.00	0.00	0.00	1.20
Evangelical Lutheran	760.44	6.50	0.55	0.00	0.44	0.30	1.85	0.00	6.54
Other Lutheran	223.94	8.17	0.00	0.00	2.45	0.00	2.43	0.00	5.80
Montessori	615.14	5.46	0.45	0.00	1.03	1.62	1.03	0.00	5.69
Schools for Exceptional Children	317.81	--	--	0.00	0.00	0.00	--	--	--
Natl Assoc of Independent Schools (only)	1,506.25	4.21	1.23	0.00	0.75	1.45	1.64	1.01	4.10
Military	10.18	--	--	--	--	--	--	--	--
Other Private Schools	2,766.70	2.53	1.69	0.00	0.41	0.89	0.87	0.80	2.16
Catholic	2,547.31	1.46	0.41	0.00	0.42	0.23	0.49	0.39	1.12
Parochial	1,994.71	1.58	0.57	0.00	0.59	0.26	0.71	0.51	1.30
Diocesan	1,952.97	2.69	0.40	0.00	0.38	0.00	0.78	0.56	2.56
Private order	877.72	6.69	0.28	0.00	1.91	1.49	3.55	2.76	7.27
Other religious	3,602.48	1.42	0.59	0.05	0.19	0.34	0.41	0.48	1.16
Conservative Christian	2,194.64	2.98	1.33	0.00	0.62	0.00	0.35	0.63	2.45
Affiliated	2,043.58	1.72	0.48	0.10	0.41	0.45	0.80	0.55	1.68
Unaffiliated	1,399.00	3.65	1.34	0.00	0.34	1.35	0.04	1.57	3.22
Nonsectarian	2,547.83	2.72	1.73	0.00	0.62	1.16	1.05	0.67	2.73
Regular	2,008.41	3.86	1.19	0.00	0.46	1.69	1.55	0.78	3.95
Special emphasis	1,392.86	3.97	2.13	0.00	0.75	1.80	1.44	1.47	4.14
Special education	538.71	6.81	9.59	0.00	7.53	0.00	0.34	3.03	7.84
<b>All members of NAIS</b>	<b>1,616.02</b>	<b>3.35</b>	<b>0.89</b>	<b>0.00</b>	<b>0.53</b>	<b>0.87</b>	<b>1.28</b>	<b>0.77</b>	<b>3.22</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A3.2b- Standard errors for percentage distribution of grades 7-12 teachers, by main field of assignment in 1990-91 and affiliation**

	Total Number of 7-12 Teachers	% Ele- mentary	% Special Education	% Vocational Education	% Science	% Foreign Language	% Mathe- matics	% Social Studies	% Other Specialty
<b>Total Private</b>	<b>4,489.69</b>	<b>0.51</b>	<b>0.44</b>	<b>0.44</b>	<b>0.79</b>	<b>0.59</b>	<b>0.65</b>	<b>0.69</b>	<b>0.95</b>
Catholic	2,870.21	0.65	0.42	0.63	1.33	1.16	0.91	1.08	1.76
Episcopal	522.98	2.06	0.00	0.00	3.79	3.49	7.36	2.91	5.62
Friends	281.48	4.26	2.23	0.00	7.40	10.43	7.69	5.77	16.19
Seventh-Day Adventist	239.34	7.84	0.00	2.87	3.95	1.15	2.83	1.12	6.49
Hebrew Day	433.83	0.00	1.48	0.00	4.43	7.41	3.59	4.37	8.59
Solomon Schechter	124.98	--	0.00	0.00	--	--	--	--	9.10
Other Jewish	292.90	4.20	0.35	0.00	0.88	7.47	8.75	4.59	9.05
Christian Schools Intl	565.91	6.77	2.84	0.95	4.60	1.50	8.50	2.54	7.26
Assoc of Christn Schls Intl	1,173.91	1.97	0.68	2.35	3.63	1.38	3.74	4.98	8.21
Lutheran, Missouri Synod	580.34	6.56	1.12	1.29	4.16	1.47	3.07	3.01	4.84
Lutheran, Wisconsin Synod	117.76	6.54	0.00	3.07	1.47	1.02	2.45	4.00	4.79
Evangelical Lutheran	419.32	5.51	6.82	2.15	2.81	1.97	10.07	16.69	11.48
Other Lutheran	69.34	--	0.00	0.00	0.00	--	0.00	0.00	--
Montessori Schools for Exceptional Children	74.99	--	--	--	--	--	--	--	--
Natl Assoc of Independent Schools (only)	560.20	1.22	4.86	1.78	0.92	1.24	3.50	3.86	4.83
Military	1,587.97	0.13	1.40	0.83	1.68	2.38	1.81	1.81	3.06
Other Private Schools	164.62	0.00	0.00	2.71	6.60	3.48	5.08	4.93	8.58
	2,625.90	2.02	1.60	1.20	2.17	0.89	2.21	2.13	3.24
Catholic	2,870.21	0.65	0.42	0.63	1.33	1.16	0.91	1.08	1.76
Parochial	1,369.73	1.82	0.00	0.66	2.55	1.16	2.10	2.36	3.45
Diocesan	1,819.94	0.98	1.18	1.35	2.09	1.58	1.86	1.80	2.96
Private order	1,769.58	0.35	0.15	0.94	1.94	2.62	1.88	2.03	2.92
Other religious	2,628.88	1.35	0.61	0.87	1.46	0.94	1.67	1.65	2.28
Conservative Christian	1,703.34	3.20	0.25	1.15	2.86	1.72	3.01	3.02	4.82
Affiliated	1,640.16	1.85	0.51	0.99	1.60	1.40	2.65	1.51	2.77
Unaffiliated	1,577.35	2.54	2.49	2.19	3.12	2.17	2.99	4.66	5.21
Nonsectarian	2,613.43	0.45	1.61	0.86	1.37	1.48	1.39	1.53	2.49
Regular	2,029.24	0.12	0.63	1.25	1.95	2.08	1.96	1.95	3.01
Special emphasis	1,072.32	2.50	1.10	2.03	3.29	3.06	3.21	3.07	4.89
Special education	1,160.54	0.61	5.28	0.78	3.05	0.19	1.48	3.22	5.17
<b>All members of NAIS</b>	<b>2,433.26</b>	<b>0.14</b>	<b>0.90</b>	<b>0.58</b>	<b>1.41</b>	<b>1.52</b>	<b>1.41</b>	<b>1.33</b>	<b>2.39</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A3.3- Standard errors for percentage of teachers certified and with varying levels of experience in 1987-88 and 1990-91, by affiliation**

	% Teachers Certified	% Teachers < 3 Yrs.		% Teachers 3 - 9 Yrs.		% Teachers 10 - 20 Yrs.		% Teachers > 20 Yrs.	
		87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.70	0.50	0.33	0.74	0.60	0.72	0.55	0.37	0.37
Catholic	0.74	0.63	0.44	1.02	0.57	0.98	0.63	0.75	0.50
Episcopal	4.62	1.46	1.45	2.17	2.66	1.99	2.13	2.26	1.99
Friends	0.00	0.81	0.00	5.75	0.00	3.60	0.00	1.32	0.00
Seventh-Day Adventist	4.18	1.71	2.26	2.86	2.24	2.78	4.12	2.88	3.31
Hebrew Day	5.86	2.17	1.87	5.82	3.96	4.44	3.31	2.15	3.24
Solomon Schechter	2.02	--	1.69	--	0.49	--	2.06	--	0.26
Other Jewish	4.61	--	2.65	--	3.22	--	2.40	--	1.01
Christian Schools Intl	4.03	1.98	1.77	5.57	1.50	2.23	1.86	4.32	1.62
Assoc of Christn Schls Intl	2.87	2.30	1.58	2.14	2.08	2.23	1.76	0.65	0.96
Lutheran, Missouri Synod	2.75	1.44	0.95	2.06	4.44	2.84	5.28	1.29	1.64
Lutheran, Wisconsin Synod	3.35	--	1.33	--	1.81	--	2.85	--	2.30
Evangelical Lutheran	21.84	--	2.95	--	4.26	--	3.56	--	1.79
Other Lutheran	--	3.04	--	5.78	8.40	4.46	--	2.58	--
Montessori	4.84	3.32	2.17	6.76	3.37	7.78	2.55	1.77	1.71
Schools for Exceptional Children	3.30	2.45	3.28	2.93	4.77	3.09	3.38	1.74	2.07
Natl Assoc of Independent Schools (only)	2.72	1.53	0.77	1.96	1.49	2.55	1.21	1.19	1.08
Military	4.15	1.22	3.18	2.84	1.23	1.29	3.37	0.33	0.56
Other Private Schools	2.57	1.36	1.17	1.14	1.45	1.16	1.46	0.67	0.59
Catholic	0.74	0.62	0.44	1.03	0.57	0.98	0.63	0.75	0.50
Parochial	0.91	0.73	0.75	1.19	0.94	0.99	0.75	0.90	0.83
Diocesan	1.45	1.64	0.90	2.33	1.24	2.03	1.54	1.68	1.02
Private order	1.95	1.66	0.86	2.33	1.67	2.95	2.13	2.48	1.52
Other religious	1.34	1.08	0.51	1.23	0.96	1.15	0.94	0.51	0.45
Conservative Christian	2.54	1.67	1.11	1.69	1.27	1.39	1.40	0.36	0.61
Affiliated	1.85	1.03	0.50	1.87	1.42	1.74	1.47	0.88	0.73
Unaffiliated	3.94	2.58	1.90	2.23	2.23	1.99	2.30	0.93	0.97
Nonsectarian	2.21	1.22	0.85	1.58	1.47	1.44	1.45	0.80	0.73
Regular	2.82	1.49	0.74	1.73	1.31	1.39	1.16	1.03	1.06
Special emphasis	6.06	1.54	2.50	3.46	4.33	3.25	4.36	1.70	1.09
Special education	3.67	3.53	2.94	3.04	2.91	2.26	1.67	1.03	0.91
All members of NAIS	2.43	1.13	0.60	1.41	1.10	1.86	1.04	0.86	0.82

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (School Questionnaire).

**Table A3.4- Standard errors for percentage of teachers with different highest degree obtained in 1990-91, by affiliation**

	Percent less than Bachelor's	Percent Bachelor's	Percent Master's	Percent Ed. Prof.	Percent Doctorate
Total Private	0.45	0.90	0.71	0.24	0.22
Catholic	0.39	1.07	1.08	0.36	0.27
Episcopal	1.77	6.94	5.82	1.72	2.29
Friends	0.73	8.42	7.59	2.47	6.07
Seventh-Day Adventist	2.04	4.03	4.48	0.45	0.50
Hebrew Day	3.99	5.74	5.07	1.81	2.37
Solomon Schechter	1.35	3.64	2.70	1.63	1.54
Other Jewish	4.24	5.93	5.13	2.88	2.08
Christian Schools Intl	2.82	5.85	3.97	0.92	0.00
Assoc of Christn Schls Intl	3.24	3.46	2.32	0.95	0.45
Lutheran, Missouri Synod	0.77	2.15	2.29	0.83	0.00
Lutheran, Wisconsin Synod	1.40	3.22	3.26	0.60	0.00
Evangelical Lutheran	2.82	22.45	16.04	7.21	0.00
Other Lutheran	4.16	14.53	9.39	4.79	1.56
Montessori	5.30	6.34	4.29	5.34	0.00
Schools for Exceptional Children	0.35	6.24	6.36	0.57	0.93
Natl Assoc of Independent Schools (only)	0.93	2.48	2.20	0.96	1.01
Military	0.00	9.94	7.26	4.07	2.29
Other Private Schools	1.71	2.18	1.85	0.57	0.48
Catholic	0.39	1.07	1.08	0.36	0.27
Parochial	0.42	1.53	1.54	0.41	0.32
Diocesan	0.92	2.36	2.10	0.63	0.46
Private order	0.40	3.04	3.08	1.31	0.73
Other religious	1.10	1.48	1.03	0.33	0.24
Conservative Christian	2.76	2.82	1.75	0.56	0.22
Affiliated	0.84	1.89	1.74	0.46	0.39
Unaffiliated	2.96	3.25	3.45	1.16	0.86
Nonsectarian	0.80	2.13	1.99	0.80	0.76
Regular	0.77	2.76	2.36	0.76	1.01
Special emphasis	2.26	3.66	2.48	1.74	1.57
Special education	1.04	5.17	5.51	3.13	0.81
All members of NAIS	0.68	2.09	1.91	0.86	0.74

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Questionnaire).

**Table A3.5- Standard errors for percentage of teachers in different age ranges in 1987-88 and 1990-91, by affiliation**

	Percent Younger than 25		Percent 25 - 39		Percent 40 - 54		Percent 55 or Older	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.35	0.34	0.96	0.76	0.74	0.77	0.57	0.52
Catholic	0.45	0.54	1.28	1.32	1.24	1.21	0.70	0.95
Episcopal	2.65	1.45	5.98	4.80	7.14	4.83	1.57	2.84
Friends	2.51	1.56	5.96	9.54	6.50	7.63	2.62	2.93
Seventh-Day Adventist	1.17	1.37	3.50	5.42	4.07	6.11	3.12	2.87
Hebrew Day	2.83	2.95	6.05	6.58	5.20	5.62	3.62	3.27
Solomon Schechter	0.76	1.20	7.84	6.58	7.27	7.14	1.50	4.09
Other Jewish	--	2.80	--	6.35	--	5.96	--	2.62
Christian Schools Intl	1.74	2.88	4.55	4.37	3.59	5.36	2.06	2.22
Assoc of Christn Schls Intl	1.56	1.72	3.48	3.57	2.72	3.58	1.74	1.69
Lutheran, Missouri Synod	1.78	1.56	2.69	2.97	3.32	3.54	0.93	1.62
Lutheran, Wisconsin Synod	--	1.46	--	3.28	--	3.08	--	2.28
Evangelical Lutheran	--	2.79	--	13.24	--	13.79	--	2.66
Other Lutheran	3.02	5.07	4.47	9.35	3.32	7.46	2.63	4.58
Montessori	1.60	4.00	7.36	7.52	8.07	7.52	2.02	2.23
Schools for Exceptional Children	6.14	1.43	11.15	5.99	7.80	6.00	3.14	5.21
Natl Assoc of Independent Schools (only)	1.39	0.45	3.75	2.63	3.41	2.39	1.60	2.21
Military	2.75	2.94	13.01	9.45	11.45	7.87	4.67	5.15
Other Private Schools	1.21	1.18	2.50	2.12	2.11	1.93	1.95	1.03
Catholic	0.45	0.54	1.30	1.32	1.26	1.21	0.71	0.95
Parochial	0.63	0.85	1.45	1.84	1.25	1.83	0.90	1.10
Diocesan	1.11	0.68	3.10	2.10	2.70	2.07	1.69	1.41
Private order	0.83	0.93	3.44	2.09	3.24	2.34	2.07	2.13
Other religious	0.81	0.79	1.61	1.37	1.58	1.47	1.30	0.62
Conservative Christian	1.30	1.54	2.65	3.02	1.99	3.13	1.32	1.18
Affiliated	0.78	0.83	1.84	1.75	2.25	1.65	2.50	0.88
Unaffiliated	2.52	2.25	3.46	3.52	2.97	3.76	2.11	1.77
Nonsectarian	0.77	0.53	2.52	1.92	2.31	1.65	0.84	1.38
Regular	0.89	0.51	3.50	2.75	3.36	2.20	1.03	1.96
Special emphasis	1.82	1.04	3.49	3.96	3.34	3.94	1.81	1.52
Special education	5.32	2.27	7.06	3.54	5.42	4.35	1.73	3.17
All members of NAIS	1.13	0.40	2.54	2.00	2.55	1.85	1.27	1.54

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Questionnaire).

