

## CHAPTER 7

# Libraries and Educational Technology

This chapter contains statistics on libraries and the use of information technologies. These data show the extent of America's public access to information technologies outside of formal classroom activities. The data also provide a capsule description of the magnitude and availability of library resources.

The first section of the chapter (tables 409 to 415) deals with public libraries, public and private school libraries, and college and university libraries. It contains data on collections, population served, staff, and expenditures. Table 413 provides institutional-level information for the largest college libraries in the country.

The second part of the chapter (tables 416 to 421) provides information on the availability and use of technology at school and at work. For example, the proportion of children using computers at school is shown over time. Also included are data on the use of home computers and the Internet by adults and school children, with comparisons among various demographic groups.

Related data may be found in other chapters of the *Digest*. For example, statistics on the number of degrees conferred in computer and information sciences and library sciences are in chapter 3. Further information on survey methodologies is in the Guide to Sources in the appendix and the publications cited in the source notes.

## Libraries

In 1999–2000, there were 95 school library visits each week per 100 public school students (table 409). Public elementary school students were more likely to visit their school libraries (107 visits per 100 students each week) than public secondary school students (73 per 100). There was no measurable difference detected between the number of visits per week at public and private schools. However, private secondary school students were more likely than public secondary school students to visit the library (90 percent and 73 percent, respectively). The average number of library staff per school was 1.9 at public schools and 1.2 at private schools. On average, public school libraries had smaller numbers of books on a per student basis (1,803 per 100) than private school libraries (2,857 per 100 students) in 1999–2000. Public elementary school libraries had larger holdings than public secondary schools on a per student basis (1,894 per 100 students, compared to 1,606 per 100 students), and elementary school stu-

dents checked out more books on a per student basis (1.5 per week compared to 0.3 per week).

The increase in college library resources rose faster than enrollment between 1991–92 and 1999–2000 (table 412). After adjustment for inflation, the average library operating expenditure per student rose 6 percent. In 1999–2000, the average library operating expenditure per student was \$459.

In 2002, there were 9,137 public libraries in the United States with a total of 785 million books and serial volumes. The annual attendance per capita was 4.5, and the reference transactions per capita were 1.1 (table 415).

## Educational Technology

There has been widespread introduction of computers into the schools in recent years. In 2003, the average public school contained 136 instructional computers (table 416). One important technological advance that has come to classrooms following the introduction of computers has been connections to the Internet. The proportion of instructional rooms with internet access increased from 51 percent in 1998 to 93 percent in 2003 (figure 29). Nearly all schools had access to the Internet in 2003 (table 416).

The increasing number of computers in schools has been reflected in rising proportions of students using computers (table 420). The proportion of elementary and secondary school students using computers at school rose from 70 percent in 1997 to 83 percent in 2003. Students in elementary and secondary schools who were 10 years old or older were more likely to use computers at school than younger children. Eighty percent of children from families with incomes of \$20,000 to \$24,999 used computers at school compared to 86 percent of children from families with incomes of \$75,000 or more.

In addition to large proportions of elementary and secondary students using computers at school, a majority of students in 2003 used computers at home (table 420). In 2003, 68 percent of elementary and secondary school students used computers at home, compared to 43 percent in 1997. During the same period of time, the proportion of students using computers at home for school work rose from 25 to 47 percent. In 2003, female students were slightly more likely to use computers at home for school work than males. About 54 percent of White elementary and secondary school students used computers at home for school work in 2003 com-

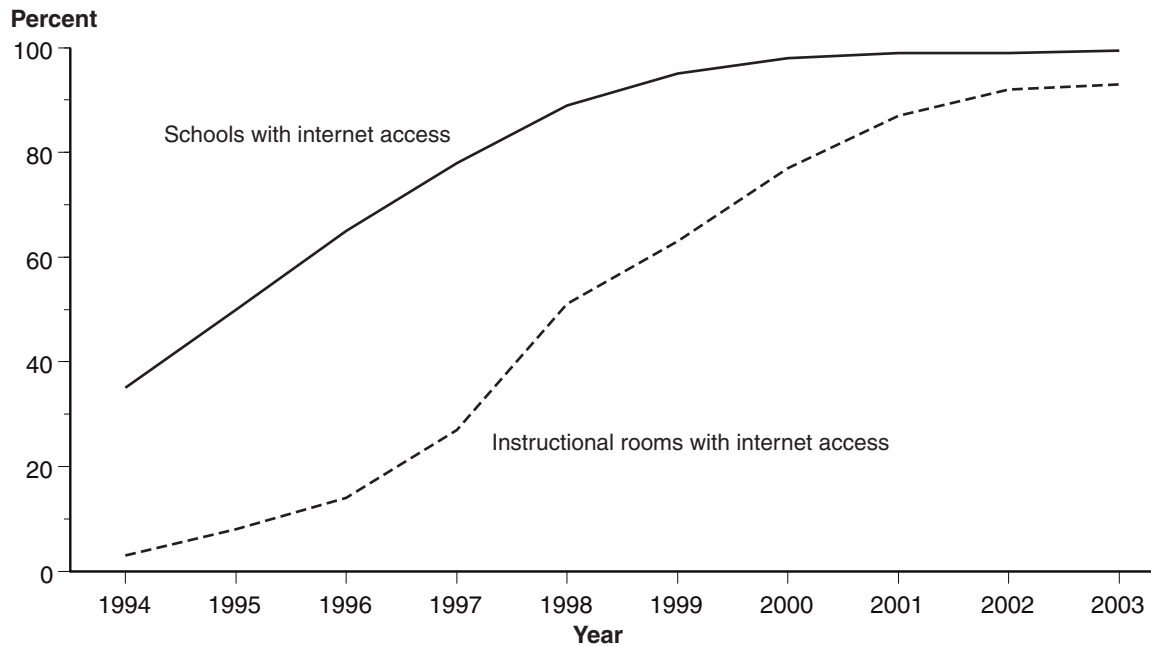
pared to 35 percent of Black students and 34 percent of Hispanic students. About 63 percent of students from families with an income of \$75,000 or more used a computer at home for school work compared to 32 percent of students from families with incomes of \$20,000 to \$24,999.

