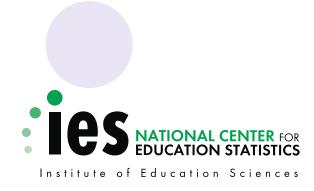
# Characteristics of Public Elementary and Secondary School Library Media Centers in the United States:

Results From the 2011–12 Schools and Staffing Survey

First Look



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August 2013

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#### Introduction

This report presents selected findings from the Public School Library Media Center Data File<sup>1</sup> of the 2011–12 Schools and Staffing Survey (SASS). SASS is a nationally representative sample survey of public<sup>2</sup> and private K–12 schools, principals, and teachers in the 50 states and the District of Columbia. School districts associated with public schools and library media centers in public schools are also part of SASS. Developed by the National Center for Education Statistics (NCES) of the Institute of Education Sciences within the U.S. Department of Education and conducted by the U.S. Census Bureau, SASS was first conducted in school year 1987–88. Since then, SASS has been conducted six times: in school years 1990–91, 1993–94, 1999–2000, 2003–04, 2007–08, and, most recently, 2011–12.

The purpose of SASS is to collect information that can provide a detailed picture of U.S. elementary and secondary schools and their staff. This information is collected through the following surveys: district, school, principal, teacher, and library media center. Information from all the surveys can be linked. For more information about surveys and data files, see appendix C. The SASS questionnaires can be found at <a href="http://nces.ed.gov/surveys/sass/questionnaire.asp">http://nces.ed.gov/surveys/sass/questionnaire.asp</a>.

The 2011–12 SASS uses a school-based sample of public and private schools. Because SASS uses a school-based sample design, districts, principals, and library media centers associated with public schools were included, as were principals associated with private schools. Teachers associated with a selected school were sampled from a teacher list provided by the school or district. The selected samples include about 11,000 traditional and charter public schools, public school principals, and public school library media centers; 5,800 public school districts; 51,100 public school teachers; 3,000 private schools and their principals; and 7,100 private school teachers. The samples were drawn to support estimates by geography, grade span, and charter school status for public schools, and by geography, grade span, and affiliation group for private schools for a wide range of topics. The reader is referred to the *Survey Documentation for the 2011–12 Schools and Staffing Survey* (Chambers et al. forthcoming) for details about these estimation domains and their precision criteria.

The data were collected via mailed questionnaires with telephone and in-person field follow-up. The first questionnaires were mailed in October 2011, and data collection ended in June 2012. The weighted unit response rates varied from 65 percent for private school principals to 81 percent for public school districts. For information about response rates, bias analysis results, methodology, and design of the 2011–12 SASS, please see the technical notes of this report in appendix B or the *Survey Documentation* for the 2011–12 Schools and Staffing Survey (Chambers et al. forthcoming).

The purpose of this First Look is to introduce new data through the presentation of tables containing descriptive information. Selected findings chosen for this report demonstrate the range of information available on the 2011–12 SASS Public School Library Media Center Data File. The selected findings do not represent a complete review of all observed differences in the data and are not meant to emphasize any particular issue. This First Look report highlights findings from the SASS public school library media center survey. Findings from the district, school, principal, and teacher data files will be presented in four companion First Look reports:

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<sup>&</sup>lt;sup>1</sup> A library media center is an organized collection of printed and/or audiovisual and/or computer resources that is administered as a unit, is located in a designated place or places, and makes resources and services available to students, teachers, and administrators. A library media center may be called a school library, media center, resource center, information center, instructional materials center, learning resource center, or any other similar name.

<sup>&</sup>lt;sup>2</sup> Public schools include traditional public and charter schools.

- Characteristics of Public School Districts in the United States: Results From the 2011–12 Schools and Staffing Survey (NCES 2013-311);
- Characteristics of Public and Private Elementary and Secondary Schools in the United States: Results From the 2011–12 Schools and Staffing Survey (NCES 2013-312);
- Characteristics of Public and Private Elementary and Secondary School Principals in the United States: Results From the 2011–12 Schools and Staffing Survey (NCES 2013-313); and
- Characteristics of Public and Private Elementary and Secondary School Teachers in the United States: Results From the 2011–12 Schools and Staffing Survey (NCES 2013-314).

The tables in this report contain counts and percentages demonstrating bivariate relationships. All of the results have been weighted to reflect the sample design and to account for nonresponse and other adjustments. Comparisons drawn in the selected findings have been tested for statistical significance at the .05 level using Student's *t* statistics to ensure that the differences are larger than those that might be expected due to sampling variation. No adjustments were made for multiple comparisons. Many of the variables examined are related to one another, and complex interactions and relationships have not been explored. Statistical Analysis Software (SAS 9.3) and SUDAAN (10.0) were used to compute the statistics for this report. Tables of standard errors are provided in appendix A. Detailed information about the survey methodology is provided in appendix B. Appendix C contains a description of the survey data files, and appendix D contains a description of the variables used in this report.

More information about the SASS can be found at http://nces.ed.gov/surveys/sass.

## **Selected Findings**

- During the 2011–12 school year, 79,000 of the 85,500 traditional public schools in the United States reported having a library media center, while 2,200 of the 4,500 public charter schools reported having one (table 1).
- About two-thirds (67 percent) of library media centers in traditional public schools had full-time, paid, state-certified library media center specialists, while one-third (33 percent) of those in public charter schools had this type of staff (table 2). In traditional public schools, 20 percent of library media centers did not have any paid, state-certified library media center specialists (full or part time), and 56 percent of those in public charter schools did not have this type of staff.
- The percentage of paid, professional library media center staff<sup>3</sup> with a master's degree in a library-related major field was 52 percent for all public schools, 52 percent in traditional public schools, and 27 percent in public charter schools (table 3).
- During the 2010–11 school year, public school library media centers spent an average of \$9,340 for all information resources<sup>4</sup> (table 4). This includes an average of \$6,010 for the purchase of books and \$490 for the purchase of audio/video materials.<sup>5</sup>
- The number of holdings in public library media centers per 100 students was 2,188 for book titles and 81 for audio/video materials at the end of the 2010–11 school year (table 5).
- Public school library media centers provided technological services, including automated catalog(s) for student and/or staff use (88 percent), laptops for staff use outside the library media center (54 percent), laptops for student use outside the library media center (40 percent), and technology to assist students and/or staff with disabilities<sup>6</sup> (31 percent) (table 6).
- The percentage of library media centers with computer workstations for student and/or staff use was 97 percent in traditional public schools and 88 percent in public charter schools (table 7). Of the library media center computer workstations, 95 percent had internet access. Among all public school library media centers, 86 percent provided student access to online, licensed databases.<sup>7</sup>
- For classes and other activities, 61 percent of public school library media centers had both flexible scheduling (available as needed) and regular scheduling (previously specified times), while 19 percent had only flexible scheduling, and 19 percent had only regular scheduling (table 8). The percentage of public school library media centers that were available for independent student use was 89 percent during regular school hours, 57 percent before school, and 54 percent after school.
- About one-fourth (24 percent) of public school library media centers were open to community members who do not attend the school and do not have children who attend the school (table 9). Of these, 61 percent had workstations that community members could use to access the Internet.
- Public school library media centers supported programs that encourage students to read (65 percent) and family literacy activities (36 percent) (table 10). Per 100 students in the school, there was an average of 100 student visits to the library media center and 110 books or other materials checked out during a full week of school.

<sup>&</sup>lt;sup>3</sup> Paid professional library media center staff includes state-certified library media center specialists and other professional staff with paid full-time or part-time positions in the library media center. Library aides and clerical staff are excluded.

<sup>&</sup>lt;sup>4</sup> Information resources include such items as books, periodicals, audio/visual materials, database licensing, and software. They do not include salaries, computer hardware, or audio/visual equipment.

<sup>&</sup>lt;sup>5</sup> Includes all copies of any tape, CD, DVD, or Blu-ray.

<sup>&</sup>lt;sup>6</sup> Includes TDD and specially equipped workstations.

<sup>&</sup>lt;sup>7</sup> Online, licensed databases are supplied by commercial vendors via the Internet. They may include indexes, abstracts, full-text article databases, or full-text reference sources, such as encyclopedias, almanacs, biographical sources, and other quick fact-finding sources.

### References

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## **Estimate Tables**

Table 1. Number of public schools that reported having library media centers, by selected school characteristics: 2011–12

Selected school characteristic	Total number of schools <sup>1</sup>	Number of schools with a library media center <sup>2</sup>
All public schools	90,000	81,200
School classification		
Traditional public	85,500	79,000
Charter school	4,500	2,200
Community type		
City	23,600	20,200
Suburban	24,300	22,500
Town	12,200	11,000
Rural	29,900	27,500
School level		
Primary	50,300	47,400
Middle	14,000	13,400
High	18,400	15,400
Combined	7,400	5,000
Student enrollment		
Less than 100	6,800	3,600
100–199	6,500	5,100
200–499	37,100	34,200
500–749	21,700	20,800
750–999	8,900	8,600
1,000 or more	9,100	8,800
Percent of K–12 students who were approved for free or reduced-price lunches		
0–34	27,000	25,700
35–49	14,600	14,000
50–74	23,000	21,300
75 or more	22,100	18,800
School did not participate in free or reduced-price lunch program	3,300	1,400

<sup>&</sup>lt;sup>1</sup> The Public School Data File was used to generate these estimates, which are rounded to hundreds.

NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School and Public School Library Media Center Data Files," 2011–12.

<sup>&</sup>lt;sup>2</sup> The Public School Library Media Center Data File was used to generate these estimates, which are rounded to hundreds.