**Table A3.6- Standard errors for percentage of teachers of different sex, race, and ethnicity in 1987-88 and 1990-91, by affiliation**

	% Male		% American Indian		% Asian		% Black Non-Hispanic		% White Non-Hispanic		% Hispanic	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.86	0.74	0.12	0.11	0.26	0.19	0.27	0.28	0.50	0.46	0.36	0.26
Catholic	1.34	1.15	0.25	0.17	0.36	0.20	0.51	0.44	0.98	0.71	0.61	0.49
Episcopal	3.94	3.77	0.09	0.68	6.41	1.20	1.67	3.96	6.45	4.64	0.43	2.07
Friends	5.76	5.11	0.00	0.00	0.29	0.11	4.13	1.39	4.12	2.93	0.00	2.90
Seventh-Day Adventist	4.15	3.63	0.19	1.42	1.72	2.89	1.54	2.75	3.67	5.30	2.95	1.20
Hebrew Day	5.68	6.29	0.50	0.00	0.00	2.24	1.28	0.00	2.00	2.40	0.68	1.39
Solomon Schechter	10.23	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	3.20
Other Jewish	--	4.32	--	0.05	--	0.00	--	0.77	--	1.64	--	0.93
Christian Schools Intl	2.97	3.49	0.00	0.44	0.00	0.97	0.43	0.56	2.56	1.66	2.68	0.90
Assoc of Christn Schls Intl	3.77	2.30	0.00	0.55	0.13	0.78	0.68	0.81	1.08	1.92	0.82	1.50
Lutheran, Missouri Synod	2.62	2.60	0.75	0.10	0.14	0.40	0.47	0.16	0.90	0.66	0.09	0.46
Lutheran, Wisconsin Synod	--	3.69	--	0.34	--	0.00	--	0.00	--	0.76	--	0.68
Evangelical Lutheran	--	4.98	0.00	0.37	0.00	0.00	--	1.71	8.62	2.63	0.00	1.03
Other Lutheran	4.62	12.71	1.58	0.00	1.55	0.00	0.00	1.10	2.36	1.10	0.68	0.00
Montessori	1.57	1.56	0.45	0.71	9.86	2.70	3.48	0.00	9.67	3.27	1.68	1.51
Schools for Exceptional Children	8.15	3.75	2.06	0.41	0.00	0.69	1.17	1.31	1.84	4.17	0.00	3.60
Natl Assoc of Independent Schools (only)	3.00	2.37	0.39	0.06	0.22	0.52	0.30	1.04	1.17	1.48	1.05	0.99
Military	12.10	10.64	0.00	3.01	0.00	2.06	0.00	0.00	1.46	5.52	1.46	2.47
Other Private Schools	1.62	2.03	0.19	0.21	0.25	0.62	0.63	0.94	0.78	1.37	0.35	0.51
Catholic	1.34	1.15	0.25	0.17	0.36	0.20	0.50	0.44	0.97	0.71	0.62	0.49
Parochial	0.99	1.05	0.31	0.30	0.33	0.36	0.72	0.64	0.90	0.91	0.66	0.65
Diocesan	3.89	1.78	0.69	0.29	0.82	0.39	0.90	0.62	1.58	1.14	0.77	1.15
Private order	4.94	3.77	0.36	0.14	1.01	0.54	0.54	1.16	3.47	1.73	3.19	0.91
Other religious	1.41	1.16	0.11	0.17	0.54	0.33	0.51	0.44	0.80	0.80	0.38	0.39
Conservative Christian	2.52	2.31	0.13	0.30	0.08	0.59	0.46	0.60	1.03	1.52	0.81	0.92
Affiliated	1.75	1.36	0.22	0.17	1.19	0.40	0.79	0.89	1.47	1.20	0.49	0.39
Unaffiliated	2.49	2.33	0.04	0.46	0.19	0.65	1.18	0.86	1.36	1.51	0.65	0.96
Nonsectarian	1.72	1.78	0.27	0.17	0.64	0.55	0.46	0.89	0.78	1.19	0.47	0.74
Regular	2.37	2.21	0.31	0.26	0.23	0.93	0.36	1.20	0.86	1.71	0.61	1.06
Special emphasis	3.92	3.34	0.63	0.24	2.04	0.50	1.10	1.99	2.08	2.17	0.96	0.96
Special education	5.25	5.14	0.62	0.09	0.00	0.48	2.19	2.20	2.14	2.69	0.00	1.59
All members of NAIS	2.66	1.99	0.26	0.09	1.21	0.52	0.40	0.72	1.53	1.16	0.71	0.82

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Questionnaire).

**Table A3.7- Standard errors for principals' experience in teaching and administering, and salary in 1987-88 and 1990-91, by affiliation**

	Number of Principals		Yrs Teaching		Yrs Principal at school		Yrs Principal elsewhere		Salary	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	715.40	390.31	0.22	0.15	0.14	0.15	0.12	0.14	\$436.47	\$440.54
Catholic	229.70	132.04	0.28	0.23	0.18	0.18	0.23	0.27	\$539.83	\$454.60
Episcopal	33.23	57.11	0.87	0.70	0.72	0.88	1.14	0.92	\$2,725.58	\$3,808.23
Friends	10.40	0.00	0.14	0.00	0.20	0.00	0.12	0.00	\$1,084.98	\$0.00
Seventh-Day Adventist	62.41	62.91	0.65	0.92	0.28	0.42	0.41	1.03	\$825.34	\$766.80
Hebrew Day	35.65	14.96	0.85	0.85	0.89	1.43	1.09	0.79	\$2,677.43	\$3,480.60
Solomon Schechter	--	6.81	--	0.69	--	0.48	--	0.64	\$8,354.68	\$2,088.24
Other Jewish	--	21.93	--	0.73	--	0.67	--	0.86	--	\$2,939.68
Christian Schools Intl	50.64	45.87	0.96	0.68	0.90	0.67	1.60	0.75	\$3,540.62	\$1,681.16
Assoc of Christn Schls Intl	236.65	186.32	1.13	0.67	0.48	0.50	0.46	0.47	\$1,568.67	\$1,554.08
Lutheran, Missouri Synod	53.97	54.99	0.56	0.70	0.74	1.03	0.62	0.73	\$791.21	\$838.93
Lutheran, Wisconsin Synod	--	31.37	--	0.53	--	0.68	--	0.62	--	\$645.33
Evangelical Lutheran	--	11.79	--	0.59	--	0.51	--	0.17	\$3,090.46	\$1,006.57
Other Lutheran	80.71	--	0.93	--	0.80	1.25	0.73	--	\$758.19	\$3,450.51
Montessori	112.91	71.00	0.59	1.02	1.11	0.98	0.37	0.19	\$3,044.25	\$1,682.93
Schools for Exceptional Children	61.09	63.21	1.96	2.20	1.05	2.16	0.20	0.75	\$2,595.52	\$3,953.76
Natl Assoc of Independent Schools (only)	62.68	62.25	0.81	0.57	0.65	0.48	0.41	0.37	\$2,410.16	\$2,147.83
Military	--	1.58	0.83	0.52	2.07	0.99	--	0.07	\$2,022.92	\$1,817.15
Other Private Schools	579.76	363.34	0.38	0.31	0.31	0.35	0.15	0.20	\$930.38	\$1,231.12
Catholic	233.50	132.04	0.27	0.23	0.18	0.18	0.23	0.27	\$537.04	\$454.60
Parochial	208.05	160.23	0.32	0.38	0.18	0.24	0.27	0.37	\$427.69	\$619.50
Diocesan	178.33	137.03	0.59	0.56	0.52	0.34	0.50	0.48	\$1,201.38	\$878.15
Private order	129.97	67.86	1.06	0.67	0.62	0.52	1.16	0.76	\$2,832.34	\$1,979.41
Other religious	532.55	332.33	0.30	0.25	0.20	0.27	0.19	0.20	\$741.26	\$674.97
Conservative Christian	379.72	221.07	0.61	0.41	0.27	0.33	0.30	0.29	\$828.11	\$906.29
Affiliated	225.46	165.62	0.36	0.40	0.28	0.40	0.27	0.33	\$832.39	\$631.50
Unaffiliated	301.98	249.59	0.78	0.63	0.51	0.47	0.24	0.47	\$1,968.97	\$2,264.66
Nonsectarian	332.56	225.62	0.43	0.34	0.41	0.41	0.17	0.26	\$1,311.31	\$1,192.82
Regular	289.10	124.93	0.81	0.61	0.63	0.67	0.36	0.55	\$1,915.53	\$2,187.96
Special emphasis	198.24	163.25	0.63	0.64	0.52	0.52	0.29	0.15	\$2,091.66	\$2,298.25
Special education	114.96	99.55	0.84	0.96	0.90	1.13	0.31	0.31	\$2,716.52	\$1,879.35
All members of NAIS	80.95	91.90	0.59	0.47	0.54	0.40	0.30	0.33	\$1,690.29	\$1,977.54

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Administrator Questionnaire).

**Table A3.8- Standard errors for percentage of principals in different age ranges in 1987-88 and 1990-91, by affiliation**

	Percent Younger than 25		Percent 25 - 39		Percent 40 - 54		Percent 55 or Older	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
Total Private	0.14	0.21	1.36	1.04	1.40	1.11	0.85	0.87
Catholic	0.00	0.00	1.56	1.29	2.00	1.94	1.59	1.81
Episcopal	0.00	0.00	4.75	6.41	5.15	9.55	4.36	4.88
Friends	0.00	0.00	2.92	0.00	6.56	0.00	5.67	0.00
Seventh-Day Adventist	1.03	0.00	4.35	7.66	4.89	8.27	4.33	5.98
Hebrew Day	0.00	2.26	6.59	7.50	7.71	8.51	4.99	5.53
Solomon Schechter	0.00	0.00	--	5.48	--	5.59	--	1.21
Other Jewish	--	0.00	--	4.80	--	5.18	--	4.82
Christian Schools Intl	0.00	0.00	6.39	6.65	7.68	7.03	3.63	4.52
Assoc of Christn Schls Intl	0.00	0.00	5.99	5.28	6.32	5.90	5.30	3.47
Lutheran, Missouri Synod	0.00	0.00	4.73	5.27	4.24	5.30	3.39	4.75
Lutheran, Wisconsin Synod	--	6.08	--	5.06	--	5.14	--	1.94
Evangelical Lutheran	0.00	0.00	--	3.70	--	5.80	--	7.74
Other Lutheran	6.45	0.00	12.50	--	7.85	--	1.17	--
Montessori	0.61	0.00	11.88	7.96	10.63	8.22	3.87	3.21
Schools for Exceptional Children	0.00	0.00	12.07	12.07	12.22	12.42	7.36	8.43
Natl Assoc of Independent Schools (only)	0.00	0.00	4.83	3.50	5.71	4.33	5.22	3.32
Military	0.00	0.00	--	1.13	--	3.39	--	4.52
Other Private Schools	0.25	0.64	3.37	3.03	3.15	2.77	2.00	1.70
Catholic	0.00	0.00	1.56	1.29	2.00	1.94	1.62	1.81
Parochial	0.00	0.00	2.01	2.04	2.48	2.81	1.99	2.46
Diocesan	0.00	0.00	4.25	2.58	4.55	3.58	3.62	3.35
Private order	0.00	0.00	6.50	2.69	6.45	4.37	5.41	3.97
Other religious	0.36	0.51	2.04	2.04	2.20	1.93	1.65	1.34
Conservative Christian	0.21	0.00	3.88	3.66	3.99	3.69	2.55	2.62
Affiliated	0.52	0.77	2.97	2.13	2.88	2.87	1.81	2.25
Unaffiliated	1.25	1.68	5.58	5.42	5.16	5.98	4.15	2.21
Nonsectarian	0.06	0.13	3.05	3.41	3.00	3.14	2.19	2.27
Regular	0.00	0.28	3.53	4.53	4.60	4.37	4.33	3.46
Special emphasis	0.16	0.00	5.47	5.31	5.73	5.47	2.29	2.86
Special education	0.00	0.00	6.78	7.23	6.20	6.75	4.94	5.15
All members of NAIS	0.00	0.00	3.23	2.90	4.19	3.15	4.32	2.86

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Administrator Questionnaire).



**Table A3.9- Standard errors for percentage of principals with different highest degree obtained in 1987-88 and 1990-91, by affiliation**

	Percent less than Bachelor's		Percent Bachelor's		Percent Master's		Percent Ed. Prof.		Percent Doctorate	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	0.94	1.19	1.54	1.13	1.59	1.13	0.90	0.76	0.56	0.60
Catholic	0.12	0.00	1.69	1.46	1.87	1.88	1.65	1.38	0.41	0.76
Episcopal	0.51	0.00	6.93	4.91	6.55	6.45	5.18	6.06	2.55	4.75
Friends	0.23	0.00	1.75	0.00	6.31	0.00	5.67	0.00	1.19	0.00
Seventh-Day Adventist	1.16	0.00	4.21	5.20	3.84	4.51	1.72	3.10	1.61	2.54
Hebrew Day	2.18	0.00	5.73	6.06	7.09	7.55	6.53	5.51	7.71	6.86
Solomon Schechter	0.00	0.00	0.00	9.04	--	5.18	--	1.81	--	5.66
Other Jewish	--	4.05	--	6.90	--	6.92	--	4.52	--	3.39
Christian Schools Intl	0.00	1.91	4.13	7.54	5.97	7.74	2.36	6.16	2.15	1.23
Assoc of Christn Schls Intl	6.52	2.50	6.98	5.58	5.65	5.61	1.87	3.47	2.46	2.52
Lutheran, Missouri Synod	0.00	0.01	4.34	4.50	4.33	4.96	1.82	2.00	1.74	1.53
Lutheran, Wisconsin Synod	--	0.00	--	4.75	--	4.67	--	1.91	--	0.73
Evangelical Lutheran	0.00	0.11	--	4.15	--	5.27	--	2.40	--	0.22
Other Lutheran	0.00	--	6.25	--	6.24	--	0.00	--	0.60	0.00
Montessori	3.44	6.29	11.74	5.81	6.54	5.43	8.96	5.30	1.32	1.53
Schools for Exceptional Children	0.16	0.00	2.10	12.42	11.74	12.25	7.06	4.50	7.77	4.11
Natl Assoc of Independent Schools (only)	0.97	0.29	2.06	3.19	5.50	3.80	3.82	2.38	5.38	2.59
Military	0.00	0.00	--	0.56	9.14	3.95	--	--	--	2.26
Other Private Schools	2.47	3.76	3.25	2.80	3.17	2.25	1.27	1.13	1.23	1.55
Catholic	0.12	0.00	1.70	1.46	1.92	1.88	1.67	1.38	0.41	0.76
Parochial	0.16	0.00	1.75	2.16	2.20	2.57	2.18	1.76	0.34	1.01
Diocesan	0.19	0.00	3.55	2.81	4.19	3.57	2.71	2.57	1.39	1.49
Private order	0.00	0.00	6.27	2.65	6.27	5.44	6.31	4.25	1.92	2.85
Other religious	2.09	2.79	2.32	2.22	2.05	1.67	0.63	1.01	0.92	0.85
Conservative Christian	3.62	3.10	4.42	3.75	4.58	3.03	0.86	1.88	1.55	1.74
Affiliated	0.45	0.84	2.98	2.98	2.85	2.72	1.00	1.70	1.35	1.19
Unaffiliated	6.20	7.55	6.30	5.10	5.60	3.85	1.27	1.63	1.58	1.46
Nonsectarian	1.18	1.72	3.77	2.77	3.77	2.54	2.29	1.80	1.61	1.85
Regular	1.75	2.84	6.60	3.93	5.78	4.15	3.39	2.08	2.34	3.22
Special emphasis	2.42	2.90	5.46	4.72	5.55	4.19	4.30	3.65	2.36	2.84
Special education	0.03	0.00	5.28	4.49	7.01	7.56	6.05	3.80	4.12	5.25
<b>All members of NAIS</b>	0.74	0.18	1.81	2.44	4.74	3.13	3.65	2.54	3.66	2.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Administrator Questionnaire).

**Table A3.10- Standard errors for percentage of principals of different sex, race, and ethnicity in 1987-88 and 1990-91, by affiliation**

	% Male		% American Indian		% Asian		% Black		% White		% Hispanic	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91
<b>Total Private</b>	<b>1.44</b>	<b>1.16</b>	<b>0.18</b>	<b>0.19</b>	<b>0.31</b>	<b>0.23</b>	<b>0.54</b>	<b>0.52</b>	<b>0.89</b>	<b>0.65</b>	<b>0.65</b>	<b>0.30</b>
Catholic	1.64	1.42	0.17	0.45	0.26	0.00	0.55	0.50	1.30	0.91	1.34	0.67
Episcopal	6.91	6.97	0.00	0.00	3.52	0.15	2.55	7.51	4.77	7.36	4.22	0.72
Friends	6.84	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.87	0.00	0.30	0.00
Seventh-Day Adventist	4.30	7.90	0.00	0.47	1.65	1.48	2.41	3.65	3.26	4.27	1.67	1.69
Hebrew Day	7.43	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	1.16
Solomon Schechter	--	6.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Jewish	--	6.17	--	0.00	--	0.00	--	0.00	--	0.27	--	0.27
Christian Schools Intl	7.21	7.69	0.00	0.58	0.00	2.13	1.13	0.67	1.23	2.46	0.56	0.85
Assoc of Christn Schls Intl	7.52	4.60	0.41	0.18	1.32	0.07	1.58	1.37	2.29	1.40	0.81	0.00
Lutheran, Missouri Synod	2.33	4.21	0.00	0.00	1.18	0.00	1.14	2.06	1.65	2.06	0.00	0.00
Lutheran, Wisconsin Synod	--	1.19	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00
Evangelical Lutheran	--	6.09	0.00	2.26	0.00	0.00	0.00	0.44	0.00	2.27	0.00	0.00
Other Lutheran	3.44	11.56	1.17	0.00	0.00	0.00	0.00	--	1.17	0.62	0.00	0.00
Montessori	6.22	3.20	0.00	0.84	1.13	2.58	3.61	1.09	4.34	5.01	1.84	4.07
Schools for Exceptional Children	11.91	9.39	0.00	0.00	0.00	0.00	0.00	2.24	0.00	2.38	0.00	0.47
Natl Assoc of Independent Schools (only)	5.15	5.31	1.03	0.00	1.00	1.31	0.40	0.63	1.49	1.43	0.99	1.12
Military	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	0.00	--	0.00
Other Private Schools	3.06	3.05	0.55	0.43	0.84	0.49	1.36	1.01	1.88	1.17	0.78	0.60
Catholic	1.66	1.42	0.17	0.45	0.27	0.00	0.54	0.50	1.30	0.91	1.34	0.67
Parochial	1.60	2.14	0.24	0.68	0.38	0.00	0.23	0.74	0.95	1.36	0.83	1.04
Diocesan	3.71	2.74	0.00	0.42	0.00	0.00	1.89	1.00	2.08	1.68	0.96	1.46
Private order	5.87	3.91	0.49	0.00	0.00	0.00	2.70	1.52	10.04	2.73	10.00	2.43
Other religious	2.43	1.69	0.41	0.09	0.34	0.20	0.70	0.95	0.96	1.10	0.38	0.26
Conservative Christian	4.40	2.58	0.62	0.09	0.58	0.23	0.99	1.32	1.38	1.39	0.75	0.36
Affiliated	2.77	2.12	0.11	0.15	0.63	0.40	0.72	1.80	1.03	2.03	0.44	0.45
Unaffiliated	5.45	5.28	1.49	0.21	0.23	0.33	2.08	1.03	2.65	1.30	0.82	0.59
Nonsectarian	2.72	2.73	0.22	0.70	1.41	0.91	1.51	0.59	2.48	1.68	1.09	1.06
Regular	5.94	4.33	0.38	1.60	1.06	1.38	2.23	1.04	3.03	2.62	0.85	1.34
Special emphasis	4.28	6.09	0.41	0.00	3.08	1.54	2.09	0.89	4.06	2.46	2.37	1.80
Special education	8.04	4.18	0.00	0.00	0.00	0.97	5.66	1.54	6.10	3.77	2.98	3.26
<b>All members of NAIS</b>	<b>4.48</b>	<b>3.88</b>	<b>0.70</b>	<b>0.00</b>	<b>0.67</b>	<b>0.80</b>	<b>0.94</b>	<b>1.58</b>	<b>1.41</b>	<b>1.72</b>	<b>0.67</b>	<b>0.70</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Administrator Questionnaire).

