# School Library Media Centers in the United States: 1990-91

by
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#### Highlights

#### Historical Overview

· In 1958, only 50 percent of public elementary and secondary schools in the United States had a library or library media center. As of 1990-91, 96 percent of public and 87 percent of private elementary and secondary schools in the United States had a library or library media center (table 3).

From 1960 to 1980, the number of public school librarians/media specialists in the United States nearly tripled, from 17,363 to 48,018, outstripping increases in student enrollments. Since 1980, expansion in the number of public school librarians/media specialists substantially slowed and, in the early 1990s, school library media center staffing levels did not keep pace with increases in student enrollments (table 4).

#### The Availability of School Library Media Centers

· In the public sector, small schools (those with fewer than 300 students) and combined schools (those jointly offering both elementary and secondary levels) were the least likely to be equipped with library media centers in 1990-91. Ten percent of small public schools and 15 percent of combined public schools did not have library media centers (table 6).

· In the private sector, small schools, elementary schools, combined schools, and non-Catholic private schools, both religious and nonsectarian,

were the least likely to be equipped with library media centers in 1990-91. The percentages of schools in these groups without library media centers ranged from 14 to 23 percent (table 6).

#### Staffing Levels of School Library Media Centers

In the public sector, 8 percent of schools with library media centers did not employ some kind of library media center staff, neither a professional librarian/media specialist nor a library aide in 1990-91. Four percent of public school students attended such schools. Elementary schools, combined schools, and small public schools were the most likely to have employed no library staff. One-third of small public schools had no librarian/media specialist, and one-fifth of these same schools had neither a librarian/media specialist nor an aide (table 9).

• The proportion of private schools with unstaffed library media centers was far greater than for public schools in 1990-91. Over half of smaller, elementary, and non-Catholic religious private schools employed neither a librarian/media specialist nor a library aide. Overall, a quarter of all private school students were enrolled in schools with no employed library media center staff (table 9).

#### The Role of School Library Media Specialists

- · Teachers in public schools were slightly more likely than teachers in private schools to strongly agree that the materials in their school library media centers were supportive of their instructional objectives (table 15).
- · Few school principals (16 percent) reported that school librarians/media specialists had a great deal of influence over decisions concerned with establishing the curriculum in their schools. Librarians/media specialists in private schools were more frequently reported to have a great deal of influence over curricular decisions than in public schools (table 17).

#### Acknowledgments

This report was produced under the direction of the NCES Library Statistics Unit. Jeffrey Williams was the project officer. Carrol Kindel was the unit director. Mary Jo Lynch of the Amnerican Library association, Ann Weeks of the American Association of School Librarians, and John Burkett, Steve Broughman, Mary Rollefson, and Mike Cohen of NCES reviewed this report and provided many helpful comments. Among AIR staff, thanks goes to Millie Carter who prepared the tables and figures, George Wheaton who reviewed the text, Rick White who aided in the review of the literature, and Don McLaughlin who edited the text and provided overall direction to the project.

#### Introduction

School library media centers have become a topic of increasing interest and concern to a number of education policymakers and researchers over the past decade. Interest has centered in general on the contribution school library media centers ought to make to the current education reform movement and, in particular, to their potential contribution to the expanding role of computer- and technology-based education. Concern among education policymakers has stemmed from the perception that school library media centers have suffered from inadequate support in recent years. number of policy analysts have argued that as a result of inadequate funding, the availability of services provided by and staffing levels of school library media centers have declined over the past decade. The objective of this report is to present data on these issues from the National Center for Education Statistics 1990-91 Schools and Staffing Survey. It specifically focuses on three issues: the numbers of schools with library media centers, the levels at which these library media centers are staffed, and the role library media centers and their staff play in schools.

#### Background

Historically, libraries have been an important component of the education process, contributing to the success of the educational mission in schools. Many view a good school as one having a well-supplied and well-staffed library or library media center—a term increasingly used in recent years. In fact, the caliber of school library media centers is often used as a convenient index of the quality of a particular community's school system as a whole. Businesses, for example, have often considered the quality of school library media centers when making relocation decisions for employee families (Loertscher 1993). The importance of library media centers to schools and education has also been recognized at the federal level; since the 1960s, education legislation has included provisions for funding school library media center facilities and staff.

Education reform has prompted increased attention to the role school library media centers might play in applying new technology and developing new teaching methods. In particular, some analysts argue that library media centers have a crucial role in developing computer literacy and educating students in the use of modern information technologies (Lance, Welborn, and Hamilton-Pennell 1992). This is reflected in the increasing use of the name library media center, in place of library—the traditional title. Library media centers, these advocates point out, often provide many students with their first or primary exposure to the use of computers and on-line education technologies. Moreover, they argue that an expanded role for library media centers is integral to the larger reform effort to move pedagogical methods away from textbook-based instruction toward an emphasis on interactive and resource-based methods. Indeed, a number of observers have argued that expansion in the availability, staffing, and role of library media centers is a key

prerequisite to meeting the major educational achievements outlined in the National Education Goals (Stripling 1992).

At the same time, there also has been a movement to rethink the role of library media center staff. Traditionally, the role of librarians and library media specialists has been to acquire and to disseminate instructional media and to communicate to students the importance of reading and using a wide range of materials. Current analysis of the role of the library media specialist, however, advocates a shift from simply maintaining the school library media center and providing materials in response to teachers' requests, to becoming an integral part of the curriculum development and implementation process. In this view, the responsibilities of the library media specialist should include working with teachers to plan, implement, and evaluate instructional units where library materials are used to support classroom instruction (American Association of School Librarians and Association of Educational Communications and Technology 1988; Pickard 1993; Schon, Helmstadter, and Robinson 1991).

Precisely because of this increased attention to the importance and role of school library media centers and their staff, concern over support and funding for library media centers has increased. Traditionally, the federal government has been one of the most important sources of support for school library media centers. Federal funding for school library media centers began in earnest in 1965 with the Elementary and Secondary Education Act (ESEA). Title II funds, in particular, fostered the establishment of library media centers, funded demonstration projects, and supported training for professional library media specialists throughout the country. Moreover, this legislation made grants available to states and territories for the acquisition of books and other instructional materials.

A number of policy analysts have argued, however, that by the mid-1980s, federal funding for school library media centers was greatly reduced. In an effort to increase local officials' discretion over the use of federal education resources, the 1981 Education Consolidation and Improvement Act combined funding into block grants. An unanticipated outcome of this consolidation, some have argued, has been the reduction of support for library media centers (McCarthy 1993). In this view, as school systems developed strategies to cope with shrinking budgets through the 1980s, library media centers often became prime casualties (DeCandido and Mahony 1992; Miller and Shontz 1989, 1991, 1993). Along with concern for overall support of library media centers, policy analysts have also drawn attention to issues of funding equity across different communities and states. These critics argue that cutbacks in resources available to library media centers have fallen disproportionately on less affluent schools and districts (Miller and Shontz 1989, 1991, 1993).

One of the primary manifestations of reductions in resources for school library media centers is a decrease in staffing. For example, one possible strategy for school systems coping with reduced budgets is to replace professional library media specialists with fewer well-trained personnel or even parent or student volunteers. Another possible strategy is simply to eliminate librarian positions altogether, resulting in fewer staff for increasing numbers of pupils (Sadowski 1993).

In 1993, these concerns led to federal proposals for an Elementary and Secondary School Library Media Act. This legislation seeks to provide support both for the retention of existing library media centers and for expansion in the number of library media centers by allocating portions of the former block

grants specifically for school library media centers. In addition, the proposed act seeks to reduce disparities by targeting additional funds to areas that face lower local contributions or greater fixed costs, including schools serving students from communities with high concentrations of low-income families and schools situated in sparsely populated areas (McCarthy 1993; Simon 1993).

The debate over the role of and support for school library media centers highlights the need for information on the current state of library media centers across the country. Unfortunately, there has been a shortage of up-to-date data on school library media centers. Few studies have been national in scope, and state-based data on the condition of school library media centers are neither comprehensive nor based on comparable measures (Rogers 1993; Garland 1993). As a result, it has been difficult to discern how many schools in the country have library media centers or how well staffed existing school library media centers are. Moreover, there has been little national information on the role school librarians play in the development of curricular and instructional programs or the extent to which teachers collaborate with librarians to integrate their teaching with the available resources and services of their school's library media center.

In order to provide background information to these issues, the National Center for Education Statistics (NCES) recently initiated two efforts to collect national data on school library media centers. The 1990-91 Schools and Staffing Survey obtained selected basic information on the availability, staffing, and role of school library media centers throughout the nation. The 1993-94 Schools and Staffing Survey followed this initial effort with an expanded survey component on school library media centers, including data collection on the background, training, and attitudes of school librarians and

the expenditures, materials, equipment, and services of school library media centers throughout the nation.

This report presents results from the first of these data collection efforts—the 1990-91 Schools and Staffing Survey.¹ After describing this survey in more detail, this report begins with an historical overview of school library media centers. It then turns to data on the numbers and availability of school library media centers. Next, it presents information on library media center staffing levels, and finally, it examines both teachers' and principals' views of the role and performance of the library media specialists in their schools.

#### Sources of Data

The primary data source for this report is the nationally representative NCES 1990-91 Schools and Staffing Survey (SASS). SASS is the largest and most comprehensive data set available on the staffing, occupational, and organizational aspects of the nation's elementary and secondary schools. It gathered a wide range of information on the characteristics, work, and attitudes of administrators and faculty, as well as the characteristics of a wide range of schools and districts across the country. SASS was designed to provide national—and state—level estimates for public schools and national—and association—level estimates for private schools.

A subsequent report is planned for the 1993-94 SASS when this database is due to be released in 1995.

SASS included four separate sets of questionnaires: for each school sampled, for the central district office in the case of public schools, for an administrator at each school, and for a random sample of teachers in each school. This report utilizes data from all four questionnaires. The sizes of the samples are: 4,884 public school districts; 8,969 public schools; 2,620 private schools; 46,705 public school teachers; and 6,642 private school teachers. More detail on the technical aspects of the 1990-91 SASS are included at the end of this report (see Technical Notes).

This report focuses on the extent to which library media centers vary across different kinds of schools. Previous research on school library media centers has indicated that there are, in fact, important differences in the availability and staffing of library media centers among different types of schools. In particular, pronounced differences have been found to exist between public and private schools, between schools of different sizes, between elementary and secondary schools, and between more and less affluent schools. In addition, among private schools, researchers have reported differences based on whether the school had a religious or nonreligious orientation or affiliation (Cahalan, Hernandez, and Williams 1987; Garland 1993).

This report examines distinctions and comparisons among these same types and categories of schools. Table 1 displays the typology of schools that will be used throughout this report: school level, size, poverty level, and orientation are examined separately within public and private schools. Table 1 also provides background data on the numbers of schools within each category, the size and ethnic diversity of their student populations, and the communities in which they tend to be located. A standard measure of student population poverty level was used—the proportion of a school's student population eligible for the federal reduced— or free-lunch program, sponsored by the federal Department of

Agriculture.<sup>2</sup> Note that these data on student poverty levels were not available for private schools.

As the basic background data in table 1 indicate, many of these school characteristics are interrelated. Private schools, for example, are generally smaller than public schools; in fact, most private schools fall into the smallest size category, while very few public schools do so. Elementary and combined schools are usually smaller than secondary schools. Catholic schools are usually larger than other private schools. This analysis, however, examines size, level, and orientation separately because the research literature has indicated, and background analyses for this project have suggested, that each is independently related to the likelihood of schools having libraries and to library staffing levels. Table 2 presents similar background data for public schools in the 50 states and the District of Columbia.

All figures and estimates presented in this report are based on samples and, hence, are subject to sampling error. Standard errors indicating the accuracy of selected estimates are included in the Appendix. All comparisons and differences discussed in the report itself were statistically significant at the .05 level.

In order to place the 1990-91 SASS data in context, this report also presents historical data on school library media centers and librarians drawn from previously published NCES reports, including the *Digest of Education Statistics* and *Statistics of Public and Private School Library Media Centers*, 1985-86.

<sup>&</sup>lt;sup>2</sup> Although free lunch eligibility is a standard measure of poverty level in school populations, it must be interpreted with some caution. The number of children reported to be eligible may be an underestimate, because not all children who are eligible identify themselves as such (especially at the secondary level), and not all schools participate in the program.

Data on the number of public school librarians and pupils by state for selected years from 1960 to 1992 were drawn from previous editions of the Digest of Education Statistics. These data were collected by the annual NCES Common Core of Data (CCD) Survey from 1980 to the present and, prior to that, as part of the Statistics of State School Systems survey. These are basic annual national surveys of the public education system for grades K through 12.

Data on the numbers and proportions of schools that had library media centers and proportions of pupils in such schools for selected years from 1958 to 1985 were drawn from Statistics of Public and Private School Library Media Centers, 1985-86. This 1987 report by NCES on school library media centers summarized the results of the 1985 Survey of Public and Private School Libraries and Media Centers as well as the results from several earlier Department of Education studies of school library media centers.