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Table 2. Number and percentage distribution of library media centers that reported having full-time or part-time, state-certified, paid professional library media center specialists, by selected school characteristics: 2011–12

	Number of library media centers that had			Percentage distribution of library media centers that had					
	At least one full-	No full-time and at	No full-time or part-	At least one full-	No full-time and at	No full-time or part-			
	time, paid, state-	least one part-time,	time, paid, state-	time, paid, state-	least one part-time,	time, paid, state-			
	certified library	paid, state-certified	certified library	certified library	paid, state-certified	certified library			
Selected school	media center	library media center	media center	media center	library media center	media center			
characteristic	specialist	specialist	specialist	specialist	specialist	specialist			
All public schools with									
library media centers	53,940	10,260	16,990	66.4	12.6	20.9			
School classification									
Traditional public	53,210	10,020	15,740	67.4	12.7	19.9			
Charter school	720	240	1,250	32.8	10.9	56.4			
Community type									
City	13,080	2,230	4,840	64.9	11.1	24.0			
Suburban	15,540	2,620	4,300	69.2	11.6	19.2			
Town	7,300	1,510	2,220	66.2	13.7	20.1			
Rural	18,010	3,890	5,630	65.4	14.1	20.4			
School level									
Primary	29,370	6,930	11,120	61.9	14.6	23.5			
Middle	10,060	1,490	1,830	75.1	11.2	13.7			
High	11,650	1,280	2,420	75.9	8.3	15.8			
Combined	2,850	560	1,610	56.8	11.1	32.1			
Student enrollment									
Less than 100	1,080	920	1,540	30.5	26.0	43.4			
100–199	2,080	1,310	1,720	40.7	25.7	33.6			
200-499	20,950	5,590	7,700	61.2	16.3	22.5			
500–749	15,400	1,500	3,910	74.0	7.2	18.8			
750–999	6,750	640	1,250	78.1	7.4	14.4			
1,000 or more	7,670	290	880	86.8	3.3	9.9			
Percent of K-12 students who									
were approved for free or reduced-price lunches									
0–34	16,850	3,760	5,100	65.5	14.6	19.8			
35–49	9,790	1,880	2,320	70.0	13.4	16.6			
50–74	15,050	2,290	3,930	70.8	10.8	18.5			
75 or more	11,740	2,170	4,930	62.3	11.5	26.2			
School did not participate									
in free or reduced-price									
lunch program	500	170	700	36.5	12.5	51.0			

NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 3. Staffing characteristics of library media center personnel, by selected school characteristics: 2011–12

	Total number of	Percent of paid professional library media center staff	Percent of paid professional library media center staff	Percent of paid professional library media center staff		Total number o
	paid professional	who were state-	who had a master's	who are state-	Total number of	volunteers (adult and
	library media	certified classroom	degree in a library-	certified library media	paid library aides or	student) during mos
Selected school characteristic	center staff <sup>1</sup>	teachers	related major <sup>2</sup>	specialists	clerical staff	recent full week
All public schools with			,			
library media centers	88,520	63.0	51.8	82.9	55,010	273,260
School classification						
Traditional public	86,340	63.6	52.5	83.6	54,180	266,070
Charter school	2,180	41.0	26.7	52.9	830	7,19
Community type						
City	22,080	61.1	50.5	81.0	12,030	72,05
Suburban	24,870	63.9	56.2	83.7	16,190	99,95
Town	11,780	62.9	49.1	83.1	8,190	29,26
Rural	29,790	63.8	50.2	83.5	18,600	72,01
School level						
Primary	50,000	60.3	48.5	81.7	30,560	181,08
Middle	14,630	67.9	58.2	87.2	9,470	49,06
High	18,240	68.5	60.2	85.4	12,130	36,05
Combined	5,640	56.3	38.0	73.9	2,850	7,06
Student enrollment						
Less than 100	2,770	57.7	37.5	76.7	2,060	3,45
100–199	5,960	46.8	31.6	74.1	3,210	5,40
200-499	35,870	62.9	49.1	82.5	20,650	106,13
500-749	22,650	62.7	54.0	82.6	13,920	83,82
750–999	9,560	69.2	56.0	85.1	6,640	37,01
1,000 or more	11,710	68.6	66.4	88.4	8,540	37,45
Percent of K–12 students who were approved for free or reduced- price lunches						
0–34	29,430	62.6	53.2	80.4	18,680	123,77
35–49	15,680	65.9	52.8	85.5	10,770	39,19
50–74	22,260	66.6	54.7	87.6	13,950	63,83
75 or more	19,970	57.9	46.7	80.2	10,650	40,77
School did not participate in free or	10,070	01.0	-10.1	00.2	10,000	40,11
reduced-price lunch program	1,180	55.7	39.5	65.5	950	5,69

<sup>&</sup>lt;sup>1</sup> Paid professional library media center staff includes state-certified library media specialists and other professional staff with paid full-time or part-time positions in the library media center. Excludes library aides and clerical staff.

<sup>&</sup>lt;sup>2</sup> A library-related major refers to degrees in librarianship, library science, information science, educational media, instructional design, or instructional technology.

NOTE: Percentages are based on the total number of paid professional library media center staff, including full time and part time. The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 4. Average number of holdings, additions, and expenditures in library media centers during 2010–11 for various kinds of materials, by selected school characteristics: 2011–12

	Average number of holdings at the end of the 2010–11 school year		Average number a		Average amount of expenditures during			
			the 2010–11 s	school year	the 2010–11 school year for			
	Book	Audio/video	Book	Audio/video	Book	Audio/video	All information	
Selected school characteristic	titles	materials <sup>1</sup>	titles	materials <sup>1</sup>	titles	materials <sup>1</sup>	resources <sup>2</sup>	
All public schools with library media centers	12,780	470	520	20	\$6,010	\$490	\$9,340	
School classification								
Traditional public	12,830	480	510	20	6,000	490	9,350	
Charter school	10,360	360	820	‡	6,260	610	9,030	
Community type								
City	12,790	430	590	30	6,480	560	10,240	
Suburban	14,140	530	560	20	6,480	510	9,610	
Town	12,700	480	450	20	5,600	430	9,820	
Rural	11,680	450	470	20	5,450	440	8,300	
School level								
Primary	12,930	410	520	20	4,940	330	7,760	
Middle	12,410	470	520	20	7,030	650	10,140	
High	13,350	680	530	40	8,740	870	14,000	
Combined	10,490	490	490	50!	4,960	370	7,950	
Student enrollment								
Less than 100	7,370	270	330	10!	2,750	120	4,150	
100–199	10,340	400	380	10	3,640	280!	5,510	
200–499	11,200	360	440	20	4,650	310	7,530	
500–749	13,830	480	570	20	6,180	580	9,870	
750–999	14,970	630	620	30	7,790	570	10,890	
1,000 or more	17,460	850	750	70	11,500	1,130	17,500	
Percent of K-12 students who were approved								
for free or reduced-price lunches								
0–34	13,700	490	510	30	6,240	530	9,530	
35–49	13,120	460	470	20	5,470	450	8,530	
50–74	12,810	500	540	20	6,050	410	8,780	
75 or more	11,520	430	550	30	6,020	550!	10,360	
School did not participate in free or								
reduced-price lunch program	7,990	430	520	20	6,380	430!	9,420	

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 percent and 50 percent (i.e., the standard error is at least 30 percent and less than 50 percent of the estimate).

<sup>‡</sup> Reporting standards not met. The coefficient of variation (CV) for this estimate is 50 percent or greater (i.e., the standard error is 50 percent or more of the estimate).

<sup>&</sup>lt;sup>1</sup> Includes all copies of any tape, CD, DVD, or Blu-ray.

<sup>&</sup>lt;sup>2</sup> Information resources include such items as books, periodicals, audio/visual materials, database licensing, and software. They do not include salaries, computer hardware, or audio/visual equipment. NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 5. Number of holdings, additions, and expenditures, per 100 students, in library media centers during 2010–11 for various kinds of materials, by selected school characteristics: 2011–12

	Per 100 students								
•	Number of holdings 2010–11 sch		Number acquired 2010–11 sch		Amount of expenditures during the 2010–11 school year for				
	Book	Audio/video	Book	Audio/video	Book	Audio/video	All information		
Selected school characteristic	titles	materials1	titles	materials <sup>1</sup>	titles	materials <sup>1</sup>	resources <sup>2</sup>		
All public schools with									
library media centers	2,188	81	89	4	\$1,028	\$84	\$1,600		
School classification									
Traditional public	2,189	81	88	4	1,023	83	1,595		
Charter school	2,131	75	170	‡	1,288	126	1,857		
Community type									
City	1,975	66	91	5	1,000	86	1,580		
Suburban	2,013	76	80	3	922	73	1,368		
Town	2,494	94	89	4	1,099	84	1,927		
Rural	2,475	96	100	5	1,154	94	1,757		
School level									
Primary	2,751	87	111	4	1,051	70	1,652		
Middle	1,948	73	81	4	1,104	103	1,592		
High	1,412	72	56	4	924	92	1,480		
Combined	2,530	118	118	11!	1,197	88	1,918		
Student enrollment									
Less than 100	11,793	428	528	18!	4,408	191	6,646		
100–199	6,751	261	248	9	2,377	184!	3,598		
200-499	3,106	99	123	5	1,288	85	2,087		
500–749	2,278	80	95	3	1,018	96	1,625		
750–999	1,758	74	73	4	915	66	1,279		
1,000 or more	1,132	55	49	4	745	73	1,134		
Percent of K–12 students who were approved for free or reduced-									
price lunches 0–34	2,125	76	80	4	969	82	1,478		
0–34 35–49	2,125 2,266	76 80	80 81	4 4	969 945	82 78	1,478		
50–74	2,263	89	96	4	945 1,068	78 72	1,474 1,551		
75 or more	2,141	79	103	5	1,118	103!	1,925		
School did not participate in free or	۷, ۱۳۱	13	100	3	1,110	103:	1,020		
reduced-price lunch program	2,088	113	137	5	1,666	114!	2,460		

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent (i.e., the standard error is at least 30 percent and less than 50 percent of the estimate).

<sup>‡</sup> Reporting standards not met. The coefficient of variation (CV) for this estimate is 50 percent or greater (i.e., the standard error is 50 percent or more of the estimate).

<sup>&</sup>lt;sup>1</sup> Includes all copies of any tape, CD, DVD, or Blu-ray.

<sup>&</sup>lt;sup>2</sup> Information resources include such items as books, periodicals, audio/visual materials, database licensing, and software. They do not include salaries, computer hardware, or audio/visual equipment. NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools. Ratios are computed as the weighted sum of the survey item (number of book titles, audio/video materials, or expenditures) across all libraries, divided by total enrollment, with the result multiplied by 100.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 6. Percentage of library media centers that reported having various technological services, average number of computer workstations, and average number of computer workstations that had internet access in the library media center, by selected school characteristics: 2011–12

that had internet acces	, , , , , , , , , , , , , , , , , , ,	, - <b>,</b>		h various technologic	al services				
Selected school characteristic	Automated circulation system	Automated catalog(s) for student and/or staff use	Digital video disk (DVD) player(s), Blu- ray disc (BD) player(s), or video cassette recorder(s) (VCR) for student and/or staff use	Media retrieval system <sup>1</sup>	Laptops for student use outside of the library media center	Laptops for staff use outside of the library media center	Technology to assist students and/or staff with disabilities <sup>2</sup>	Average number of computer workstations	Average number of computer workstations with internet access
All public schools with library media centers	90.3	88.3	83.2	32.5	40.2	54.3	31.0	18	17
School classification Traditional public Charter school	91.1 63.0	89.1 59.0	83.8 63.4	32.8 21.1	40.0 44.5	54.2 59.0	31.0 30.6	18 15	17 14
Community type City Suburban Town Rural	90.4 90.1 93.9 89.0	87.6 89.3 90.8 86.9	78.3 83.1 88.0 85.0	34.7 35.2 28.5 30.4	37.4 43.6 36.8 40.8	54.3 55.3 49.2 55.4	28.5 31.9 31.6 31.8	17 21 18 17	16 20 18 16
School level Primary Middle High Combined	91.3 93.7 89.7 74.3	88.3 92.9 90.0 70.3	81.1 90.0 85.8 77.1	31.8 41.1 31.6 19.5	37.7 46.1 42.1 41.6	52.3 60.4 55.9 52.0	27.8 37.4 34.8 31.6	12 23 33 15	12 22 30 14
Student enrollment Less than 100 100–199 200–499 500–749 750–999 1,000 or more	62.3 79.2 90.8 92.8 94.7 96.3	59.5 75.6 88.0 90.0 95.2 97.2	64.8 78.8 83.4 84.9 85.4 86.5	12.0 17.7 27.7 38.0 47.9 39.8	31.9 42.4 39.3 40.0 43.0 43.2	38.0 48.0 52.6 57.1 58.3 60.7	26.4 30.6 27.0 33.2 36.1 38.0	10 13 14 16 22 39	10 13 14 16 22 34
Percent of K–12 students who were approved for free or reduced-price lunches 0–34 35–49 50–74 75 or more School did not participate in free or reduced-price lunch program	93.2 94.0 89.9 85.9	92.0 92.8 87.2 82.7	83.3 87.4 84.8 79.0	30.8 34.6 36.2 30.8	42.1 41.6 41.0 36.2	52.6 55.4 55.2 55.4	33.3 32.3 30.8 27.3	22 20 16 14	21 19 16 13

<sup>&</sup>lt;sup>1</sup> A media retrieval system consists of centralized video distribution equipment with a scheduling and control server that telecasts video to classrooms upon request.