**Table A3.11- Standard errors for average teacher ratings on policy and control over teaching practices in 1990-91, by affiliation**

	Influence				Classroom Control					
	Disci- pline	In- Service	Group- ing	Curricu- lum	Text- books	Con- tent	Tech- nique	Gra- ding	Disci- pline	Home- work
Total Private	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.02	0.02
Catholic	0.04	0.04	0.05	0.04	0.03	0.02	0.01	0.02	0.02	0.02
Episcopal	0.09	0.11	0.15	0.09	0.14	0.07	0.04	0.07	0.07	0.07
Friends	0.11	0.15	0.14	0.08	0.11	0.09	0.04	0.09	0.10	0.09
Seventh-Day Adventist	0.10	0.15	0.14	0.12	0.16	0.15	0.05	0.05	0.06	0.15
Hebrew Day	0.19	0.26	0.18	0.15	0.19	0.15	0.14	0.10	0.09	0.15
Solomon Schechter	0.17	0.16	0.18	0.12	0.13	0.12	0.04	0.18	0.11	0.12
Other Jewish	0.14	0.20	0.19	0.13	0.17	0.12	0.10	0.12	0.11	0.12
Christian Schools Intl	0.23	0.24	0.25	0.17	0.15	0.15	0.09	0.05	0.13	0.15
Assoc of Christn Schls Intl	0.12	0.15	0.17	0.14	0.15	0.12	0.08	0.09	0.06	0.12
Lutheran, Missouri Synod	0.10	0.10	0.15	0.09	0.09	0.07	0.05	0.05	0.07	0.07
Lutheran, Wisconsin Synod	0.07	0.07	0.08	0.06	0.09	0.05	0.04	0.04	0.04	0.05
Evangelical Lutheran	0.14	0.62	0.59	0.13	0.23	0.25	0.13	0.11	0.21	0.25
Other Lutheran	0.20	0.19	0.47	0.24	0.24	0.19	0.12	0.20	0.18	0.19
Montessori	0.18	0.21	0.29	0.18	0.14	0.14	0.16	0.10	0.10	0.14
Schools for Exceptional Children	0.19	0.21	0.21	0.14	0.14	0.10	0.07	0.10	0.08	0.10
Natl Assoc of Independent Schools (only)	0.09	0.09	0.09	0.10	0.08	0.05	0.03	0.04	0.05	0.05
Military	0.16	0.25	0.31	0.37	0.18	0.19	0.14	0.15	0.13	0.19
Other Private Schools	0.06	0.07	0.08	0.07	0.08	0.06	0.04	0.04	0.05	0.06
Catholic	0.04	0.04	0.05	0.04	0.03	0.02	0.01	0.02	0.02	0.02
Parochial	0.06	0.06	0.07	0.06	0.05	0.04	0.02	0.02	0.03	0.04
Diocesan	0.07	0.08	0.09	0.07	0.05	0.05	0.03	0.04	0.04	0.05
Private order	0.11	0.10	0.09	0.06	0.08	0.07	0.03	0.04	0.05	0.07
Other religious	0.05	0.05	0.06	0.04	0.05	0.04	0.02	0.03	0.03	0.04
Conservative Christian	0.09	0.09	0.12	0.08	0.11	0.09	0.05	0.07	0.07	0.09
Affiliated	0.05	0.07	0.07	0.05	0.05	0.05	0.03	0.03	0.03	0.05
Unaffiliated	0.11	0.12	0.10	0.11	0.13	0.10	0.07	0.05	0.05	0.10
Nonsectarian	0.06	0.06	0.06	0.06	0.06	0.04	0.03	0.03	0.04	0.04
Regular	0.08	0.09	0.08	0.07	0.07	0.06	0.04	0.05	0.05	0.06
Special emphasis	0.14	0.13	0.11	0.13	0.09	0.07	0.09	0.07	0.06	0.07
Special education	0.14	0.12	0.18	0.14	0.12	0.07	0.07	0.06	0.08	0.07
All members of NAIS	0.08	0.09	0.08	0.08	0.06	0.04	0.03	0.03	0.04	0.04

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Teacher Questionnaire).

**Table A3.12- Standard errors for teachers' salaries and satisfaction ratings in 1987-88 and 1990-91, by affiliation**

	Base Salary		Extra Salary		Teach Again?		Satisfaction
	87-88	90-91	87-88	90-91	87-88	90-91	90-91
<b>Total Private</b>	<b>\$149.19</b>	<b>\$163.78</b>	<b>\$47.53</b>	<b>\$82.15</b>	<b>0.06</b>	<b>0.05</b>	<b>0.03</b>
Catholic	\$206.85	\$234.39	\$55.26	\$95.18	0.09	0.09	0.06
Episcopal	\$681.17	\$1,132.38	\$63.76	\$1,386.97	0.32	0.26	0.14
Friends	\$1,456.15	\$2,948.80	\$411.33	--	0.53	0.63	0.31
Seventh-Day Adventist	\$457.13	\$879.59	\$219.47	--	0.47	0.32	0.15
Hebrew Day	\$1,713.34	\$1,188.07	\$365.82	--	0.54	0.45	0.16
Solomon Schechter	\$2,313.14	\$1,306.28	\$289.83	--	1.06	0.46	0.24
Other Jewish	--	\$1,103.99	--	--	--	0.32	0.12
Christian Schools Intl	\$524.37	\$938.90	\$144.53	\$188.21	0.49	0.17	0.15
Assoc of Christn Schls Intl	\$455.20	\$425.06	\$237.58	\$172.15	0.23	0.15	0.10
Lutheran, Missouri Synod	\$453.03	\$452.25	\$66.40	\$373.96	0.16	0.18	0.11
Lutheran, Wisconsin Synod	--	\$391.96	--	--	--	0.23	0.12
Evangelical Lutheran	\$2,068.27	\$1,520.55	--	\$314.55	1.41	0.24	0.32
Other Lutheran	\$695.97	\$1,304.12	\$204.74	--	0.38	0.26	0.39
Montessori	\$637.34	\$1,050.46	\$81.60	--	0.37	0.41	0.17
Schools for Exceptional Children	\$1,802.75	\$733.95	\$793.22	--	0.81	0.48	0.18
Natl Assoc of Independent Schools (only)	\$492.67	\$606.06	\$253.92	\$109.67	0.25	0.17	0.12
Military	\$550.24	\$1,512.64	\$770.30	--	0.83	0.94	0.42
Other Private Schools	\$421.47	\$514.02	\$117.57	\$275.41	0.15	0.15	0.08
Catholic	\$206.60	\$234.39	\$55.48	\$95.18	0.10	0.09	0.06
Parochial	\$212.21	\$211.93	\$35.99	\$193.04	0.14	0.11	0.08
Diocesan	\$343.63	\$438.80	\$118.17	\$120.75	0.22	0.18	0.09
Private order	\$727.77	\$623.73	\$235.79	\$198.28	0.19	0.20	0.12
Other religious	\$321.38	\$222.32	\$58.69	\$193.53	0.13	0.09	0.04
Conservative Christian	\$461.34	\$296.44	\$142.60	\$377.65	0.21	0.14	0.09
Affiliated	\$410.96	\$368.22	\$68.24	\$340.58	0.17	0.10	0.05
Unaffiliated	\$786.96	\$736.24	\$69.12	\$271.96	0.26	0.23	0.12
Nonsectarian	\$437.09	\$526.03	\$150.28	\$191.15	0.16	0.16	0.08
Regular	\$466.97	\$696.33	\$193.37	\$116.44	0.19	0.19	0.10
Special emphasis	\$969.06	\$641.61	\$305.11	\$614.83	0.41	0.35	0.16
Special education	\$797.32	\$699.35	\$143.91	--	0.36	0.33	0.20
<b>All members of NAIS</b>	<b>\$373.99</b>	<b>\$544.75</b>	<b>\$168.53</b>	<b>\$193.54</b>	<b>0.17</b>	<b>0.12</b>	<b>0.09</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Questionnaire).

**Table A3.13- Standard errors for percentage of teachers reporting in-kind benefits in 1990-91, by affiliation**

	Housing	Meals	Tuition	Child Care	College	Transport
<b>Total Private</b>	0.37	0.63	0.66	0.22	0.45	0.33
Catholic	0.71	0.83	0.63	0.15	0.71	0.70
Episcopal	3.98	4.72	2.60	1.18	2.65	0.83
Friends	3.11	10.70	4.29	5.30	4.57	5.16
Seventh-Day Adventist	2.04	1.52	3.41	1.17	4.07	2.43
Hebrew Day	3.10	5.29	4.96	0.00	0.00	2.78
Solomon Schechter	0.00	0.00	1.32	0.00	1.89	0.00
Other Jewish	2.90	2.89	3.45	2.42	0.28	2.01
Christian Schools Intl	1.70	3.99	4.24	0.08	2.75	1.02
Assoc of Christn Schls Intl	1.19	2.23	3.68	1.25	1.70	0.84
Lutheran, Missouri Synod	3.08	1.89	2.21	1.09	3.22	1.47
Lutheran, Wisconsin Synod	3.93	1.39	1.82	0.35	2.53	1.76
Evangelical Lutheran	1.62	3.53	4.55	0.81	1.75	0.46
Other Lutheran	13.85	0.00	18.00	9.61	12.31	3.31
Montessori	0.76	0.91	5.49	1.85	1.68	0.82
Schools for Exceptional Children	0.80	8.98	1.59	1.50	5.07	2.05
Natl Assoc of Independent Schools (only)	2.01	2.91	2.03	0.54	1.66	1.03
Military	7.07	9.49	6.89	0.00	7.01	2.09
Other Private Schools	0.72	1.36	1.69	0.66	0.84	0.42
Catholic	0.71	0.83	0.63	0.15	0.71	0.70
Parochial	0.92	1.08	0.97	0.16	1.05	0.78
Diocesan	1.34	1.45	0.98	0.34	1.02	1.22
Private order	1.44	2.44	1.51	0.28	2.31	1.20
Other religious	0.71	1.07	1.35	0.44	0.69	0.47
Conservative Christian	1.07	1.99	2.73	1.06	1.39	0.86
Affiliated	1.12	1.36	1.42	0.53	1.10	0.55
Unaffiliated	1.55	2.38	3.04	0.88	1.54	1.15
Nonsectarian	0.95	1.85	1.44	0.41	1.18	0.57
Regular	1.35	2.60	1.72	0.56	1.64	0.59
Special emphasis	1.64	2.34	3.60	1.06	1.96	0.77
Special education	2.45	5.37	0.57	0.65	2.96	1.93
<b>All members of NAIS</b>	1.47	2.34	1.94	0.41	1.43	0.82

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Teacher Questionnaire).

**Table A3.14- Standard errors for number of teachers who left in 1990-91 in each field of teaching, by affiliation—Continued on next page**

	Total Left School	Total Left Teaching	Field				
			General Elementary	Special Education	English	Mathematics	Physical Sciences
<b>Total Private</b>	<b>1,123.19</b>	<b>721.41</b>	<b>437.90</b>	<b>145.30</b>	<b>174.19</b>	<b>114.49</b>	<b>66.62</b>
Catholic	818.84	408.11	288.99	48.51	85.88	71.87	42.55
Episcopal	107.94	44.99	40.48	0.63	12.85	7.72	6.32
Friends	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	102.79	75.85	72.65	0.00	5.49	3.16	6.04
Hebrew Day	88.08	24.82	--	--	--	--	--
Solomon Schechter	22.41	--	--	--	0.00	0.00	0.00
Other Jewish	89.59	43.56	--	0.00	--	--	--
Christian Schools Intl	157.32	77.51	41.28	3.69	22.63	15.50	12.07
Assoc of Christn Schls Intl	586.16	324.78	148.05	0.00	92.47	58.73	27.54
Lutheran, Missouri Synod	216.30	79.78	62.79	7.31	3.91	23.76	5.23
Lutheran, Wisconsin Synod	24.40	18.47	17.73	0.00	0.00	0.00	0.00
Evangelical Lutheran	59.01	24.80	12.15	0.00	0.00	0.00	0.00
Other Lutheran	--	--	--	--	--	--	--
Montessori	90.92	46.57	--	0.00	0.00	0.00	0.00
Schools for Exceptional Children	214.25	50.97	--	--	--	0.00	0.00
Natl Assoc of Independent Schools (only)	236.78	123.98	69.23	27.72	30.04	21.94	12.26
Military	--	--	--	--	--	--	--
Other Private Schools	588.97	373.75	275.63	125.88	72.45	42.40	40.06
Catholic	818.84	408.11	288.99	48.51	85.88	71.87	42.55
Parochial	614.37	317.12	244.50	25.33	74.64	36.29	30.53
Diocesan	502.82	232.65	143.23	40.18	32.19	34.92	30.17
Private order	282.14	122.07	41.19	1.26	33.81	47.63	20.74
Other religious	849.06	549.70	344.29	76.89	120.16	81.40	48.45
Conservative Christian	643.22	391.46	230.66	18.79	104.38	68.25	44.98
Affiliated	333.67	201.67	125.86	13.66	39.85	28.74	18.34
Unaffiliated	437.29	251.92	222.63	72.06	25.30	22.34	4.52
Nonsectarian	491.83	250.57	115.76	120.37	51.03	25.54	19.56
Regular	323.74	136.32	80.31	34.31	29.64	23.36	9.76
Special emphasis	248.85	134.85	77.37	26.99	36.39	14.90	15.75
Special education	319.88	114.78	0.00	107.26	14.00	0.00	3.43
<b>All members of NAIS</b>	<b>330.51</b>	<b>159.77</b>	<b>81.04</b>	<b>28.79</b>	<b>35.80</b>	<b>34.22</b>	<b>13.76</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A3.14- Standard errors for number of teachers who left in each field of teaching in 1990-91, by affiliation—Continued**

	Field					
	Biology	English as Second Language	Bilingual Education	Foreign Language	Voc or Tech Education	Other
Total Private	75.75	4.79	16.87	86.22	64.98	260.68
Catholic	56.94	1.47	14.67	42.14	23.40	171.02
Episcopal	9.95	0.00	0.00	18.27	0.00	10.46
Friends	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	2.36	0.00	0.00	2.04	5.46	24.53
Hebrew Day	--	0.00	0.00	--	0.00	--
Solomon Schechter	0.00	0.00	0.00	0.00	0.00	0.00
Other Jewish	--	0.00	0.00	--	0.00	--
Christian Schools Intl	16.60	0.00	1.88	18.63	3.55	24.42
Assoc of Christn Schls Intl	12.41	0.00	0.00	21.90	21.85	91.70
Lutheran, Missouri Synod	2.68	4.08	0.00	10.92	0.00	34.46
Lutheran, Wisconsin Synod	0.00	0.00	0.00	3.58	0.00	2.11
Evangelical Lutheran	6.65	0.00	0.00	6.65	0.00	0.00
Other Lutheran	--	--	--	--	--	--
Montessori	0.00	0.00	0.00	0.00	0.00	--
Schools for Exceptional Children	--	0.00	0.00	0.00	0.00	--
Natl Assoc of Independent Schools (only)	12.41	2.34	0.00	35.20	0.00	47.18
Military	--	--	--	--	--	--
Other Private Schools	52.41	0.00	8.35	47.42	49.59	124.19
Catholic	56.94	1.47	14.67	42.14	23.40	171.02
Parochial	41.67	0.00	14.67	20.82	1.73	117.10
Diocesan	35.41	1.47	0.00	36.14	17.98	94.86
Private order	24.84	0.00	0.00	28.50	14.14	41.08
Other religious	44.55	4.65	8.53	44.87	55.33	163.10
Conservative Christian	27.66	0.00	0.00	27.67	53.23	112.25
Affiliated	36.21	4.08	8.73	26.47	6.57	73.57
Unaffiliated	15.45	2.34	1.06	16.59	12.88	65.64
Nonsectarian	33.15	0.00	0.00	57.81	3.42	77.18
Regular	17.11	0.00	0.00	33.08	0.00	44.71
Special emphasis	24.75	0.00	0.00	43.96	3.42	56.78
Special education	9.84	0.00	0.00	0.00	0.00	10.53
All members of NAIS	27.92	2.34	0.00	38.90	14.21	56.46