Table 1.— Number of schools and pupils, average enrollment, average minority enrollment, and percentage distribution of school community type, by selected school characteristics: 1990-91

	Total schools	Total pupils	Average enrollmen t	Average % minority enrollmen t	% schools rural/ small town	% schools urban fringe/ large town	% schools central city
TOTAL	104,5	44,777,5	428	25.2	45.8	27.3	26.9
PUBLIC		40,103,6	502	26.6	50.5	26.1	23.4
School level							
Elementary		25,086,3	447	27.4	47.2	27.5	25.2
Secondary	56,12	19	694	23.6	56.6	24.2	19.2
Combined	1	13,692,7 68	328	29.9	66.2	15.2	18.6
School size							
Less than 300			170	18.6	72.9	14.5	12.6
	24,61	4,184,17	443	26.9	46.1	30.1	23.8
300-599	2	2	947	34.9	32. <i>5</i>	33.0	34.5
600 or more		14,431,8					
Free lunch eligibility							
Less than 20%		16,772,5	559	12.8	46.7	38.1	15.2
	30,01	71	474	21.9	59.3	20.6	20.1
20-49%	5	14,253,6	466	56.0	42.0	16.4	41.6
50% or more		96					
PRIVATE			189	20.6	<i>30</i> .7	31.2	38.1
School level							
Elementary			171	21.0	29.3	32.0	38.7
Secondary	15,44	2,643,25	363	23.1	20.0	27.4	52.6
Combined	5	2	168	19.0	37.8	<i>30.5</i>	31.6
School size							
Less than 300			116	20.3	35.4	30.3	34.2
	20,09	2,323,95	407	22.3	11.0	36.7	52.3
300-599 600 or more	9	5	8 <i>30</i>	21.6	7.4	29.3	63.3
Orientation							
Catholic			293	23.8	19.5	34.4	46.1
Other religious	8,731	2,555,93	128	16.5	40.6	28.0	31.5
Mancaatarian		2	115	240	277	77 1	70/

NOTE: Details may not add to totals due to rounding or cell suppression. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey:	
1990-91 (School Questionnaire).	
2110 12 (School Questionality).	
2110 12 (School Quescioraure).	
The The The Control Question author.	
12 (School Questionality).	

Table 2.— Number of public schools and pupils, average enrollment, average minority enrollment, and percentage distribution of school community type, by state: 1990-91

	Total schools	Total pupils	Average enrollmen t	Average % minority enrollment	% schools rural/ small town	% schools urban fringe/ large town	% schools central city
TOTAL PUBLIC	79,88 <i>5</i>	40,103, 699	502	26.6	50.5	26.1	23.4
Alabama			554	41.8	53.5	27.7	18.8
Alaska		688,98	257	47.7	83.0	3.2	13.8
Arizona		0	595	40.6	40.9	17.4	41.7
Arkansas			387	2 <i>5</i> .8	80.6	5.6	13.8
California		109,11	667	47.1	24.5	44.4	31.1
		2					
	1,243						
		590,52					
	425	9					
	992	415,98 1					
	1,074						
	2,011	4,798,1					
	7,193	36					
Colorado			442	23.4	40.6	35.1	24.3
Connecticut	1,304	575,84	487	21.5	35.0	34.8	30.2
Delaware	1,50-1	575,84	597	31.1	47.2	40.9	12.0
Dist. of	933	3	462	94.6	0.0	0.0	100
Columbia		453,81	779	40.5	23.7	42.5	33.8
Florida	161	3		,		,,,,,	
	170	96,375					
	2,269	78,415					
		1,766,8 90					
Georgia			668	37.3	49.7	24.8	25.4
Hawaii	1,650	1,102,7	763	76.1	20.1	46.2	33.7
Idaho		79	396	8.1	74.0	18.0	8.0
Illinois	231		457	26.5	42.6	33.4	24.0
Indiana		176,14	482	13.5	54.1	19.7	26.2
	545	9					
	3,949	215,69					

		2					
	1,856						
		1,804,7					
		06					
		894,51					
		8					
Iowa			313	5.5	7 <i>5.</i> 3	9.2	15.5
Kansas	1,530	479,02	314	11.2	72. <i>5</i>	12.3	15.3
Kentucky	2,020	3	467	9.4	66.3	18.4	15.4
Louisiana	1,442		510	48.4	50.8	17.6	31.6
Maine		453,17	296	3.4	86.8	6.7	6.5
	1,323	0					
	1,449	617,62					
		5					
	738						
		738,3 <i>0</i>					
		0					
		218,61					
		4					
Maryland			599	37.3	22.6	48.2	29.2
Massachusetts	1,128	675,49	457	19.1	38. <i>0</i>	33.4	28.6
Michigan	. ,	1	456	20.0	47.8	32.4	19.8
Minnesota	1,775		502	8 <i>.5</i>	69.6	20.5	9.9
Mississippi		810,75	555	49.8	7 <i>5</i> .7	13.6	10.7
	3,110	5					
	1,434	1,418,9					
		07					
	913						
		719,58					
		1					
		506,69					
		7					
Missouri			397	15.8	63.6	29.2	7.2
Montana	2,063	818,23	213	11.0	88.1	2.5	9.4
Nebraska		9	179	5.3	84.0	4.4	11.6
Nevada	739		<i>635</i>	22.1	<i>5</i> 2.7	7.7	39.6
New Hampshire		157,53	3 <i>5</i> 3	2.3	77.8	7.2	15.0
•	1,455	0					
	313	260,03					
		0					
		C					

	417						
	411	198,75					
		1 10,73					
		1					
		147,02					
		3					
M. L							
New Jersey	0.001	1 110 0	500	28.7	22.5	63.1	14.4
New Mexico	2,224	1,112,8	468	59.3	60.7	20.2	19.1
New York North Carolina	626	72	613 550	27.1 32.6	36.1 50.0	33.2 17.2	3 <i>0</i> .8
North Carolina North Dakota	626	202 10	558		58.8	17.2	24.1 7.6
North Dakota	7 000	292,48	183	7.6	87.7	4.7	7.6
	3,889	2					
	1,917	2,384,9					
	-,	89					
	647						
	•	1,069,6					
		03					
		118,77					
		8					
ol :			4-4		4.4.		
Ohio	7 (07	4 74 ( 0	474	15.3	48.5	27.5	24.1
Oklahoma	3,623	1,716,9	332	28.6	70.0	9.9	20.1
Oregon	1 770	55	39 <i>5</i>	10.0 14.6	58.6	21.5	19.8 16.6
Pennsylvania Rhode Island	1,730	571 51	<i>5</i> 37		<i>5</i> 1.8	31.6	
RNOAE ISIANA	1,164	574,54 6	503	14.8	22.2	50.3	27.4
	1,104	0					
	3,205	459,10					
	,	6					
	294						
		1,722,0					
		46					
		148,02					
		7					
South Carolina			599	44.1	61.9	22.5	15.6
South Dakota	1,085	649,82	203	11.1	91.4	3.4	5.2
Tennessee	- ,	8	532	20.1	54.4	20.4	25.2
Texas	732		588	45.7	46.9	14.7	38.4
Utah		148,79	612	9.2	42.4	36.9	20.8
	1,485	0	- <del>-</del>				,
	, · · ·	-					
	5,651	789,39					
		3					
	718						

		3,323, <i>5</i>					
		23					
		470.07					
		438,87 <i>5</i>					
		9					
Vermont			274	2.7	96.8	0.8	2.5
Virginia	331	90,632	<i>5</i> 43	29.8	50.0	22.5	27.5
Washington			<i>50</i> 7	18.1	44.8	29.4	2 <i>5</i> .8
West Virginia	1,737	943,17	334	4.5	7 <i>0.5</i>	16.2	13.3
Wisconsin		9	431	12.6	63.9	14.0	22.1
Wyoming	1,772		271	8.1	83. <i>5</i>	8.6	8.0
		897,99					
	1,007	7					
	1,848	336,58					
		4					
	376						
		796,13					
		1					
		101,71					
		0					

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

#### **Definitions**

School library media centers vary greatly in the way they have been set up and organized. Not surprisingly, these centers are also referred to by a number of different names. In addition to library media center, many, of course, continue to be referred to by the traditional title—school library. Other labels commonly used are instructional materials center and learning resource center. It is the concept, not the name, that is important. This report utilizes the definition approved by the primary professional organizations concerned with school library media centers—the American Association of School Librarians (AASL) and the Association of Educational and Communications Technology (AECT):

A school library media center is defined as an organized collection of printed and/or audiovisual and/or computer resources which (a) is administered as a unit, (b) is located in a designated place or places, (c) makes resources and services accessible and available to students, teachers, and administrators.

District or county audio-visual resource centers that are designed solely for the use of teachers are not school library media centers. As in current school library research, this report will use the terms library and library media center interchangeably.

Likewise, the professional employees who are responsible for library media centers have a wide range of training, certification, and background experiences; they are also given a number of different titles. This report uses the terms librarian and library media specialist interchangeably to refer to

professional school staff members who are assigned to school library media center responsibilities, such as dealing with books and other materials as well as planning and guiding the use of the library and media services by students, teachers, and others.

#### School Library Media Centers—Historical Overview

This section examines the extent to which the number of schools with library media centers, the number of students served by library media centers, and the number of librarians have changed over the past several decades. The objective is to discern whether there has been growth or decline in the availability and staffing of school library media centers in recent years. A historical summary of the proportions of public and private schools equipped with library media centers and the proportions of students attending such schools is displayed in table 3, with the most recent figures (from SASS) located in the last row.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> It should be noted that the numbers in table 3 were generated from different sample surveys. Due to differences in population definition and variable definition, caution should be used in comparing data across time.

Table 3.— Percentage of schools with library media centers and percentage of pupils in schools with library media centers: historical summary, United States, 1958-1991

	Percentage of schools with library media centers		Percentage of pupils in schools with library media centers		
	Public	Private	Public	Private	
1958 <sup>1</sup>	50	NA	68	NA	
1962 <sup>2</sup>	59	44	74	NA	
1974³	8 <i>5</i>	NA	NA	NA	
1978/794	85	83	93	86	
1985 <sup>5</sup>	93	7 <i>5</i>	98	88	
1990/91	96	87	98	95	

NA-Data not available.

- The public school sample excluded schools in districts with fewer than 150 pupils—estimated to represent 97 percent of public school pupils.
- The public school sample excluded schools in districts with fewer than 150 pupils—estimated to represent 98 percent of public school pupils. An extensive library study was also conducted in 1960-61 that included all districts. This study found a pupil membership of 35,952,711, out of which 25,300,243 pupils, or 70 percent, were in schools with library media centers. The study also found that overall, 46 percent of total schools had library media centers.
- <sup>3</sup> The public school sample represented all districts.
- <sup>4</sup> The public school sample represented all districts and included technical centers and special schools.
- The public school sample represented all districts and included regular public schools only. The private school sample in 1985 included a number of small and special/alternative schools which may not have been included in the universe listing used to draw the sample in 1978. This may account, in part, for the lower percentage of private schools reporting having a library media center in 1985 compared to 1979.

SOURCES: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire) and Statistics of Public and Private School Library Media Centers: 1985-86 (with historical comparisons from 1958 to 1985).

The SASS data indicate that as of the school year 1990-91, most elementary and secondary schools in the United States did, in fact, have library media centers. There were, however, differences between public and private

schools; the latter tended to be less likely to have library media centers, 87 percent in contrast to 96 percent for public schools. Hence, most students in the United States were provided with the benefits of a library media center at the schools in which they were enrolled.

Table 3 indicates, however, that the widespread prevalence of libraries in schools is a relatively new phenomenon. For example, as recently as 35 years ago, only half of the nation's public schools were equipped with library media centers, and only about two-thirds of the students in the public sector attended schools having library media centers. But over the past several decades, the proportion of both public and private schools with library media centers has steadily increased.<sup>4</sup>

NCES has also collected trend data on the staffing levels for public school library media centers, displayed in table 4 and figure 1. These data indicate that along with the number of school library media centers, the number of school librarians has also shown a marked increase over the past several decades. Since 1960, the overall number of public school librarians in the United States has nearly tripled. This increase, however, has not followed a steady trajectory. The 1960s and 1970s were decades of relatively rapid expansion in the size of the school librarian population. This was a period of substantial federal ESEA Title II funding for library media centers, and during this time the rate of growth in the numbers of librarians outstripped that of pupils. During the 1980s, expansion in the number of librarians dramatically slowed, although the rate of growth still slightly outstripped that of pupils. In the early 1990s, while most students were served by library media centers, staffing levels of these centers did not keep pace with increases in pupil enrollments.

<sup>&</sup>lt;sup>4</sup> The one exception to this upward trend was a drop between 1979 and 1985 in the proportion of private schools with library media centers. This, however, may have been an artifact of survey differences (see note 5 in table 3).

Table 4.— Number of public school pupils and librarians: historical summary, United States, 1959-1992

	Total pupils	Total librarians¹	Pupil/librarian ratio
1959/60	35,182,000	17,363	2026.3
1969/70	45,550,000	42,685	1067
1980	40,877,000	48,018	8 <i>5</i> 1.3
1984	39,208,000	47,024	833.8
1985	39,422,000	47,442	831
1986	39,753,000	47,938	829.3
1987	40,008,000	48,185	8 <i>30.</i> 3
1988	40,189,000	48,980	8 <i>20.5</i>
1989	40,543,000	49,769	814.6
1990	41,217,000	49,909	8 <i>25</i> .8
1991	42,000,000	49,718	844.8
1992	42,730,504	50,019	8 <i>5</i> 4.3

<sup>1</sup> Respondents have indicated the number of positions in full-time equivalents (FTE's). Full-time equivalent describes the number of positions in terms of an average full day. The FTE for a given person is derived by dividing the amount of time the person works by the amount of time normally required for a full day.

SOURCES: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1993, Common Core of Data Survey, and Statistics of State School Systems.

Figure 1 here.

In the original report a graph was presented here of the data in Table 1.

The relationship between the number of librarians and the size of school enrollment is reflected in the overall ratio of pupils to librarians in public schools. During the 1960s, the ratio dropped by half—from about 2000 pupils for every librarian to 1000 pupils for every librarian. Throughout the 1970s, the ratio continued to decrease: by the end of that decade, there were about 850 pupils for every librarian in public schools. During the 1980s, the overall ratio decreased slightly. However, from 1989 onward the ratio reversed direction and has shown a slight increase. As a result, the 1992 pupil/librarian ratio equaled that of 1980.