<sup>&</sup>lt;sup>2</sup> Includes TDD and specially equipped workstations.

NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools.

Table 7. Percentage of library media centers that reported having computer workstations for student and/or staff use and percentage that reported providing student access to online, licensed databases, by selected school characteristics: 2011–12

Of library media centers that provided students with access to online, licensed databases,

percent that provided access from Percent of library Percent of all library Percent of library media center media centers that media centers that computer provided student had computer workstations that access to online. Selected school characteristic workstations had internet access licensed databases1 Classroom Home All public schools with library media centers 96.6 95.3 86 4 94.8 78 4 School classification Traditional public 96.9 95.4 86.6 95.0 79.1 87.8 Charter school 93.4 79.3 85.3 52.7 Community type City 97.0 95.2 89.4 95.7 80.4 Suburban 98.1 93.2 88.7 95.5 83.1 Town 96.5 97.6 82.7 94.0 75.6 Rural 95.3 96.6 83.8 93.7 73.9 School level 98.3 95.9 75.7 Primary 96.5 84.5 Middle 98.9 97.0 88.9 94.3 83.2 Hiah 97.5 91.1 91.3 93.0 85.3 Combined 89.6 94.6 82.4 91.0 67.3 Student enrollment 81.6 95.6 73.8 90.6 55.3 Less than 100 100-199 93.7 99.0 81.6 93.9 65.8 200-499 96.2 97.9 84.7 94.4 73.6 500-749 97.0 87.5 95.5 81.2 98.2 750-999 97.1 88.6 99.4 90.6 95.6 1.000 or more 99.5 88.2 94.0 95.6 93.4 Percent of K-12 students who were approved for free or reduced-price lunches 0-34 98.2 93.7 0.88 94.5 85.1 35-49 98.2 96.2 86.5 94.5 80.7 50-74 95.7 96.5 86.2 96.0 75.7 75 or more 95.3 96.4 85.6 94.0 70.8 School did not participate in free or reduced-price 92.3 lunch program 83.5 96.7 68.7 71.1

<sup>1</sup> Online, licensed databases are supplied by commercial vendors via the Internet. They may include indexes, abstracts, full-text article databases, or full-text reference sources, such as encyclopedias, almanacs, biographical sources, and other quick fact-finding sources.

NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 8. Percentage of library media centers that were available for independent student use during specific times, and percentage distribution of library media centers with various types of scheduling for classes and other activities, by selected school characteristics: 2011–12

	Percent of library me indep	edia centers that we endent student us		Percentage distribution of library media centers, by type of scheduling for classes and other activities		
Selected school characteristic	Before school	After school	During regular school hours	Only flexible scheduling <sup>1</sup>	Only regular scheduling	Both flexible and regular scheduling
All public schools with library media centers	57.1	54.0	89.0	19.4	19.2	61.5
School classification Traditional public Charter school	57.3	54.1	89.1	19.2	19.3	61.5
	46.6	51.4	87.5	25.7	13.9	60.4
Community type City Suburban Town Rural	53.5	57.0	87.4	17.7	20.4	61.9
	54.6	48.4	86.4	20.4	23.4	56.2
	59.2	58.5	90.1	18.5	18.0	63.5
	60.8	54.6	92.0	20.1	15.3	64.6
School level Primary Middle High Combined	42.8	39.0	84.0	5.0	30.2	64.8
	75.0	69.3	96.6	29.8	3.3	66.9
	84.6	82.9	97.0	53.6	2.6	43.8
	59.4	66.0	92.8	22.7	8.0	69.3
Student enrollment Less than 100 100–199 200–499 500–749 750–999 1,000 or more	51.8	52.9	87.8	23.4	14.8	61.7
	48.0	49.5	87.3	17.1	13.1	69.8
	47.3	45.7	86.9	11.0	23.0	65.9
	57.1	51.6	87.5	15.9	22.4	61.7
	72.9	66.3	93.2	27.0	16.2	56.8
	86.5	82.9	98.4	52.1	4.6	43.3
Percent of K–12 students who were approved for free or reduced-price lunches 0–34 35–49 50–74 75 or more School did not participate in free or reduced-price lunch program	61.3	56.5	90.7	22.6	16.7	60.7
	59.6	57.0	90.8	20.3	17.1	62.6
	58.6	52.2	90.1	16.8	18.8	64.4
	48.7	51.0	84.5	16.0	24.6	59.4
	42.4	46.3	85.0	34.6	18.4	46.9

<sup>&</sup>lt;sup>1</sup> Flexible scheduling indicates that the library media center is available as needed.

NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 9. Percentage of library media centers that were open to community members who do not attend the school and do not have children who attend the school and, of these, percentage open to community members during various times and percentage providing computer workstations with internet access, by selected school characteristics: 2011–12

		Percent of library media centers open to community members					
	Percent of library media						
	centers open to community						
	members who do not		During the week,	On weekends,	With workstations		
	attend the school and	During regular	outside	outside of	community members		
	do not have children	school	of regular	regular	can use to access		
Selected school characteristic	who attend the school	hours	school hours	school hours	the Internet		
All public schools with library media centers	23.8	80.9	48.9	19.2	61.3		
School classification							
Traditional public	24.1	80.9	48.8	19.2	61.0		
Charter school	15.5	78.2	52.5	18.3!	76.0		
Community type							
City	21.7	81.4	55.9	16.7	62.3		
Suburban	16.2	74.1	47.0	20.9	50.4		
Town	25.3	81.4	52.9	23.7	56.8		
Rural	31.1	83.3	44.8	18.2	66.9		
School level							
Primary	20.3	80.1	46.4	15.8	59.3		
Middle	24.0	80.3	52.1	25.5	60.0		
High	30.5	81.7	51.9	23.1	61.6		
Combined	36.8	83.5	48.6	15.6	73.1		
Student enrollment							
Less than 100	28.8	75.1	38.7	23.6	72.9		
100–199	33.8	86.8	41.1	10.4!	66.9		
200–499	22.2	81.4	49.2	17.7	62.8		
500–749	22.0	78.4	47.5	20.5	54.8		
750–999	24.5	83.5	54.2	22.0	65.7		
1,000 or more	26.1	79.7	56.0	23.5	55.7		
Percent of K–12 students who were approved for free or reduced- price lunches							
0–34	22.1	74.5	55.1	25.6	54.3		
35–49	26.4	82.5	47.6	18.6	57.8		
50–74	24.0	84.5	41.6	15.6	67.4		
75 or more	24.6	83.9	50.7	15.0	66.6		
School did not participate in free or reduced-price lunch program	18.6	71.7	44.4	31.1!	46.9		
School did not participate in free or reduced-price lunch program							

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 percent and 50 percent (i.e., the standard error is at least 30 percent and less than 50 percent of the estimate).

NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Table 10. Percentage of library media centers that provided support for various programs, average number of student visits, and average number of books checked out during the most recent full week of school, per library media center and per 100 students, by selected school characteristics: 2011–12

			During the most recent full week of school					
	Percent of library n	nedia centers that	Per library media	a center,				
	provided si	upport for	average numb	per of	Per 100 students, aver	age number of <sup>2</sup>		
		Programs that		Books or other		Books or other		
	Family literacy	encourage		materials		materials		
Selected school characteristic	activities <sup>1</sup>	students to read	Student visits	checked out	Student visits	checked out		
All public schools with								
library media centers	36.4	65.3	560	620	100	110		
School classification								
Traditional public	36.4	65.2	560	630	100	110		
Charter school	33.8	68.1	280!	360	60!	70		
Community type								
City	43.5	66.9	540	630	80	100		
Suburban	34.1	67.5	640	680	90	100		
Town	35.2	62.8	570	650	110	130		
Rural	33.4	63.4	490	550	110	120		
School level								
Primary	45.9	65.1	470	800	100	170		
Middle	28.0	74.7	620	530	100	80		
High	14.6	59.6	840	230	90	30		
Combined	35.4	60.0	340	300	80	70		
Student enrollment								
Less than 100	26.2	45.4	110	150	180	250		
100–199	29.0	56.3	220	280	140	180		
200–499	38.7	61.9	390	580	110	160		
500–749	40.4	71.2	600	780	100	130		
750–999	39.2	71.8	800	870	90	100		
1,000 or more	23.3	71.6	1,240	500	80	30		
Percent of K–12 students who were approved for free or reduced-price lunches								
0–34	27.1	65.6	640	620	100	100		
35–49	32.4	64.2	560	590	100	100		
50–74	43.2	67.8	550	660	100	120		
75 or more	45.3	63.4	450	610	80	110		
School did not participate in free or	00.0	50.0	0001	0.101	440	221		
reduced-price lunch program	20.3	59.8	390!	340!	110	90!		

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 percent and 50 percent (i.e., the standard error is at least 30 percent and less than 50 percent of the estimate).

<sup>&</sup>lt;sup>1</sup> Activities that offer educational opportunities to students' family members in order to improve their literacy and life skills.

<sup>&</sup>lt;sup>2</sup> Ratios computed as the weighted sum of the survey item (student visits or materials checked out) across all libraries, divided by total enrollment, with the result multiplied by 100. NOTE: The 2011–12 Schools and Staffing Survey did not collect school library media center data from private schools.