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A3.15- Standard errors for number of newly hired teachers in each field of teaching in 1990-91, by affiliation—Continued on next page**

	Total New Teachers	Field				
		General Elementary	Special Education	English	Mathematics	Physical Sciences
<b>Total Private</b>	<b>1,154.62</b>	<b>798.85</b>	<b>357.86</b>	<b>252.66</b>	<b>196.89</b>	<b>158.63</b>
Catholic	698.25	573.79	79.41	165.67	137.88	95.78
Episcopal	165.79	84.05	8.91	22.58	16.94	11.96
Friends	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	111.88	103.48	2.80	18.75	29.89	14.31
Hebrew Day	104.90	60.98	5.33	28.11	13.87	9.81
Solomon Schechter	27.61	27.61	0.00	0.00	0.00	0.00
Other Jewish	137.29	60.58	26.62	17.17	21.09	9.95
Christian Schools Intl	160.59	68.55	17.30	37.57	14.94	20.47
Assoc of Christn Schls Intl	665.93	399.36	123.66	104.28	86.41	55.47
Lutheran, Missouri Synod	123.11	110.01	7.31	9.98	15.57	17.83
Lutheran, Wisconsin Synod	42.82	41.20	5.83	2.34	2.46	3.82
Evangelical Lutheran	46.19	23.25	15.59	0.00	11.41	0.00
Other Lutheran	--	--	0.00	0.00	--	0.00
Montessori	149.67	130.33	29.35	15.92	0.48	19.33
Schools for						
Exceptional Children	151.58	49.71	112.26	5.13	8.01	12.74
Natl Assoc of						
Independent Schools (only)	331.28	177.71	74.27	61.94	45.65	40.03
Military	16.18	0.00	0.00	3.16	--	--
Other Private Schools	681.61	529.41	254.33	138.30	128.60	89.55
Catholic	698.25	573.79	79.41	165.67	137.88	95.78
Parochial	699.88	545.44	44.30	130.99	98.70	86.32
Diocesan	473.41	326.31	33.47	71.41	83.56	56.70
Private order	282.73	130.60	59.42	67.38	79.30	31.89
Other religious	1,003.45	645.20	207.23	180.84	138.05	101.33
Conservative Christian	740.93	435.14	179.38	124.48	96.98	66.10
Affiliated	437.66	258.99	32.73	90.35	53.84	46.82
Unaffiliated	567.69	473.36	94.75	70.07	78.76	43.54
Nonsectarian	646.00	343.10	273.27	125.49	62.36	81.21
Regular	358.33	233.58	65.69	84.05	45.21	62.40
Special emphasis	409.60	204.64	48.17	66.00	38.74	56.84
Special education	299.84	56.58	267.32	48.76	26.41	9.47
<b>All members of NAIS</b>	<b>396.48</b>	<b>181.93</b>	<b>74.91</b>	<b>75.67</b>	<b>64.31</b>	<b>42.64</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).



**Table A3.15- Standard errors for number of newly hired teachers in each field of teaching in 1990-91, by affiliation—Continued**

	Field					
	Biology	English as Second Language	Bilingual Education	Foreign Language	Voc or Tech Education	Other
<b>Total Private</b>	<b>159.54</b>	<b>63.22</b>	<b>50.27</b>	<b>145.08</b>	<b>94.11</b>	<b>468.77</b>
Catholic	128.28	30.91	13.66	69.56	42.47	274.31
Episcopal	13.87	4.10	0.00	30.34	8.34	49.69
Friends	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	22.23	0.00	0.00	8.41	14.42	38.11
Hebrew Day	11.78	1.23	7.85	24.85	0.88	26.76
Solomon Schechter	0.00	0.00	0.00	0.00	0.00	0.00
Other Jewish	11.48	15.32	20.20	22.33	0.18	55.90
Christian Schools Intl	18.86	12.47	0.00	23.36	6.70	50.19
Assoc for Christn Schls Intl	36.28	12.89	0.00	39.32	44.80	176.34
Lutheran, Missouri Synod	10.39	0.00	0.00	14.70	10.04	25.91
Lutheran, Wisconsin Synod	1.41	0.00	0.00	0.00	0.00	5.45
Evangelical Lutheran	6.94	0.00	0.00	6.65	0.00	6.65
Other Lutheran	0.00	0.00	0.00	--	0.00	--
Montessori	19.33	0.00	0.00	4.50	0.00	38.47
Schools for Exceptional Children	8.69	0.00	0.00	1.85	11.25	17.60
Natl Assoc for Independent Schools (only)	57.19	19.49	4.03	58.11	2.68	98.23
Military	--	0.00	0.00	--	0.00	--
Other Private Schools	72.23	38.00	43.11	80.10	69.86	331.53
Catholic	128.28	30.91	13.66	69.56	42.47	274.31
Parochial	88.90	24.21	0.00	36.76	12.98	245.78
Diocesan	61.09	6.95	6.62	50.28	39.88	165.31
Private order	39.64	18.42	11.94	58.40	19.23	101.75
Other religious	76.08	45.86	47.46	90.68	67.81	287.46
Conservative Christian	45.28	18.10	0.00	66.59	59.79	193.08
Affiliated	51.86	38.70	35.68	56.38	32.17	125.23
Unaffiliated	46.98	11.48	31.30	51.27	12.39	139.01
Nonsectarian	65.12	19.12	13.96	83.06	50.33	268.42
Regular	54.63	10.40	2.34	72.81	39.64	94.53
Special emphasis	38.46	17.77	13.85	39.19	3.42	233.86
Special education	12.09	0.00	0.00	17.86	19.97	24.57
<b>All members of NAIS</b>	<b>65.08</b>	<b>21.40</b>	<b>6.93</b>	<b>68.92</b>	<b>14.30</b>	<b>110.52</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A3.16- Standard errors for average difficulty filling vacancies in each field of teaching in 1990-91, by affiliation**

	% Schools with Vacancies	Diff. General Elem.	Diff. Spec. Education	Diff. English	Diff. Math	Diff. Physical Sciences	Diff. Biol.	Diff. ESOL or Bilingual	Diff. Foreign Lang.	Diff. Voc. Education
Total Private	1.28	0.03	0.09	0.04	0.05	0.04	0.05	0.14	0.07	0.10
Catholic	1.76	0.04	0.15	0.05	0.06	0.08	0.08	0.32	0.10	0.22
Episcopal	7.97	0.35	--	0.07	0.14	0.18	0.13	--	0.48	--
Friends	0.00	0.00	--	0.00	0.00	0.00	0.00	--	0.00	--
Seventh-Day Adventist	6.66	0.13	--	0.31	0.25	0.26	0.30	--	0.18	--
Hebrew Day	8.53	0.16	--	0.27	0.23	0.24	0.22	0.30	0.24	--
Solomon Schechter	1.62	0.08	--	--	--	--	0.00	0.06	0.00	--
Other Jewish	4.84	0.10	0.10	0.19	0.15	0.19	0.20	0.08	0.12	--
Christian Schools Intl	5.23	0.27	0.27	0.16	0.20	0.31	0.33	--	0.18	--
Assoc of Christn Schls Intl	6.63	0.07	0.13	0.14	0.14	0.12	0.15	--	0.30	--
Lutheran, Missouri Synod	5.62	0.07	--	0.15	0.26	0.31	0.34	--	--	--
Lutheran, Wisconsin Synod	4.06	0.08	--	--	--	--	--	--	--	--
Evangelical Lutheran	2.71	0.07	--	0.21	--	--	--	--	0.23	--
Other Lutheran	--	--	--	--	--	--	--	--	--	--
Montessori	7.18	0.14	--	--	--	--	--	--	--	--
Schools for										
Exceptional Children	13.51	0.17	0.20	0.16	0.28	0.28	0.28	--	--	--
Natl Assoc for										
Independent Schools (only)	3.16	0.08	0.26	0.06	0.11	0.10	0.11	0.14	0.10	--
Military	6.87	--	--	--	--	--	--	--	--	--
Other Private Schools	2.42	0.06	0.16	0.08	0.11	0.13	0.14	0.17	0.15	0.18
Catholic	1.76	0.04	0.15	0.05	0.06	0.08	0.08	0.32	0.10	0.22
Parochial	2.32	0.04	0.14	0.08	0.10	0.14	0.13	--	0.20	0.32
Diocesan	3.91	0.06	--	0.05	0.12	0.14	0.12	--	0.19	--
Private order	3.19	0.13	--	0.09	0.09	0.15	0.11	--	0.11	--
Other religious	2.31	0.05	0.12	0.06	0.07	0.07	0.08	0.22	0.12	0.08
Conservative Christian	4.25	0.09	0.14	0.09	0.10	0.12	0.13	0.37	0.21	0.01
Affiliated	2.76	0.07	0.14	0.07	0.08	0.12	0.12	0.13	0.15	0.23
Unaffiliated	4.97	0.07	0.34	0.14	0.18	0.21	0.18	0.23	0.17	--
Nonsectarian	3.06	0.04	0.15	0.05	0.10	0.12	0.12	0.21	0.10	0.26
Regular	3.73	0.06	0.31	0.07	0.10	0.16	0.15	0.17	0.11	--
Special emphasis	5.41	0.09	--	0.10	0.25	0.16	0.22	0.31	0.11	--
Special education	6.75	0.24	0.14	0.16	0.17	0.18	0.19	--	--	0.28
All members of NAIS	2.32	0.06	0.18	0.04	0.08	0.09	0.08	0.11	0.06	0.27

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A3.17- Standard errors for mean percentage of schools using different strategies to address unfilled vacancies in 1990-91, by affiliation**

	Percent Schools with Unfilled Vacancies	Percent Canceled Courses	Percent Expanded Class Sizes	Percent Added to Others Teaching Loads	Percent Assigned Out of Field Teachers	Percent Used Substitute Teachers	Percent Used Itinerant Teachers	Percent Hired Less Qualified Teachers
Total Private	0.71	2.52	2.86	3.47	3.62	4.45	3.52	3.51
Catholic	1.07	3.17	2.89	3.51	6.91	7.50	4.83	6.22
Episcopal	13.79	--	--	--	--	--	--	--
Friends	0.00	--	--	--	--	--	--	--
Seventh-Day Adventist	0.78	--	--	--	--	--	--	--
Hebrew Day	1.72	--	--	--	--	--	--	--
Solomon Schechter	8.66	--	--	--	--	--	--	--
Other Jewish	3.35	--	0.00	--	--	--	--	--
Christian Schools Intl	6.70	--	--	--	--	--	--	0.00
Assoc of Christn Schls Intl	2.97	--	--	--	--	--	--	--
Lutheran, Missouri Synod	3.11	0.00	0.00	--	--	--	--	0.00
Lutheran, Wisconsin Synod	1.16	--	--	--	--	--	--	--
Evangelical Lutheran	0.70	--	--	--	--	--	--	--
Other Lutheran	0.00	--	--	--	--	--	--	--
Montessori	4.33	--	--	--	--	--	--	--
Schools for Exceptional Children	8.71	--	--	--	--	11.92	--	--
Natl Assoc of Independent Schools (only)	2.14	--	--	--	--	--	--	--
Military	3.36	--	--	--	--	--	--	--
Other Private Schools	1.54	2.89	5.82	7.79	6.14	7.34	7.90	6.09
Catholic	1.07	3.17	2.89	3.51	6.91	7.50	4.83	6.22
Parochial	1.56	--	--	--	--	8.66	--	--
Diocesan	1.52	--	--	--	--	--	--	--
Private order	2.51	--	--	--	--	--	--	--
Other religious	1.14	4.80	5.43	6.72	5.47	6.54	5.77	5.65
Conservative Christian	2.29	8.63	9.07	10.48	11.54	8.14	9.83	9.93
Affiliated	2.11	5.40	4.98	8.58	8.88	12.03	8.79	4.18
Unaffiliated	1.72	--	--	--	--	--	--	--
Nonsectarian	1.55	2.44	4.11	3.18	6.82	7.86	7.68	9.13
Regular	2.38	0.00	0.00	--	--	--	--	--
Special emphasis	2.31	--	--	--	--	--	--	--
Special education	6.09	3.88	7.90	4.37	7.89	12.56	8.18	13.78
All members of NAIS	1.54	--	--	--	--	--	--	--

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A4.1- Standard errors for percentage of principals rating each of eight educational goals most important in 1990-91, by affiliation**

	Literacy	Excellence	Vocational Skills	Discipline	Growth Esteem	Social Skills	Moral Values	Religious Development
<b>Total Private</b>	1.23	0.83	0.12	0.43	0.69	0.18	0.49	1.22
Catholic	1.59	1.17	0.00	0.70	1.09	0.33	0.83	2.09
Episcopal	6.76	4.98	0.00	1.70	7.69	0.00	1.70	2.47
Friends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	5.13	1.04	1.09	2.95	2.37	0.55	4.28	7.22
Hebrew Day	5.49	6.35	0.00	4.68	4.65	0.00	5.55	6.39
Solomon Schechter	5.48	4.78	0.00	0.30	8.83	0.30	1.21	1.51
Other Jewish	7.32	5.04	0.00	1.89	6.23	0.81	1.64	4.81
Christian Schools Intl	6.50	4.84	0.00	1.25	0.81	0.00	0.96	7.42
Assoc of Christn Schls Intl	4.44	2.68	0.00	0.89	1.26	0.00	0.90	5.59
Lutheran, Missouri Synod	2.87	2.44	0.00	0.00	2.60	0.59	1.53	5.04
Lutheran, Wisconsin Synod	1.12	0.00	0.00	0.00	0.00	0.00	0.00	1.12
Evangelical Lutheran	3.69	7.65	0.00	0.11	1.24	1.82	0.11	4.31
Other Lutheran	--	0.00	0.00	0.00	0.00	0.00	0.00	4.28
Montessori	6.15	6.11	0.00	3.79	7.18	0.12	0.06	0.06
Schools for Exceptional Children	11.26	2.28	1.51	4.14	6.12	2.44	0.59	0.00
Natl Assoc for Independent Schools (only)	3.35	4.66	0.23	2.81	4.38	1.10	0.80	0.67
Military	2.26	3.36	0.00	0.56	0.54	0.00	0.00	0.00
Other Private Schools	2.92	2.12	0.40	1.02	1.83	0.56	1.26	2.85
Catholic	1.59	1.17	0.00	0.70	1.09	0.33	0.83	2.09
Parochial	1.82	1.47	0.00	0.88	1.42	0.53	1.30	2.58
Diocesan	3.12	2.82	0.00	1.84	1.88	0.00	1.79	3.88
Private order	3.88	3.79	0.00	0.99	3.43	0.00	2.19	5.09
Other religious	2.10	1.26	0.11	0.73	0.94	0.29	0.95	2.14
Conservative Christian	2.92	2.27	0.00	0.51	0.63	0.00	2.19	4.25
Affiliated	2.83	1.40	0.00	0.84	1.41	0.22	1.20	2.91
Unaffiliated	6.59	3.52	0.46	2.38	3.19	1.09	1.55	5.08
Nonsectarian	2.66	2.35	0.68	0.95	2.36	0.54	0.37	0.39
Regular	3.31	2.97	0.12	1.06	3.75	1.03	0.84	0.87
Special emphasis	5.13	6.34	0.00	2.38	5.80	0.04	0.00	0.02
Special education	6.20	2.03	3.28	2.53	6.39	2.71	0.20	0.00
<b>All members of NAIS</b>	3.08	3.27	0.28	1.74	2.86	0.67	0.45	2.66

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

**Table A4.2- Standard errors for percentage of teachers rating each of eight educational goals most important in 1990-91, by affiliation**