Long-term changes in the staffing levels of public school library media centers, however, varied among states. Table 5 presents trend data on numbers of public school librarians by state. Parallel to the national trend, most states also dramatically increased their numbers of school librarians in the two decades of the 1960s and 1970s. However, since the early 1980s, there has been divergence among states. For some states, like Florida and Texas, the number of librarians gradually increased during the 1980s and early 1990s. For a few states, such as Delaware, the number remained about the same during the 1980s and early 1990s. Finally, there are states for which the number slightly decreased, such as Mississippi, Illinois, and Utah during that same period.

# The Availability of School Library Media Centers

This section turns from the topic of long-term trends to a closer look at the availability of school library media centers in 1990-91 and how these levels varied across different types of schools. Table 6 presents SASS data showing school differences in the proportion of schools with library media centers and the proportion of pupils attending such schools.

Notably, a school's proportion of students from poverty-level families did not appear to make a great difference in the likelihood of having a library media center. In the public sector, smaller schools and combined schools (those jointly offering both elementary and secondary levels) were the least likely to be equipped with library media centers. However, because these types of schools represented a relatively small portion of the overall student population, the number of students enrolled in schools without a library media center was small. There were relatively few combined schools in the United States. They enrolled fewer students than elementary and secondary schools, and they were typically located in rural areas (see table 1).

Overall, private schools were less likely than public schools to have library media centers. This was especially true for the smaller schools, elementary schools, combined schools, and also for the non-Catholic private schools, both religious and nonsectarian. Nearly a quarter of the latter did not have library media centers. However, with the exception of nonsectarian private schools, in all categories over 90 percent of the students attended schools with libraries.

	1959/	601969	/70198	0 198	4 198:	5 1986	6 198	7 198	3 198	9 199	0 1991
Alabama				1201	1152	1192	1207	1224	1238	1224	1206
Alaska	15	61	126	152	150	156	130	169	165	163	156
Arizona	249		704	558	567	583	596	611	639	657	671
Arkansas	202	360	711	723	812	837	7 <i>5</i> 7	756	936	946	949
California	845	1599	674	1125	1114	1187	1188	1139	1205	1155	1200
Colorado		454	699	737	76 <i>5</i>	757	726	724	732	740	743
Connecticut	114	388	<i>55</i> 2	561	574	618	63 <i>5</i>	644	<i>65</i> 3	668	665
Delaware	65	133	114	113	114	117	119	119	117	115	113
Dist. of Columbia	10	156	167	181	182	168	182	185	196	179	187
Florida	87 <i>5</i>	2057	2258	2316	2320	2331	2421	2424	2467	2521	2566
Georgia	416	1701	1834	1841	1850	1848	1859	1871	1921	1908	1935
Hawaii	114	213	243	247	249	251	258	258	264	264	267
Idaho	148	187	145	167	164	165	171	174	176	177	172
Illinois	681	1728	2471	2199	2185	2199	2169	2115	2125	2075	2055
Indiana	164	887	1245	1141	1138	1049	1055	1057	1056	1071	1016
Iowa	181	892	779	648	658	679	680	675	662	667	670
Kansas	NA	771	895	893	907	900	923	927	930	946	938
Kentucky	590	1057	1137	1105	1059	1060	1079	1090	1085	1111	1141
Louisiana	665	1187	1301	1115	1193	1112	1112	1162	1182		1158
Maine		147	198	187	198	204	222	235	242	260	2 <i>5</i> 3
Maryland	NA	934	1158	970	994	1037	1041	1051	1070	1070	1070
Massachusetts	211	714	1294	690	660	699	682	701	656	656	560
Michigan	1049	1862	1752	1523	1526	1557	1551	1564	1575	1578	1573
Minnesota	526	1131	1252	729	7 <b>4</b> 5	759	766	78 <i>5</i>	767	781	791
Mississippi	269	604	764	724	708	678		669	681	670	652
Missouri	150	845	1226	1239	1258	1280	1273	1303	1313	1271	1252
Montana	92		351	322	32 <i>5</i>	328	329	306	312	315	<i>335</i>
Nebraska	70	411	511	<i>50</i> 7	499	500	498	497	520	530	539
Nevada	31	116	149	154	159	155	166	175	175	194	217
New Hampshire	13	98	161	155	178	186	192	222	284	265	2 <i>5</i> 3
New Jersey			1636	1604	1589	1608	1587	1635	1667	1687	1700
New Mexico	91	240	269	241	23 <i>5</i>	224	230	229	237	236	238
New York	1,533	3 <i>5</i> 38	2793	3066	3114	3219	3268	33 <i>5</i> 3	3387	3336	3186
North Carolina	<i>55</i> 8	1776	2056	1792	1858	2020	2043	2098	2137	2178	2134
North Dakota	159	173	147	188	186	175	167	170	172	171	177

Ohio	<i>5</i> 27	1687	1953	1706	1713	1705	1701	1707	1694 1684	1678
Oklahoma	62	3 <i>5</i> 2	515	652	682	67 <i>5</i>	662	702	7 <i>05</i> 767	806
Oregon	241	641	818	783	787	7 <i>5</i> 8	759	726	732 731	746
Pennsylvania	8 <i>55</i>	1859	2075	1921	1906	1916	1921	1940	1949 2220	2205
Rhode Island	40	198	230	215	221	220	220	229	231 213	102
South Carolina	730	1356	1125	1073	1080	1075	1074	1081	1084 1088	1082
South Dakota		153	174	171	175	171	183	170	174 179	191
Tennessee	<i>5</i> 3 <i>5</i>	1086	1303	1284	1286	1306	1318	1313	1330 1290	1284
Texas	1125	1795	2948	3203	3344	3377	3406	3718	3811 3876	3984
Utah	177	333	365	320	329	329	319	288	252 255	249
Vermont	17	124	246	164	167		175	182	182 200	192
Virginia	NA	1413	1798	1724	1687	1678	1754	1770	1771 1747	1740
Washington	617	891	1098	1099	1091	1092	1114	1109	1150 1174	1209
West Virginia	183	239	327	366	359	372	371	3 <i>5</i> 8	381 373	377
Wisconsin	579	1176	1158	1074	1062	1148	1136	1230	1240 970	993
Wyoming	42	67	113	155	168	149	133	140	139 142	142

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1980 and 1993, Common Core of Data Survey, and Statistics of State School Systems: 1959-60 and 1969-70.

Table 6.— Number and percentage of schools with library media centers and of pupils in schools with library media centers, by selected school characteristics: 1990-91

		Schools with library media centers		nools with library ia centers
	Number	Percent	Number	Percent
TOTAL	97,976	93.7	43,864,3	98.0
			81	
PUBLIC	76,544	<i>95</i> .8	39,429,1	98.3
, 6,52,6		.0,0	43	. 6.0
School level				
Elementary	<i>5</i> 4,388	96.9	24,713,0	98.5
Secondary	18,7 <i>05</i>	94.8	25	98.3
Combined	3,4 <i>5</i> 2	8 <i>5.</i> 4	13,458,0	95.0
Comomea	5,-152	83	96	13.0
			70	
			1,258,02	
			3	
School size				
Less than 300	22,032	89.5		93.9
300-599	32,023	98.3	3,929,77	98.3
600 or more	22,490	99.1	6	99.2
			14,192,2	
			8 <i>5</i>	
			21,307,0	
			83	
Free lunch eligibility				
Less than 20%	28,7 <i>5</i> 3	95.8	16,554,0	98.7
20%-49%	29,172	97.0	81	98.7
50% or more	18,118	94.6	14,071,0	97.3
			73	
			8,680,60	
			6	

PRIVATE	21,431	86.8		94.9
			4,435,23	
			8	
School level				
Elementary	13,296	86.1		93.7
Secondary	2,301	94.1	2,476,74	99.0
Combined	5,834	8 <i>5</i> .8	5	94.5
			878,201	
			1,080,29	
			3	
School size				
Less than 300	16,897	84.1		90.7
300-599	3,403	98.6	2,108,08	98.8
600 or more	1,132	99.3	3	99.4
			1,386,67	
			6	
			240 470	
			940,478	
Orientation				
Catholic	8,476	97.1		98.3
Other religious	9,515	82.9	2,513,65	91.6
Nonsectarian	3,441	76.8	1	88.8
			1,345,05	
			5	
			576,532	

NOTE: Details may not add to totals due to rounding or cell suppression.

For public schools, there also were slight differences among states as to the proportion of schools with library media centers (table 7). In 44 states (including D.C.), 95 percent or more of the schools had library media centers. In an additional 14 states, between 90 percent and 94.9 percent of the schools had library media centers. In only 3 states did less than 90 percent of the schools have centers. With the single exception of West Virginia, 95 percent or more of the public school pupils in each state attended schools with library media centers.

Table 7.— Number and percentage of public schools with library media centers and of pupils in schools with library media centers, by state: 1990-91

	Schools with library	media centers	Pupils in schools with library media centers		
	Number	Percent	Number	Percent	
TOTAL PUBLIC	76,544	95.8	39,429,143	98.3	
Alabama	1,243	100	688,980	100	
Alaska	418	98.3	108,738	99.7	
Arizona	942	95.0	588,821	99.7	
Arkansas	1,074	100	415,981	100	
California	6,796	94.5	4,749,189	99.0	
Colorado	1,276	97.9	572,431	99.4	
Connecticut	896	96.1	446,126	98.3	
Delaware	150	93.2	95,513	99.1	
Dist. of Columbia	170	100	78, <b>41</b> 5	100	
Florida	2,146	94.6	1,755,497	99.4	
Georgia	1,643	100	1,102,496	100	
Hawaii	229	99.0	172,621	98.0	
Idaho	507	93.0	206,862	95.9	
Illinois	3,744	94.8	1,722,422	95.4	
Indiana	1,808	97.4	884,005	98.8	
Iowa	1,500	98.0	476,379	99.4	
Kansas	1,424	98.7	451,391	99.6	
Kentucky	1,232	93.1	609,980	98.8	
Louisiana	1,362	94.0	724,045	98.1	
Maine	683	92.6	209,951	96.0	
Maryland	1,090	96.6	664,166	98.3	
Massachusetts	1,689	95.2	788,047	97.2	
Michigan	2,790	89.7	1,358,102	9 <i>5</i> .7	
Minnesota	1,379	96.2	715,523	99.4	
Mississippi	870	95.3	493,658	97.4	
Missouri	1,946	94.3	797,538	97.5	
Montana	701	94.8	155,481	98.7	
Nebraska	1,343	92.3	256,818	98.8	
Nevada	301	96.1	197,888	99.6	
New Hampshire	379	90.9	143,631	97.7	
New Jersey	2,083	93.7	1,083,825	97.4	
New Mexico	593	94.7	288,906	98.8	
New York	3,713	95.5	2,300,738	96.5	
North Carolina	1,893	98.7	1,068,361	99.9	
North Dakota	612	94.5	114,921	96.8	

Ohio	3,600	99.4	1,707,644	99.5
Oklahoma	1,657	95.8	559,542	97.4
Oregon	1,134	97.4	458,000	99.8
Pennsylvania	3,134	97.8	1,688,326	98.0
Rhode Island	282	95.9	145,934	98.6
South Carolina	1,045	96.4	630,619	97.0
South Dakota	696	95.1	145,746	98.0
Tennessee	1,439	96.9	778,548	98.6
Texas	5,610	99.3	3,320,551	99.9
Utah	688	95.9	437,160	99.6
Vermont	290	87 <i>.5</i>	88,649	97.8
Virginia	1,711	98.5	934,841	99.1
Washington	1,728	97.5	885,743	98.6
West Virginia	769	76.4	283,043	84.1
Wisconsin	1,763	95.4	775,638	97.4
Wyoming	376	100	101,710	100

Although nearly all children attended schools with a library media center, it is important to ask whether these library media centers were accessible to all students. Did the mere fact of having a library media center mean that all students in a school had access to the center? As indicated in table 8, very few school administrators indicated that any students did not have, or were denied access to, existing library media center facilities. That is, if a school did have a library, in almost all instances it was available to all the students of that school. Hence, overall, the data in tables 6-8 suggest that there were not large disparities in the availability of library media centers as a function of school characteristics.

Table 8.— Number and percentage of schools with library media centers in which some students did not have center access, by school sector: 1990-91

	Schools in which some students have no access			
	Number	Percent		
TOTAL	672	0.7		
PUBLIC SCHOOLS	465	0.6		
PRIVATE SCHOOLS	207	1.0		

<sup>&</sup>lt;sup>5</sup> Note that these data do not indicate how flexible the library accessibility was for students. For example, in some schools, students may have been assigned a "library period" once every 2 weeks. In other schools, students may have been able to use the library anytime.

These data are concerned with library availability and do not address whether differences exist in the quality of the library media centers available to different schools and different students. Although the vast majority of schools had library media centers, the centers may have differed widely in resources. The next section turns to an examination of differences in the number of librarians—one of the key resources in school library media centers.

# Staffing Levels of School Library Media Centers

Research on school library media centers distinguishes two types of employed staff positions, depending on training levels: professional librarians and library support personnel, typically referred to as library aides, assistants, clerks, or technicians. The AASL and AECT recommend that professional school librarians be required to have "a broad undergraduate education with a liberal arts background and hold a master's degree or equivalent from a program that combines academic and professional preparation in library and information science, education, management, media, communications theory, and technology ... the master's degree is considered the entry-level degree for the profession." (AASL and AECT 1988, 59). The number of professional librarians and aides a library may need to employ depends on a number of factors, including the size of the school, the school curriculum, the range of library media center services provided by district or regional programs, and the needs of the students. As a basic minimum standard, the AASL and the AECT (1988) recommend that every school library media center, regardless of size, have at least one full-time professional librarian and one full-time aide.