The proportion of college students using computers rose from 63 percent in 1997 to 85 percent in 2003. About 76 percent used computers at home in 2003 (table 420).

Computers are widely used in the workplace. In 2003, 56 percent of all workers used computers at work (table 421).

More frequent use of computers was associated with higher levels of education and higher incomes. Forty percent of high school graduates and 16 percent of high school dropouts used computers at work compared to 82 to 87 percent of those with bachelor's, master's, first-professional, or doctor's degrees. Among the common applications for all employees using computers on the job were Internet and e-mail (75 percent), word processing/desktop publishing (68 percent), spreadsheets and data bases (64 percent), and calendar/schedule (57 percent).

**Figure 29. Percentage of all public schools and instructional rooms with internet access: Fall 1994 through fall 2003**



SOURCE: U.S. Department of Education, National Center for Education Statistics, *Internet Access in U.S. Public Schools and Classrooms: 1994–2003*.

**Table 409. Selected statistics on school libraries/media centers, by control and level of school: 1999–2000**

Selected statistic	Public								Private							
	Total		Elementary		Secondary		Combined		Total		Elementary		Secondary		Combined	
1	2		3		4		5		6		7		8		9	
Number of schools with libraries <sup>1</sup> .....	77,288	(420.6)	57,024	(376.9)	18,039	(199.4)	2,226	(111.7)	17,054	(323.2)	10,961	(251.4)	1,955	(91.2)	4,138	(173.8)
Average number of staff per library <sup>1</sup> .....	1.89	(0.018)	1.80	(0.024)	2.21	(0.021)	1.50	(0.057)	1.18	(0.026)	1.01	(0.032)	1.80	(0.083)	1.33	(0.055)
Certified library/media specialists .....	0.81	(0.007)	0.74	(0.009)	1.06	(0.009)	0.63	(0.032)	0.23	(0.011)	0.13	(0.009)	0.55	(0.027)	0.35	(0.027)
Full-time .....	0.65	(0.007)	0.56	(0.009)	0.94	(0.011)	0.52	(0.031)	0.17	(0.009)	0.07	(0.007)	0.47	(0.025)	0.27	(0.022)
Part-time .....	0.16	(0.006)	0.17	(0.008)	0.12	(0.006)	0.10	(0.011)	0.06	(0.005)	0.06	(0.006)	0.07	(0.010)	0.08	(0.013)
Other professional staff .....	0.17	(0.007)	0.18	(0.009)	0.15	(0.007)	0.23	(0.021)	0.48	(0.014)	0.47	(0.020)	0.53	(0.039)	0.46	(0.024)
Full-time .....	0.12	(0.005)	0.12	(0.007)	0.10	(0.007)	0.12	(0.014)	0.22	(0.009)	0.19	(0.012)	0.33	(0.023)	0.27	(0.020)
Part-time .....	0.06	(0.004)	0.06	(0.006)	0.05	(0.005)	0.11	(0.019)	0.25	(0.012)	0.29	(0.017)	0.20	(0.029)	0.19	(0.017)
Other paid employees .....	0.91	(0.014)	0.88	(0.019)	1.00	(0.017)	0.65	(0.035)	0.48	(0.014)	0.41	(0.020)	0.72	(0.048)	0.52	(0.030)
Full-time .....	0.49	(0.008)	0.44	(0.010)	0.67	(0.016)	0.34	(0.024)	0.14	(0.009)	0.11	(0.011)	0.24	(0.024)	0.18	(0.015)
Part-time .....	0.41	(0.014)	0.44	(0.018)	0.33	(0.013)	0.31	(0.026)	0.34	(0.014)	0.31	(0.018)	0.48	(0.043)	0.34	(0.025)
Percentage of schools' library media centers with certain media equipment .....																
Telephone .....	84.8	(0.53)	82.8	(0.69)	91.5	(0.46)	81.9	(1.94)	53.2	(1.48)	45.3	(2.02)	78.2	(2.67)	62.3	(2.25)
Fax machine .....	11.5	(0.43)	8.1	(0.55)	22.2	(0.65)	12.1	(1.52)	6.7	(0.64)	4.8	(0.82)	13.6	(1.38)	8.7	(1.50)
Automated catalog .....	72.8	(0.69)	71.0	(0.87)	80.0	(0.78)	61.5	(2.72)	34.2	(1.25)	28.1	(1.54)	55.8	(2.61)	39.9	(2.25)
Automated circulation system .....	74.4	(0.65)	73.2	(0.88)	79.9	(0.72)	59.5	(3.10)	29.0	(1.17)	22.9	(1.31)	52.3	(2.48)	33.9	(2.33)
Video laser disc or DVD .....	43.0	(0.69)	41.8	(0.87)	47.7	(0.88)	35.1	(2.70)	12.7	(0.67)	10.4	(0.99)	21.2	(1.79)	15.0	(1.40)