	Literacy	Excellence	Vocational Skills	Discipline	Growth Esteem	Social Skills	Moral Values	Religious Development
Total Private	0.69	0.51	0.07	0.47	0.73	0.19	0.23	0.83
Catholic	1.20	0.72	0.13	0.73	1.32	0.24	0.39	0.86
Episcopal	3.79	3.81	0.00	3.39	3.14	0.91	0.99	1.86
Friends	6.23	8.68	0.00	7.61	5.62	2.52	0.51	1.75
Seventh-Day Adventist	4.27	2.22	0.00	1.49	2.87	1.42	1.35	5.34
Hebrew Day	3.68	4.51	0.29	3.94	5.31	2.36	1.21	2.65
Solomon Schechter	6.36	3.59	0.00	5.49	5.85	0.99	1.49	3.72
Other Jewish	4.57	4.55	0.00	3.36	5.03	2.36	2.14	3.61
Christian Schools Intl	3.56	4.97	0.00	2.84	1.63	0.29	0.78	6.34
Assoc of Christn Schls Intl	3.40	1.50	0.00	1.38	1.06	1.15	1.11	4.28
Lutheran, Missouri Synod	2.45	1.60	0.00	1.35	1.95	0.56	1.00	2.73
Lutheran, Wisconsin Synod	1.78	1.16	0.00	0.00	0.34	0.34	0.77	2.22
Evangelical Lutheran	4.89	11.97	0.00	2.12	7.00	0.41	0.99	4.41
Other Lutheran	7.59	0.00	0.00	7.63	4.38	1.64	2.74	10.24
Montessori	4.19	3.67	0.00	3.93	5.31	1.76	0.53	0.00
Schools for Exceptional Children	4.67	2.59	1.44	4.51	5.97	2.88	0.00	0.51
Natl Assoc for Independent Schools (only)	2.63	2.16	0.00	1.69	1.97	0.74	1.13	0.97
Military	7.00	4.39	1.92	3.49	4.42	1.53	5.79	8.91
Other Private Schools	2.35	1.44	0.19	1.24	1.80	0.49	0.45	2.23
Catholic	1.20	0.72	0.13	0.73	1.32	0.24	0.39	0.86
Parochial	1.65	0.93	0.21	0.98	1.34	0.37	0.72	1.45
Diocesan	2.12	1.52	0.27	1.34	2.76	0.34	0.88	1.42
Private order	2.32	2.43	0.00	1.66	2.82	0.77	1.09	1.81
Other religious	1.29	1.06	0.11	0.58	0.81	0.34	0.45	1.56
Conservative Christian	2.47	1.59	0.25	1.15	1.01	0.76	0.82	2.98
Affiliated	1.58	1.12	0.02	1.04	1.24	0.33	0.38	1.68
Unaffiliated	3.21	2.46	0.37	1.67	2.18	0.69	1.01	3.41
Nonsectarian	2.03	1.61	0.09	1.30	1.72	0.59	0.55	0.53
Regular	2.81	2.35	0.06	1.67	2.16	0.63	0.91	0.82
Special emphasis	4.23	2.48	0.11	2.81	3.33	0.54	0.62	0.33
Special education	4.43	2.79	0.58	4.52	5.78	2.50	0.00	0.21
All members of NAIS	1.85	1.81	0.15	1.20	1.57	0.61	0.73	1.02

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Teacher Questionnaire).

**Table A4.3- Standard errors for average principal ratings of school climate in 1987-88 and 1990-91, by affiliation**

	Basic Standards		Respect for Teachers			Community		Attendance		Involvement		Respect for Property	
	87-88	90-91	87-88	90-91		87-88 <sup>1</sup>	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91	87-88	90-91
Total Private	0.03	0.02	0.03	0.03	.	0.05	0.05	0.05	.	0.05	0.05	0.05	0.05
Catholic	0.03	0.02	0.04	0.03	.	0.07	0.07	0.08	.	0.08	0.07	0.05	0.05
Episcopal	0.08	0.09	0.11	0.30	.	0.38	0.15	0.47	.	0.15	0.22	0.20	0.20
Friends	0.06	0.00	0.13	0.00	.	0.00	0.20	0.00	.	0.00	0.23	0.00	0.00
Seventh-Day Adventist	0.05	0.06	0.09	0.14	.	0.18	0.19	0.25	.	0.18	0.12	0.19	0.19
Hebrew Day	0.09	0.15	0.10	0.16	.	0.14	0.25	0.31	.	0.22	0.23	0.19	0.19
Solomon Schechter	0.00	0.11	0.25	0.05	.	0.06	0.39	0.13	.	0.22	0.44	0.07	0.07
Other Jewish	--	0.06	--	0.13	.	0.13	--	0.31	.	0.19	--	0.22	0.22
Christian Schools Intl	0.18	0.09	0.18	0.08	.	0.22	0.18	0.24	.	0.23	0.42	0.19	0.19
Assoc of Christn Schls Intl	0.06	0.04	0.08	0.06	.	0.11	0.19	0.15	.	0.16	0.16	0.13	0.13
Lutheran, Missouri Synod	0.04	0.04	0.07	0.08	.	0.14	0.11	0.15	.	0.15	0.11	0.15	0.15
Lutheran, Wisconsin Synod	--	0.04	--	0.10	.	0.14	--	0.12	.	0.17	--	0.12	0.12
Evangelical Lutheran	0.07	0.06	0.39	0.11	.	0.15	0.68	0.18	.	0.23	0.00	0.09	0.09
Other Lutheran	0.07	0.42	0.13	0.42	.	0.44	0.22	0.39	.	0.46	0.22	0.42	0.42
Montessori Schools for	0.02	0.11	0.11	0.13	.	0.21	0.28	0.25	.	0.26	0.15	0.17	0.17
Exceptional Children	0.46	0.31	0.43	0.58	.	0.62	0.39	0.52	.	0.86	0.37	0.54	0.54
Natl Assoc for													
Independent Schools (only)	0.09	0.09	0.09	0.08	.	0.09	0.16	0.12	.	0.11	0.16	0.12	0.12
Military	0.16	0.02	0.36	0.01	.	0.04	0.53	0.04	.	0.16	0.36	0.04	0.04
Other Private Schools	0.07	0.06	0.07	0.09	.	0.10	0.11	0.10	.	0.10	0.07	0.11	0.11
Catholic	0.03	0.02	0.04	0.03	.	0.07	0.07	0.08	.	0.08	0.07	0.05	0.05
Parochial	0.02	0.02	0.05	0.04	.	0.10	0.07	0.10	.	0.12	0.07	0.07	0.07
Diocesan	0.09	0.05	0.10	0.07	.	0.11	0.16	0.14	.	0.13	0.17	0.09	0.09
Private order	0.22	0.11	0.14	0.08	.	0.18	0.41	0.18	.	0.17	0.26	0.16	0.16
Other religious	0.04	0.02	0.04	0.05	.	0.06	0.08	0.07	.	0.07	0.06	0.06	0.06
Conservative Christian	0.04	0.05	0.06	0.07	.	0.12	0.14	0.11	.	0.12	0.10	0.12	0.12
Affiliated	0.03	0.04	0.04	0.05	.	0.08	0.09	0.09	.	0.09	0.06	0.08	0.08
Unaffiliated	0.16	0.05	0.11	0.14	.	0.17	0.18	0.16	.	0.22	0.19	0.13	0.13
Nonsectarian	0.07	0.09	0.09	0.10	.	0.11	0.09	0.11	.	0.12	0.10	0.12	0.12
Regular	0.07	0.08	0.06	0.16	.	0.10	0.14	0.15	.	0.18	0.16	0.18	0.18
Special emphasis	0.13	0.14	0.11	0.11	.	0.16	0.20	0.20	.	0.18	0.11	0.13	0.13
Special education	0.21	0.35	0.32	0.26	.	0.33	0.30	0.33	.	0.31	0.25	0.32	0.32
All members of NAIS	0.07	0.07	0.06	0.05	.	0.08	0.12	0.11	.	0.08	0.12	0.11	0.11

<sup>1</sup> Information not available for 1987-88. (0 = Serious Problems, 10 = Best Responses)

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Administrator Questionnaire).

**Table A4.4- Standard errors for average teacher ratings of school climate in 1987-88 and 1990-91, by affiliation—Continued on next page**

	Basic Standards		Respect for Teachers		Community		Attendance		Respect for Students	
	87-88	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91	87-88	90-91	87-88	90-91
Total Private	0.03	0.03	0.03	0.03	.	0.04	0.03	0.04	.	0.04
Catholic	0.05	0.03	0.04	0.03	.	0.05	0.05	0.05	.	0.06
Episcopal	0.17	0.19	0.07	0.20	.	0.22	0.14	0.15	.	0.28
Friends	0.16	0.00	0.04	0.00	.	0.00	0.09	0.00	.	0.00
Seventh-Day Adventist	0.08	0.09	0.12	0.11	.	0.13	0.11	0.17	.	0.18
Hebrew Day	0.05	0.05	0.13	0.21	.	0.22	0.27	0.25	.	0.27
Solomon Schechter	0.00	0.04	0.34	0.21	.	0.05	0.24	0.18	.	0.32
Other Jewish	--	0.10	--	0.14	.	0.14	--	0.16	.	0.17
Christian Schools Intl	0.09	0.11	0.08	0.10	.	0.27	0.27	0.20	.	0.19
Assoc of Christn Schls Intl	0.08	0.07	0.09	0.10	.	0.15	0.16	0.12	.	0.17
Lutheran, Missouri Synod	0.07	0.04	0.06	0.07	.	0.14	0.10	0.10	.	0.16
Lutheran, Wisconsin Synod	--	0.05	--	0.08	.	0.13	--	0.10	.	0.19
Evangelical Lutheran	0.15	0.15	0.14	0.16	.	0.12	0.26	0.09	.	0.11
Other Lutheran	0.08	0.11	0.18	0.16	.	0.27	0.23	0.39	.	0.17
Montessori	0.03	0.05	0.11	0.16	.	0.10	0.27	0.27	.	0.28
Schools for										
Exceptional Children	0.53	0.38	0.38	0.44	.	0.45	0.26	0.34	.	0.21
Natl Assoc for										
Independent Schools (only)	0.26	0.11	0.13	0.08	.	0.09	0.20	0.10	.	0.09
Military	0.65	0.25	0.70	0.15	.	0.16		0.55	.	0.16
Other Private Schools	0.08	0.09	0.10	0.10	.	0.12	0.10	0.10	.	0.11
Catholic	0.05	0.03	0.04	0.03	.	0.05	0.05	0.05	.	0.06
Parochial	0.05	0.03	0.04	0.04	.	0.07	0.05	0.05	.	0.07
Diocesan	0.15	0.07	0.08	0.07	.	0.11	0.11	0.09	.	0.09
Private order	0.27	0.13	0.20	0.08	.	0.13	0.20	0.13	.	0.10
Other religious	0.03	0.03	0.03	0.04	.	0.06	0.04	0.06	.	0.07
Conservative Christian	0.04	0.06	0.06	0.08	.	0.18	0.13	0.11	.	0.14
Affiliated	0.04	0.04	0.04	0.05	.	0.06	0.05	0.06	.	0.09
Unaffiliated	0.08	0.05	0.08	0.07	.	0.09	0.11	0.15	.	0.16
Nonsectarian	0.12	0.12	0.13	0.13	.	0.14	0.12	0.11	.	0.12
Regular	0.15	0.11	0.14	0.13	.	0.11	0.13	0.13	.	0.16
Special emphasis	0.18	0.18	0.16	0.13	.	0.15	0.16	0.20	.	0.19
Special education	0.29	0.32	0.42	0.40	.	0.40	0.40	0.27	.	0.33
All members of NAIS	0.20	0.11	0.10	0.07	.	0.08	0.16	0.10	.	0.08

<sup>1</sup> Information not available for 1987-88.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Questionnaire).

**Table A4.4- Standard errors for average teacher ratings of school climate in 1987-88 and 1990-91, by affiliation—Continued**

	Teachers' Influence on School Policy		Teachers' Classroom Control		Behavior Standards		Teachers' Satisfaction with Teaching		Assistance for New Teachers	
	87-88	90-91	87-88	90-91	87-88	90-91	87-88	90-91	87-88 <sup>1</sup>	90-91
Total Private	0.06	0.06	0.03	0.04	0.06	0.04	0.06	0.05	.	0.06
Catholic	0.05	0.06	0.05	0.03	0.07	0.06	0.08	0.06	.	0.08
Episcopal	0.15	0.17	0.15	0.13	0.23	0.41	0.27	0.20	.	0.19
Friends	0.33	0.00	0.14	0.00	0.10	0.00	0.20	0.00	.	0.00
Seventh-Day Adventist	0.24	0.27	0.14	0.14	0.13	0.13	0.27	0.26	.	0.25
Hebrew Day	0.51	0.26	0.33	0.18	0.54	0.40	0.56	0.26	.	0.43
Solomon Schechter	0.63	0.05	0.48	0.49	0.62	0.00	0.72	0.33	.	0.08
Other Jewish	.	0.31	.	0.19	.	0.21	.	0.25	.	0.29
Christian Schools Intl	0.14	0.34	0.14	0.14	0.19	0.20	0.27	0.14	.	0.16
Assoc of Christn Schls Intl	0.35	0.24	0.12	0.14	0.29	0.17	0.21	0.25	.	0.25
Lutheran, Missouri Synod	0.15	0.21	0.06	0.12	0.14	0.24	0.11	0.11	.	0.28
Lutheran, Wisconsin Synod	.	0.12	.	0.09	.	0.13	.	0.13	.	0.20
Evangelical Lutheran	0.82	0.18	0.79	0.10	0.74	0.05	0.80	0.09	.	0.10
Other Lutheran	0.21	0.34	0.10	0.20	0.23	0.38	0.43	0.24	.	0.39
Montessori Schools for	0.32	0.33	0.22	0.21	0.26	0.47	0.29	0.21	.	0.57
Exceptional Children	0.36	0.26	0.13	0.13	0.26	0.41	0.57	0.36	.	0.55
Natl Assoc for Independent Schools (only)	0.21	0.14	0.11	0.09	0.20	0.18	0.20	0.15	.	0.24
Military	0.17	0.08	0.22	0.03	0.60	0.22	0.41	0.30	.	0.27
Other Private Schools	0.16	0.20	0.08	0.13	0.17	0.09	0.14	0.17	.	0.15
Catholic	0.05	0.06	0.05	0.03	0.07	0.06	0.08	0.06	.	0.08
Parochial	0.08	0.08	0.06	0.05	0.08	0.08	0.09	0.08	.	0.11
Diocesan	0.13	0.11	0.08	0.08	0.19	0.13	0.16	0.11	.	0.12
Private order	0.21	0.13	0.15	0.07	0.34	0.18	0.22	0.14	.	0.18
Other religious	0.11	0.11	0.06	0.08	0.13	0.06	0.10	0.10	.	0.10
Conservative Christian	0.25	0.22	0.10	0.19	0.19	0.13	0.17	0.24	.	0.16
Affiliated	0.12	0.11	0.06	0.05	0.10	0.09	0.12	0.10	.	0.12
Unaffiliated	0.30	0.22	0.18	0.12	0.25	0.14	0.16	0.24	.	0.22
Nonsectarian	0.15	0.15	0.08	0.08	0.11	0.14	0.16	0.13	.	0.21
Regular	0.22	0.17	0.12	0.11	0.19	0.15	0.23	0.19	.	0.19
Special emphasis	0.20	0.28	0.12	0.16	0.21	0.28	0.31	0.24	.	0.40
Special education	0.31	0.25	0.14	0.18	0.23	0.25	0.26	0.29	.	0.28
All members of NAIS	0.15	0.13	0.08	0.11	0.15	0.17	0.14	0.11	.	0.22

<sup>1</sup> Information not available for 1987-88.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Questionnaire).