## **Appendix A: Standard Error Tables**

A-2

Table A-1. Standard errors for Table 1: Number of public schools that reported having library media centers, by selected school characteristics: 2011–12

Selected school characteristic	Total number of schools	Number of schools with a library media center
All public schools	410	510
School classification		
Traditional public	310	450
Charter school	210	190
Community type		
City	300	320
Suburban	360	320
Town	380	280
Rural	430	420
School level		
Primary	470	410
Middle	170	150
High	430	320
Combined	570	340
Student enrollment		
Less than 100	460	280
100–199	340	300
200–499	670	660
500–749	600	620
750–999	420	400
1,000 or more	380	340
Percent of K-12 students who were approved for free or reduced-price lunches		
0–34	620	580
35–49	540	510
50–74	540	500
75 or more	620	650
School did not participate in free or reduced-price lunch program	270	160

Table A-2. Standard errors for Table 2: Number and percentage distribution of library media centers that reported having full-time or part-time, state-certified, paid professional library media center specialists, by selected school characteristics: 2011–12

	Numbe	er of library media centers th	at had	Percentage distribution of library media centers that had				
	At least one full-	No full-time and at	No full-time or part-	At least one full-	No full-time and at	No full-time or part-		
	time, paid, state-	least one part-time,	time, paid, state-	time, paid, state-	least one part-time,	time, paid, state-		
	certified library	paid, state-certified	certified library	certified library	paid, state-certified	certified library		
Selected school	media center	library media center	media center	media center	library media center	media center		
characteristic	specialist	specialist	specialist	specialist	specialist	specialist		
All public schools with library media centers	612	504	588	0.77	0.60	0.69		
School classification								
Traditional public	563	510	552	0.74	0.62	0.68		
Charter school	122	65	154	5.08	2.90	4.19		
Community type								
City	399	287	357	1.57	1.38	1.80		
Suburban	324	286	265	1.39	1.22	1.12		
Town	255	175	197	1.56	1.56	1.70		
Rural	427	255	339	1.31	0.91	1.15		
School level								
Primary	498	447	470	1.03	0.93	0.94		
Middle	171	105	124	1.03	0.77	0.90		
High	276	104	206	1.29	0.66	1.23		
Combined	263	63	188	2.75	1.37	2.68		
Student enrollment								
Less than 100	155	215	176	4.53	5.34	4.04		
100–199	202	156	186	3.16	2.81	3.06		
200-499	551	350	429	1.24	0.97	1.13		
500-749	515	194	307	1.23	0.91	1.32		
750–999	293	102	209	2.11	1.13	2.02		
1,000 or more	302	46	113	1.24	0.49	1.15		
Percent of K–12 students who were approved for free or reduced-price lunches								
0–34	496	275	360	1.40	1.04	1.26		
35–49	425	200	240	1.94	1.38	1.53		
50–74	465	216	288	1.50	1.01	1.22		
75 or more	488	263	414	1.90	1.27	1.92		
School did not participate								
in free or reduced-price								
lunch program	83	44	139	5.49	3.17	6.05		

Table A-3. Standard errors for Table 3: Staffing characteristics of library media center personnel, by selected school characteristics: 2011–12

		Percent of paid	Percent of paid	Percent of paid		
		professional library	professional library	professional library		Total number of
	Total number of	media center staff	media center staff	media center staff		regularly scheduled
	paid professional	who were state-	who had a master's	who are state-	Total number of	volunteers (adult and
	library media	certified classroom	degree in a library-	certified library media	paid library aides or	student) during most
Selected school characteristic	center staff	teachers	related major	specialists	clerical staff	recent full week
All public schools with						
library media centers	1,165	0.82	0.76	0.58	970	9,326
School classification						
Traditional public	1,090	0.85	0.79	0.60	985	9,267
Charter school	273	6.47	3.68	3.83	110	1,931
Community type						
City	1,020	2.35	2.26	1.66	522	5,215
Suburban	482	1.61	1.31	1.09	483	5,913
Town	371	1.71	1.80	1.51	350	2,427
Rural	585	1.09	1.12	0.92	522	3,870
School level						
Primary	979	1.28	1.22	0.91	702	8,790
Middle	192	1.06	1.11	0.83	279	2,542
High	419	1.29	1.15	1.20	418	1,993
Combined	467	3.03	2.16	2.40	285	2,108
Student enrollment						
Less than 100	265	4.64	6.67	4.03	326	975
100–199	829	5.55	4.93	2.18	285	1,045
200–499	718	1.31	1.34	1.10	625	6,922
500–749	816	1.96	1.72	1.36	563	5,231
750–999	447	2.08	2.18	1.85	392	3,739
1,000 or more	449	1.38	1.41	0.98	408	2,834
Percent of K–12 students who were approved for free or reduced-						
price lunches						
0–34	676	1.32	1.31	1.18	605	8,209
35–49	553	1.64	1.66	1.18	560	3,080
50–74	596	1.45	1.43	0.96	546	5,187
75 or more	995	2.59	2.31	1.61	592	3,152
School did not participate in free or						
reduced-price lunch program	176	5.55	6.11	6.53	173	1,657

Table A-4. Standard errors for Table 4: Average number of holdings, additions, and expenditures in library media centers during 2010–11 for various kinds of materials, by selected school characteristics: 2011–12

	•	Average number of holdings at the end of the 2010–11 school year		acquired during school year	Average amount of expenditures during the 2010–11 school year for		
						,	All
	Book	Audio/video	Book	Audio/video	Book	Audio/video	information
Selected school characteristic	titles	materials	titles	materials	titles	materials	resources
All public schools with library media centers	215	14	20	2	206	43	407
School classification							
Traditional public	216	14	20	2	205	43	413
Charter school	1,022	87	164	†	1,302	171	1,117
Community type							
City	325	26	62	6	630	151	1,202
Suburban	456	26	32	4	333	35	429
Town	306	37	21	2	277	53	1,179
Rural	452	26	18	3	254	40	392
School level							
Primary	340	20	33	2	179	40	613
Middle	180	22	23	2	740	179	953
High	209	32	19	7	516	64	579
Combined	438	50	36	22	528	67	697
Student enrollment							
Less than 100	1,276	53	52	3	396	24	470
100–199	2,280	113	55	3	575	95	680
200–499	190	16	21	2	190	20	505
500–749	492	23	58	2	536	142	1,181
750–999	449	55	35	7	456	50	570
1,000 or more	271	45	36	16	763	98	925
Percent of K–12 students who were approved for free or reduced-price lunches							
0–34	360	26	17	4	203	37	355
35–49	408	24	21	2	296	35	554
50–74	538	37	55	3	410	39	567
75 or more	265	29	46	7	659	171	1,511
School did not participate in free or							
reduced-price lunch program	811	70	80	4	1,158	178	1,365

<sup>†</sup> Not applicable.

Table A-5. Standard errors for Table 5: Number of holdings, additions, and expenditures, per 100 students, in library media centers during 2010–11 for various kinds of materials, by selected school characteristics: 2011–12

	Per 100 students							
	Number of holdings 2010–11 sch		Number acquired	•	Amount of expenditures during the 2010–11 school year for			
	Book	Audio/video	Book	Audio/video	Book	Audio/video	All information	
Selected school characteristic	titles	materials	titles	materials	titles	materials	resources	
All public schools with								
library media centers	42.4	2.4	3.5	0.4	34.3	7.2	69.1	
School classification								
Traditional public	41.5	2.3	3.4	0.3	34.9	7.3	70.4	
Charter school	236.0	18.6	34.0	†	255.3	36.0	225.9	
Community type								
City	62.8	4.1	9.6	1.0	93.2	22.8	181.0	
Suburban	66.8	3.7	4.7	0.5	46.8	4.7	60.8	
Town	71.5	7.1	4.3	0.4	58.4	10.6	234.5	
Rural	97.3	5.5	4.1	0.6	51.9	8.6	81.0	
School level								
Primary	73.3	4.3	6.9	0.4	37.8	8.5	130.6	
Middle	32.7	3.7	3.7	0.3	118.2	28.3	153.1	
High	27.1	2.9	2.0	0.7	50.9	6.4	57.8	
Combined	140.0	13.1	8.9	5.3	115.0	16.1	167.4	
Student enrollment								
Less than 100	1,820.2	88.9	81.0	5.7	596.9	39.9	745.2	
100–199	1,429.4	71.9	34.4	2.1	368.0	60.6	428.1	
200-499	57.9	4.5	6.0	0.5	53.5	5.7	141.5	
500–749	83.2	3.8	9.6	0.3	87.9	23.3	193.4	
750–999	54.3	6.4	4.2	0.8	54.0	5.9	67.8	
1,000 or more	16.8	2.8	2.3	1.0	48.7	6.2	57.8	
Percent of K–12 students who were approved for free or reduced- price lunches								
0–34	62.7	4.0	2.8	0.6	30.7	5.7	53.1	
35–49	79.8	3.4	3.6	0.3	44.2	5.9	91.8	
50–74	109.6	6.6	9.8	0.5	73.4	6.9	99.9	
75 or more	61.2	5.1	8.0	1.2	115.4	31.0	272.0	
School did not participate in free or								
reduced-price lunch program	262.6	17.8	25.9	1.0	320.8	39.8	374.8	

<sup>†</sup> Not applicable.

Table A-6. Standard errors for Table 6: Percentage of library media centers that reported having various technological services, average number of computer workstations, and average number of computer workstations that had internet access in the library media center, by selected school characteristics: 2011–12

number of computer				n various technologic					
Selected school characteristic	Automated circulation system	Automated catalog(s) for student and/or staff use	Digital video disk (DVD) player(s), Blu- ray disc (BD) player(s), or video cassette recorder(s) (VCR) for student and/or staff use	Media retrieval system	Laptops for student use outside of the library media center	Laptops for staff use outside of the library media center	Technology to assist students and/or staff with disabilities	Average number of computer workstations	Average number of computer workstations with internet access
All public schools with library media centers	0.47	0.49	0.76	0.76	0.69	0.85	0.75	0.3	0.3
School classification Traditional public Charter school	0.45 4.66	0.48 4.35	0.77 3.98	0.79 4.26	0.70 4.28	0.84 3.96	0.76 3.94	0.3 3.0	0.2 3.1
Community type City Suburban	0.88 0.93	1.14 0.83	1.75 1.31	1.44 1.47	1.88 1.40	1.83 1.60	1.70 1.54	0.7 0.6	0.6 0.5
Town Rural	0.79 0.77	1.20 0.74	1.02 1.18	1.43 1.23	1.73 1.18	1.81 1.12	2.10 1.30	0.6 0.4	0.6 0.4
School level Primary Middle High Combined	0.71 0.79 0.82 2.56	0.70 0.88 0.85 2.51	1.16 0.80 0.88 2.27	1.17 1.18 1.00 1.87	1.06 1.25 1.09 3.07	1.22 1.24 1.20 2.87	1.16 1.38 1.14 2.37	0.3 0.5 0.8 1.3	0.3 0.5 0.6 1.4
Student enrollment Less than 100 100–199 200–499 500–749 750–999	3.82 2.62 0.71 0.87 0.94 0.61	3.78 2.80 0.89 0.97 0.82 0.52	4.29 2.46 1.20 1.26 1.78 1.39	2.15 3.17 1.25 1.57 2.30 1.60	3.46 3.46 1.41 1.68 2.16 1.55	4.12 3.64 1.42 1.61 2.46 1.66	3.32 3.70 1.20 1.65 2.14 1.76	1.0 0.9 0.4 0.5 0.8 1.1	1.0 0.9 0.4 0.5 0.7 0.8
Percent of K–12 students who were approved for free or reduced-price lunches 0–34 35–49 50–74 75 or more School did not participate in free or reduced-price	0.83 0.70 0.88 1.38	0.88 0.94 1.09 1.41	1.51 1.41 1.35 1.53	1.24 2.04 1.38 1.69	1.50 1.79 1.35 1.78	1.45 1.99 1.37 1.93	1.24 2.15 1.57 1.50	0.6 0.6 0.4 0.5	0.5 0.5 0.3 0.5
lunch program	5.91	5.98	4.92	2.70	6.87	6.53	4.62	4.0	4.0