Connection to Internet .....	90.1	(0.57)	87.9	(0.75)	96.9	(0.32)	88.7	(1.59)	60.6	(1.37)	55.1	(1.77)	81.6	(2.46)	65.2	(2.05)
Cable television .....	77.4	(0.66)	76.6	(0.83)	82.2	(0.66)	58.5	(3.21)	46.3	(1.21)	48.2	(1.68)	57.6	(2.44)	36.1	(1.91)
Broadcast television .....	43.4	(0.76)	43.9	(1.00)	42.9	(0.90)	34.8	(2.51)	48.0	(1.32)	52.5	(1.67)	42.4	(2.67)	38.6	(2.64)
Closed circuit television .....	25.0	(0.67)	23.3	(0.84)	30.8	(0.82)	20.5	(2.16)	7.9	(0.49)	6.5	(0.68)	19.2	(1.21)	6.4	(0.95)
Satellite dish .....	27.9	(0.60)	20.5	(0.71)	49.9	(0.93)	38.2	(2.79)	8.9	(0.58)	5.4	(0.74)	28.0	(1.71)	9.1	(1.04)
Percentage of schools with certain services .....																
Long distance learning offered .....	21.2	(0.48)	15.2	(0.61)	38.1	(0.79)	38.3	(2.76)	8.3	(0.78)	7.3	(1.08)	15.6	(2.09)	7.7	(1.16)
Students permitted to check out computer hardware .....	2.2	(0.14)	1.2	(0.16)	5.5	(0.41)	1.9	(0.48)	1.0	(0.17)	0.9	(0.25)	2.2	(0.41)	1.0	(0.29)
Students permitted to check out computer software .....	6.9	(0.31)	4.5	(0.36)	14.3	(0.69)	7.5	(1.07)	6.9	(0.57)	3.8	(0.50)	16.6	(1.53)	10.5	(1.59)
Total students using library per 100 students each week <sup>1,2</sup> .....	94.9	(0.88)	106.6	(1.12)	73.4	(1.05)	80.0	(4.47)	94.9	(5.96)	105.1	(10.88)	90.3	(2.57)	77.9	(2.41)
Books checked out per 100 students each week <sup>2</sup> .....	106.6	(1.63)	146.8	(2.46)	32.3	(1.36)	64.2	(4.83)	88.8	(3.81)	123.0	(5.56)	22.7	(1.40)	64.2	(5.17)
Average holdings per 100 students at the end of the school year .....																
Books (number of volumes) .....	1,803	(19.7)	1,894	(26.6)	1,606	(25.8)	2,190	(166.6)	2,857	(84.8)	2,801	(86.0)	2,737	(178.3)	3,043	(213.2)
Video materials (tape and disc) .....	51	(0.8)	51	(1.1)	51	(1.3)	69	(6.1)	71	(2.5)	66	(3.3)	72	(6.0)	81	(5.8)
CD-ROM titles .....	8	(0.3)	10	(0.5)	5	(0.3)	9	(1.4)	10	(0.6)	10	(0.8)	10	(1.3)	10	(1.0)
Total expenditures for library/media materials per pupil .....	\$23.37	(0.438)	\$22.99	(0.634)	\$23.84	(0.461)	\$27.93	(2.508)	\$29.02	(1.050)	\$23.60	(1.646)	\$38.72	(1.582)	\$33.40	(1.831)
Books .....	9.97	(0.153)	10.47	(0.229)	8.95	(0.174)	11.03	(0.713)	10.57	(0.625)	9.29	(1.115)	11.18	(0.472)	12.68	(0.834)
Video materials .....	1.07	(0.022)	1.04	(0.029)	1.13	(0.025)	1.20	(0.108)	1.34	(0.051)	1.04	(0.057)	1.51	(0.106)	1.83	(0.153)
CD-ROM titles .....	0.59	(0.020)	0.55	(0.028)	0.64	(0.023)	0.94	(0.193)	0.82	(0.056)	0.72	(0.081)	1.15	(0.109)	0.81	(0.081)
Current serial subscriptions .....	1.26	(0.016)	0.98	(0.018)	1.75	(0.032)	1.98	(0.184)	1.34	(0.035)	0.62	(0.030)	2.71	(0.120)	1.86	(0.098)
Electronic subscriptions .....	0.81	(0.018)	0.32	(0.023)	1.74	(0.042)	0.94	(0.111)	1.35	(0.056)	0.17	(0.036)	3.85	(0.213)	2.08	(0.124)
Microcomputer hardware .....	7.48	(0.306)	7.31	(0.390)	7.68	(0.373)	9.59	(1.744)	11.54	(0.843)	10.50	(1.298)	14.65	(1.030)	11.57	(1.278)
Other audiovisual equipment .....	2.19	(0.181)	2.32	(0.274)	1.94	(0.071)	2.25	(0.258)	2.06	(0.114)	1.27	(0.097)	3.68	(0.406)	2.58	(0.196)

<sup>1</sup>Public school data include charter schools.

<sup>2</sup>During the most recent full week of school.

NOTE: Percentages are based on schools that have library/media centers. Standard errors appear in parentheses. 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 Questionnaire," 1999–2000; "Charter School Questionnaire," 1999–2000; and "Private School Library Media Center Questionnaire," 1999–2000, unpublished tabulations. (This table was prepared August 2004.)