**Table A4.5- Standard errors for average percentage of 12th-grade students who were graduated and who applied to college in 1990-91, by affiliation**

	Graduate	Applied to College
	90-91	90-91
<b>Total Private</b>	<b>0.69</b>	<b>1.69</b>
Catholic	0.20	0.93
Episcopal	0.44	2.57
Friends	0.00	0.00
Seventh-Day Adventist	1.20	2.46
Hebrew Day	3.71	3.13
Solomon Schechter	--	--
Other Jewish	2.19	8.15
Christian Schools Intl	0.08	3.36
Assoc of Christn Schls Intl	1.30	8.03
Lutheran, Missouri Synod	1.65	2.56
Lutheran, Wisconsin Synod	--	--
Evangelical Lutheran	--	--
Other Lutheran	--	--
Montessori	--	--
Schools for		
Exceptional Children	2.77	14.48
Natl Assoc for		
Independent Schools (only)	0.44	0.83
Military	0.46	5.26
Other Private Schools	1.57	2.45
Catholic	0.20	0.93
Parochial	0.38	2.43
Diocesan	0.39	1.08
Private order	0.16	1.68
Other religious	0.83	2.46
Conservative Christian	1.24	4.09
Affiliated	0.76	2.04
Unaffiliated	1.47	5.04
Nonsectarian	2.07	3.10
Regular	1.60	2.07
Special emphasis	1.51	5.38
Special education	6.29	9.22
<b>All members of NAIS</b>	<b>0.30</b>	<b>0.64</b>

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A4.6- Standard errors for average years of academic study required for graduation in private secondary schools in 1990-91, by affiliation**

	English	Math	Computers	Social Studies	Science	Language
<b>Total Private</b>	0.05	0.04	0.04	0.05	0.05	0.05
Catholic	0.02	0.05	0.04	0.05	0.04	0.07
Episcopal	0.01	0.10	0.11	0.15	0.18	0.20
Friends	0.00	0.00	0.00	0.00	0.00	0.00
Seventh-Day Adventist	0.04	0.19	0.09	0.18	0.17	0.29
Hebrew Day	0.00	0.12	--	0.07	0.16	0.18
Solomon Schechter	--	--	--	--	--	--
Other Jewish	0.40	0.33	0.23	0.36	0.28	0.32
Christian Schools Intl	0.04	0.12	0.09	0.13	0.12	0.27
Assoc of Christn Schls Intl	0.34	0.25	0.09	0.32	0.27	0.15
Lutheran, Missouri Synod	0.00	0.13	--	0.14	0.18	--
Lutheran, Wisconsin Synod	--	--	--	--	--	--
Evangelical Lutheran	--	--	--	--	--	--
Other Lutheran	--	--	--	--	--	--
Montessori	--	--	--	--	--	--
Schools for Exceptional Children	0.09	0.13	0.35	0.21	0.31	0.20
Natl Assoc for Independent Schools (only)	0.01	0.05	0.07	0.06	0.06	0.10
Military	0.00	0.12	0.05	0.11	0.12	0.08
Other Private Schools	0.07	0.05	0.07	0.06	0.08	0.08
Catholic	0.02	0.05	0.04	0.05	0.04	0.07
Parochial	0.10	0.14	0.15	0.18	0.13	0.15
Diocesan	0.01	0.08	0.05	0.06	0.05	0.10
Private order	0.03	0.07	0.08	0.06	0.09	0.13
Other religious	0.09	0.06	0.06	0.09	0.08	0.06
Conservative Christian	0.15	0.11	0.08	0.14	0.13	0.07
Affiliated	0.03	0.09	0.07	0.08	0.09	0.16
Unaffiliated	0.06	0.10	0.14	0.11	0.12	0.17
Nonsectarian	0.07	0.05	0.07	0.06	0.07	0.10
Regular	0.08	0.06	0.08	0.07	0.07	0.12
Special emphasis	0.23	0.15	0.14	0.15	0.14	0.21
Special education	0.13	0.14	0.17	0.16	0.18	0.10
<b>All members of NAIS</b>	0.01	0.04	0.06	0.05	0.06	0.08

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

**Table A4.7- Standard errors for average percentage of students absent in 1990-91, by affiliation**

Average % of Students Absent	
Total Private	0.19
Catholic	0.17
Episcopal	0.53
Friends	0.00
Seventh-Day Adventist	0.56
Hebrew Day	0.45
Solomon Schechter	0.72
Other Jewish	0.55
Christian Schools Intl	1.21
Assoc of Christn Schls Intl	0.39
Lutheran, Missouri Synod	0.32
Lutheran, Wisconsin Synod	0.40
Evangelical Lutheran	0.49
Other Lutheran	--
Montessori	2.71
Schools for Exceptional Children	1.07
Natl Assoc for Independent Schools (only)	0.32
Military	0.20
Other Private Schools	0.44
Catholic	0.17
Parochial	0.25
Diocesan	0.25
Private order	0.28
Other religious	0.34
Conservative Christian	0.60
Affiliated	0.34
Unaffiliated	0.58
Nonsectarian	0.54
Regular	0.42
Special emphasis	1.38
Special education	0.73
All members of NAIS	0.25

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 (School Questionnaire).

**Table A4.8- Standard errors for mathematics and reading performance in public and private schools in 1992**

	Grade 4		Grade 8		Grade 12	
	Reading	Math	Reading	Math	Reading	Math
Catholic	2.2	1.2	1.9	2.1	1.5	2.5
Other Private	5.3	3.7	3.0	4.1	3.0	4.3
Public	1.1	0.8	1.0	1.0	0.7	1.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1992 Assessments in Reading and Mathematics.

**Appendix B**  
**Technical Notes**

## I. Survey Content

The Schools and Staffing Survey (SASS) consists of four component surveys administered to districts, schools, principals, and teachers. These surveys are the Teacher Demand and Shortage Survey, the School Administrator Survey, the School Survey, and the Teacher Survey.

- The *Teacher Demand and Shortage Survey* questionnaire has two sections, enrollment and teaching positions, and district policies. The first section, on enrollment and teaching positions, obtains information on number of students, number of teachers and librarians, position vacancies, new hires and certification status. The second section, on district policies, obtains information on teacher salaries and benefits, incentives, hiring and retirement policies, and high school graduation requirements. Race/ethnic data on the student population and the teacher work force are also collected. The corresponding sections for private schools are incorporated into the Private School Survey. The data derived from this survey permit an assessment of teacher demand and shortage, the estimation of the number of teachers who hold certification in their field of assignment, and the affect of various policies on teacher supply and demand balances.
- The *School Administrator Survey* obtains information about the age, sex, race/ethnicity, training, experience, salary, benefits, opinions and attitudes of school principals/headmasters. Questions required both objective responses (e.g., number of years of teaching experience) and judgmental responses (e.g., ranking the seriousness of school problems). The data derived from this survey provide insight into qualifications of school administrators, which school problems administrators view as serious, and how administrators perceive their influence on school policies.
- Questionnaires for the *School Survey* were sent to public schools and private schools. The private school version of the questionnaire included items for identifying the religious or other affiliation of the school. This survey obtained information about schools such as student characteristics, staffing patterns, student-teacher ratios, types of programs and services offered, length of school day and school year, graduation and college application rates, and teacher turnover rates. These data provide information about the teaching experience of the staff, the sources of newly hired teachers, and the destinations of teachers who left the school the previous year.
- Questionnaires for the *Teacher Survey* were sent to teachers in public and private schools. The two versions of the questionnaire were virtually identical. The survey collected data from teachers regarding their education and training, teaching assignment, teaching experience, certification, teaching workload, perceptions and attitudes about teaching, job mobility, and workplace conditions.

This information permits analyses of how these factors affect movement into and out of the teaching profession.

Copies of the questionnaires used in the SASS can be obtained by writing to:

Schools and Staffing Survey  
National Center for Education Statistics  
555 New Jersey Ave., N.W.  
Washington, DC 20208-5651

A more complete set of Technical Notes on SASS, focusing on public schools, is available in the NCES Technical Report, "1990-91 Schools and Staffing Survey Sample Design and Estimation" by S. Kaufman and H. Huang, U.S. Department of Education, NCES 93-449. See also Gruber, Rohr, and Fondelier 1993, "1990-91 Schools and Staffing Survey Data File User's Manual: Vol I: Survey Documentation."

## **II. Target Population and Estimates for SASS**

***Target Populations.*** The target populations for 1990-91 SASS were:

- Local Education Agencies (LEAs) that employ elementary and/or secondary level teachers (for example: public school districts, state agencies that operate schools for special student populations, such as inmates of juvenile correctional facilities, and cooperative agencies that provide special services to more than one school district).
- Public and private schools with students in any of grades 1-12.
- Principals of those schools.
- Teachers in public and private schools who teach students in grades K-12.

***Estimates.*** The SASS was designed to support estimates at the national and association level for the private sector. The association groups for private schools were determined by the school's association or affiliation group listed on the 1989-90 Private Schools Survey (the frame). The association groups were determined in the following order:

- (1) Military - membership in the Association of American Military Colleges and Schools;
- (2) Catholic - affiliation as Catholic or membership in the National Catholic Education Association or the Jesuit Secondary Education Association;
- (3) Friends - affiliation as Friends or membership in the Friends Council on Education;

- (4) Episcopal - affiliation as Episcopal or membership in the National Association of Episcopal Schools association;
- (5) Hebrew Day - membership in the National Society for Hebrew Day Schools association;
- (6) Solomon Schechter - membership in the Solomon Schechter Day Schools;
- (7) other Jewish - other Jewish affiliation;
- (8) Missouri Synod - membership in the Lutheran Church, Missouri Synod school association;
- (9) Wisconsin Synod - membership in the Evangelical Lutheran Church - Wisconsin Synod school association or affiliation as Evangelical Lutheran - Wisconsin Synod;
- (10) Evangelical Lutheran - membership in the Association of Evangelical Lutheran Churches school association or affiliation as Evangelical Lutheran Church in America;
- (11) other Lutheran - other Lutheran affiliation;
- (12) Seventh-Day Adventist - affiliation as Seventh-Day Adventist or membership in the General Conference of Seventh-Day Adventists;
- (13) Christian Schools International - membership in Christian Schools International;
- (14) Association of Christian Schools International - membership in the Association of Christian Schools International;
- (15) National Association of Private Schools for Exceptional Children - membership in the National Association of Private Schools for Exceptional Children;
- (16) Montessori - membership in the American Montessori Society or other Montessori associations;
- (17) National Association of Independent Schools - member of the National Association of Independent Schools;
- (18) all else - member of any other association specified in the PSS or affiliated with a group not listed above or not a member of any association.

Comparisons between public and private schools are only possible at the national level, because private schools are selected for sampling by association group and not by geographic location, such as state.



### III. Sample Design and Implementation<sup>1</sup>

#### A. Sampling Frames

##### 1. Private Schools

The SASS sampling frame for private schools was the 1989-90 Private School Universe Survey (PSS).<sup>2</sup> The PSS data collection used two components to develop estimates of the number of private schools in the United States. A list frame was the primary private school sampling frame, and an area frame was used to sample areas to identify schools not on the list frame and thereby compensate for the undercoverage aspects of the list frame. No additional "area frame search" beyond that in PSS was conducted for the 1990-91 SASS.

##### *List Frame*

The list frame used for the 1990-91 SASS private school sample was the same list used for the 1989-90 Private Schools Survey (PSS). It consisted of approximately 22,600 schools from the 1986 QED private school list and about 1,600 schools added in a 1989 list-frame update operation.<sup>3</sup>

##### *Area Frame*

The area frame consisted of a list of schools that had not been included by QED on their private school listing and had not been reported by a private school association during the list frame updating operation. These schools were located in selected PSUs<sup>4</sup> throughout the United States. They were identified and listed during area search operations in which Census field representatives used sources such as the telephone book, yellow pages, local government offices, chambers of commerce and religious institutions to compile a list of all private schools in each selected area. These lists were then compared to the existing private school universe (PSS) and nonmatches were added to the universe as part of the area frame.

This area search was conducted prior to the 1987-88 SASS and again before the 1990-91 survey. For more details of the area search before 1987-88 SASS, see the NCES Technical Report, "1987-88 Schools and Staffing Survey Sample Design and

---

<sup>1</sup>For a detailed description of the Sample Design see Steven Kaufman and Hertz Huang, 1990-91 Schools and Staffing Survey Sample Design and Estimation, U.S. Department of Education, National Center for Education Statistics, (93-449).

<sup>2</sup>United States Department of Education, National Center for Education Statistics, Private School Universe, 1989-90, NCES 93-122.

<sup>3</sup>In the spring of 1989, the Census Bureau compared lists of schools provided by various private school associations to the 1986 QED lists. Nonmatches were added to the PSS frame.

<sup>4</sup>A PSU is a primary sample unit, which is a geographic area consisting of one or more contiguous counties or an independent city.

Estimation" by S. Kaufman, U.S. Department of Education, Office of Educational Research and Improvement, NCES 91-127.

The area search prior to the 1990-91 SASS was completed in November 1989. It included 60 of the 95 PSUs in the 1987-88 SASS area frame and 64 new PSUs which were selected as follows:

Sixteen strata were defined, the same as the 1988 area frame design:

i) census region (4 levels); ii) metro/nonmetro status; (2 levels), and iii) whether the PSU's private school enrollment exceeded the median enrollment of the other PSUs in the census region/metro status strata (2 levels). Within each stratum, PSUs were selected as a systematic sample with probability proportionate to the square root of the 1988 projected PSU population.

A total of 123 PSUs were in sample since one PSU was selected for both sets of samples. Its weight was adjusted to reflect the duplication.

## **2. Public Schools**

The public school sampling frame was based on the 1988-89 school year Common Core of Data, which is a file of information collected annually by the NCES from all state education agencies and which is believed to be the most complete public school listing available. The frame includes regular public schools, Department of Defense operated military bases, and nonregular schools such as special education, vocational, and alternative schools. After the deletion of duplicate schools, schools outside of the United States, and schools that only teach prekindergarten, kindergarten or postsecondary students, there were a total of 83,165 schools on the public school frame.

## **B. Sample Allocation**

For list frame private schools, the frame was partitioned into an initial set of 216 cells. The first level of stratification was school association membership (18):

- (1) Military - membership in the Association of American Military Colleges and Schools;
- (2) Catholic - affiliation as Catholic or membership in the National Catholic Education Association or the Jesuit Secondary Education Association;
- (3) Friends - affiliation as Friends or membership in the Friends Council on Education;
- (4) Episcopal - affiliation as Episcopal or membership in the National Association of Episcopal Schools association;

- (5) Hebrew Day - membership in the National Society for Hebrew Day Schools association;
- (6) Solomon Schechter - membership in the Solomon Schechter Day Schools;
- (7) other Jewish - other Jewish affiliation;
- (8) Missouri Synod - membership in the Lutheran Church, Missouri Synod school association;
- (9) Wisconsin Synod - membership in the Evangelical Lutheran Church - Wisconsin Synod school association or affiliation as Evangelical Lutheran - Wisconsin Synod;
- (10) Evangelical Lutheran - membership in the Association of Evangelical Lutheran Churches school association or affiliation as Evangelical Lutheran Church in America;
- (11) other Lutheran - other Lutheran affiliation;
- (12) Seventh-Day Adventist - affiliation as Seventh-Day Adventist or membership in the General Conference of Seventh-Day Adventists;
- (13) Christian Schools International - membership in Christian Schools International;
- (14) Association of Christian Schools International - membership in the Association of Christian Schools International;
- (15) National Association of Private Schools for Exceptional Children - membership in the National Association of Private Schools for Exceptional Children;
- (16) Montessori - membership in the American Montessori Society or other Montessori associations;
- (17) National Association of Independent Schools - member of the National Association of Independent Schools;
- (18) all else - member of any other association specified in the PSS or affiliated with a group not listed above or not a member of any association.

The secondary levels of stratification for the list frame were region and school level (elementary, secondary, or combined).

The area frame was stratified by PSU and school level.

See Table III-1 for the private school sample allocation.

Table III-1.--Sample allocation for public and private schools, administrators, and public LEAs				
	Total	Elementary	Combined	Secondary
<b>Public</b>				
LEAs	5,515			
General Schools (Administrators)	9,336	4,206	1,502	3,628
American Indian Oversample Schools (Administrators)	250	162	8	80
<b>Private</b>				
List Frame Schools (Administrators)	2,670	1,355	890	425
Area Frame Schools (Administrators)	600	300	258	42

Within each second level of stratification there were three grade level strata (elementary, secondary, and combined schools), defined as follows:

Elementary	Lowest Grade $\leq 6$ and Highest grade $\leq 8$
Secondary	Lowest Grade $\geq 7$ and Highest grade $\leq 12$
Combined	Lowest Grade $\leq 6$ and Highest grade $> 8$

As used in this report, *middle* schools refer to those elementary, secondary, and combined schools whose lowest grade is 4 or higher and whose highest grade is 7, 8, or 9. Middle schools do not constitute a stratum in the sample design, however.

### C. Sample Selection Procedures for Private Schools

#### 1. Schools

Within each stratum for private schools on the list frame, sorting took place on the following variables:

State;

Urbanicity:

0 = unclassified

1 = urban

2 = suburban

3 = rural;

ZIP Code (The first two digits);

Highest grade in the school;

Enrollment;

PIN number (a unique number which identifies the school).

Within each stratum, private schools in the list frame were systematically selected using a probability proportionate to size algorithm. The measure of size used was the square root of the 1989-90 PSS number of teachers in the school. Any school with a measure of size larger than the sampling interval was excluded from the probability sampling process and included in sample with certainty.

Eligible schools in the private schools area frame were sorted using the following variables:

Affiliation (Catholic, other religious, and nonsectarian);  
Enrollment; and  
Alphabetical order of name.

Within each stratum, eligible schools in the area frame were systematically selected using a probability proportionate to size algorithm. The measure of size was the square root of the number of reported teachers from 1989-90 PSS. Any school with a measure of size larger than the sampling interval was excluded from the probability sampling process and included in sample with certainty.

## **2. Teachers**

Each selected school was asked to provide a list of their teachers and selected characteristics. Eleven percent of the private schools and five percent of the public schools did not provide teacher lists. A factor in the teacher weighting system was used to adjust for these nonparticipant schools.

For each teacher on the list, the following was to be specified:

- New/experienced; (New defined as in third year or less of teaching, experienced defined as everyone else.)
- Bilingual/English as a Second Language (ESL); (Teachers using a language other than English in the classroom.)
- Race/ethnicity; and
- Field of Teaching (General elementary, special education, and all others for elementary level teachers; math, science, english, social studies, vocational education, special education, and all others for secondary teachers.)