Table A-7. Standard errors for Table 7: Percentage of library media centers that reported having computer workstations for student and/or staff use and percentage that reported providing student access to online, licensed databases, by selected school characteristics: 2011–12

Of library media centers that provided students with access to online, licensed databases,

percent that provided access from Percent of library Percent of all library Percent of library media center media centers that media centers that computer provided student had computer workstations that access to online. Selected school characteristic workstations had internet access licensed databases Classroom Home All public schools with library media centers 0.31 0.55 0.59 0.38 0.76 School classification Traditional public 0.30 0.56 0.61 0.38 0.75 2.45 6.42 Charter school 2.62 2.88 3.49 Community type City 0.66 1.10 1.19 0.82 1.71 Suburban 0.47 1.35 1.10 0.66 1.20 Town 0.83 0.53 1.45 0.76 1.93 Rural 0.58 0.87 1.15 0.64 1.27 School level 0.47 0.41 0.94 0.52 Primary 1.21 Middle 0.33 0.83 0.94 0.63 1.16 High 0.50 1.41 0.64 0.69 1.05 Combined 2.53 2.20 2.34 2.31 1.60 Student enrollment Less than 100 3.35 1.58 3.76 2.99 5.03 100-199 1.52 0.39 2.58 1.85 3.92 200-499 0.53 0.54 0.89 0.62 1.23 500-749 0.49 0.73 1.20 0.82 1.52 750-999 0.30 0.96 1.47 0.78 1.68 1.000 or more 0.17 2.02 0.76 0.73 0.95 Percent of K-12 students who were approved for free or reduced-price lunches 0-34 0.41 1.15 1.17 0.69 1.08 35-49 0.41 0.68 1.40 0.79 1.41 50-74 0.67 0.95 1.06 0.52 1.66 75 or more 0.93 1.14 1.33 0.89 2.04 School did not participate in free or reduced-price 3.84 6.61 lunch program 1.35 5.88 2.65

Table A-8. Standard errors for Table 8: Percentage of library media centers that were available for independent student use during specific times, and percentage distribution of library media centers with various types of scheduling for classes and other activities, by selected school characteristics: 2011–12

	Percent of library me indep	edia centers that we endent student us		Percentage distribution of library media centers, by type of scheduling for classes and other activities		
Selected school characteristic	Before school	After school	During regular school hours	Only flexible scheduling	Only regular scheduling	Both flexible and regular scheduling
All public schools with library media centers	0.77	0.81	0.54	0.42	0.67	0.73
School classification						
Traditional public	0.77	0.80	0.53	0.41	0.69	0.73
Charter school	4.57	8.13	2.67	3.41	2.72	4.41
Community type						
City	1.98	2.32	1.30	0.89	1.73	1.85
Suburban	1.47	1.43	1.14	0.77	1.39	1.45
Town	1.95	2.24	1.24	1.18	1.51	1.76
Rural	1.11	1.22	0.75	0.76	0.90	1.12
School level						
Primary	1.19	1.17	0.86	0.48	1.10	1.12
Middle	1.22	1.14	0.49	1.28	0.48	1.34
High	0.95	1.00	0.46	1.14	0.48	1.17
Combined	2.40	2.96	1.39	2.77	1.42	2.94
Student enrollment						
Less than 100	4.24	4.46	2.36	3.45	2.98	4.70
100–199	3.20	2.80	2.31	1.99	2.40	2.97
200–499	1.36	1.35	1.06	0.66	1.13	1.34
500–749	1.75	1.64	1.16	0.84	1.52	1.62
750–999	2.39	2.05	1.28	1.89	2.12	2.12
1,000 or more	1.35	1.63	0.49	1.75	1.01	1.77
Percent of K–12 students who were approved for free or reduced-price lunches						
0–34	1.45	1.35	0.89	0.79	1.08	1.32
35–49	1.92	1.95	1.25	1.13	1.49	1.87
50–74	1.69	1.54	0.98	0.83	1.44	1.45
75 or more	1.86	2.29	1.56	1.28	1.96	2.01
School did not participate in free or reduced-price lunch program	6.67	7.07	3.59	5.78	4.91	6.01

Table A-9. Standard errors for Table 9: Percentage of library media centers that were open to community members who do not attend the school and do not have children who attend the school and, of these, percentage open to community members during various times and percentage providing computer workstations with internet access, by selected school characteristics: 2011–12

	Percent of library media centers open to community memb						
	Percent of library media						
	centers open to community						
	members who do not		During the week,	On weekends,	With workstations		
	attend the school and	During regular	outside	outside of	community members		
	do not have children	school	of regular	regular	can use to access		
Selected school characteristic	who attend the school	hours	school hours	school hours	the Internet		
All public schools with library media centers	0.82	1.24	1.40	1.31	1.59		
School classification							
Traditional public	0.83	1.25	1.45	1.35	1.63		
Charter school	2.68	9.23	11.84	6.78	7.60		
Community type							
City	1.60	3.51	3.52	3.19	3.81		
Suburban	1.12	3.59	2.99	2.83	3.78		
Town	1.64	2.93	3.46	2.97	3.50		
Rural	1.19	1.71	2.15	1.90	2.03		
School level							
Primary	1.12	2.47	2.66	2.38	2.83		
Middle	1.19	1.88	2.37	1.98	2.41		
High	1.26	1.59	2.34	1.93	2.19		
Combined	2.62	2.78	3.57	2.23	3.23		
Student enrollment							
Less than 100	3.97	6.01	6.43	6.09	5.19		
100–199	2.70	3.17	5.25	3.28	5.28		
200–499	1.25	2.17	2.86	2.34	2.61		
500–749	1.36	3.19	2.98	2.85	3.29		
750–999	1.92	2.77	3.54	3.07	3.56		
1,000 or more	1.59	2.31	3.23	2.66	3.08		
Percent of K-12 students who were approved for free or reduced-							
price lunches							
0–34	1.10	2.57	2.68	2.18	2.64		
35–49	1.86	2.62	3.52	3.40	3.27		
50–74	1.50	2.08	2.74	2.05	2.81		
75 or more	1.68	2.97	3.42	2.26	3.48		
School did not participate in free or reduced-price lunch program	4.17	9.90	11.91	11.69	10.84		

Table A-10. Standard errors for Table 10: Percentage of library media centers that provided support for various programs, average number of student visits, and average number of books checked out during the most recent full week of school, per library media center and per 100 students, by selected school characteristics: 2011–12

		_	During the most recent full week of school					
	Percent of library n	nedia centers that	Per library media	a center,				
	provided support for		average num	ber of	Per 100 students, aver	rage number of		
		Programs that		Books or other		Books or other		
	Family literacy	encourage		materials		materials		
Selected school characteristic	activities	students to read	Student visits	checked out	Student visits	checked out		
All public schools with								
library media centers	0.79	0.78	10	11	1	2		
School classification								
Traditional public	0.80	0.81	9	10	1	2		
Charter school	3.93	4.58	90	97	18	19		
Community type								
City	1.89	2.00	24	25	3	4		
Suburban	1.45	1.45	19	22	3	3		
Town	2.17	1.84	20	23	4	5		
Rural	1.17	1.23	13	18	3	3		
School level								
Primary	1.34	1.26	11	16	2	3		
Middle	1.06	0.98	15	16	2	3		
High	1.03	1.28	27	7	3	1		
Combined	2.89	2.98	40	43	10	10		
Student enrollment								
Less than 100	3.67	4.23	18	31	26	51		
100–199	3.39	3.23	16	34	10	21		
200-499	1.40	1.34	11	16	3	4		
500–749	1.68	1.51	18	21	3	4		
750–999	2.40	2.31	32	49	4	6		
1,000 or more	1.47	1.27	41	24	2	2		
Percent of K–12 students who were approved for free or reduced-price lunches								
0–34	1.26	1.41	16	22	2	4		
35–49	1.98	1.80	22	26	4	5		
50–74	1.57	1.41	17	22	3	4		
75 or more	1.73	1.68	18	24	3	5		
School did not participate in free or								
reduced-price lunch program	4.44	6.54	142	130	31	33		

# **Appendix B: Methodology and Technical Notes**

## **Overview of the Schools and Staffing Survey**

The Schools and Staffing Survey (SASS) is sponsored by the National Center for Education Statistics (NCES) of the Institute of Education Sciences within the U.S. Department of Education and is conducted by the U.S. Census Bureau. SASS is a nationally representative sample survey of public and private K–12 schools, principals, and teachers in the 50 states and the District of Columbia. School districts associated with public schools and library media centers in public schools are also part of SASS. SASS has been conducted seven times: in school years 1987–88, 1990–91, 1993–94, 1999–2000, 2003–04, 2007–08, and 2011–12.

The 2011–12 SASS consisted of questionnaires for five types of respondents: school districts (public), schools (public and private), principals (public and private), teachers (public and private), and school library media centers (public). Modified versions of the public school principal, public school, and public school teacher questionnaires that incorporated wording and questions appropriate for private school settings were sent to private schools. Charter schools and schools in single-school districts received a modified public school questionnaire that included both district and school items.

For public schools, information can be linked across teachers and their principals, schools, library media centers, and districts. For private schools, information can be linked across teachers and their principals and schools. For the content of the questionnaires, see <a href="http://nces.ed.gov/surveys/sass/questionnaire.asp">http://nces.ed.gov/surveys/sass/questionnaire.asp</a>. Appendix C of this report provides information about how the SASS data files used to produce this report were created.