**Table 410. Selected statistics on public school libraries/media centers, by level and enrollment size of school: 1999–2000**

Selected statistic	All public school libraries/media centers	Elementary libraries					Secondary libraries				
		Total	Less than 150	150 to 499	500 to 749	750 or more	Total	Less than 500	500 to 749	750 to 1,499	1,500 or more
1	2	3	4	5	6	7	8	9	10	11	12
Average number of staff per library <sup>1</sup>	1.89 (0.018)	1.80 (0.024)	1.42 (0.051)	1.69 (0.034)	1.93 (0.032)	2.09 (0.081)	2.21 (0.021)	1.68 (0.029)	1.94 (0.037)	2.48 (0.033)	3.47 (0.058)
Certified library/media specialists	0.81 (0.007)	0.74 (0.009)	0.62 (0.043)	0.71 (0.015)	0.77 (0.019)	0.80 (0.027)	1.06 (0.009)	0.86 (0.016)	0.94 (0.015)	1.15 (0.014)	1.56 (0.025)
Full-time	0.65 (0.007)	0.56 (0.009)	0.25 (0.037)	0.48 (0.012)	0.69 (0.019)	0.73 (0.028)	0.94 (0.011)	0.64 (0.020)	0.91 (0.015)	1.10 (0.014)	1.49 (0.025)
Part-time	0.16 (0.006)	0.17 (0.008)	0.38 (0.036)	0.24 (0.013)	0.08 (0.008)	0.07 (0.014)	0.12 (0.006)	0.23 (0.012)	0.03 (0.007)	0.04 (0.007)	0.07 (0.013)
Other professional staff	0.17 (0.007)	0.18 (0.009)	0.11 (0.019)	0.16 (0.012)	0.19 (0.015)	0.22 (0.031)	0.15 (0.007)	0.15 (0.012)	0.14 (0.021)	0.14 (0.014)	0.18 (0.023)
Full-time	0.12 (0.005)	0.12 (0.007)	0.04 (0.010)	0.10 (0.009)	0.14 (0.012)	0.18 (0.026)	0.10 (0.007)	0.10 (0.012)	0.09 (0.014)	0.11 (0.013)	0.13 (0.018)
Part-time	0.06 (0.004)	0.06 (0.006)	0.07 (0.015)	0.06 (0.007)	0.05 (0.009)	0.04 (0.017)	0.05 (0.005)	0.05 (0.008)	0.05 (0.014)	0.04 (0.007)	0.05 (0.011)
Other paid employees	0.91 (0.014)	0.88 (0.019)	0.69 (0.033)	0.81 (0.028)	0.96 (0.028)	1.07 (0.059)	1.00 (0.017)	0.67 (0.024)	0.86 (0.031)	1.19 (0.024)	1.73 (0.048)
Full-time	0.49 (0.008)	0.44 (0.010)	0.26 (0.040)	0.36 (0.013)	0.51 (0.025)	0.67 (0.036)	0.67 (0.016)	0.36 (0.020)	0.52 (0.031)	0.85 (0.026)	1.35 (0.037)
Part-time	0.41 (0.014)	0.44 (0.018)	0.42 (0.035)	0.45 (0.028)	0.45 (0.029)	0.40 (0.049)	0.33 (0.013)	0.31 (0.022)	0.33 (0.026)	0.34 (0.018)	0.38 (0.027)
Percentage of schools' library media centers with certain media equipment											
Telephone	84.8 (0.53)	82.8 (0.69)	70.1 (4.18)	77.4 (1.30)	90.0 (1.16)	92.4 (1.36)	91.5 (0.46)	82.5 (1.09)	94.4 (0.91)	98.3 (0.35)	99.6 (0.24)
Fax machine	11.5 (0.43)	8.1 (0.55)	6.6 (1.67)	6.7 (0.67)	9.7 (1.00)	10.6 (1.40)	22.2 (0.65)	14.2 (1.24)	22.4 (1.81)	26.8 (1.28)	35.1 (2.18)
Automated catalog	72.8 (0.69)	71.0 (0.87)	47.5 (4.43)	65.4 (1.28)	80.7 (1.41)	81.4 (1.68)	80.0 (0.78)	66.6 (1.56)	84.0 (1.52)	89.6 (1.06)	93.5 (1.30)
Automated circulation system	74.4 (0.65)	73.2 (0.88)	45.6 (4.05)	67.0 (1.38)	83.7 (1.29)	86.3 (1.66)	79.9 (0.72)	63.9 (1.59)	85.5 (1.39)	91.6 (0.81)	95.1 (0.96)
Video laser disc or DVD	43.0 (0.68)	41.8 (0.87)	25.0 (4.28)	36.1 (1.17)	49.0 (2.06)	54.3 (2.35)	47.7 (0.88)	34.3 (1.53)	49.3 (2.05)	60.7 (1.68)	58.6 (2.02)
Connection to Internet	90.1 (0.57)	87.9 (0.75)	83.9 (3.47)	86.9 (1.10)	90.7 (1.41)	87.7 (1.57)	96.9 (0.32)	95.8 (0.55)	96.0 (0.91)	98.6 (0.34)	97.8 (0.61)
Cable television	77.4 (0.66)	76.6 (0.83)	56.8 (3.55)	77.4 (1.19)	78.4 (1.66)	79.5 (2.02)	82.2 (0.66)	77.0 (1.35)	83.2 (1.48)	87.3 (1.18)	85.6 (1.78)
Broadcast television	43.4 (0.76)	43.9 (1.00)	29.5 (3.59)	41.7 (1.47)	46.9 (1.93)	51.8 (2.40)	42.9 (0.90)	34.8 (1.36)	43.8 (2.43)	49.0 (1.42)	52.1 (1.74)