The above information for each teacher in a selected SASS school comprised the school teacher frame.

Within each selected school, teachers were stratified into one of five teacher types in the following hierarchical order:

- Asian or Pacific Islander;
- American Indian or Aleutian Eskimo;
- Bilingual;
- New; and
- Experienced

#### *Within-School Teacher Allocation*

Teachers were allocated to the new and experienced categories proportional to their numbers in the school. However, for private teachers, it was decided to oversample new teachers to ensure that there would be a sufficient sample of new teachers in the Teacher Follow-up Survey (TFS). (This was also done in 1987-88 SASS.)

Asian or Pacific Islander, American Indian or Aleutian Eskimo, and bilingual teachers were oversampled at a rate to ensure a set number of each group was selected. To make sure a school wasn't overburdened, the maximum number of teachers per school was set at 20. When the number of sample teachers exceeded 20 in a school, the Asian or Pacific Islander, American Indian or Aleutian or Eskimo and bilingual teachers were proportionally reduced to meet the maximum requirement.

Within each teacher stratum, teachers were sorted by primary field of teaching. Specifically, secondary teachers were sorted by primary field of teaching. Elementary teachers were sorted by general elementary, special education or other teaching assignment. When combined schools had both elementary and secondary teachers, the teachers were sorted by grade level/primary field of teaching. This was done to assure a good distribution of teachers by field of teaching.

Within each school and teacher stratum, teachers were selected systematically with equal probability.

A total of 65,217 teachers were selected (60,056 new and experienced, 1,511 Asian Pacific Islander, 1,529 American Indian or Aleutian or Eskimo and 2,121 bilingual). Table III-2 shows the number of selected teachers in SASS sample by teacher type and sector.

Table III-2.--Number of selected teachers in SASS sample by teacher type and sector			
Teacher type	Public	Private	Total
American Indian/Aleut	1,259	270	1,529
Asian/Pacific Islander	1,475	36	1,511
Bilingual/ESL	1,957	164	2,121
New	5,970	2,002	7,972
Experienced	45,390	6,694	52,084
Total	56,051	9,166	65,217

#### IV. Data Collection Procedures

Data collection operations for the 1990-91 SASS took place during the 1990-91 school year. Following introductory letters to local school districts, questionnaires were distributed to selected schools, administrators, and teachers for completion. The follow-up operation for sample cases that did not return the initial questionnaire was twofold. First, about five weeks after the first mailing, a second questionnaire was mailed to all nonrespondents. If the second questionnaire was not returned within the next six or seven weeks, Census field representatives began calling the nonrespondents. They attempted to complete the interviews by telephone or, in some cases, to persuade the respondent to complete and mail back the questionnaire. All data collection ended during the first week of June 1991.

#### V. Response Rates

##### A. Survey Response Rates

The weighted private schools response rates for each component of SASS are detailed in Tables V-1 through V-5. Table V-1 lists private school response rates by private school typology; Table V-2 lists private school response rates for administrators by private school typology; Table V-3 lists response rates for teachers by private school typology. The response rate tables are useful as an indication of possible nonresponse bias.

The weighted response rates were derived by dividing the sum of the basic weights for the interview cases by the sum of the basic weights for the eligible cases. The basic weight for each sample case was assigned at the time of sampling and is the inverse of the probability of selection.

Teacher response rates refer to the percentage of teachers responding in schools that provided teacher lists for sampling. Eleven percent of private schools and five percent of public schools did not send in teacher lists. The effective response rate is calculated by multiplying together the teacher list rate and the response rate:

Public teachers:  $.95 \times .903 = .8575 \times 100 = 85.8\%$  effective response rate

Private teachers:  $.89 \times .843 = .7503 \times 100 = 75.0\%$  effective response rate

<b>Table V-1.--Final weighted private school response rates by private school typology</b>	
<b>Private school type</b>	<b>School response rate</b>
All private schools	83.9
<b>Catholic</b>	90.8
Parochial	89.9
Diocesan	92.1
Private order	93.9
<b>Other religious</b>	79.6
Conservative Christian	73.6
Affiliated	88.0
Unaffiliated	76.5
<b>Non-sectarian</b>	81.5
Regular	76.5
Special emphasis	83.4
Special education	92.0



**Table V-2.--Final weighted private school administrator response rates by private school typology**

<b>Private school type</b>	<b>Administrator response rate</b>
All private principals	90.0
<b>Catholic</b>	96.5
Parochial	95.8
Diocesan	97.8
Private order	97.7
<b>Other religious</b>	84.9
Conservative Christian	82.2
Affiliated	91.1
Unaffiliated	80.1
<b>Non-sectarian</b>	89.9
Regular	86.3
Special emphasis	92.5
Special education	94.6

**Table V-3.--Final weighted private school teacher response rates by private school typology**

Private school type	Teacher response rate
All private teachers	84.3
Catholic	88.2
Parochial	87.3
Diocesan	88.6
Private order	90.2
Other religious	79.4
Conservative Christian	77.2
Affiliated	82.6
Unaffiliated	77.3
Non-sectarian	83.1
Regular	83.8
Special emphasis	79.3
Special education	86.1

<b>Table V-4.-Unweighted and final weighted response rates by sampled association for private administrators and schools</b>				
	<b>Administrators</b>		<b>Schools</b>	
<b>Area and List Frame</b>	<b>Unwtd</b>	<b>Wtd</b>	<b>Unwtd</b>	<b>Wtd</b>
Total area frame and list frame	91.1	90.1	85.1	83.9
Area frame	54.8	83.4	76.9	74.0
<b>Association list frame</b>				
Association of Military Colleges and Schools	92.5	95.5	90.9	90.9
<b>National Catholic Education Association</b>				
Jesuit Secondary Education Association	96.4	96.2	90.2	90.9
Friends Council on Education	93.8	93.8	90.6	90.6
National Association of Episcopal Schools	92.5	93.7	85.0	89.4
Hebrew Day Schools	86.4	86.1	73.0	70.8
Solomon Schechter Day Schools	97.9	97.9	85.1	85.1
Other Jewish	67.0	72.4	63.7	70.4
Lutheran Church-Missouri Synod	97.8	97.3	95.7	96.1
Evangelical Lutheran Church-Wisconsin Synod	97.9	97.5	97.9	97.9
Evangelical Lutheran Church in America	98.9	98.9	95.5	95.5
Other Lutheran	96.7	97.3	93.4	94.2
General Council of Seventh Day Adventist	95.8	94.9	94.9	93.9
Christian Schools International	92.9	94.3	91.0	93.7
American Association of Christian Schools International	81.6	73.4	70.0	59.0
<b>National Association of Private Schools for</b>				
Exceptional Children	94.0	94.7	88.0	86.5
American Montessori Society Schools	89.8	92.2	85.6	85.5
National Association of Independent Schools	92.5	93.7	94.5	84.6
All else	88.0	85.0	82.7	81.1

Note: Area frame schools cannot be reported by association because there was no information on association at the time the sample was drawn. The sample is designed to represent area frame schools and the list frame associations nationally.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire and School Questionnaire).

## B. Item Response Rates

Tables V-5 through V-7 provide summaries of the unweighted item response rates for selected items used in this report.

<b>Table V-5.--Unweighted item response rates, School File</b>			
<b>Item description</b>	<b>Public and Private Item name</b>	<b>Response rate (%)</b>	
		<b>Public</b>	<b>Private</b>
English as a second language Program Students	ESOLPROG ESOLNUM	98.8 90.4	99.2 91.0
Bilingual education Program Students	BILNGPGM BLNGNUM	98.6 84.4	98.7 78.0
Remedial reading Program Students	READPROG READNUM	95.5 82.9	98.4 82.6
Remedial mathematics Program Students	MATHPROG MATHNUM	95.4 82.6	97.8 82.1
Handicapped Program Students	SPECLPGM SPECLNUM	95.7 84.4	98.3 81.9
Gifted and talented Program Students	GIFTDPGM GIFTDNUM	96.6 83.8	97.4 76.2
Diagnostic and prescriptive services Services Students	DIAGNSVC DIAGNUM	94.7 76.4	97.6 78.1
Extended day/after-school Services Students	AFTERPGM AFTERNUM	99.0 86.0	98.6 78.9
Schools with 12th grade students	TWELFTH	98.8	99.2
Number of graduates last year	GRADNUM	94.5	95.9
Number of graduates applied college	GRADAPLY	88.7	93.9

**Table V-6.--Unweighted item response rates, Administrator File**

Item description	Source code		Response rate (%)	
	Public	Private	Public	Private
Associate's degree	021	021	97.5	95.0
Bachelor's degree	012	012	99.9	99.4
Master's degree	017	017	99.8	99.2
Education specialist degree	024	024	97.5	95.0
Ph.D./first professional degree	027	027	97.5	95.0
Current annual salary	055	055	97.1	91.8
Years employed:				
As a principal in this school	044	044	100.0	100.0
As a principal in other schools	045	045	99.5	99.7

<b>Table V-7.--Unweighted item response rates, Teacher File</b>				
	Source code		Response rate (%)	
Item description	Public	Private	Public	Private
Number of FTE teachers				
All	045	179	95.4	92.3
Associate's degree	049	049	99.7	99.4
Bachelor's degree	040	040	99.9	99.7
Master's degree	045	045	99.6	99.3
Education specialist degree	052	052	99.7	99.4
Ph.D./first professional degree	055	055	99.7	99.4
Full-time experience (private schools)	029	031	97.2	97.4
Full-time experience (public schools)	031	029	99.0	97.9
Total earned income	300	300	91.3	87.0
Academic base year salary	292	292	93.1	85.3

## VI. Imputation Procedures

For questionnaire items that should have been answered but were not, values were imputed by (1) using data from other items on the questionnaire, (2) extracting data from a related component of the Schools and Staffing Survey (for example, using data from a school record to impute missing values on that school's LEA questionnaire), (3) extracting data from the sample file (information about the sample case from other sources; for example, the Private Schools Survey or the Common Core of Data, collected in the 1988-89 school year), and (4) extracting data from a respondent with similar characteristics.

For some incomplete items, the entry from another part of the questionnaire or information from the sample file was directly imputed to complete the item; for others the entry was used as part of an adjustment factor with other data on the incomplete record. For example, if a respondent did not report whether a school offered remedial reading in item 10c of the public school questionnaire, the response (1 = Yes or 2 = No) for a similar school was imputed to item 10c of the incomplete record. However, if a respondent had answered "Yes" to item 10c but had not reported the number of

students in the program, the ratio of number of students in remedial reading to the total enrollment for a similar school was used with the enrollment at the school for which item 10c was incomplete to impute an entry to item 10c (i.e., SCHOOL A item 10c = SCHOOL A ENROLLMENT multiplied by the ratio of SCHOOL B item 10c to SCHOOL B ENROLLMENT).

Values were imputed to items with missing data for records that had been classified as interviews (ISR=1). Noninterview adjustment factors were used during the data weighting process to compensate for data that were missing because the sample case was a noninterview (ISR=2).

## **VII. Weighting<sup>5</sup>**

The private sector was weighted to produce national and affiliation group estimates.

### **A. Schools and Administrators**

Schools were assigned a base weight at the time of sampling equal to the stratum's sampling interval divided by the school's measure of size. This ratio is the inverse of the probability of selection for each school. Schools selected from the private school area frame were assigned a base weight equal to the inverse of the PSU probability of selection multiplied by the school's base weight. Administrators were assigned the same base weight as their schools.

The base weight of each school was adjusted with three factors:

- A sampling adjustment factor was applied to certain schools and administrators to account for duplicate records, merged schools or any other circumstance that would affect the school's true probability of selection.
- Noninterview adjustment factors were calculated to compensate for schools or administrators eligible for the survey but were not interviewed, usually because they refused to respond.
- First stage ratio adjustment factors adjusted the sample weighted count of all cases (interviewed, noninterview, and ineligible) to known frame totals. The 1989-90 PSS was the source of totals such as grade level by Association Membership.

---

<sup>5</sup>For a detailed description of the weighting processes see Steven Kaufman and Hertz Huang, 1990-91 Schools and Staffing Survey Sample Design and Estimation, U.S. Department of Education, National Center for Education Statistics, (93-449).

## **B. Teachers**

The teacher base weight is equal to the within-school sampling interval multiplied by the school's base weight. Teacher base weights were also adjusted to account for schools that refused to participate in the teacher selection process, and for teachers who did not respond to the survey. In addition, the frame first stage ratio adjustment factor was applied. This factor adjusted the sample weighted count of all cases (interviewed, noninterviewed, and ineligible) to the known universe totals from the 1989-90 PSS. Finally the teacher adjustment factor adjusted the inconsistency between the estimated number of teachers from the SASS school files and the SASS teacher files. Thus, the final weight is the product of the school weight, the within-school teacher weight, and the three factors mentioned above.

## **VIII. Standard Errors**

Estimates found in the tables of this report are based on samples and are subject to sampling variability. Standard errors were estimated using a balanced repeated replications procedure that incorporates the design features of this complex sample survey. The standard errors provide indications of the accuracy of each estimate. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the universe value in approximately 95 percent of the cases. Note, however, that the standard errors do not take into account the effects of biases due to item nonresponse, measurement error, data processing error, or other systematic error.

For the purposes of identifying statistically significant results between public and private schools, the private school standard error estimate was used as a conservative (i.e., high) estimate of the public school standard error. Standard errors for many public school estimates are presented in Choy, Henke, et al. 1993.

## **IX. Cautions Concerning Change Estimates for Private Schools**

Care must be taken estimating 1987-88 to 1990-91 change in a SASS data element, because some of the measured change may not be attributable to a change in the education system (like a 3% drop in enrollment). Some of the change may be due to changes in the design. Below are design changes in the 1990-91 SASS that might partially contribute to difficulties in measuring change.

*Private school sampling frame.* Some differences exist between the number of schools on the private school frames used in the 1987-88 SASS and the 1990-91 SASS, and the number of schools on the respective SASS surveys. The sampling frame for private schools in the 1987-88 SASS was based on the 1986 Quality Education Data (QED) file of private schools. The QED was supplemented with 17 private school association lists and an area frame component to reflect schools missing from the list frame. The frame



excluded both duplicate and out-of-scope schools as determined in a matching operation. Additional duplicate and out-of-scope schools were found during the SASS data collection and processing. The affect of the additional deleted schools, as found in SASS, was that the weighted estimate of number of schools from the frame was 31,848, while the weighted estimate of schools from the SASS was 26,807. In the first cycle of SASS, a rudimentary matching operation and the actual SASS data collection identified duplicates and out-of-scopes.

The frame for the 1990-91 SASS was the 1989-90 Private School Survey (PSS). The PSS methodology was similar to the 1987-88 SASS frame in that the QED file of private schools was updated with association lists and an area frame component. Duplicates were excluded through an improved matching operation; however, the development of the PSS universe differed somewhat from the previous private school universe development because all private schools were asked to update their enrollment and teacher counts, as well as their in-scope status through the PSS collection. This PSS operation reduced the number of schools on the frame prior to the 1990-91 SASS data collection. The weighted number of schools on the 1989-90 PSS was 26,712, while the weighted number of schools from the 1990-91 SASS was 24,690. In SASS, additional out-of-scope schools were identified and the design did not allow a reclassification of the out-of-scope schools in the 1989-90 PSS to an in-scope school in the SASS.

*Adjusting the estimated number of teachers from the teacher file to the estimated number of teachers from the school file.* This was done to make estimates from the two files more consistent. Since this was not done in the 1987-88 survey, some of the distributional difference between the 1987-88 and 1990-91 teacher files may be partially attributable to this adjustment. In the public 1987-88 files, the teacher counts on the teacher file are smaller than the counts on the school file. In the 1990-91 files, the teacher file counts are increased to equalize the estimates between the teacher and school files. This increase is not a change in the educational system, but a bias correction between the files.

*Missing data on the administrator and teacher files are imputed.* All data files in both collection periods are adjusted for complete refusals. However, for the 1987-88 administrator and teacher files, missing data elements within responding units are not imputed. Hence, estimates of totals use a value of zero for all missing data elements (i.e., 1987-88 totals are underestimates whenever there are missing data). The 1990-91 estimates of totals use imputed values for missing data elements. Therefore, some of the measured change between the 1987-88 and 1990-91 totals is inflated to correct for a bias in the 1987-88 estimates. This inflation is not due to a change in the educational system.

Change estimates for ratios and averages are also inflated/deflated to correct for a possible bias in the 1987-88 estimates. However, the magnitude and direction of the bias is unknown and dependent on the variable of interest.

***Questionnaire and Conceptual Differences.*** Care must also be observed in the interpretation of change estimates between 1987-88 and 1990-91 since specific questions are not always worded the same from the first SASS survey to the second. Both major and minor changes in wording of specific items occur; the ordering of items may be different and concepts can be different.

In most cases where confusion might be introduced by questionnaire wording changes from 1987-88 to 1990-91, 1987-88 data are omitted from this report. For school climate and teacher attitude (tables 4.3 and 4.4) measures, however, factors are presented for both 1987-88 and 1990-91, even though the items for some of the factors are, of course, omitted from tables, but readers should take into account that respondents may have responded to items present in both years differently because they were embedded in different lists.