In the 1990-91 SASS, school administrators were asked to list the numbers of both full-time and part-time librarians or other professional media staff and the numbers of full-time and part-time library or media center aides employed in their schools. This section presents several related measures of school library media center staffing levels derived from these data. First, it examines schools whose library media centers had no employed staff. Second, for those schools with some employed staff, it examines schools whose library media center staffing levels did not meet the minimum levels recommended by the AASL and AECT. Finally, for those schools with some employed staff, it examines average school staffing levels and the ratios of both pupils and teachers to librarians.

Table 9 shows data on the numbers and proportions of schools that had library media centers but no librarian, either full-time or part-time; schools that had neither a librarian nor a library aide, again either full-time or part-time; and the proportions of pupils attending such schools.

Overall, for the public sector, 26 percent of schools with library media centers had no professional librarian, and 8 percent did not employ any library media center staff at all. There were, however, distinct differences among different types of public schools. Just as small schools were most likely to have no library media centers, they were also most likely to have no library

<sup>&</sup>lt;sup>6</sup> It should be noted that the respondents were not asked to indicate the training or certification level of school library employees. The data reported are based on simple counts of "librarians and other professional and media staff" and "library or media center aides" employed in sampled schools. Among professional school librarians themselves, there are wide variations in expertise, preparation, and qualifications. Moreover, training and certification requirements for school librarians vary greatly between jurisdictions and across states (Perritt 1992). These data do not include unpaid or volunteer library staff.

staff. One-third of smaller public schools had no librarian, and one-fifth of these same schools had neither a librarian nor an aide (table 9 and figure 2). Elementary schools and combined schools also were less likely to have librarians than were secondary schools. Nearly one in every five combined schools had neither a librarian nor a library aide. Notably, the school's proportion of students from poverty-level families did not appear to be strongly related to staffing levels. Schools with a higher proportion of students eligible for the federal free lunch program were only slightly less likely to have staff for their library media centers.

Table 9.— Number and percentage of schools with library media centers, but no library staff, and number and percentage of pupils in such schools, by selected school characteristics: 1990-91

	Schools ( libra		Pupils in schools without librarian		Schools with neither librarian nor aide		Pupils in schools with neither librarian nor aide	
	Number	Percen	Number	Percen	Number	Percen	Number	Percent
TOTAL	25,280	2 <i>5</i> .8	5,917,	13.5	16,379	16.7	2,687,43	6.1
PUBLIC	13,700	17.9	4,522,	11.5	6,193	8.1	1,523,00	3.9
School level								
Elementary	10,998	20.2	3,902,	15.8	4,261	7.8	1,166,89	4.7
Secondary	1,792	9.6	926	3.6	1,288	6.9	8	2.0
Combined	910	26.4	487,19 3	10.5	644	18.7	271,798 84,309	6.7
School size								
Less than 300	7,286	33.1	1,076,	27.4	4,404	20.0	519,559	13.2
300-599	4,474	14.0	584	13.4	1,114	3.5	455,746	3.2
600 or more	1,940	8.6	1,906, 929	7.2	67 <i>5</i>	3.0	547,701	2.6
Free lunch eligibility								
Less than 20%	4,691	16.3	1,488,	9.0	2,334	8.1	496,407	3.0
20%-49%	4,953	17.0	425	12.3	1,689	5.8	439,598	3.1
50% or more	3,783	20.9	1,729, 427	14.7	2,011	11.1	572,107	6.6
PRIVATE	11,580	54.0	1,394,	31.4	10,186	47.5	1,164,43	26.3
School level								
Elementary	8,116	61.0	1,105,	44.6	7,046	53.0	918,978	37.1
Secondary	3 <i>5</i> 7	15.5	<i>5</i> 27	5.1	298	12.9	32,911	3.7
Combined	3,107	<i>5</i> 3.3	45,133 244,18	22.6	2,842	48.7	212,541	19.7
School size								
Less than 300	10,695	63.3	1,026,	48.7	9,480	56.1	873,948	41.5
300-599	829	24.4	38 <i>0</i>	23.8	655	19.2	<i>255</i> ,888	18.5
600 or more	56	4.9	329,46	4.1	51	4.5	34,594	3.7
			3					
Orientation								
Catholic	3,460	40.8	735,07	29.2	2,728	32.2	<i>5</i> 77,48 <i>5</i>	23.0
Other religious	6,238	65.6	8	38.7	5,673	59.6	457,722	34.0

Nonsectarian 1,882 54.7 520,68 24.1 1,786 51.9 129,224 22.4 6 139,07 7

NOTE: Details may not add to totals due to rounding or cell suppression.

### Figure 2 here.

The original document showed a bar graph here with the following information:

Figure 2. - Percentage of schools with neither a librarian nor an aide, by school size: 1990-1991

#### Public schools:

20% of schools under 300 students did not have a librarian or an aide 3.5% of schools sized 300-599 did not have a librarian or an aide 3% of schools sized over 599 did not have a librarian or an aide

#### Private schools:

56.1% of schools under 300 students did not have a librian or an aide 19.2% of schools sized 300-599 did not have a librarian or an aide 4.5% of schools over 599 did not have a librarian or an aide

The proportion of private schools with unstaffed library media centers was far greater than for public schools (figure 2). Over half of smaller and elementary private schools had neither a librarian nor an aide. Non-Catholic religious private schools also stood out—nearly 60 percent of those with library media centers had no library staff. Overall, over a quarter of all private school students was enrolled in schools with library media centers but with no library media center staff.

For public schools, there also were differences among states as to the proportion of schools with library media center staff (table 10). In Alaska, California, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, and West Virginia, over one-fifth of the schools had unstaffed library media centers. All of the school library media centers sampled in the District of Columbia, Hawaii, and New Mexico were staffed.

Table 11 directly assesses the proportion of schools that had a library media center and some employed library staff, but that did not meet the minimum staffing level standards (at least one full-time professional librarian and one full-time aide) recommended by the AASL and the AECT (1988). These data generally parallel those in table 9 except that the levels are higher. That is, large numbers of schools have some library media center staff but fail to meet the minimum standards recommended. For example, over a quarter of public schools did not have at least one full-time librarian and one full-time aide. As expected, these were more likely to be smaller schools. In addition, over two-thirds of the private schools failed to meet the minimum standards recommended. Smaller private schools and non-Catholic religious schools particularly stood out as the most likely to be understaffed. On the other hand, less than 10 percent of large schools, whether public or private, fell below the minimum standard.

Table 12 presents these data by state for public schools. In only the District of Columbia and Hawaii did all the sampled schools meet the minimum requirements. Another group (Florida, Georgia, Mississippi, North Carolina, and South Carolina) had less than 10 percent of schools without a full-time librarian and a full-time aide. In Montana, Nebraska, North Dakota, and South Dakota, over or close to two-thirds of schools did not meet the requirements, and in Alaska, California, Massachusetts, Rhode Island, Utah, West Virginia, and Wyoming, about 40 to 50 percent of schools did not have a full-time librarian and a full-time aide.

Table 10.—Number and percentage of schools with library media centers but no library staff, and number and percentage of pupils in such schools, by state: 1990-91

	Schools ( libra		t Pupils in schools without librarian			ith neither nor aide	•	nools with neithe an nor aide
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL PUBLIC	13,700	17.9	4,522,6 45	11.5	6,193	8.1	1,523,0 05	3.9
Alabama	105	8. <i>5</i>	15,206	2.2	38	3.0		0.8
Alaska	167	40.0	13,795	12.7	105	25.0	5,664	6.2
Arizona	192	20.4	56,755	9.6	89	9.5		2.1
Arkansas	80		13,994	3.4	76	7.1		2.9
California	3,332		1,595,6	33.6	1,383	20.3	11,861	12.3
	-		56		-		582,766	
Colorado	155	12.1	48,967	8.6	27	2.1	4,345	0.8
Connecticut	101	11.3	31,491	7.1	12	1.3	3,804	0.9
Delaware	5	3.6	1,244	1.3	3	2.0	873	0.9
Dist. of Columbia	0	0.0	0	0	0	0.0	0	0.0
Florida	77	3.6	17,408	1.0	51	2.4	4,764	0.3
Georgia	32	1.9	14,198	1.3	19	1.1	1,353	0.1
Hawaii	2	1.1	1,495	0.9	0	0.0	0	0.0
Idaho	181	35.6	72,039	34.8	17	3.3	422	0.2
Illinois	821	21.9	225,365	13.1	281	7.5	70,861	4.1
Indiana	248	13.7	97,527	11.0	42	2.3	19,625	2.2
Iowa	212	14.1	51,235	10.8	123	8.2	21,592	4.5
Kansas	66	4.6	10,327	2.3	29	2.0	7,23 <i>5</i>	1.6
Kentucky	44	3.5	12,364	2.0	30	2.4	5,993	1.0
Louisiana	164	12.0	55,723	7.7	153	11.3	46,895	6.5
Maine	200	29.2	43,862	20.9	92	13.5	12,773	6.1
Maryland	53	4.9	35,395	5.3	40	3.7	24,348	3.7
Massachusetts	674	39.9	207,339	26.3	310	18.4	84,124	10.7
Michigan	668	23.9	239,407	17.6	165	5.9	44,306	3.3
Minnesota	61	4.5	14,003	2.0	49	3.5	9,875	1.4
Mississippi	143	16.4	50,376	10.2	50	<i>5</i> .7	8,711	1.8
Missouri	255	13.1	61,612	7.7	191	9.8	40,483	5.1
Montana	280	40.0	31,181	20.1	252	36.0	27,152	17.5
Nebraska	630	46.9	32,58 <i>0</i>	12.7	<i>5</i> 87	43.7	30,780	12.0
Nevada	36	11.9	19,623	9.9	12	4.1	8,848	4.5
New Hampshire	62	16.3	14,508	10.1	15	4.0	1,860	1.3
New Jersey	172	8.2	70,741	6.5	81	3.9	19,827	1.8
New Mexico	137	23.1	49,647	17.2	0	0.0	0	
New York	246	6.6	121,549	5.3	197	5.3	101,272	4.4
North Carolina	<i>5</i> 7	3.0	8,549	0.8	29	1.5	4,305	0.4

North Dakota	242	39.6 29,805	25.9	205	33.4	19,111	16.6
Ohio	970	27.0 349,514	20.5	202	5.6	49,969	2.9
Oklahoma	423	2 <i>5.5</i> 72,736	13.0	336	20.3	51,660	9.2
Oregon	135	11.9 27,186	5.9	24	2.1	1,777	0.4
Pennsylvania	166	5.3 70,349	4.2	22	0.7	10,444	0.6
Rhode Island	9	3.2 2,153	1.5	9	3.2	2,153	1.5
South Carolina	9	0.8 6,221	1.0	5	0.5	3,536	0.6
South Dakota	249	<i>35.</i> 8 <i>34</i> ,72 <i>0</i>	23.8	208	29.9	23,798	16.3
Tennessee	110	7.7 23,376	3.0	63	4.3	11,494	1.5
Texas	569	10.1 228,157	6.9	94	1.7	28,876	0.9
Utah	244	35.4 105,477	24.1	64	9.2	11,942	2.7
Vermont	47	16.4 6,225	7.0	19	6.5		2.3
Virginia	38	2.2 7,670	0.8	14	0.8	2,051	0.3
Washington	177	10.2 59,604	6.7	42	2.4	2,470	1.5
West Virginia	224	29.2 54,177	19.1	177	23.0	12,846	13.9
Wisconsin	318	18.0 86,370	11.1	138	7.8	39,272	3.2
Wyoming	114	30.4 23,743	23.3	27	7.2	25,129	0.6
						<i>635</i>	

Table 11.—Number and percentage of schools with library media centers without full-time library staff, and number and percentage of students in such schools, by selected school characteristics: 1990-91

	Schools without full-time librarian and without full-time aide		Pupils in schools without full-time librarian and withou full-time aide		
	Number	Percent	Number	Percent	
TOTAL	35.659	36.4	8.128.784	18.5	
PUBLIC	21,102	27.6	6,094,944	15.5	
School level					
Elementary	16,946	31.2	5,307,371	21.5	
Secondary	2,980	15.9	598,580	4.4	
Combined	1,177	34.1	188,992	15.0	
School size					
Less than 300	13,095	59.4	2,018,286	51.4	
300-599	6,191	19.3	2,628,714	18.5	
600 or more	1,816	8.1	1,447,944	6.8	
Free lunch eligibility					
Less than 20%	6,911	24.0	1,966,881	11.9	

20%-49%	8,462	29.0	2,392,161	17.0
PRIVATE	14,557	67.9	2,033,841	45.9
School level				
Elementary	9,983	75.1	1,519,952	61.4
Secondary	626	27.2	95,243	10.8
Combined	3,947	67.7	418,646	38.8
School size				
Less than 300	13,053	77.3	1,417,388	67.2
300-599	1,392	40.9	<i>5</i> 37,788	38.8
600 or more	112	9.9	78,66 <i>5</i>	8.4
Orientation				
Catholic	4,761	56.2	1,059,381	42.1
Other religious	7,599	79.9	789,399	<i>5</i> 8.7
Nonsectarian	2,197	63.8	185,060	32.1

NOTE: Details may not add to totals due to rounding or cell suppression.