Closed circuit television	25.0 (0.67)	23.3 (0.84)	5.4 (1.95)	18.5 (0.96)	27.3 (1.90)	39.8 (2.13)	30.8 (0.82)	20.2 (1.56)	29.5 (1.74)	40.7 (1.32)	42.4 (1.91)
Satellite dish	27.9 (0.60)	20.5 (0.71)	36.9 (5.09)	17.6 (1.08)	20.0 (1.37)	23.5 (1.96)	49.9 (0.93)	50.9 (1.76)	53.6 (2.16)	49.5 (1.69)	43.6 (2.08)
Percentage of schools with certain services											
Long distance learning offered	21.2 (0.48)	15.2 (0.61)	23.2 (4.25)	14.3 (0.81)	13.7 (1.14)	17.4 (1.61)	38.1 (0.79)	45.7 (1.52)	36.0 (2.35)	31.5 (1.27)	32.3 (2.06)
Students permitted to check out computer hardware	2.2 (0.14)	1.2 (0.16)	0.7 (0.22)	1.2 (0.23)	1.6 (0.33)	0.5 (0.19)	5.5 (0.41)	6.1 (0.73)	3.6 (0.78)	5.0 (0.62)	6.9 (1.20)
Students permitted to check out computer software	6.9 (0.31)	4.5 (0.36)	8.4 (2.22)	4.4 (0.54)	4.5 (0.67)	3.3 (0.79)	14.3 (0.69)	13.8 (1.28)	12.4 (1.22)	15.2 (1.22)	16.2 (1.64)
Total students using library per 100 students each week <sup>1,2</sup>	94.9 (0.88)	106.6 (1.12)	202.2 (20.53)	121.9 (1.82)	109.0 (1.96)	80.6 (1.76)	73.4 (1.05)	119.0 (3.71)	80.4 (2.44)	69.6 (1.74)	59.9 (1.78)
Books checked out per 100 students each week <sup>2</sup>	106.6 (1.63)	146.8 (2.46)	273.6 (28.68)	175.3 (4.55)	152.6 (3.89)	99.2 (2.95)	32.3 (1.36)	76.0 (3.99)	39.8 (3.31)	25.6 (1.40)	21.7 (2.67)
Average holdings per 100 students at the end of the school year											
Books (number of volumes)	1,803 (19.7)	1,894 (26.6)	5,806 (416.1)	2,379 (46.4)	1,742 (30.9)	1,323 (51.2)	1,606 (25.8)	3,550 (137.1)	1,958 (88.2)	1,415 (39.4)	1,038 (32.1)
Video materials (tape and disc)	51 (0.8)	51 (1.1)	132 (22.0)	59 (1.9)	48 (1.8)	41 (2.1)	51 (1.0)	103 (6.2)	54 (3.2)	45 (1.5)	38 (2.2)
CD-ROM titles	8 (0.3)	10 (0.5)	30 (6.0)	12 (0.6)	9 (0.4)	7 (1.5)	5 (0.3)	13 (0.9)	6 (0.8)	5 (0.8)	2 (0.2)
Total expenditures for library/media materials per pupil	\$23.37 (0.438)	\$22.99 (0.634)	\$68.71 (7.689)	\$24.88 (0.869)	\$21.07 (0.792)	\$20.98 (1.823)	\$23.84 (0.461)	\$42.15 (1.859)	\$29.88 (1.654)	\$21.31 (0.535)	\$18.20 (0.617)
Books	9.97 (0.153)	10.47 (0.229)	25.13 (2.305)	11.32 (0.286)	10.09 (0.430)	9.26 (0.559)	8.95 (0.174)	14.89 (0.668)	10.68 (0.557)	8.19 (0.259)	7.16 (0.309)
Video materials	1.07 (0.022)	1.04 (0.029)	2.31 (0.550)	1.12 (0.046)	0.98 (0.035)	0.97 (0.067)	1.13 (0.025)	2.04 (0.117)	1.25 (0.081)	1.03 (0.042)	0.89 (0.039)
CD-ROM titles	0.59 (0.020)	0.55 (0.028)	1.92 (0.462)	0.66 (0.048)	0.55 (0.045)	0.36 (0.040)	0.64 (0.023)	1.02 (0.062)	0.74 (0.059)	0.68 (0.050)	0.46 (0.034)
Current serial subscriptions	1.26 (0.016)	0.98 (0.018)	3.67 (0.528)	1.20 (0.030)	0.87 (0.027)	0.71 (0.048)	1.75 (0.032)	3.91 (0.144)	2.30 (0.111)	1.57 (0.040)	1.04 (0.034)
Electronic subscriptions	0.81 (0.018)	0.32 (0.023)	0.73 (0.229)	0.34 (0.041)	0.30 (0.037)	0.30 (0.043)	1.74 (0.042)	2.00 (0.116)	1.92 (0.130)	1.79 (0.080)	1.56 (0.062)
Microcomputer hardware	7.48 (0.306)	7.31 (0.390)	30.98 (5.900)	7.77 (0.715)	6.71 (0.537)	6.39 (0.900)	7.68 (0.373)	14.94 (1.682)	10.71 (0.480)	6.15 (0.320)	5.70 (0.439)
Other audiovisual equipment	2.19 (0.181)	2.32 (0.274)	3.97 (1.202)	2.48 (0.324)	1.59 (0.102)	2.98 (0.778)	1.94 (0.071)	3.35 (0.214)	2.28 (0.144)	1.90 (0.104)	1.40 (0.094)

<sup>1</sup>Public school data include charter schools.