## **X. Analysis and Reporting**

### **A. Typologies of Private Schools**

Private schools can be broadly divided into those that are religiously oriented and those that are not (nonsectarian schools) (McMillen and Benson 1991). Both religiously oriented and nonsectarian schools can be further meaningfully differentiated. By far the largest category of religiously oriented schools are those affiliated with the Catholic Church, and Catholic schools can be divided into parochial (associated with a parish), diocesan (associated with a diocese), and private orders. Other religiously oriented schools can be differentiated as conservative Christian, others affiliated with national church organizations, and unaffiliated schools. Among nonsectarian schools, two special types can be differentiated from the majority: schools focusing on the provision of special education and schools with a special programmatic emphasis (the largest group of which are the Montessori schools).

### **B. Suppression of Small Sample Data**

Some of the figures presented in this report are based on thousands of respondents, others on a few. All statistics based on fewer than 10 respondents have been suppressed both to protect the privacy of the respondents and to avoid presentation of unstable results. In addition, and also to eliminate unstable results, all statistics that are based on fewer than 30 respondents and whose standard errors are more than 20 percent as large as their values are suppressed. Thus, for example, a statistic with a value of 10, based on 25 respondents, was not printed in this report if its standard error is greater than 2 (i.e., greater than 20 percent of 10).

### C. Statistical Significance

Statements of relations between measures (e.g., between type of private school and a characteristic such as school size) are included in the text only if they are statistically significant at  $\alpha = .05$ . All such statements are either implicit or explicit comparisons of statistics for one group of schools with another. A comparison is statistically significant, for the purpose of this report, if the difference between statistics for two groups is greater than 1.96 times the standard error of the difference, approximated as the square root of the sum of squares of the standard errors of the statistics for each of the groups of schools. That is, the large scale approximation to Student's *t* statistic is used, with a two-tailed alpha level of .05.

When multiple statistical tests of significance are made on differences between figures in a table, then it is much more likely than .05 that some difference will be "significant" by chance. The Bonferroni correction can be applied to adjust for the increased likelihood of finding some difference significant. This correction involves definition of a "family" of comparisons and division of the alpha level (for reporting significance) by the number of comparisons in that family. A family is defined here as comparisons involving a single column of a table in the report.

The definitions of family size for comparisons made in this report are: one (1) when comparing private to public or 1987 to 1990, three (3) when comparing major types of private schools, nine (9) for comparing typology categories to all private schools, and 18 for comparing affiliations to all private schools.<sup>6</sup> Essentially all statements of relations in the report are of one of these types. An important implication of this choice, however, is that readers who wish *only* to compare one type of school (e.g., Montessori) to the average private school may find differences to be significant that are not reported as significant in this publication. Those readers should use the tables of standard errors provided in Appendix A to compute *t*-statistics and adjust for the family sizes of the comparisons they wish to make.

---

<sup>6</sup> In this report, all statements that private schools of a particular type have more (or less) of something than "other private schools" are supported by comparisons between that type and the average of *all* private schools. This is slightly conservative because the pool of all private schools includes the type being compared to the average. On the other hand, statements that some schools are *similar* to others are purely descriptive of the size of differences and are not supported by tests of statistical significance.

#### **D. Factor Analysis of Teacher and Principal Attitudinal Items**

A series of attitudinal items were included in the principal's and teacher's questionnaires for SASS. These items were factor analyzed to identify a set of factors that would provide more reliable information about teachers, administrators, and their schools than individual items. For teachers in 1990-91, these items were:

1. a set of 12 items to be rated on a four-point scale from "strongly agree" to "strongly disagree"
  - a. I usually look forward to each working day at this school.
  - b. Staff members in this school generally do not have much school spirit.
  - c. This school's administration knows the problems faced by the staff.
  - d. In this school, the teachers and the administration are in close agreement on school discipline policy.
  - e. The level of student misbehavior (e.g., noise, horseplay or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching.
  - f. My principal enforces school rules for student conduct and backs me up when I need it.
  - g. Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes.
  - h. The attitudes and habits my students bring to my class greatly reduce their chances for academic success.
  - i. Many of the students I teach are not capable of learning the material I am supposed to teach them.
  - j. My teaching assignments are more difficult than those of other teachers at this school.
  - k. For me the job of teaching has more advantages than disadvantages.
  - l. If I had a chance to exchange my job as a teacher for another kind of job, I would.

2. a set of 22 items about problems rated on a four-point scale of "not a problem, minor, moderate, serious"
  - a. student tardiness
  - b. student absenteeism
  - c. teacher absenteeism
  - d. students cutting class
  - e. physical conflicts among students
  - f. robbery or theft
  - g. vandalism of school property
  - h. student pregnancy
  - i. student use of alcohol
  - j. student drug abuse
  - k. student possession of weapons
  - l. physical abuse of teachers
  - m. verbal abuse of teachers
  - n. student disrespect for teachers
  - o. students dropping out
  - p. student apathy
  - q. lack of academic challenge
  - r. lack of parental involvement
  - s. parental alcoholism and/or drug abuse
  - t. poverty
  - u. racial tension
  - v. cultural conflict
3. a set of four items on influence on school policies, scaled from 1 (no influence) to 6 (a great deal of influence)
  - a. determining discipline policy
  - b. determining the content of in-service programs
  - c. setting policy on grouping students in classes by ability
  - d. establishing curriculum
4. a set of six items on control of classroom practices, scaled from 1 (no control) to 6 (complete control)
  - a. selecting textbooks and other instructional materials
  - b. selecting content, topics, and skills to be taught
  - c. selecting teaching techniques
  - d. evaluating and grading students
  - e. disciplining students
  - f. determining the amount of homework to be assigned
5. a set of four four-point items concerning the effectiveness with which the school helps new teachers with:
  - a. student discipline
  - b. instructional methods
  - c. curriculum
  - d. adjusting to the school environment.

Similar items were included on the principal's questionnaire and on the 1987-88 questionnaires. Based on an unweighted principal components analysis of the 1990-91 teachers' data with a varimax rotation, a set of twelve factors was identified, and these are presented in the report. Some factors are missing for 1987-88 and for principals because the corresponding items were not included in those questionnaires. In order to enhance the meaningfulness of the factors, the items were all re-ordered in the positive direction and scaled on a scale from 0 to 10, where 0 refers to the "worst" response (e.g. strong agreement with a negative item) and 10 to the "best" response (e.g., "not a problem"). Not all items are included in a factor, but all items included in the same factor were highly correlated with each other. In computing the factor scores to report, all items included in a factor were given equal weight, and naming them was guided by communicativeness concerns. The factors are:

- **Basic Standards:** Lack of serious problems with drug abuse, alcohol, pregnancy, and dropouts

items: 2 (h, i, j, o)

- **Community:** Lack of serious problems stemming from poverty, racial tension, and cultural conflict

items: 2 (t, u, v)

- **Involvement:** Academic challenge, parent involvement, and absence of apathy

items: 2 (p, q, r)

- **Behavior Standards:** Systematic enforcement of agreed upon discipline policy and student behavioral standards

items: 1 (c, d, f, g)

- **Attendance:** Lack of serious tardiness and absence problems

items: 2 (a, b, c, d)

- **Respect for Teachers:** Lack of serious problems with physical and verbal abuse and disrespect of teachers

items: 2 (e, k, l, m, n)

- **Respect for Students:** Belief that students are capable of learning and do not have attitudes and habits that reduce their learning potential  
    items: 1 (e, h, i, j)
- **Respect for Property:** Lack of vandalism and theft  
    items: 2 (f, g)
- **Teachers' Influence on School Policy:** Grouping students, discipline, curriculum, and in-service topics  
    items: 3 (b, c, d) and 4 (a, b)
- **Teachers' Classroom Control:** Selecting topics, materials, and techniques, assigning homework, and evaluating and disciplining students  
    items: 4 (c, d, e, f)
- **Teachers' Satisfaction with Teaching**  
    items: 1 (a, k, l)
- **Assistance for New Teachers:** Methods, curriculum, discipline, and adjustment  
    items: 5 (a, b, c, d)

One additional item that measured satisfaction (Would you become a teacher again?) is analyzed separately to enable comparisons between 1987-88 and 1990-91.

## Index

### A

- Absenteeism, 87, 89, 90, 95, 97
- Academic degrees
  - earned by principals, 60, 63
  - earned by teachers, 52, 54-55
- Academic excellence, promotion of, 82-86
- Admission requirements, 32, 36
- Age
  - of principals, 60, 62
  - of schools, 7, 12-13
  - of teachers, 56-57
- Alcoholism, 87
- American Indian
  - principals, 65
  - students, 41
  - teachers, 59
- Asian/Pacific Islander
  - principals, 65
  - students, 41
  - teachers, 59
- Association of Christian Schools International, 7, 10, 12, 32, 92, 104

### B

- Basic literacy skills, promotion of, 82-86
- Benefits, occupational
  - for principals, 61
  - for teachers, 66, 68-70, 72
- Bilingual programs
  - teaching vacancies in, 78
- Biological sciences
  - teaching vacancies in, 78
- Black
  - principals, 65
  - students, 32, 39, 41
  - teachers, 58-60
- Boarding schools, 7, 27, 29, 30

### C

- Careers, choice of, 69
  - continuation of, 73-75
- Catholic schools, 1, 7-23, 25-33, 35-43, 52-57, 60-65, 81, 83, 86, 93, 95, 101-102
- Central city schools, enrollment in, 31, 34, 35
- Certification status, 52-54
- Christian Schools International, 10, 20, 56, 104
- Classes
  - departmentalized, 50
  - self-contained, 49
  - size of, 7, 18, 20-22
- Coeducational schools, 32, 39, 40
- College application rates, 81, 93, 94
- Combined schools, 8, 9, 14-16, 27
- Compensation. *See* Benefits; Salaries, 66-72
- Computer science
  - graduation requirements in, 95, 96
- Conservative Christian schools, 8, 12, 16, 31, 32, 36, 104
- Curriculum, establishment of, 66, 67, 91, 92

### D

- Data collection procedures, 176
- Day care programs, 24, 26-27
- Departmentalized classes, 50
- Diagnostic and prescriptive services, 24, 26
- Disciplinary policy, teacher influence on, 67
- Drug abuse, 87



## E

- Educational goals
  - of principals, 81, 82-86
  - of teachers, 82, 85, 86
- Elementary schools
  - number of, 8-9
- English
  - graduation requirements in, 95, 96
  - English as a second language (ESL) programs, 24, 25
  - teaching vacancies in, 78
- Enrollment, 7, 10-11,
  - by region, 31, 32-33
  - by community type, 31, 34-35
- Episcopal schools, 10, 16, 27, 30, 36, 56, 81, 86, 93, 95, 105
- Experience, teaching, 52-53
- Extended-day programs, 24, 26-27

## F

- Foreign languages
  - graduation requirements, 95, 96
  - number of teachers assigned to, 48-51
  - teaching vacancies in, 78
- Friends schools, 12, 16, 20, 27, 30, 32, 36, 43, 54, 56, 66, 81, 86, 92, 93, 95, 105
- Full-time teachers, 45, 46, 47

## G

- Gifted students, programs for, 24, 26
- Good work habits, promotion of, 82-86
- Graduation rates, 93, 94
- Graduation requirements, 81, 95-96

## H

- Handicapped students, programs for, 24, 26, 27
- Hispanic
  - principals, 65
  - students, 39, 41
  - teachers, 59
- Human relations (social) skills,
  - promotion of, 82-86

## I

- In-kind benefits, 46, 68, 70, 71
- Itinerant teachers, 79, 80

## J

- Jewish schools, 7, 16, 20, 22, 30, 31, 32, 39, 43, 46, 81, 86, 95, 103

## K

- Kindergarten programs, 14-15

## L

- Librarians, 27, 28
- Library facilities, 27, 28
- Lutheran schools, 7, 8, 12, 16, 22, 27, 31, 32, 34, 43, 52, 54, 60, 66, 70, 83, 92, 102-103

## M

- Mathematics
  - graduation requirements in, 95, 96
  - number of teachers assigned to, 48-50
  - student performance in, 98
  - teaching vacancies in, 78

Middle schools, 7, 14  
 Military schools, 7, 8, 12, 16, 20, 22, 27,  
 39, 54, 60, 70, 86, 92, 95, 107  
 Minority (nonwhite) students, 39, 41, 42  
 Montessori schools, 7, 10, 12, 14, 20, 43,  
 60, 64, 86, 95, 107-108  
 Moral values, promotion of, 82-86  
 Multicultural awareness, promotion of,  
 84, 85

## N

National Association of Independent  
 Schools, 8, 12, 16, 20, 22, 27, 31,  
 32, 36, 43, 54, 56, 81, 86, 93, 95,  
 106-107  
 Newly hired teachers, 76-77  
 support for, 91  
 Noninstructional personnel, 46, 47

## P

Part-time teachers, 45, 46, 47  
 Personal growth, promotion of, 82-86  
 Physical sciences  
 teaching vacancies in, 78  
 Policy, teachers' influence on, 46, 66-67  
 Principals  
 academic degrees earned by, 60,  
 63  
 age of, 46, 60, 62  
 educational goals of, 81, 82-86  
 number of, 60, 61  
 race-ethnicity of, 64-65  
 problems reported by, 81, 87-89  
 sex ratios of, 64-65  
 teaching experience of, 60-61  
 salaries of, 61  
 Private schools  
 affiliations, 3-4  
 enrollment in, 7, 10, 11  
 number of, 7, 8, 9  
 size of, 18-20  
 Problems in schools, 81, 87-92

## R

Race-ethnicity  
 of principals, 64-65  
 of students, 32, 39-43  
 of teachers, 58-60  
 Religious development, promotion of,  
 82-86  
 Remedial programs, 7, 24, 25  
 Rural/small town schools  
 enrollment in, 34-35

## S

Salaries, for principals, 61  
 Salaries, for teachers, 46, 66, 68, 69  
 and qualifications, 68  
 and supplemental income, 66, 69  
 Sampling procedures, 3-4, 154-160  
 Satisfaction, occupational, 46, 69, 70, 72  
 School climate  
 perceived by principals, 81, 87-89  
 perceived by teachers, 81, 88, 90-  
 92  
 School day, length of, 22-23  
 School year, length of, 22-23  
 Schools and Staffing Survey (SASS), 2-4  
 Sciences  
 graduation requirements in, 95, 96  
 number of teachers assigned to,  
 48-50  
 teaching vacancies in, 78  
 Secondary schools  
 number of, 8, 9  
 Self-contained classes, 49  
 Self-discipline, promotion of, 82-86  
 Seventh-Day Adventist schools, 16, 20,  
 31, 32, 39, 95, 106  
 Sex ratios  
 of principals, 64-65  
 of teachers, 58-59  
 Shortages, of teachers, 73, 78, 79

## Size

- of classes, 7, 20-22
- of schools, 7, 18, 19, 21, 27

## Social sciences

- graduation requirements, 95, 96
- number of teachers assigned to, 48-50

## Special education schools, 7, 8, 12-16, 22-30, 32, 36, 39, 43, 45, 46, 48, 52-56, 60-64, 73, 81, 82-86, 92-97, 108-109

## Special education programs, 24, 26, 27

## Standard errors, tables of, 117-164

## Student/teacher ratios, 7, 20-22

## Students

- number of, 7, 10, 11
- performance in math of, 98
- performance in reading of, 98
- race-ethnicity of, 39, 41-43

## Substitute teachers, 79

## T

## Tardiness, 87

## Teacher aides, 48

## Teachers

- academic degrees earned by, 45, 52, 54-55
- ages of, 46, 56-57
- and career continuation, 73-75
- certification status of, 45, 52-54
- full-time, 45, 46, 47
- educational goals of, 82, 85, 86
- newly hired, 76-77
- number of, 45, 46, 47
- occupational satisfaction of, 69, 70, 72
- part-time, 45, 46, 47
- race-ethnicity of, 58-60
- salaries of, 66, 68, 69
- school policy influenced by, 66-67
- problems reported by, 81, 87-92
- sex ratios of, 58-59

## Teachers (*cont.*)

- shortages of, 73, 78, 79
- substitute, 79

- teaching experience of, 45, 52-53

## Transportation, reimbursement for, 68

## Tuition, 7, 16-17

- growth compared to median family income, 16

## Turnover, occupational, 46, 73-75

## U

## Urban fringe/large town schools, enrollment in, 31, 34-35

## V

## Vacancies, in teaching positions, 73, 78, 79

- difficulty filling, 73, 78
- methods of filling, 79-80

## Vocational education

- number of teachers assigned to, 45, 48-51

## Vocational skills, promotion of, 82-86

## W

## White

- principals, 65
- students, 32, 39, 41-43
- teachers, 59

United States  
Department of Education  
Washington, DC 20208-5651

---

Official Business  
Penalty for Private Use, \$300

Postage and Fees Paid  
U.S. Department of Education  
Permit No. G-17

**Fourth Class Special  
Special Handling**