SASS was designed to produce national, regional, and state estimates for public elementary and secondary schools, school districts, principals, teachers, and school library media centers; and national and regional estimates for public charter schools, as well as principals, teachers, and school library media centers within these schools. For private schools, the sample supports national, regional, and affiliation strata estimates for schools, principals, and teachers. Comparisons between public and private schools and their principals and teachers are possible only at the regional and national levels, because private schools were selected for sampling by affiliation strata and region rather than by state.

The teacher survey was designed to support comparisons between new and experienced teachers (3 years or less of experience vs. more than 3 years of experience) at the state level for public school teachers and at the regional or affiliation strata level for private school teachers.

This appendix includes information on all components of SASS. For additional information on the specific SASS-related topics discussed in this appendix, consult the *Survey Documentation for the 2011–12 Schools and Staffing Survey* (Chambers et al. forthcoming) or the *User's Manual for the 2011–12 Schools and Staffing Survey Volumes 1–6* (Goldring et al. 2013). To access additional general information on SASS or for electronic copies of the questionnaires, go to the SASS home page (http://nces.ed.gov/surveys/sass).

### **Sampling Frames and Sample Selection**

**Public schools.** The starting point for the 2011–12 SASS public school sampling frame was the preliminary 2009–10 Common Core of Data (CCD) Nonfiscal School Universe data file. The sampling frame was adjusted from the CCD in order to fit the definition of a school eligible for SASS. To be eligible for SASS, a school was defined as an institution or part of an institution that provides classroom

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<sup>&</sup>lt;sup>1</sup> For more information about the CCD, see <a href="http://nces.ed.gov/ccd/">http://nces.ed.gov/ccd/</a>.

instruction to students, has one or more teachers to provide instruction, serves students in one or more of grades 1–12 or the ungraded equivalent, and is located in one or more buildings apart from a private home. It was possible for two or more schools to share the same building; in that case, they were treated as different schools if they had different administrators (i.e., principal or school head).

The SASS 2011–12 universe of schools is confined to the 50 states plus the District of Columbia and excludes the other jurisdictions, Department of Defense overseas schools, Bureau of Indian Education schools, and CCD schools that do not offer teacher-provided classroom instruction in grades 1–12 or the ungraded equivalent. This last group includes schools that are essentially administrative units that may oversee entities that provide classroom instruction or may only provide funding and oversight.

The SASS definition of a school is generally similar to the CCD definition, with some exceptions. Because SASS allows schools to define themselves, Census Bureau staff observed that schools generally report as one entity in situations where the administration of two or more schools reported separately on CCD is the same. Thus, CCD schools with the same location, address, and phone number were collapsed during the SASS frame building on the assumption that the respondent would consider them to be one school. A set of rules was applied in certain states to determine in which instances school records should be collapsed together. When school records were collapsed together, the student and teacher counts, grade ranges, and names as reported to CCD were all modified to reflect the change.

Finally, additional school records were added to the sampling frame. Most of these records were for alternative, special education, or juvenile justice facilities in California, Pennsylvania, and New York.<sup>2</sup> For a detailed list of frame modifications, see the *Survey Documentation for the 2011–12 Schools and Staffing Survey* (Chambers et al. forthcoming). After deleting, collapsing, and adding school records, the SASS public school sampling frame consisted of about 90,530 traditional public schools and 5,080 public charter schools.

SASS uses a stratified, probability proportionate to size (PPS) sample (for an explanation of PPS sampling, see Cochran, 1977). The first level of stratification was school type: (1) schools in a subset of the states where counties are the school districts (Florida, Maryland, Nevada, and West Virginia) so that each of these districts had school(s) selected; (2) public charter schools; and (3) all other traditional public schools. The second-level stratification was state and school district for type 1 schools, and states or groups of states for type 2 and 3 schools. Each of the school types was then stratified by grade level (elementary, secondary, and combined for public charter schools; primary, middle, high, and combined for traditional public schools). Within each stratum, schools were sorted prior to sampling by state, community type (12 categories), collapsed ZIP code, percent free or reduced-price lunch (2 categories), highest grade in the school, percent minority enrollment (4 categories), and enrollment. The measure of size used for the schools was the square root of the number of full-time-equivalent teachers reported or imputed for each school during sampling frame development. If a school's measure of size was greater than the sampling interval, the school was included in the sample with certainty. Each stratum was assigned a sample size to meet the defined precision goals of the survey. For example, for public primary schools, the goal was 15 percent or lower for coefficient of variation (CV) for national, regional, and state estimates for key characteristics. These sampling procedures resulted in a total public school sample of about 10,250 traditional public schools and 750 public charter schools.

**Private schools.** The 2011–12 SASS private school frame was based on the 2009–10 Private School Universe Survey (PSS) as updated for the 2011–12 PSS.<sup>3</sup> That update is conducted prior to each

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<sup>&</sup>lt;sup>2</sup> In the 2007–08 SASS, records for Career Technical Centers (CTCs) were added to the frame because they were believed to be underrepresented in CCD. In 2011–12 SASS, special handling of CTCs was not deemed necessary. However, CTCs listed in CCD that met the SASS eligibility criteria were included on the SASS sampling frame.

<sup>&</sup>lt;sup>3</sup> For more information about the PSS, see <a href="http://nces.ed.gov/surveys/pss">http://nces.ed.gov/surveys/pss</a>.

administration of PSS by collecting membership lists from private school associations and religious denominations, as well as private school lists from state education departments. The 2011–12 SASS private school frame was further augmented by the inclusion of additional schools that were identified through the 2009–10 PSS area frame data collection; these area frame schools were included in the SASS sample survey with certainty. Schools with kindergarten as the highest grade level were deleted from the frame to fit the SASS definition. After these changes, the private school sampling frame consisted of about 28,490 private schools.

Private schools were stratified by affiliation strata, grade level (elementary, secondary, and combined), and Census region (Northeast, Midwest, South, and West). The 11 affiliation strata included 3 strata for Catholic (parochial, diocesan, and private); Baptist; Jewish; Lutheran; Seventh-day Adventist; other religious; and 3 strata for nonsectarian (regular, special emphasis, and special education). Within each stratum, private schools in the list frame were sorted prior to sampling by: state, highest grade in the school, community type (12 categories), ZIP code, and enrollment. The measure of size and PPS procedures described for public schools were used for private schools as well. Of the 3,000 private schools sampled for the 2011–12 SASS, about 2,750 were from the list frame and about 250 were from the 2009–10 PSS area frame.

**Public school districts.** Since the SASS sample design calls for schools to be selected first, the public school district sample consists of the districts that were associated with the schools in the public school sample. This provides the linkage between the district and the school. In Florida, Maryland, Nevada, and West Virginia, school sampling was done in such a way that all districts were taken with certainty. About 5,800 public school districts were pulled into the sample by being associated with sampled public schools.

**Teachers.** Teachers are defined as staff members who teach regularly scheduled classes to students in any of grades K–12. Teacher Listing Forms (i.e., teacher rosters) were collected from sampled schools and districts, primarily by mail, and compiled at the Census Bureau. This compilation was done on an ongoing basis throughout the roster collection period. Along with the names of teachers, sampled schools were asked to provide information about each teacher's teaching experience (1st year, 2–3 years, 4–19 years, and 20 or more years), teaching status (full or part time), and subject matter taught (special education, general elementary, math, science, English/language arts, social studies, vocational/technical, or other).

Sampling was also done on an ongoing basis throughout the roster collection period. The Census Bureau first stratified teachers into four teacher strata: (1) beginning teachers (in their first year of teaching); (2) early-career teachers (in their second or third years of teaching), (3) mid-career teachers (in their 4th through 19th years of teaching), and (4) experienced teachers (in their 20th or later years of teaching). Beginning and early-career teachers were oversampled to improve the survey estimates for this subpopulation. Teachers within a school were sorted by the teacher stratum code, the subject matter taught, and the teacher line number code. The teacher line number is a unique number assigned to identify the individual within the teacher list. Within each teacher stratum in each school, teachers were selected systematically with equal probability.

So that a school would not be overburdened by sampling too large a proportion of its teachers, the maximum number of teachers per school was set at 20. About 20 percent of the eligible public schools and 28 percent of the eligible private schools did not provide teacher lists that could be used for sampling teachers. For these schools, no teachers were selected. About 51,100 public schools teachers and 7,100 private school teachers were sampled.

**Principals.** The principal of each sampled school was selected. About 14,000 school principals were sampled (10,250 traditional public school principals, 750 public charter school principals, and 3,000 private school principals).

**Library media centers.** A library media center in each sampled public school was also selected. Private schools were not included in the library media center survey. About 10,250 traditional public school and 750 public charter school library media centers were sampled.

For details on sampling at all levels, see the *Survey Documentation for the 2011–12 Schools and Staffing Survey* (Chambers et al. forthcoming).

#### **Data Collection Procedures**

In 2011–12, SASS employed a mail-based survey approach with subsequent telephone and in-person field follow-up. Prior to the beginning of data collection, research applications were submitted to public school districts that required applications to conduct research in their schools. Starting in June 2011, all districts were contacted by telephone to verify or collect the information about the district and sampled school(s) needed for data collection, identify the best person to receive the district questionnaire, and determine if the district would provide an electronic teacher list for sampled school(s). Survey packages were mailed to districts in October 2011. Follow-up was conducted sequentially by mail, telephone, and in person to districts that did not provide the requested questionnaire and/or teacher list.

In preparation for school-level data collection, advance letters were mailed to the sampled schools in June 2011 to verify their addresses. School packages were mailed in October 2011. Next, schools were telephoned using a computer-assisted telephone-interviewing instrument to verify school information, establish a survey coordinator (who became the main contact person at the school for subsequent communication), and follow up on the Teacher Listing Form if the school district had not already provided an electronic teacher list. Teacher questionnaires were mailed to schools on a flow basis as teachers were sampled on an ongoing basis from the data provided on the Teacher Listing Form or electronic teacher list. The field follow-up period was preceded by phone calls from the telephone centers to remind the survey coordinators to have staff complete and return all forms. Individual survey respondents (principal, librarian, and teachers) were also called from the telephone centers and asked to complete the questionnaire by phone. Data collection ended in June 2012.

# **Data Processing and Imputation**

The Census Bureau used both central processing and headquarters staff to check returned questionnaires, key the data, and implement quality control procedures. Questionnaires that had a preliminary classification of a complete interview were submitted to a series of computer edits consisting of a range check, a consistency edit, a blanking edit, and a logic edit. After these edits were run and reviewed by analysts, the records were put through another edit to make a final determination as to whether the case

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<sup>&</sup>lt;sup>4</sup> The SASS district package contained a cover letter, the School District Questionnaire, and postage-paid return envelope. Districts that indicated they would provide electronic list(s) of teachers for their selected school(s) received a letter that explained the purpose of the teacher list and provided instructions for uploading the file. In districts with only one school, the school received the Public School Questionnaire (With District Items) in lieu of the School District Questionnaire and School Questionnaire.