<sup>2</sup>During the most recent full week of school.

NOTE: Percentages are based on schools that have library/media centers. Standard errors appear in parentheses. 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 Questionnaire," 1999–2000; and "Charter School Questionnaire," 1999–2000, unpublished tabulations. (This table was prepared August 2004.)

Table 411. Selected statistics on public school libraries/media centers, by state: 1999–2000

State	Percent of centers offering selected services/equipment				Average number of staff per library <sup>1,2</sup>	Total students using library per 100 students each week <sup>2,3</sup>	Books checked out per 100 students each week <sup>3</sup>	Books held at end of year per 100 students	Total expenditure for materials per student <sup>2</sup>
	Automated catalog	Automated circulation system	Connection to the Internet	Video laser disc or DVD					
1	2	3	4	5	6	7	8	9	10
<b>United States</b> .....	<b>72.8 (0.69)</b>	<b>74.4 (0.65)</b>	<b>90.1 (0.57)</b>	<b>43.0 (0.68)</b>	<b>1.89 (0.018)</b>	<b>94.9 (0.88)</b>	<b>106.6 (1.63)</b>	<b>1,803 (19.7)</b>	<b>\$23.37 (0.438)</b>
Alabama .....	83.7 (2.53)	85.4 (2.30)	85.1 (2.92)	40.6 (4.09)	1.76 (0.039)	102.4 (5.40)	119.3 (9.04)	1,908 (158.4)	17.08 (0.870)
Alaska .....	76.1 (2.79)	67.4 (3.17)	91.6 (1.84)	35.4 (2.87)	1.43 (0.061)	97.5 (2.78)	137.5 (14.08)	2,855 (90.7)	25.46 (2.353)
Arizona .....	86.1 (3.39)	88.5 (3.17)	91.6 (2.40)	51.4 (4.19)	1.97 (0.061)	92.4 (4.99)	113.0 (11.08)	1,897 (147.1)	15.73 (1.050)
Arkansas .....	75.8 (3.47)	79.9 (3.04)	86.6 (3.23)	23.0 (2.52)	1.50 (0.042)	94.8 (3.98)	115.6 (8.40)	2,038 (82.4)	22.38 (2.309)
California .....	66.5 (3.63)	76.7 (3.21)	71.3 (3.83)	37.8 (3.57)	1.73 (0.068)	75.9 (2.51)	86.7 (5.17)	1,399 (85.8)	17.66 (1.272)
Colorado .....	86.9 (2.65)	86.3 (2.45)	96.8 (1.27)	41.6 (4.21)	1.99 (0.077)	107.3 (5.34)	100.9 (5.45)	1,758 (90.4)	25.68 (2.551)
Connecticut .....	57.2 (2.73)	59.8 (2.83)	87.2 (2.31)	42.9 (3.80)	2.06 (0.062)	102.0 (2.40)	87.9 (6.06)	2,092 (126.3)	27.74 (1.341)
Delaware .....	80.3 (3.53)	88.7 (2.99)	97.3 (1.10)	35.0 (4.39)	1.51 (0.073)	85.1 (3.59)	63.2 (9.15)	1,435 (76.3)	18.94 (2.573)
District of Columbia .....	33.8 (3.03)	35.4 (3.46)	78.1 (2.93)	26.7 (3.34)	1.16 (0.030)	64.7 (2.53)	36.2 (4.52)	2,066 (184.0)	12.59 (1.710)
Florida .....	94.1 (1.48)	96.8 (0.99)	95.1 (1.22)	90.6 (1.53)	2.53 (0.192)	93.7 (4.81)	101.1 (6.97)	1,567 (102.0)	31.24 (5.676)
Georgia .....	99.7 (0.29)	99.7 (0.29)	96.3 (1.56)	71.4 (3.42)	2.33 (0.122)	111.1 (6.45)	119.4 (7.67)	1,586 (53.5)	24.39 (1.426)
Hawaii .....	87.9 (2.62)	94.0 (1.95)	96.8 (1.43)	50.6 (4.15)	1.54 (0.049)	87.3 (3.15)	113.7 (12.93)	1,622 (37.5)	14.31 (1.214)
Idaho .....	79.4 (2.38)	82.9 (2.13)	95.6 (1.46)	30.5 (2.55)	1.75 (0.038)	122.9 (3.09)	202.4 (12.44)	2,374 (122.9)	49.49 (2.183)
Illinois .....	61.4 (3.70)	59.9 (3.76)	89.6 (2.25)	34.9 (4.09)	2.03 (0.103)	95.0 (3.47)	82.9 (6.55)	1,545 (76.2)	22.54 (1.727)
Indiana .....	70.0 (3.75)	72.9 (4.18)	89.0 (2.61)	50.2 (3.84)	1.93 (0.045)	95.3 (2.15)	114.2 (7.93)	2,177 (173.4)	23.93 (1.683)
Iowa .....	75.1 (3.31)	70.3 (3.90)	97.2 (1.13)	41.0 (3.86)	2.36 (0.244)	133.0 (4.98)	140.9 (8.98)	2,517 (74.0)	26.52 (1.683)
Kansas .....	76.4 (3.99)	77.4 (4.00)	94.8 (2.36)	43.3 (3.90)	1.85 (0.053)	119.3 (5.08)	182.7 (12.96)	2,637 (104.3)	25.72 (1.222)
Kentucky .....	77.9 (3.96)	77.3 (4.16)	97.9 (1.07)	49.7 (4.25)	1.64 (0.064)	119.2 (8.64)	123.7 (8.25)	1,758 (47.2)	30.43 (3.961)
Louisiana .....	53.5 (4.84)	62.5 (5.45)	88.0 (3.86)	25.8 (3.85)	1.27 (0.088)	75.3 (3.73)	71.7 (7.48)	1,602 (63.9)	15.23 (2.208)
Maine .....	54.4 (4.54)	52.8 (4.82)	99.3 (0.63)	15.5 (1.95)	1.73 (0.066)	102.5 (2.74)	102.5 (6.89)	2,931 (224.6)	26.00 (1.233)
Maryland .....	83.3 (3.21)	81.4 (3.52)	94.5 (2.28)	50.4 (6.04)	1.68 (0.093)	82.6 (3.02)	130.3 (39.71)	1,401 (61.5)	28.47 (4.900)