Table 12.—Number and percentage of schools with library media centers without full-time library staff, and number and percentage of students in such schools, by state: 1990-91

Schools without full-time librarian and without full-time aide

Pupils in schools without full-time librarian and without full-time aide

_				
	Number	Percent	Number	Percent
TOTAL PUBLIC	21,102	27.6	6,094,944	15.5
Alabama	192	15.4	36,802	5.3
Alaska	198	47.5	14,205	13.1
Arizona	198	21.0	54,751	9.3
Arkansas	202	18.8	36,867	8.9
California	3, <i>50</i> 7	51.6	1,725,492	36.3
Colorado	204	16.0	52,956	9.3
Connecticut	194	21.7	79,283	17.8
Delaware	22	15.0	6,940	7.3
Dist. of Columbia	0	0.0	0	0.0
Florida	78	3.6	10,835	0.6
Georgia	22	1.3	8,236	0.7
Hawaii	0	0.0	0	0.0
Idaho	156	30.7	35,815	17.3
Illinois	1,418	37.9	351,444	20.4
Indiana	381	21.1	127,428	14.4
Iowa	589	39.3	124,014	26.0
Kansas	494	34.7	86,488	19.2
Kentucky	316	<i>25.</i> 7	79,581	13.0
Louisiana	281	20.7	93,490	12.9
Maine	266	38.9	47,6 <i>5</i> 7	22.7
Maryland	267	24.5	122,828	18.5
Massachusetts	7 <i>5</i> 8	44.9	232,611	29.5
Michigan	774	27.7	256,789	18.9
Minnesota	406	29.4	114,462	16.0
Mississippi	72	8.3	16,364	3.3
Missouri	716	36.8	191,123	24.0
Montana	448	63.9	64,251	41.3
Nebraska	936	69.7	8 <i>0,5</i> 72	31.4
Nevada	50	16.6	18,623	9.4
New Hampshire	88	23.2	15,400	10.7
New Jersey	476	22.9	141,983	13.1
New Mexico	88	14.8	19,945	6.9
New York	415	11.2	168,377	7.3
North Carolina	145	7.7	27,310	2.6
North Dakota	455	74.4	56,479	49.1
Ohio	904	25.1	258,731	15.2
Oklahoma	629	38.0	103,707	18.5

Oregon	291	25.6	51,432	11.2
Pennsylvania	818	26.1	261,275	15.5
Rhode Island	117	41.7	34,053	23.3
South Carolina	70	6.7	16,615	2.6
South Dakota	502	72.1	74,956	51.4
Tennessee	320	22.2	89,008	11.4
Texas	77 <i>5</i>	13.8	228,425	6.9
Utah	287	41.6	126,997	29.1
Vermont	96	33.0	15,037	17.0
Virginia	180	10.5	18,865	2.0
Washington	33 <i>5</i>	19.4	104,414	11.8
West Virginia	397	51.6	91,369	32.3
Wisconsin	419	23.7	103,469	13.3
Wyoming	149	39.8	17,191	16.9

In contrast to examining understaffed school libraries, when the focus is on those schools which did have some library staff, a different picture of overall average staffing levels emerges. Data on average numbers of librarians and aides per school are displayed in table 13.7

In the public sector, both the average number of librarians and the average number of aides were fewer than one per school, probably reflecting the large proportion of schools that relied on part-time staff. As noted before, schools serving student populations with a higher poverty level appeared to have only slightly lower staffing levels. In private schools, the average number of both librarian staff categories also was just under one per school. However, distinct differences were found among private schools. For example, nonsectarian private schools were more likely than Catholic private schools to have library media centers with no staff (table 9), but when their library media centers were staffed, they tended to be at a higher level. Large private schools had the highest overall levels of library staff—on average, nearly two librarians and nearly one aide per school.

One theme to emerge from the data presented so far is that larger schools, both private and public, were generally more likely to have library

<sup>&</sup>lt;sup>7</sup> The data in this table represent average staffing at the school-level. The number of librarians per school was calculated by summing the total number of full-time librarians and one-half of the total number of part-time librarians in each school. The number of aides per school was calculated by summing the total number of full-time aides and one-half of the total number of part-time aides in each school. Calculation of the school averages of librarians and aides excluded schools without a library media center or without any employed library staff, that is, without at least a part-time librarian or a part-time aide. Calculation of the school ratios excluded schools without at least a part-time librarian.

media centers and also likely to have more staff in their library media centers. But, once school size is accounted for, were larger school library media centers actually staffed at higher levels? In order to have a basis for comparing school staffing levels, table 13 also presents, for those schools with librarians, average school ratios of both pupils and teachers per professional librarian.

The ratios indicate that although larger schools had more library media center staff, they actually had fewer librarians per pupil and per teacher than smaller schools (table 13 and figure 3). This finding suggests that although library media center staffing levels increased with school size, they may have done so at a diminishing rate.

Average staffing levels for public schools by state are shown in table 14. Fourteen states had, on average, at least one librarian per school: Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Hawaii, Louisiana, New Jersey, New York, North Carolina, South Carolina, Tennessee, and Virginia. California, Idaho, Utah, and Wyoming averaged approximately one-half librarian per school. All states averaged fewer than one library aide per school.

State differences in staffing levels are also illustrated by the wide range in pupil/librarian ratios. California had one librarian for every 1,042 pupils. Kansas, Montana, Nebraska, North Dakota, South Dakota, Vermont, and Wyoming had one librarian for fewer than 400 pupils.

Table 13.—School library media center staffing levels, by selected school characteristics: 1990-91

TOTAL	Average librarians per school 0.9	Average library aides per school 0.6	Average school pupil/librarian ratio 545.0	Average school teacher/librarian ratio 33.5
TOTAL	0.9	0.6	343.0	33.3
PUBLIC	0.9	0.6	<i>5</i> 78.6	3 <i>5</i> .3
School level				
Elementary	0.8	0.6	558.3	32.8
Secondary	1.1	0.8	650.6	41.9
Combined	0.9	0.6	445.0	33.6
School size				
Less than 300	0.6	0.5	293.2	22.0
300-599	0.8	0.6	523.9	32.1
600 or more	1.1	0.9	856.6	49.1
Free lunch				
eligibility	0.9	0.8	616.1	37.6
Less than 20%	0.8	0.6	553.0	33.3
20%-49%	0.8	0.5	561.6	34.8
50% or more				
PRIVATE	0.9	0.5	<i>330</i> .8	22.0
School level				
Elementary	0.7	0.5	337. <i>0</i>	18.6
Secondary	1.2	0.5	363.5	26.2
Combined	1.1	0.4	295.8	25.6
School size				
Less than 300	0.8	0.4	233.1	17.6
300-599	1.0	0.6	454.4	27.5
600 or more	1.7	0.8	598.8	34.9

Orientation				
Catholic	0.9	0.6	384.9	21.0
Other religious	0.8	0.4	299.3	22.1
Nonsectarian	1.3	0.4	223.2	25.2

The number of librarians per school was calculated by summing the total number of full-time librarians and one-half of the total number of part-time librarians. The number of aides per school was calculated by summing the total number of full-time aides and one-half of the total number of part-time aides. Calculation of the school averages of librarians and aides excluded schools without a library media center or without any employed library staff, that is, without at least a part-time librarian or a part-time aide. Calculation of the school ratios excluded schools without at least a part-time librarian.

NOTE: Details may not add to totals due to rounding or cell suppression.

### Figure 3 here

The original document had a bar chart here that contained the following information:

Figure 3. - Average school pupil/librarian ration, by school size: 1990-1991

#### Public schools:

In schools under 300 students, the pupil/librarian ratio was 1/293.2 In schools from 300-599 students, the pupil/librarian ratio was 1/523.9 In schools over 599 students, the pupil/librarian ratio was 1/856.6

#### Private schools:

In schools under 300 students, the pupil/librarian ratio was 1/233.1
In schools from 300-599 students, the pupil/librarian ratio was 1/454.4
In schools over 599 students, the pupil/librarian ratio was 1/598.8

Table 14.—Public school library media center staffing levels, by state: 1990-91

	librarians per school	aides per school	Pupil/librarian ratio	Teacher/librarian ratio
TOTAL PUBLIC	0.9	0.6	<i>5</i> 78.6	35.3
Alabama	1.0	0.5	<i>55</i> 7.2	32.8
Alaska	0.7	0.4	408.1	24.7
Arizona	0.9	0.8	685.1	35.5
Arkansas	1.0	0.3	420.7	27.5
California	0.6	0.8	1041.7	44.7
Colorado	0.9	0.7	490.1	29.8
Connecticut	0.9	0.7	566.2	41.9
Delaware	1.0	0.3	665.0	40.3
Dist. of Columbia	1.1	0.3	415.5	31.4
Florida	1.1	0.8	726.9	42.8
Georgia	1.1	0.8	584.9	35.5
Hawaii	1.1	0.3	634.1	36.9
Idaho	0.6	0.7	494.1	28.3
Illinois	0.9	0.7	500.5	32.8
Indiana	0.8	0.6	569.1	34.8
Iowa	0.7	0.7	430.9	30.2
Kansas	0.9	0.6	376.5	26.1
Kentucky	0.9	0.6	522.2	31.9
Louisiana	1.0	0.2	544.9	33.2
Maine	0.7	0.7	408.0	29.8
Maryland	0.9	0.4	670.8	38.2
Massachusetts	0.7	0.6	662.6	50.2
Michigan	0.8	0.7	563.1	31.3
Minnesota	0.9	0.9	602.5	36.6
Mississippi	0.9	0.5	595.2	33.9
Missouri	0.9	0.4	494.6	32.3
Montana	0.8	0.5	360.2	23.9
Nebraska	0.7	0.5	38 <i>5</i> .2	26.6
Nevada	0.9	0.6	708.7	37.3
New Hampshire	0.8	0.7	448.3	32.0
New Jersey	1.0	0.5	522.0	41.1
New Mexico	0.7	0.6	<i>5</i> 77.7	<i>35.</i> 4
New York	1.1	0.8	594.0	41.6
North Carolina	1.1	0.7	521.1	32.6
North Dakota	0.7	0.4	324.6	21.9
Ohio	0.7	0.7	587.8	34.9
Oklahoma	0.8	0.7	471.5	31.1
Oregon	0.8	0.8	497.8	28.0
Pennsylvania	0.9	0.6	593.5	37.1
Rhode Island	0.9	0.4	578.1	40.5

South Carolina	1.1	0.7	542.0	33.1
South Dakota	0.7	0.5	361.4	24.2
Tennessee	1.0	0.3	569.6	31.8
Texas	0.9	0.8	651.5	41.7
Utah	0.6	0.6	8 <i>5</i> 9.7	35.2
Vermont	0.8	0.6	370.6	28.2
Virginia	1.1	0.5	461.5	29.9
Washington	0.9	0.6	572.6	29.1
West Virginia	0.8	0.1	459.8	30.7
Wisconsin	0.9	0.8	493.0	33.8
Wyoming	0.6	0.7	357.6	26.9

The number of librarians per school was calculated by summing the total number of full-time librarians and one-half of the total number of part-time librarians. The number of aides per school was calculated by summing the total number of full-time aides and one-half of the total number of part-time aides. Calculation of the school averages of librarians and aides excluded schools without a library media center or without any employed library staff, that is, without at least a part-time librarian or a part-time aide. Calculation of the school ratios excluded schools without at least a part-time librarian.

The data presented thus far suggest that although most schools were provided with library media centers, staffing levels differed widely. Relative to the minimum standards set by the relevant professional organizations, many school library media centers were understaffed. Moreover, there were substantial numbers of students who attended schools whose library media centers had no staff.

The discussion up to this point has not included information on the actual work of library media center staff. Whether or not schools have librarians does not, of course, address the question of what the role and tasks of the library and its staff is or should be.

## The Role of Library Media Specialists in Schools

What is the role of librarians in the education process? Is it simply one of maintaining the school library media center and its collections, or is it one of being an integral part of the school curriculum development and implementation process? In particular, to what extent do librarians collaborate with teachers in the design of courses? Do librarians link library media center materials to the instructional objectives of teachers? Compared to teachers and principals, how much actual influence do librarians have over the design of school curricula? The 1990-91 SASS obtained information on selected aspects of the role of librarians in schools, from teachers and principals.

On a 4-point scale ranging from "strongly agree" to "strongly disagree," teachers were asked whether they planned, with the assistance of librarians, to integrate school library media center services into their teaching, and also

whether they felt the library media center materials in their schools were adequate to support their instructional objectives. Data showing the proportion of teachers who strongly agreed with these statements are presented in table 15.8

In general, between one-quarter and one-third of public and private school teachers strongly agreed with the statement that they planned with librarians to integrate library media center resources into their teaching. Notably, there were only slight differences among different types of schools in the extent to which teachers reported collaborating with librarians.

Teachers in public schools were more likely than private school teachers to strongly agree that the materials in their schools were supportive of their instructional objectives. Overall, just over one-third of public school teachers and just under one-third of private school teachers gave high marks for the adequacy of library media center materials. School size was especially relevant in the case of private schools: nearly 40 percent of teachers in large private schools compared to less than 30 percent of teachers in small private schools strongly agreed that their library media center materials were adequate.

<sup>&</sup>lt;sup>8</sup> Calculation of the frequency that teachers and librarians collaborated excluded schools without a librarian. Calculation of the frequency that teachers reported library materials adequate excluded schools without a library.

Table 15.—Percentage of teachers who strongly agreed that they planned with the librarian for integration of library media center services into their teaching, and who strongly agreed that library media center materials were adequate to support instructional objectives, by selected school characteristics: 1990-91

	Percent who planned with librarian	Percent who agreed library materials were adequate to support objectives
TOTAL	29.3	35.0
PUBLIC	29.4	<i>35.6</i>
School level		
Elementary	30.6	36.3
Secondary	27.1	34.8
Combined	<i>30.5</i>	32.0
School size		
Less than 300	30.3	32.0
300-599	<i>30</i> .8	<i>35.</i> 3
600 or more	28.0	36.9
Free lunch eligibility		
Less than 20%	29.1	37.7
20%-49%	29.2	34.6
50% or more	29.9	33.3
PRIVATE	28.8	30.7
School level		
Elementary	27.7	28.0
Secondary	24.0	34.6
Combined	30.9	30.0
School size		
Less than 300	29.1	26.1
300-599	27.3	31.6
600 or more	26.1	38.6
Orientation		
Catholic	26.8	30.2
Other religious	28.2	25.4

Nonsectarian 30.3 37.6

NOTE: Details may not add to totals due to rounding or cell suppression.