<sup>&</sup>lt;sup>5</sup> The SASS school package contained a cover letter to the principal, a cover letter to the survey coordinator, the Teacher Listing Form if the district could not provide it, the Public School Principal Questionnaire or Private School Principal Questionnaire, the Public School Questionnaire or Public School Questionnaire (With District Items) or Private School Questionnaire, the School Library Media Center Questionnaire (for public schools only), postage-paid return envelopes, and the *Statistical Abstract of the United States: 2011* CD.

<sup>&</sup>lt;sup>6</sup> Blanking edits delete answers to questions that should not have been filled in (e.g., if a respondent followed a wrong skip pattern).

was eligible for the survey and whether sufficient data had been collected for the case to be classified as a complete interview.

After the final edits were run, cases with "not-answered" values for items remained. Values were imputed using two main approaches. Donor respondent methods, such as hot-deck imputation, were used. If no suitable donor case could be matched, the few remaining items were imputed using mean or mode from groups of similar cases to impute a value to the item with missing data. After each stage of imputation, computer edits were run again to verify that the imputed data were consistent with the existing questionnaire data. If that was not the case, an imputed value was blanked out by one of these computer edits due to inconsistency with other data within the same questionnaire or because it was out of the range of acceptable values. In these situations, Census Bureau analysts looked at the items and tried to determine an appropriate value. Edit and imputation flags, indicating which edit or imputation method was used, were assigned to each relevant survey variable. For further information, see the sections on data processing and imputation in the *Survey Documentation for the 2011–12 Schools and Staffing Survey* (Chambers et al. forthcoming).

### **Response Rates**

**Unit response rates.** The unit response rate indicates the percentage of sampled cases that met the definition of a complete interview. The weighted SASS unit response rate was produced by dividing the weighted number of respondents who completed questionnaires by the weighted number of eligible sampled cases, using the initial base weight (the inverse of the probability of selection). Table B-1 summarizes the weighted unit response rates for each survey type. Because response rates vary between surveys, it is possible to not have information for all the components related to a particular school. For example, it is possible that a district does not have a corresponding school record or there may not be a principal record for every school.

Table B-1. Weighted unit and overall response rates using initial base weight, by survey: 2011–12

Survey	Unit response rate (percent)	Overall response rate (percent)
Public School Teacher Listing Form	79.6	†
Private School Teacher Listing Form	71.6	†
Public School District	80.6	†
Public School	72.5	†
Private School	65.7	†
Public School Principal	72.7	†
Private School Principal	64.7	†
Public School Teacher	77.7	61.8
Private School Teacher	69.9	50.1
Public School Library Media Center	72.9	†_

<sup>†</sup> Not applicable.

NOTE: Response rates were weighted using the inverse of the probability of selection (initial base weight). SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School and Private School Teacher Listing Forms; Public School District, Public School, Private School, Public School Principal, Private School Principal, Public School Teacher, Private School Teacher, and Public School Library Media Center Documentation Data Files," 2011–12.

<sup>&</sup>lt;sup>7</sup> For the formula used to calculate the unit response rate, see NCES Statistical Standards (U.S. Department of Education 2003).

**Overall response rates.** The overall response rate represents the response rate to the survey taking into consideration each stage of the survey. For teachers, the overall response rate is calculated as the product of the response rate to two stages: the Teacher Listing Form and the teacher questionnaire. The weighted overall response rate using the initial base weight for public school teachers was 61.8 percent; and for private school teachers, 50.1 percent. For the other surveys, the overall and unit response rates are the same since these surveys have only one sampling stage.

**Unit nonresponse bias analysis.** Because the *NCES Statistical Standards* (4-4) require analysis of nonresponse bias for any survey stage with a base-weighted response rate less than 85 percent, all SASS files were evaluated for potential bias. For each survey, national-level estimates were first examined for potential bias. For public schools, principals, teachers, and library media centers, these national-level estimates were evaluated within charter and noncharter schools. Next, the base-weighted unit response rate was calculated by state or affiliation strata depending on the sector (public and private, respectively). If the base-weighted response rate for any state or affiliation stratum was below 85 percent, a detailed comparison of respondents to the frame population was conducted by examining characteristics. For the public school library media center survey, these characteristics were enrollment, community type, and school level. A difference between the frame and respondent population was considered noteworthy if the difference was statistically significant and the following three conditions were met:

- The relative difference between the frame and respondent population was greater than 10 percent;
- The absolute difference was greater than one percentage point; and
- The cell for each subpopulation contained at least 30 interviews.

As shown in table B-1, the weighted response rate using the initial base weight was 80.6 percent for public school districts. The weighted response rate using the initial base weight was 72.5 percent for public schools and 65.7 percent for private schools. The weighted response rate using the initial base weight was 72.7 percent for public school principals and 64.7 percent for private school principals. The weighted response rate using the initial base weight for the teacher listing form was 79.6 for public schools and 71.6 for private schools. The weighted questionnaire response rate using the initial base weight for the teacher survey was 77.7 percent for public school teachers and 69.9 percent for private school teachers. The weighted response rate using the initial base weight was 72.9 percent for public school library media centers. Table B-2 contains a list of the comparisons between the frame and the weighted distribution where evidence of potential bias was found for national-level data on the library media center survey.

Nonresponse adjustments were designed to reduce or eliminate nonresponse bias. The nonresponse-adjusted comparison to the frame shown in table B-2 reflects the nonresponse adjustment. This table shows that there is no evidence of potential bias after nonresponse adjustments were made for the national-level items included in the analysis. For further information on unit response rates and nonresponse bias analysis, see the *Survey Documentation for the 2011–12 Schools and Staffing Survey* (Chambers et al. forthcoming).

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<sup>&</sup>lt;sup>8</sup> For the formula used to calculate the overall response rate, see NCES Statistical Standards (U.S. Department of Education 2003).

<sup>&</sup>lt;sup>9</sup> Unit nonresponse bias analysis was conducted using the base weight, defined as the product of the initial base weight (the inverse of the probability of selection) and the sampling adjustment factor. The sampling adjustment factor is an adjustment that accounts for circumstances that affect the school's probability of selection that are identified after the data collection has begun, such as a merger, duplication, or incorrect building-level collapsing (i.e., a junior high school and a senior high school merge to become a junior/senior high school).

Table B-2. Indication of potential sources of bias for public school library media center data at the national level based on comparisons between frame distribution and base-weighted or nonresponse-adjusted respondent distributions: 2011–12

	Potentia	al source of bias			
Estimate level	School type (traditional or charter)	Characteristic	Value	Base-weighted respondent distribution	Nonresponse- adjusted respondent distribution
National	Traditional	Community type	(City)	X	
National	Traditional	Community type	(Town)	X	
National	Traditional	Community type	(Rural)	X	
National	Traditional	Number of teachers	(50–74)	X	
National	Traditional	Percent free lunch eligible	(75% or more)	X	
National	Traditional	Percent non-White	(5–9%)	X	
National	Traditional	Percent non-White	(50% or more)	X	

NOTE: x denotes comparisons that are a potential source of bias.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Documentation Data File," 2011–12.

**Item response rates.** The item response rate indicates the percentage of respondents who answered a given survey question or item. The weighted SASS item response rate is calculated by dividing the weighted number of respondents who provided an answer to an item by the weighted number of respondents who were eligible to answer that item. <sup>10</sup> Table B-3 provides a brief summary of the weighted item response rates for each questionnaire. All items on the public school library media center questionnaire had item response rates of 85 percent or more. Therefore, no item bias analysis was conducted for the library media center survey.

Table B-3. Summary of weighted item response rates, by survey: 2011–12

	Percent of items with a response rate of	Percent of items with a response rate of
Survey	85 percent or more	less than 85 percent
Public School District	100.0	0.0
Public School	96.2	3.8
Private School <sup>1</sup>	93.5	6.1
Public School Principal	98.9	1.1
Private School Principal	98.3	1.7
Public School Teacher	94.2	5.8
Private School Teacher	92.5	7.5
Public School Library Media Center	100.0	0.0

<sup>&</sup>lt;sup>T</sup>There was one item on the Private School Questionnaire that had 0 eligible respondents; thus, the response rate could not be calculated. For this reason, the percentages on this row do not sum to 100.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School and Private School Teacher Listing Forms; Public School District, Public School, Private School, Public School Principal, Private School Principal, Public School Teacher, Private School Teacher, and Public School Library Media Center Documentation Data Files," 2011–12.

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<sup>&</sup>lt;sup>10</sup> For the formula to calculate the item response rate, see NCES Statistical Standards (U.S. Department of Education 2003).

### Weighting

The general purpose of weighting is to scale up the sample estimates to represent the target survey population. For SASS, a base weight is used as the starting point. In some cases, this base weight is the simple reciprocal of the unit's probability of selection on the frame (the initial base weight), and in other cases, adjustments are made to this frame base weight to reflect multiple chances of selection from the frame or other situations such as subsampling.

Next, a series of nonresponse adjustment factors are calculated and applied based on a weighting cell adjustment. Weighting cells are developed using tree search algorithms. These cells are selected to be homogeneous in response propensity within cells and heterogeneous in response propensity across cells (response propensity is the underlying "chance" that a particular sample unit will respond by completing the questionnaire: its individual response rate). The adjustment is the inverse of the weighted response rate within each cell, and each respondent in the cell receives this adjustment. Nonrespondents are given weights of zero: the respondents are reweighted to represent the nonrespondents.

Finally, for some files, a ratio-adjustment factor is calculated and applied to the sample to adjust the sample totals to the frame totals. This improves the precision of survey estimates.

The product of these factors is the final weight for each SASS respondent, which appears as DFNLWGT on the SASS Public School District Data File, AFNLWGT on all SASS Principal Data Files, SFNLWGT on all SASS School Data Files, TFNLWGT on all SASS Teacher Data Files, and MFNLWGT on the SASS Library Media Center Data File.

The counts in table 1 (in the Estimate Tables section) do not necessarily match the frame counts because some cases in the frame were found to be ineligible (i.e., out of scope) and because not all data files (e.g., principal or library media center) are post-stratified to match the frame counts.

#### Variance Estimation

In surveys with complex sample designs, such as SASS, direct estimates of sampling errors that assume a simple random sample typically underestimate the variability in the estimates. The SASS sample design and estimation include procedures that deviate from the assumption of simple random sampling, such as stratifying the school sample, oversampling new teachers, and sampling with differential probabilities.

One method of calculating sampling errors of complex sample designs is replication. Replication methods involve constructing a number of subsamples (i.e., replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic. Each SASS data file includes a set of 88 replicate weights designed to produce variance estimates. The set of replicate weights for each file should be applied to the respondents in that file. The replicate weights for SASS respondents are DREPWT1–DREPWT88 for districts, AREPWT1–AREPWT88 for principals, SREPWT1–SREPWT88 for schools, TREPWT1–TREPWT88 for teachers, and MREPWT1–MREPWT88 for library media centers.