Massachusetts .....	54.0 (3.83)	49.8 (3.67)	96.8 (1.28)	31.9 (5.21)	1.87 (0.078)	83.7 (2.89)	63.8 (4.46)	1,635 (68.9)	18.76 (1.091)
Michigan .....	69.5 (4.08)	68.1 (4.04)	84.1 (2.89)	44.6 (4.21)	1.76 (0.097)	93.5 (3.80)	92.2 (7.03)	1,703 (68.0)	23.18 (2.222)
Minnesota .....	91.1 (2.56)	91.8 (2.80)	95.9 (1.21)	43.3 (5.38)	2.43 (0.097)	126.8 (9.32)	127.3 (12.41)	2,486 (174.2)	36.34 (6.738)
Mississippi .....	70.7 (2.94)	76.2 (2.41)	89.8 (2.28)	29.2 (2.61)	1.54 (0.034)	80.0 (2.84)	100.4 (7.64)	1,985 (175.3)	19.66 (1.414)
Missouri .....	71.8 (6.17)	70.7 (6.26)	89.2 (3.33)	49.3 (6.03)	1.63 (0.083)	100.5 (5.71)	110.7 (9.85)	2,250 (123.4)	30.59 (2.178)
Montana .....	52.8 (3.07)	52.0 (2.98)	88.1 (2.57)	31.2 (3.10)	1.66 (0.058)	145.5 (6.37)	153.5 (9.31)	3,578 (150.2)	32.59 (1.721)
Nebraska .....	68.1 (3.42)	69.1 (3.17)	95.5 (1.55)	38.2 (3.33)	1.85 (0.073)	101.9 (4.19)	160.8 (16.46)	3,253 (206.2)	37.44 (3.549)
Nevada .....	89.0 (3.10)	91.6 (2.76)	78.0 (3.23)	36.0 (3.03)	1.71 (0.064)	83.3 (2.15)	83.6 (4.03)	1,665 (187.1)	14.13 (1.573)
New Hampshire .....	57.6 (5.89)	60.4 (5.20)	89.0 (5.84)	36.5 (4.74)	1.83 (0.100)	103.1 (4.24)	94.2 (7.51)	1,862 (84.3)	22.73 (1.392)
New Jersey .....	62.6 (3.67)	63.1 (3.70)	87.8 (2.76)	31.8 (3.62)	1.78 (0.060)	82.9 (2.52)	81.6 (6.64)	1,905 (81.0)	23.28 (1.549)
New Mexico .....	69.1 (5.59)	62.4 (5.24)	78.5 (5.16)	28.0 (5.10)	1.53 (0.068)	92.4 (8.04)	123.8 (15.98)	2,064 (245.4)	22.81 (2.374)
New York .....	57.7 (3.86)	54.8 (3.81)	86.6 (2.12)	29.8 (2.47)	2.12 (0.086)	78.1 (3.26)	66.3 (3.37)	1,473 (55.3)	18.31 (1.415)
North Carolina .....	89.8 (2.79)	95.7 (1.65)	95.3 (2.12)	69.4 (3.79)	2.11 (0.063)	90.4 (4.86)	117.1 (7.99)	1,591 (76.7)	28.51 (2.208)
North Dakota .....	54.2 (3.44)	49.5 (3.38)	94.1 (1.40)	24.7 (2.29)	1.81 (0.073)	130.8 (3.62)	167.4 (8.35)	5,180 (251.9)	40.87 (2.946)
Ohio .....	54.8 (3.99)	53.1 (3.68)	89.9 (3.24)	32.0 (4.21)	1.77 (0.152)	96.1 (3.71)	87.2 (6.64)	1,536 (62.7)	18.71 (2.181)
Oklahoma .....	66.1 (4.39)	68.4 (3.58)	82.8 (3.22)	25.0 (3.49)	1.95 (0.061)	107.4 (4.61)	117.5 (10.90)	2,257 (100.5)	31.40 (3.148)
Oregon .....	77.6 (4.09)	80.2 (3.57)	90.0 (3.54)	41.7 (4.59)	1.84 (0.068)	102.7 (5.42)	156.7 (33.01)	2,655 (204.4)	18.97 (1.267)
Pennsylvania .....	62.4 (5.47)	64.4 (5.44)	88.9 (4.76)	28.3 (4.05)	1.90 (0.096)	92.6 (4.72)	94.5 (6.97)	2,011 (192.1)	21.88 (1.759)
Rhode Island .....	46.4 (2.07)	51.5 (1.92)	95.6 (1.04)	12.8 (1.46)	1.84 (0.034)	70.0 (1.02)	68.6 (1.88)	1,505 (33.6)	16.04 (0.656)
South Carolina .....	96.5 (1.42)	93.6 (2.62)	98.2 (0.76)	54.4 (4.11)	1.97 (0.055)	84.3 (2.61)	105.7 (7.00)	1,515 (33.6)	24.84 (1.777)
South Dakota .....	52.1 (4.15)	44.7 (3.74)	93.4 (1.35)	40.8 (3.66)	1.62 (0.076)	155.9 (7.93)	135.2 (6.82)	4,006 (315.8)	38.18 (1.916)
Tennessee .....	69.2 (4.67)	75.5 (3.97)	95.3 (2.38)	53.3 (4.73)	1.79 (0.076)	86.7 (4.89)	143.2 (14.03)	1,516 (58.3)	18.81 (4.114)
Texas .....	84.0 (2.60)	88.3 (2.39)	93.6 (2.20)	44.8 (3.14)	1.90 (0.054)	103.2 (5.12)	145.5 (7.35)	1,800 (61.0)	24.32 (1.590)
Utah .....	87.5 (3.14)	88.7 (2.76)	96.2 (1.50)	60.3 (3.88)	1.69 (0.065)	76.3 (3.46)	114.1 (20.51)	1,256 (51.3)	16.84 (1.982)
Vermont .....	62.2 (2.82)	60.3 (2.94)	93.7 (4.09)	13.3 (2.87)	1.74 (0.101)	117.2 (4.93)	93.3 (7.97)	2,783 (171.9)	36.30 (2.424)
Virginia .....	99.0 (0.66)	98.0 (0.79)	98.1 (1.05)	74.6 (4.19)	1.88 (0.064)	87.7 (2.77)	110.6 (6.62)	1,849 (166.7)	22.98 (1.550)
Washington .....	90.8 (2.23)	91.4 (2.20)	98.1 (0.95)	65.2 (3.94)	2.04 (0.047)	128.2 (8.97)	137.4 (9.23)	2,068 (120.8)	24.62 (2.363)
West Virginia .....	48.2 (4.91)	47.5 (5.12)	93.4 (2.20)	57.6 (5.45)	0.92 (0.058)	96.2 (5.30)	75.2 (7.77)	1,692 (73.4)	19.08 (1.680)
Wisconsin .....	81.0 (3.63)	86.0 (2.92)	97.9 (1.37)	42.2 (3.80)	2.09 (0.057)	138.3 (7.54)	146.7 (12.59)	2,719 (198.2)	39.38 (3.107)
Wyoming .....	75.7 (4.47)	76.8 (4.49)	93.8 (1.89)	39.9 (4.60)	1.80 (0.071)	122.8 (6.94)	126.2 (7.72)	3,341 (272.1)	32.08 (2.182)