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

In 21 states, 30 percent or more of public school teachers strongly agreed that they planned with librarians. In Mississippi and Oklahoma, about 40 percent strongly agreed that they planned with librarians. In Hawaii, Iowa, and Rhode Island, about one in five public school teachers gave similar responses (table 16).

In only eight states (California, Delaware, Hawaii, Idaho, Rhode Island, Utah, Washington, and West Virginia) did less than 30 percent of public school teachers strongly agree that library materials were adequate to support their instructional objectives. In Georgia, Mississippi, New Jersey, South Carolina, and Virginia, over 40 percent of teachers strongly agreed that library resources were supportive of their teaching goals (table 16).

<sup>&</sup>quot;Strongly agreed" was defined as 1, on a scale of 1 to 4.

Table 16.— Percentage of public school teachers who strongly agreed that they planned with librarian for integration of library media center services into their teaching, and who strongly agreed that library media center materials were adequate to support instructional objectives, by state: 1990-91

	Percent who planned with librarian	Percent who agreed library materials were adequate to support objectives
TOTAL PUBLIC	29.4	35.6
Alabama	32.7	36.3
Alaska	27.2	30.1
Arizona	27.3	31.4
Arkansas	29.8	39.3
California	28.9	28.8
Colorado	30.9	31.9
Connecticut	31.7	34.7
Delaware	26.1	23 <i>.5</i>
Dist. of Columbia	33 <i>.</i> 0	3 <i>5.5</i>
Florida	29.3	38. <i>5</i>
Georgia	38.3	44.7
Hawaii	21.0	27.3
daho	27.0	21.4
llinois	27.6	33.8
ndiana	28.1	35.3
lowa	21.4	37.0
Kansas	28.7	38. <i>5</i>
Kentucky	34.2	38.7
Louisiana	31.5	33.2
Maine	32.1	37.1
Maryland	29.5	30.1
Massachusetts	25.9	<i>35.6</i>
Michigan	28.0	30.6
Minnesota	24.1	<i>35.9</i>
Mississippi	40.3	43.5
Missouri	29.5	39.2
Montana	26.4	30.9
Vebraska	28.3	<i>37.5</i>
Vevada	30.4	32.7
Vew Hampshire	31.1	36.5
New Jersey	31.2	43.5
New Mexico	33.8	33.1
New York	23.0	36.9
North Carolina	30.4	31.7
North Dakota	27.7	34.2

Ohio	30.7	32.5
Oklahoma	40.2	39.2
Oregon	28.7	38.7
Pennsylvania	24.2	39.0
Rhode Island	21.6	27.9
South Carolina	33.9	42.5
South Dakota	26.0	30.6
Tennessee	35.0	36.1
Texas	31.9	39.0
Utah	25.9	23.4
Vermont	32.1	38.6
Virginia	33.0	41.5
Washington	24.5	22.3
West Virginia	24.7	25.9
Wisconsin	28.2	<i>35.</i> 7
Wyoming	28.1	36.3

<sup>&</sup>lt;sup>1</sup> "Strongly agreed" was defined as 1, on a scale of 1 to 4 SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School and Teacher Questionnaires).

In the 1990-91 SASS, school principals (or headmasters in private schools) were also asked to evaluate the role of librarians at their schools. In this case, on a 6-point scale from "none" to "a great deal," principals were asked to rate the amount of actual influence a number of groups had over decisions concerning establishing curriculum in their schools. The groups included state departments of education, school or governing boards, principals themselves, teachers, parents, and school librarians. These data are presented in table 17 and figure 4.9

According to public school principals, few school librarians had a great deal of input into decisions surrounding the curricula in schools. A different picture emerged, however, from private schools, especially private elementary schools and Catholic schools. In the latter schools, over a third of the principals reported that their librarians had a great deal of influence on curriculum. Nevertheless, even in these schools, librarians were far less frequently reported to be highly influential than teachers or principals. As illustrated in figure 4, the relative ranking of group influence varied substantially across different types of schools. It should be noted that public school librarians were not alone in their reported lack of influence over school curricular decision making. Very few parents' associations and private school boards, according to principals, had a great deal of influence over these issues.

Public school librarians' reported influence over curricular decisions also varied across different states. The frequency with which librarians were reported to have a great deal of influence ranged from 28 percent in Hawaii to 3 percent in Ohio (table 18).

Finally, the 1990-91 SASS also obtained data on the background, experience, and training of the teacher and principal respondents. These data

<sup>&</sup>lt;sup>q</sup> Calculation of the frequency of influential librarians excluded schools without a librarian.

can be used to examine another issue related to the role of librarians and, specifically, to the interface between librarians and other professional staff in schools—the movement of librarians into the ranks of either classroom teachers or school administrators. Do librarians ever switch jobs to become classroom teachers or become school principals? Do teachers ever work part—time as librarians? What proportion of school teachers and principals have had some post—secondary training in library science?

Tables 19 and 20 present data on the percentage of teachers and principals who held a minor or a major in library science at any post-secondary level (associate, bachelor's, master's, or doctorate). Table 20 also displays the percentage of teachers who worked part-time as librarians during that year and those whose main activity in the year before becoming a teacher was working as a school librarian.

The results show little movement from the ranks of librarians to those of either classroom teachers or principals. Very few classroom teachers previously worked primarily as librarians in the year prior to becoming teachers. Very few teachers worked part-time as librarians in their schools. Finally, very few teachers or principals had a major or a minor at the post-secondary level in library science.

It must be noted that these results are only partial. Librarians themselves were not included in the 1990-91 SASS teacher sample, and hence, there are no data available from SASS on crossover in the reverse direction—that is, from the ranks of teachers or administrators to librarians. 10

Table 17.—Percentage of principals reporting group having a great deal of influence over establishing curriculum, by selected school characteristics: 1990-91

	State department of education	School or governing board	Principal	Teacher s	Librarians/ media specialists³	Parent association
TOTAL	61.3	41.4	57.5	55.6	15.8	7.7
PUBLIC	61.3	46.0	49.1	51.2	13.9	7.1
School level						
Elementary	61.9	46.3	47.0	50.4	15.0	7.6
Secondary	60.5	45.1	54.0	53.6	11.1	5.2
Combined	56.9	41.6	56.2	53.3	12.3	6.6
School size						
Less than 300	58.1	41.6	52.4	54.0	12.2	6.0
300-599	62.5	46.9	49.4	51.5	15.7	7.3
600 or more	63.0	48.6	<i>45</i> .7	48.4	12.5	7.5
Free lunch eligibility						
Less than 20%	<i>54.5</i>	45.0	52.8	57.1	14.2	7.7
20%-49%	62.9	44.1	48.3	52.2	13.4	5.9
50% or more	69.9	49.7	44.5	40.4	14.1	7. <i>5</i>
PRIVATE <sup>2</sup>	NA	26.2	8 <i>5.</i> 3	70.0	28.6	9.9
School level	NA					
Elementary	NA NA	24.6	8 <i>5.</i> 2	72.8	3 <i>5</i> .3	10.6
Secondary	NA	15.8	8 <i>5.0</i>	73.7	18.5	5.5
Combined	NA	31.4	84.8	62.7	22.6	9.5

 $<sup>^{10}</sup>$  The 1993-94 SASS includes a sample of librarians, and hence, it will be possible to explore this issue later.

School size						
Less than 300	NA	27.4	84.6	68.8	31.5	10.6
300-599	NA	16.4	88.2	77.1	23.4	6.9
600 or more	NA	21.6	83.9	73.1	23.6	3.6
Orientation						
Catholic	NA	17.1	89.9	78.7	34.5	9.5
Other religious	NA	35.6	8 <i>0</i> .7	60.9	19.1	11.6
Nonsectarian	NA	17.6	86.0	76.3	28.3	5.6

A "great deal of influence" was defined as 5 or 6, on a scale of 1 to 6.

NOTE: Details may not add to totals due to rounding or cell suppression.

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

<sup>&</sup>lt;sup>2</sup> The Private School Administrator Questionnaire did not include the State Department of Education as a possible response.

<sup>&</sup>lt;sup>3</sup> Calculation of the frequency of influential librarians excluded schools without a librarian.

### figure 4

The original contained a bar chart with the following information:

Figure 4.- Percentage of principals reporting group having a great deal of influence over establishing curriculum, by public and private schools: 1990-1991

#### Public Schools:

61.3% of states have influence 46.0% of boards have influence 49.1% of principals have influence 51.2% of teachers have influence 13.9% of librarians have influence 7.1% of parents have influence

#### Private Schools:

26.2% of boards have influence 85.3% of principals have influence 70.0% of teachers have influence 28.6% of librarians have influence 9.9% of parents have influence

Table 18.—Percentage of public school principals reporting group having a great deal of influence over establishing curriculum, by state: 1990-91

	State department of education	School or governing board	Princip al	Teacher S	Librarians/ media specialists²	Parent associatio n
TOTAL PUBLIC	61.3	46.0	49.1	51.2	13.9	7.1
Alabama	75.5	51.5	43.1	36.7	14.2	8.7
Alaska	21.8	45.1	54.1	58.4	15.8	12.7
Arizona	<i>5</i> 7.7	53.5	45.5	50.1	12.4	8.7
Arkansas	8 <i>0</i> .3	41.7	54.4	46.7	18.1	6.0
California	7 <i>5.</i> 3	50.5	<i>58.0</i>	59.4	11.1	8 <i>.5</i>
Colorado	15.0	57.6	62.9	<i>65</i> .8	17.1	9.4
Connecticut	59.0	53.3	51.9	<i>55.</i> 7	10.4	4.9
Delaware	40.0	33. <i>5</i>	49.6	52.1	9.1	3.6
Dist. of Columbia	23.0	73.6	40.7	30.9	15.4	15.9
Florida	71.1	64.3	33.3	3 <i>5</i> .2	14.1	13.0
Georgia	83.2	44.3	27.8	29.3	8.4	5.4
Hawaii	86.4	77.3	<i>58.5</i>	52.8	28.0	17.3
Idaho	51.4	44.8	54.2	66.5	10.8	6.3
Illinois	46.6	42.8	51.8	57.9	12.4	7.8
Indiana	69.0	40.4	49.0	53.5	12.5	5.7
Iowa	58.1	32.9	51.2	60.6	14.4	3.1
Kansas	26.1	47.8	55.7	59.9	18.1	7.2
Kentucky	69.2	36.4	40.6	47.9	19.2	8.1
Louisiana	84.8	<i>5</i> 4.7	23.2	11.4	6.2	4.6
Maine	34.4	39.7	57.3	66.9	14.0	10.6
Maryland	61.7	71.5	30.5	27.4	11.4	8.1
Massachusetts	17.0	49.8	55.5	60.6	14.9	5.1
Michigan	43.3	<i>53.0</i>	56.6	61.5	16.4	10.5
Minnesota	49.6	45.2	55.3	<i>65</i> .8	15.7	12.4
Mississippi	79.0	46.3	44.8	41.6	14.9	10.0
Missouri	63.3	43.9	57.5	55.2	11.8	3.8
Montana	<i>5</i> 2.8	46.4	55.6	63.9	17.3	5.4
Nebraska	37.1	46.7	66.9	69.9	17.6	7.1
Nevada	36.7	60.7	46.0	<i>5</i> 3.2	8.8	6.2
New Hampshire	22.4	40.1	67.1	72.1	14.2	2.4
New Jersey	54.2	55.9	53.7	52.0	18.5	7.6
New Mexico	62.0	35.5	49.8	54.2	20.0	6.8
New York	72.1	28.9	49.4	47.2	14.9	4.3
North Carolina	76.8	45.2	46.8	40.7	17.7	9.3
North Dakota	57.9	44.4	65.5	59.9	17.4	7.9
Ohio	65.9	41.8	44.3	48.2	2.7	6.9
Oklahoma	74.1	44.4	50.0	43.9	17.8	6.3

Oregon	63.1	43.7	40.0	54.2	7.4	4.9
Pennsylvania	55.1	42.3	54.1	61.8	16.7	2.9
Rhode Island	70.7	51.3		48.2	9.4	2.8
South Carolina	75.4	42.4		41.3	18.9	10.0
South Dakota	45.5	36.5	68.0	60.8	18.1	4.8
Tennessee	81.8	47.9	40.1	28.2	12.7	6.4
Texas	79.6	40.4	45.6	43.8	11.6	6.3
Utah	65.4	44.6	41.4	48.2	4.4	5.2
Vermont	27.3	26.2	64.7	85.1	29.8	2.9
Virginia	56.9	61.8	40.0	40.6	17.0	10.9
Washington	31.5	40.6	48.7	64.0	20.2	6.6
West Virginia	79.4	41.5	23.4	23.0	5.6	8.0
Wisconsin	64.2	43.2	55.4	60.7	14.3	1.7
Wyoming	18.5	52.5	60.7	83.1	25.2	6.9

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

A "great deal of influence" was defined as 5 or 6, on a scale of 1 to 6. Calculation of the frequency of influential librarians excluded schools without a librarian.

Table 19.—Percentage of teachers who worked part-time as librarians, who had minor, major, or degree in library science, and whose main activity immediately prior to teaching was working as a librarian/media specialist, by selected school characteristics: 1990-91

	Percent part-time librarians	Percent with minor, major, or degree in library science	Percent previously worked as librarians
TOTAL	0.06	0.6	0.1
PUBLIC	0.04	0.6	0.1
PRIVATE	0.2	0.5	0.2

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

Table 20.—Percentage of principals who had minor, major, or degree in library science: 1990-91

	Percent with minor, major, or degree in library science
TOTAL	0.6
PUBLIC	0.6
PRIVATE	0.5

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

### Conclusion

Data from SASS indicate that most elementary and secondary schools in the United States had library media centers in 1990-91. Moreover, they show that most students had some access to a school library media center. The data also indicate, however, that over a quarter of schools with library media centers did not employ a professional librarian, even part-time.