# **Reliability of Data**

SASS estimates are based on samples. The sample estimates may differ somewhat from the values that would be obtained from the universe of respondents using the same questionnaire, instructions, and field

representatives. The difference occurs because a sample survey estimate is subject to two types of errors: nonsampling and sampling. Estimates of the magnitude of sampling error for SASS data can be derived or calculated. Nonsampling errors are attributed to many sources, including definitional difficulties, the inability or unwillingness of respondents to provide correct information, differences in the interpretation of questions, an inability to recall information, errors made in collection (e.g., in recording or coding the data), errors made in processing the data, and errors made in estimating values for missing data. Quality control and edit procedures were used to reduce errors made by respondents, coders, and interviewers.

## **Caution Concerning Changes in Estimates**

Care must be taken in estimating change over time in a SASS data element, because some of the measured change may not be attributable to a change in the education system.

Some of the change may be due to changes in the sampling frame, changes in questionnaire item wording, or other changes. For example, the definition of locale codes has undergone major changes since the 2000 Decennial Census. The first major change was an improvement in geocoding technology, which improved the assignment of specific addresses to physical locations. In 2005, a new locale code for CCD was implemented based on the new urban-centric method of classifying locale. Changes in how areas and, thus, schools are categorized may account for at least some changes that are noted from previous administrations.

# **Appendix C: Description of Data Files**

# **Description of Data Files**

The 2011–12 Schools and Staffing Survey (SASS) data are being released in eight restricted-use data files. Those data files were created from nine survey questionnaires: the School District Questionnaire, School Questionnaire (public), Public School Questionnaire (With District Items), Private School Questionnaire, Principal Questionnaire (public), Private School Principal Questionnaire, Teacher Questionnaire (public), Private School Teacher Questionnaire, and Library Media Center Questionnaire (public). Table C-1 identifies each data file and the questionnaire data used to build the file.

Table C-1. Names of data files and the questionnaires from which the data were drawn: 2011–12

Data file	Questionnaire source
School district	School District Questionnaire, Public School Questionnaire (With District Items)
Public school Private school	School Questionnaire, Public School Questionnaire (With District Items) Private School Questionnaire
Public school principal Private school principal	Principal Questionnaire Private School Principal Questionnaire
Public school teacher Private school teacher	Teacher Questionnaire Private School Teacher Questionnaire
Public school library media center	Library Media Center Questionnaire

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2011–12.

For the most part, there is a separate data file for each type of respondent (district, school, principal, teacher, and library media center) for each school sector (public<sup>2</sup> and private). There are two exceptions: 1) there is no district file for private schools, and 2) there is no library media center file for private schools.

The Public School District Data File includes responses from school districts to the School District Questionnaire along with the "district items" taken from the Public School Questionnaire (With District Items) completed by the subset of public schools that were not associated with "traditional" school districts. These schools include state-run schools, traditional public schools in single-school districts, and independent charter schools. Rather than ask these public schools to complete two questionnaires, School and School District, the National Center for Education Statistics created the Public School Questionnaire (With District Items) to capture district data from these schools. Table C-2 shows the different respondents and questionnaires used to create the Public School District Data File. The "district items" gathered from the Public School Questionnaire (With District Items) were not placed on the Public School Data File.

<sup>&</sup>lt;sup>1</sup> The School Questionnaire (With District Items) is an expanded version of the Public School Questionnaire that includes items from the School District Questionnaire.

<sup>&</sup>lt;sup>2</sup> Public includes traditional public and public charter.

Table C-2. The number of cases in the Public School District Data File, by respondent and source of data: 2011–12

Respondent	Source of data in the district file	Number of cases
Total		4,640
Regular districts	School District Questionnaire	4,000
State-run schools <sup>1</sup>	Public School Questionnaire (With District Items)	50
Schools in single-school districts	Public School Questionnaire (With District Items)	330
Independent charter schools	Public School Questionnaire (With District Items)	200
Dependent charter schools in charter school		
districts	Public School Questionnaire (With District Items)	60

<sup>&</sup>lt;sup>1</sup>These include schools for the blind, career and technical centers, and schools in detention centers run by a state.

NOTE: Rounded, unweighted number of respondents in the data file. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School District and Public School Documentation Data Files," 2011–12.

# **Appendix D: Description of Variables**

# **Description of Variables**

The variables that are included in this report are listed in table D-1. Those with variable names that begin with "M" and are followed by four digits are survey variables that come from items on the School Library Media Center Questionnaire. For survey variables, the numeric part of the variable name can be found in the questionnaire to the left of the corresponding question. The variables without the letter plus four digit names are "created variables," meaning they were created using survey variables, frame variables (variables taken from the sampling frame), other created variables, or a combination of these. They are frequently used in National Center for Education Statistics publications and have been added to the data files to facilitate data analysis. The definitions for the created variables follow table D-1.

Table D-1. Variables used in the Characteristics of Public Elementary and Secondary School Library Media Centers in the United States: Results From the Schools and Staffing Survey report: 2011–12

Variable	Variable name in data file
Access to online, licensed databases provided to students	M0077
Access to online, licensed databases provided to students at home	M0079
Access to online, licensed databases provided to students in the classroom	M0078
Amount spent for all information resources for the library media center during the 2010–11 school year	M0112
Amount spent for the purchase of audio/video materials for the 2010-11 school year	M0111
Amount spent for the purchase of books for the 2010-11 school year	M0108
Availability of library media center for student use after school	M0036
Availability of library media center for student use before school	M0035
Availability of library media center for student use during regular school hours	M0037
Availability through the library media center of laptops for staff use outside the library media center	M0085
Availability through the library media center of laptops for student use outside the library media center	M0084
Availability within library media center of automated catalog(s)	M0081
Availability within library media center of automated circulation system	M0080
Availability within library media center of DVD player(s), Blu-ray disc player(s), or VCR(s) for student and/or staff use	M0082
Availability within library media center of media retrieval system	M0083
Availability within library media center of technology to assist students and/or staff with disabilities	M0086

See notes at end of table.

Table D-1. Variables used in the Characteristics of Public Elementary and Secondary School Library Media Centers in the United States: Results From the Schools and Staffing Survey report: 2011–12—Continued

Variable	Variable name in data file
Charter school identifier <sup>1</sup>	CHARFLAG
During the most recent full week of school, number of books or other materials checked out	M0039
During the most recent full week of school, number of regularly scheduled adult volunteers in the library media center	M0066
During the most recent full week of school, number of regularly scheduled student volunteers in the library media center	M0067
During the most recent full week of school, number of student visits to the library media center	M0038
Four-category school level <sup>1</sup>	SCHLEVE2
Number of audio/video materials acquired during the 2010-11 school year	M0110
Number of audio/video materials held at the end of the 2010-11 school year	M0109
Number of book titles acquired during the 2010–11 school year	M0107
Number of book titles held at the end of the 2010-11 school year	M0106
Number of computer workstations the library media center has for student and/or staff use	M0075
Number of computer workstations with internet access the library media center has for student and/or staff use	M0076
Number of full-time paid library aides or clerical staff	M0059
Number of full-time paid professional staff who are not state-certified as library media specialists	M0055
Number of full-time, paid, state-certified library media center specialists	M0051
Number of paid professional library media staff that are state-certified as classroom teachers	M0064
Number of paid professional library media staff that have earned a master's degree in librarianship, library science, information science, educational media, instructional design or instructional	
technology	M0063
Number of part-time paid library aides or clerical staff	M0060
Number of part-time paid professional staff who are not state-certified as library media specialists	M0056
Number of part-time, paid, state-certified library media center specialists	M0052
Percentage of students in the school approved for the National School Lunch Program <sup>1</sup>	NSLAPP_S
Presence of a library media center in the school	M0025
Student enrollment in K–12 and ungraded <sup>1</sup>	SCHSIZE

See notes at end of table.

Table D-1. Variables used in the Characteristics of Public Elementary and Secondary School Library Media Centers in the United States: Results From the Schools and Staffing Survey report: 2011–12—Continued

Variable	Variable name in data file
Support for family literacy activities	M0040
Support for programs, such as book clubs, that encourage students to read	M0041
Total K–12 and ungraded enrollment in school <sup>1</sup>	ENRK12UG
Type of scheduling used by the library media center (regular or flexible)	M0033
Urban-centric school locale code <sup>1</sup>	URBANS12
Whether community members who do not attend this school and do not have children who attend this school may use the library media center computer workstations to access the Internet	M0030
Whether community members who do not attend this school and do not have children who attend this school may use the library media center during regular school hours	M0027
Whether community members who do not attend this school and do not have children who attend this school may use the library media center during the week, outside of regular school hours	M0028
Whether community members who do not attend this school and do not have children who attend this school may use the library media center during the weekends, outside of regular school hours	M0029
Whether library media center is open to community members who do not attend this school and do not have children who attend this school	M0026

<sup>&</sup>lt;sup>1</sup> The definition for this variable can be found below.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Data File," 2011–12.

Charter school identifier (CHARFLAG): A flag variable taken from the Public School Data File that identifies charter schools. 1 = School is a public charter school, 2 = School is a traditional public school. A charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulation. CHARFLAG is based on S0290 from the public school.

**Four-category school level (SCHLEVE2):** Taken from the Public School Data File, SCHLEVE2 is a four-category variable based on grades reported by the school: primary, middle, high, and combined. Primary schools are those with at least one grade lower than 5 and no grade higher than 8. Middle schools have no grade lower than 5 and no grade higher than 8. High schools have no grade lower than 7 and at least one grade higher than 8. Combined schools are those with at least one grade lower than 7 and at least one grade higher than 8, or with all students in ungraded classrooms.

#### Percentage of students in the school approved for the National School Lunch Program

(NSLAPP\_S): Taken from the Public School Data File, NSLAPP\_S is a continuous variable created by dividing the number of K-12 and ungraded students approved for free or reduced-price lunches (S0273) by the total number of K-12 and ungraded students enrolled (S0039) among schools that participated in the National School Lunch Program (NSLP) (S0272=1). Schools that did not participate in the NSLP have valid skip values. For this report, NSLAPP\_S is recoded as a categorical variable describing the proportion of students approved for free or reduced-price lunches.

Student enrollment in K–12 and ungraded (SCHSIZE): Taken from the Public School Data File, SCHSIZE is a categorical variable based on the number of K–12 and ungraded students enrolled in the school (S0039). For this report, SCHSIZE was recoded into six categories.

**Total K-12 and ungraded enrollment in school (ENRK12UG):** A continuous variable based on S0039 from the Public School Data File. For cases where the school was a noninterview, sample file or other information was used to impute (if available)

**Urban-centric school locale code (URBANS12):** Taken from the Public School Data File, URBANS12 is a created variable collapsed from the 12 category urban-centric school locale code (SLOCP12) which was assigned using the 2000 Decennial Census data and recoded into four categories: city, suburban, town, and rural.