These findings are consistent with those presented in a previous NCES report on school library media centers—Statistics of Public and Private School Library Media Centers, 1985-86, published in 1987. This earlier report summarized the results of the 1985 Survey of Public and Private School Libraries and Media Centers. Not only do school library media centers continue to be understaffed, according to criteria set by the AASL (one full-time librarian and one full-time aide), but there is also some indication that since the late 1980s, increases in staffing levels have not kept pace with increases in enrollment, at least in public schools.

However, distinct differences were found among different types of schools in 1990-91 with regard to having a library and in library staffing levels. Smaller schools, combined schools, and elementary schools especially were less likely to have a library media center and if they had a center, less likely to employ a librarian. Notably, schools with larger proportions of students eligible for federal reduced-price or free lunches—a common indicator of poverty—were only slightly less likely to have library media centers and adequate center staffing levels.

According to teachers, the 1990-91 data also indicate that school librarians did not have the professional role advocated by numerous library

researchers. Only a minority of teachers strongly agreed that they collaborated with the librarians at their schools, and only a minority of school principals reported that librarians had a great deal of influence over school curricular decisions.

Although this report has provided an overview of several key issues concerned with school library media centers—availability, staffing, and role—it has not dealt with a number of other important issues, such as the background, training, and attitudes of school librarians, and the expenditures, materials, equipment, and services of school library media centers. Data on these topics have been obtained by the 1993-94 SASS and will be the subject of an upcoming NCES report.

### Technical Notes

## Sample Selection<sup>11</sup>

Schools were the primary sampling unit for SASS. Each selected school received a school questionnaire and an administrator questionnaire. Next, a sample of teachers was selected within each school, and each teacher received a teacher questionnaire. A "Teacher Demand and Shortage" (TDS) questionnaire was sent to the local education agency (LEA) associated with each selected public school. Also, an additional sample of public school districts not associated with the sampled schools received the TDS questionnaire. The private school questionnaire included TDS questions for the school. The sample for the SASS conducted during the 1990–1991 school year included 12,856 schools and administrators; 62,217 teachers; and 5,515 local education agencies.

SASS was designed to provide: national estimates for public and private schools; state estimates for public schools; state elementary, state secondary, and national combined estimates for public schools; association and grade-level estimates for private schools; estimates of change from 1988 to 1991 in school-level characteristics; and national estimates for schools with greater than 25 percent Indian enrollment. The teacher survey was designed to support comparisons between new and experienced teachers. Comparisons between bilingual and nonbilingual teachers are possible at the national level.

<sup>&</sup>lt;sup>11</sup> For a detailed description of the sample design of the 1990-91 SASS, see Kaufman and Huang 1993.

Selection of schools. The public school sample of 9,586 schools was selected primarily from the 1988-89 school year Common Core of Data (CCD) file. The CCD is based on survey data collected annually by NCES from all state education agencies and is believed to be the most complete list of public schools available. The frame includes regular public schools, Department of Defense operated military base schools, and nonregular schools such as special education, vocational, and alternative schools.

The private school sample of 3,270 schools was selected primarily from the 1989-90 Private School Survey (PSS) list frame, which was based on the 1989 Quality of Education Data (QED) private school list, updated with 20 private school association lists provided to the Census Bureau in the spring of 1989.

To improve private school coverage, an area frame of schools was developed consisting of 123 sampling units (PSUs) selected with probability proportional to the square root of the PSU population. Schools for the private school sample were also selected from the PSU area frame.

Within each PSU, a telephone search was conducted to find all in-scope private schools. Sources included yellow pages, religious institutions (except for Roman Catholic religious institutions, because each Catholic diocese is contacted annually when the QED list is updated), local education agencies, chambers of commerce, and local government offices. PSU schools not on the QED file nor on the lists from private school associations were eligible to be selected for the area sample.

The private school sample was designed to support estimates at the national and association level. The association groups for private schools were determined by the school's association or affiliation group listed on the 1988-89 Private Schools Survey (the frame).

Selection of LEAs. All LEAs that had at least one school selected for the school sample were included in the LEA sample for the TDS Survey. Each Bureau of Indian Affairs and Department of Defense school was defined to be an LEA. Some LEAs did not have schools, but hired teachers who taught in schools in other LEAs. To ensure representation of these teachers, a sample of 135 LEAs without eligible schools was selected. Only 14 of the 135 were actually in scope (that is, were an operating public school agency that reported hiring teachers). All LEAs in Delaware, Nevada, and West Virginia were included to reduce high standard errors in these states. The total LEA sample was 5,515.

Selection of teachers. All 56,051 public and 9,166 private school teachers in the teacher samples were selected from the sampled public and private schools. The average number of teachers selected per school was 3.49, 6.98, and 5.23 teachers for public elementary, secondary, and combined schools, respectively, and 3.78, 4.72, and 2.83 teachers for private elementary, secondary, and combined schools, respectively.

### Data Collection

The data were collected for NCES by the U.S. Bureau of the Census.

Questionnaires were mailed to school districts and administrators in December 1990 and to schools and teachers in January and February 1991. Six weeks

later, a second questionnaire was sent to each nonrespondent. A telephone follow-up of nonrespondents was conducted between March and June.

# Weighting

Weights of the sample units were developed to produce national and state estimates for public schools, teachers, administrators, and LEAs. The private-sector data were weighted to produce national estimates and affiliation group estimates. The basic weights were the inverse of the probability of selection and were adjusted for nonresponse and also to adjust the sample totals (based on responding, nonresponding, and out of scope cases) to the frame totals in order to reduce sampling variability.

### Response Rates and Imputation

The final weighted questionnaire response rates were as follows:

	Public	Private
Teacher demand and shortage	93.5	
dministrator	96.7	90.0
chool	95.3	83.9
eacher*	90.3	84.3

<sup>----</sup> not applicable

Values were imputed for items with missing data by: (1) using data from other items on the questionnaire or a related component of the SASS (a school record to impute district data, for example); (2) extracting data from the sample file, such as the CCD or PSS; or (3) extracting data from a respondent with similar characteristics.<sup>12</sup>

### Statistical Procedures

<sup>\*</sup>The response rates for public school teachers do not include the 5 percent of the public schools that did not provide teacher lists, and the response rates for private school teachers do not include the 11 percent of the private schools that did not provide teacher lists. The effective response rate for public schools was 85.8 percent and for private schools, 75.9 percent.

 $<sup>^{12}</sup>$  For a detailed description of the imputation procedures in the 1990-91 SASS, see Kaufman and Huang 1993, 60-87.

The data presented in this report are based on samples and, hence, are subject to sampling variability. In order to make proper inferences about the larger population which the samples represent, the accuracy of all statistics and estimates in this report were checked.

All comparisons discussed in the report have been tested for statistical significance using the student's t statistic at an alpha level of .05. Whenever comparisons are multiple, the Bonferroni procedure was used to adjust the alpha level for the t tests.

Standard errors were calculated for the estimates in the tables to indicate 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 error units below to 1.96 standard error units 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 effect of biases due to item nonresponse, measurement error, data processing error, or other possible systematic error.

Standard errors were estimated using a balanced repeated replications procedure. Because this procedure incorporates the design features of the complex sample survey, the standard errors are generally higher than those calculated under the assumptions of simple random sampling. Standard errors for selected tables are presented in the Appendix.

### Comments and More Information

We are interested in your reaction to the information presented here and to the content of the surveys used to produce the results. We welcome

your recommendations for improving our survey work. If you have suggestions or comments or want more information about this report, please contact:

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Post Secondary Education Statistics Division

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### References

American Association of School Librarians and Association of Educational Communications and Technology. 1988. *Information Power: Guidelines for School Library Media Programs.* Chicago, IL: American Library Association and Washington, DC: Association for Educational Communications and Technology.

Cahalan, M., Hernandez, E., and Williams, J. 1987. Statistics of Public and Private School Library Media Centers, 1985-G486. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

DeCandido, G. A. and Mahony, A. P. June 1992. "Overworked and Underbudgeted: Staff and Funds for School Library Media Centers 1992." School Library Journal, pp. 25-29.

Garland, K. Winter 1993. "An Analysis of School Library Media Center Statistics Collected by State Agencies and Individual Library Media Specialists" School Library Media Quarterly, pp. 106–110.

Kaufman, S. and Huang, H. 1993. 1991 Schools and Staffing Survey:

Sample Design and Estimation. NCES Technical Report 93-449.

Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Lance, K. C., Welborn, L., and Hamilton-Pennell, C. 1992. The Impact of School Library Media Centers on Academic Achievement. Denver, CO: Colorado Department of Education, State Library & Adult Education Office.

Loertscher, D. V. May 1993. "Objective: Achievement; Solution: School Libraries." School Library Journal, pp. 30-33.

Miller, M. L. and Shontz, M. October 1993. "Expenditures for Resources in School Library Media Centers, FY 1991-92." School Library Journal, pp. 26-36.

——. August 1991. "Expenditures for Resources in School Library Media Centers, FY 1989-90." School Library Journal, pp. 32-41.

——. June 1989. "Expenditures for Resources in School Library Media Centers, FY 1988-89." School Library Journal, pp. 31-40.

McCarthy, C. A. October 1993. "A Big Engine That Might: The School

Library Media Act." American Libraries, pp.

877-880.

National Center for Education Statistics. 1993. *Digest of Education*Statistics 1993. NCES 93-292. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Perritt, P. H. June 1992. "School Library Media Certification Requirements 1992 Update." School Library Journal, pp. 30-49.

Pickard, P. W. Winter 1993. "The Instructional Consultant Role of the School Library Media Specialist." School Library Media Quarterly.

Rogers, J. V. March 1993. "Real Information Power: Why We Need Statistical Data about School Library Media Centers." School Library Journal, pp. 113-117.

Sadowski, M. J. (Ed.) "Jobs in Jeopardy as Schools Look for Cheap Alternatives." School Library Journal, pp. 10-11.

Schon, I., Helmstadter, G. C., and Robinson, D. Summer 1991. "The Role of School Library Media Specialists." *School Library Media Quarterly*, pp. 228–233.

Simon, P. January 28, 1993. Congressional Record, pp. S924-S927.

Stripling, B. K. 1992. Libraries for the National Education Goals. Syracuse, NY: ERIC Clearinghouse on Information Resources, Syracuse University.

# APPENDIX

STANDARD ERRORS FOR SELECTED TABLES

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Table 1A.—Standard errors for number of schools and pupils, average enrollment, average minority enrollment, and percentage distribution of school community type, by selected school characteristics: 1990-91

	Total schools	Total pupils	Average enrollmen t	Average % minority enrollmen t	% schools rural/ small town	% schools urban fringe/ large town	% schools central city
TOTAL	484	381,569	4	0.3	0.4	0.4	0.3
PUBLIC	197	362,553	5	0.3	0.3	0.4	0.3
School level							
Elementary	232	234,339	4	0.5	0.4	0.5	0.5
Secondary	155	285,723	14	0.5	0.5	0.6	0.5
Combined	159	75,933	13	1.0	2.1	1.6	1.5
School size							
Less than 300	482	104,378	2	0.6	1.0	0.8	0.9
300-500	597	272,114	2	0.7	0.8	0.9	0.8
600 or more	502	464,608	8	0.7	1.0	1.0	0.8
Free lunch eligibility							
Less than 20%	522	339,611	9	0.4	0.9	1.0	0.8
20-49%	682	38 <i>5,</i> 072	8	0.5	0.9	0.8	0.8
50% or more	470	238,276	7	1.0	1.1	1.0	1.1
PRIVATE	430	84,806	4	0.9	1.5	1.2	1.2
School level							
Elementary	365	58,046	4	1.0	1.7	1.6	1.4
Secondary	119	37,778	17	1.5	2.5	2.1	2.7
Combined	238	60,760	8	1.7	2.7	1.7	2.2
School size							
Less than 300	498	58,652	2	1.0	1.8	1.4	1.4
300-500	213	86,847	4	2.0	1.7	2.6	2.6
600 or more	87		18	2.2	2.6	4.1	3.9
		70,984					
Orientation							
Catholic	102	64,290	7	1.3	1.5	1.9	1.3
Other religion	374	65,821	5	1.3	2.6	1.9	1.8
Nonsectarian	249	34,38 <i>5</i>	8	1.6	3.3	2.5	2.7

NOTE: Details may not add to totals due to rounding or cell suppression.  SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey:	
1990-91 (School Questionnaire).	

Table 6A.—Standard errors for number and percentage of schools with library media centers, and of pupils in schools with library media centers, by selected school characteristics: 1990-91

		Schools with library media centers		nools with library ia centers
	Number	Percent	Number	Percent
TOTAL	531	0.3	375,772	0.2
PUBLIC	314	0.3	357,522	0.2
School level				
Elementary	284	0.4	240,832	0.2
Secondary	183	0.7	279,921	0.2
Combined	158	1.5	78,760	1.0
School size				
Less than 300	479	0.9	97,981	0.6
300-599	589	0.3	268,969	0.3
600 or more	497	0.3	454,497	0.3
Free lunch eligibility				
Less than 20%	<i>5</i> 47	0.6	337,448	0.2
20%-49%	670	0.4	386,087	0.2
50% or more	460	0.6	238,298	0.6
PRIVATE	382	0.9	88,154	0.4
School level				
Elementary	34 <i>5</i>	1.1	57,593	0.6
Secondary	96	1.7	37,3 <i>5</i> 6	0.3
Combined	255	2.0	61,715	1.0
School size				
Less than 300	440	1.1	58,605	0.8
300-599	213	0.6	86,873	0.5
600 or more	87	0.8	71,038	0.7
Orientation				
Catholic	133	0.8	66,8 <i>5</i> 8	0.5

Other religion	355	1.8	68,342	1.1
Nonsectarian	228	2.6	33,231	1.4

NOTE: Details may not add to totals due to rounding or cell suppression.

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

Table 7A.— Standard errors for number and percentage of public schools with library media centers, by state: 1990-91

	Schools with library	Schools with library media centers		rary media centers
	Number	Percent	Number	Percent
TOTAL PUBLIC	31	0.3	357,522	0.2
Alabama	22	0.0	<i>25,</i> 827	0.0
Alaska	11	1.3	7,187	0.2
Arizona	29	3.1	30,455	0.2
Arkansas	10	0.0	17,242	0.0
California	119	1.5	192,516	0.3
Colorado	21	0.9	23,108	0.3
Connecticut	22	1.8	21,246	1.2
Delaware	6	4.0	6,699	0.4
Dist. of Columbia	7	0.0	3,420	0.0
Florida	44	1.9	78,442	0.3
Georgia	38	0.4	48,552	0.0
Hawaii	2	1.1	5,648	2.0
Idaho	15	2.1	11,911	1.8
Illinois	94	1.7	89,021	1.8
Indiana	36	1.4	30,964	0.5
Iowa	56	1.4	24,405	0.4
Kansas	20	1.3	21,897	0.4
Kentucky	50	3.1	33,669	0.5
Louisiana	38	2.0	31,895	1.0
Maine	23	3.0	12,087	1.2
Maryland	43	1.6	34,490	1.1
Massachusetts	37	2.1	42,328	1.6
Michigan	116	3.8	69,133	1.6
Minnesota	50	2.0	38,149	0.3
Mississippi	19	1.1	18,158	0.8
Missouri	42	1.5	32,597	1.0
Montana	33	3.2	11,227	0.7
Nebraska	60	<i>3.5</i>	16,111	0.6
Nevada	9	2.7	10,070	0.3
New Hampshire	21	4.3	8,509	1.3
New Jersey	34	1.6	43,489	1.2
New Mexico	22	2.7	14,517	0.6
New York	50	1.1	89,115	1.9
North Carolina	26	0.8	38,003	0.1
North Dakota	21	3.0	7,482	2.1
Ohio	63	0.5	74,947	0.4
Oklahoma	40	1.7	31,029	1.0

Oregon	10	2.5	19,881	0.2
Pennsylvania	39	0.6	64,527	0.5
Rhode Island	9	2.8	6,344	1.0
South Carolina	13	0.6	26,977	0.7
South Dakota	31	2.7	9,606	1.6
Tennessee	42	2.0	40,594	0.7
Texas	47	0.2	94,198	0.0
Utah	18	2.3	25,068	0.3
Vermont	14	4.1	4,199	0.7
Virginia	9	0.4	43,909	0.1
Washington	38	1.6	36,02 <i>5</i>	0.9
West Virginia	38	3.6	17,621	2.8
Wisconsin	64	1.3	41,879	0.7
Wyoming	14	0.0	7,078	0.0

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

Table 9A.—Standard errors for number and percentage of schools with library media centers, but no library staff, and number and percentage of pupils in such schools, by selected school characteristics: 1990-91

	Schools libra		Pupils in without I		Schools v librarian		Pupils in sch librarian	
	Number	Percen	Number	Percen	Number	Percen	Number	Percent
TOTAL	618	0.6	219,17	0.5	554	0.5	130,978	0.3
PUBLIC	423	0.5	215,60	0.5	320	0.4	116,672	0.3
School level								
Elementary	403	0.7	197,00	0.8	307	0.6	111,094	0.4
Secondary	142	0.7	0	0.5	113	0.6	37,206	0.3
Combined	88	2.4	69,052 21 140	1.7	68	2.1	11,254	1.0
School size								
Less than 300	339	1.4	59,292	1.3	271	1.1	37,310	0.9
300-599	334	0.9	146,23	0.9	180	0.5	78,001	0.5
600 or more	212	0.9	2 147 02	0.8	124	0.5	92,842	0.4
Free lunch eligibility								
Less than 20%	299	1.0	141,65	0.8	176	0.6	59,395	0.4
20%-49%	297	0.9	9	0.8	188	0.6	72,801	0.5
50% or more	280	1.4	126,54 1	1.4	169	0.9	73,534	0.9
PRIVATE	369	1.3	52,336	1.2	360	1.2	46,206	1.1
School level								
Elementary	333	1.5	48,584	1.9	304	1.5	40,284	1.7
Secondary	62	2.4	9,655	1.1	<i>5</i> 8	2.3	8,149	0.9
Combined	249	2.8	24,586	2.1	243	2.9	22,3 <i>05</i>	2.0
School size								
Less than 300	365	1.5	35,572	1.8	364	1.4	31,030	1.4
300-599	115	2.8	45,730	2.7	97	2.5	37,27 <i>5</i>	2.4
600 or more	23	1.9	15,029	1.5	22	1.9	14,510	1.5
Orientation								
Catholic	182	2.0	44,146	1.8	166	1.9	40,504	1.7
Other religion	328	1.8	34,222	2.0	343	2.2	34,049	2.0
Nonsectarian	190	3.4	15,808	2.8	189	3.4	14,657	2.7

NOTE: Details may not add to totals due to rounding or cell suppression.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

Table 11A.— Standard errors for number and percentage of schools with library media centers without a full-time library staff and number and percentage of students in such schools, by selected school characteristics: 1990-91

Schools without full-time Pupils in schools without librarian and without full-time librarian and without full-time aide full-time aide Number Percent Number Percent TOTAL 632 0.6 224.247 0.5 **PUBLIC** 518 0.6 217,192 0.5 School level Elementary 495 0.9 207,752 0.8 Secondary 47,903 0.4 139 0.7 Combined 73 2.2 15,984 1.4 School size Less than 300 81,049 1.2 1.4 418 300-599 1.0 165,619 1.0 373 146,793 600 or more 188 0.8 0.6 Free lunch eligibility Less than 20% 150,637 0.9 356 1.1 20%-49% 404 1.1 135,980 0.9 50% or more 280 1.3 141,369 1.6 **PRIVATE** 1.2 56,004 1.4 368 School level Elementary 322 1.3 47,986 1.8 Secondary 72 2.7 13,475 1.5 Combined 247 2.4 31,931 2.3 School size Less than 300 43,000 382 1.3 1.8 300-599 143 2.9 56,000 2.9 600 or more 34 2.8 23,039 2.3 Orientation Catholic 186 2.0 45,509 1.9 Other religion 42,085 320 1.4 2.0 Nonsectarian

NOTE: Details may not add to totals due to rounding or cell suppression.

190

2.5

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Table 13A.— Standard errors for school library media center staffing levels, by selected school characteristics: 1990-91

	Average librarians per school	Average library aides per school	Average school pupil/librarian ratio	Average school teacher/librarian ratio
TOTAL	0.0	0.0	5.0	0.3
PUBLIC	0.0	0.0	5.5	0.3
School level				
Elementary	0.0	0.0	6.2	0.3
Secondary	0.0	0.0	10.4	0.5
Combined	0.0	0.0	13.1	O.8
School size				
Less than 300	0.0	0.0	4.6	0.3
300-599	0.0	0.0	5.6	0.3
600 or more	0.0	0.0	7.7	0.4
Free lunch				
eligibility	0.0	0.0	7.4	0.4
Less than 20%	0.0	0.0	9.2	0.5
20%-49%	0.0	0.0	9.5	0.5
50% or more				
PRIVATE	0.0	0.0	7.6	0.4
School level				
Elementary	0.0	0.1	9.4	0.5
Secondary	0.0	0.0	14.3	0.6
Combined	0.1	0.0	15.3	1.0
School size				
Less than 300	0.0	0.0	7.5	0.5
300-599	0.0	0.1	12.6	0.8
600 or more	0.1	0.1	18.6	1.0
Orientation				

Catholic	0.0	0.1	10.5	0.5
Other religion	0.0	0.0	13.1	0.8
Nonsectarian	0.1	0.0	11.6	1.2

The number of librarians per school was calculated by summing the total number of full-time librarians and one-half of the total number of part-time librarians. The number of aides per school was calculated by summing the total number of full-time aides and one-half of the total number of part-time aides. Calculation of the school averages of librarians and aides excluded schools without a library media center or without any employed library staff, that is, without at least a part-time librarian or a part-time aide. Calculation of the school ratios excluded schools without at least a part-time librarian.

NOTE: Details may not add to totals due to rounding or cell suppression.

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

Table 14A.— Standard errors for public school library media center staffing levels, by state: 1990-91

	Average librarians per school	Average library aides per school	Pupil/librarian ratio	Teacher/librarian ratio
TOTAL PUBLIC	0.0	0.0	5.5	0.3
Alabama	0.0	0.0	14.4	0.8
Alaska	0.0	0.0	28.8	1.4
Arizona	0.0	0.1	21.0	1.0
Arkansas	0.0	0.0	17.8	0.8
California	0.0	0.1	41.9	1.8
Colorado	0.0	0.1	18.3	1.2
Connecticut	0.0	0.1	24.1	1.6
Delaware	0.0	0.1	30.3	1.9
Dist. of Columbia	0.0	0.0	20.2	1.5
Florida	0.0	0.0	28.3	1.6
Georgia	0.0	0.1	20.1	1.1
Hawaii	0.0	0.0	15.1	0.9
Idaho	0.0	0.0	30.8	1.6
Illinois	0.1	0.0	24.7	1.6
Indiana	0.0	0.0	25.3	1.3
Iowa	0.0	0.1	23.4	1.7
Kansas	0.1	0.1	18.6	1.1
Kentucky	0.0	0.1	16.1	0.8
Louisiana	0.0	0.0	23.7	1.1
Maine	0.0	0.1	23.9	1.5
Maryland	0.0	0.0	24.3	1.6
Massachusetts	0.0	0.1	27.9	2.8
Michigan	0.0	0.1	28.3	1.4
Minnesota	0.0	0.1	22.2	1.2
Mississippi	0.0	0.0	22.0	1.1
Missouri	0.0	0.1	22.1	1.3
Montana	0.0	0.0	23.2	1.6
Nebraska	0.0	0.1	27.8	1.6
Nevada	0.0	0.1	46.5	2.4
New Hampshire	0.0	0.1	21.2	1.6
New Jersey	0.0	0.1	21.9	1.9
New Mexico	0.0	0.1	36.2	2.0
New York	0.1	0.1	23.1	1.5
North Carolina	0.0	0.0	14.9	0.8
North Dakota	0.0	0.0	25.6	1.2
Ohio	0.0	0.1	27.3	1.6
Oklahoma	0.0	0.0	21.3	1.1
Oregon	0.0	0.0	19.2	1.0
Pennsylvania	0.0	0.0	23.7	1.3

Rhode Island	0.0	0.0	16.8	1.2
South Carolina	0.0	0.1	20.2	1.0
South Dakota	0.1	0.0	23.4	1.4
Tennessee	0.0	0.0	20.9	1.1
Texas	0.0	0.1	14.5	0.9
Utah	0.0	0.0	44.0	1.5
Vermont	0.0	0.1	15.1	1.1
Virginia	0.0	0.0	20.7	1.1
Washington	0.0	0.0	22.0	1.0
West Virginia	0.0	0.0	22.3	1.3
Wisconsin	0.0	0.0	21.7	1.4
Wyoming	0.0	0.1	28.2	2.1

The number of librarians per school was calculated by summing the total number of full-time librarians and one-half of the total number of part-time librarians. The number of aides per school was calculated by summing the total number of full-time aides and one-half of the total number of part-time aides. Calculation of the school averages of librarians and aides excluded schools without a library media center or without any employed library staff, that is, without at least a part-time librarian or a part-time aide. Calculation of the school ratios excluded schools without at least a part-time librarian. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

Table 17A.— Standard errors for percentage of principals reporting group having a great deal of influence over establishing curriculum, by selected school characteristics: 1990-91

	State department of education	School or governing board	Principal	Teacher s	Librarians/ media specialists³	Parent association
TOTAL	0.7	0.6	0.6	0.6	0.6	0.4
PUBLIC	0.7	0.7	0.7	0.7	0.6	0.4
School level						
Elementary	1.0	0.9	1.0	0.9	0.9	0.6
Secondary	1.0	1.0	1.0	1.0	0.6	0.4
Combined	2.3	2.2	2.8	2.6	1.7	0.9
School size						
Less than 300	1.3	1.4	1.5	1.4	1.1	0.8
300-599	1.2	1.2	1.1	1.2	1.0	0.8
600 or more	1.1	1.2	1.2	1.0	1.0	0.7
Free lunch eligibility						
Less than 20%	1.2	1.1	1.1	1.4	0.9	0.7
20%-49%	1.1	1.2	1.2	1.2	0.9	0.7
50% or more	1.6	1.5	1.6	1.5	1.0	0.8
PRIVATE <sup>2</sup>		1.3	0.9	1.4	1.8	1.0
School level						
Elementary	0.0	1.8	1.1	1.8	2.6	1.2
Secondary	0.0	2.1	2.2	2.5	2.2	1.4
Combined	0.0	2.5	1.7	3.1	3.2	2.1
School size						
Less than 300	0.0	1.6	1.1	1.8	2.5	1.2
300-599	0.0	2.4	1.7	2.4	2.5	1.3
600 or more	0.0	2.4	3.3	4.0	3.4	1.7
Orientation						
Catholic	0.0	1.8	1.2	1.6	2.6	1.3
Other religion	0.0	2.5	1.6	2.3	3.1	1.8
Nonsectarian	0.0	2.3	2.0	3.5	4.0	1.0

- <sup>1</sup> A "great deal of influence" was defined as 5 or 6, on a scale of 1 to 6.
- <sup>2</sup> The Private School Administrator Questionnaire did not include the State Department of Education as a possible response.
- <sup>3</sup> Calculation of the frequency of influential librarians excluded schools without a librarian.

NOTE: Details may not add to totals due to rounding or cell suppression.

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