<sup>1</sup>Includes professional and nonprofessional staff.<sup>2</sup>Includes public charter schools.<sup>3</sup>During the most recent full week of school.

NOTE: Percentages are based on schools that have library/media centers. Standard errors appear in parentheses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Library Media Center Questionnaire," 1999–2000; and "Charter School Questionnaire," 1999–2000, unpublished data. (This table was prepared August 2004.)

**Table 412. Collections, staff, and operating expenditures of college and university libraries: Selected years, 1976–77 through 1999–2000**

Collections, staff, and operating expenditures	1976–77 <sup>1</sup>	1978–79 <sup>1</sup>	1981–82	1984–85	1987–88	1991–92	1994–95	1996–97	1997–98	1999–2000
1	2	3	4	5	6	7	8	9	10	11
Number of libraries .....	3,058	3,122	3,104	3,322	3,438	3,274	3,303	3,408	3,658	3,527
Number of circulation transactions .....	—	—	—	—	—	—	231,503	230,733	216,067	193,948
Total enrollment, in thousands <sup>2</sup> .....	11,121	11,392	12,372	12,242	12,767	14,359	14,279	14,300	14,502	14,791
Full-time-equivalent <sup>2</sup> .....	8,313	8,348	9,015	8,952	9,230	10,361	10,348	10,402	10,615	10,944
<b>Collections, in thousands</b>										
Number of volumes at end of year <sup>3</sup> .....	481,442	519,895	567,826	631,727	718,504	749,429	776,447	806,717	878,906	913,547
Number of volumes added during year .....	22,367	21,608	19,507	20,658	21,907	20,982	21,544	21,346	24,551	24,436
Number of serial subscriptions at end of year .....	4,670	4,775	4,890	6,317	6,416	6,966	6,212	5,709	<sup>4</sup> 10,908	7,499
Microform units at end of year .....	—	—	—	—	—	—	—	—	1,062,082	1,111,389
Electronic units at end of year <sup>5</sup> .....	—	—	—	—	—	—	465	983	3,473	—
<b>Library staff, in full-time equivalents (FTE)</b>										
Total staff in regular positions <sup>6</sup> .....	57,087	58,416	58,476	58,476	67,251	67,166	67,433	67,581	68,337	69,123
Librarians and professional staff .....	23,308	23,676	23,816	21,822	25,115	26,341	26,726	27,268	30,041	31,001
Other paid staff .....	33,779	34,740	34,660	38,026	40,733	40,421	40,381	40,022	38,026	37,893
Contributed services .....	—	—	—	—	1,403	404	326	291	270	229
Student assistants .....	—	—	—	—	33,821	29,075	28,411	27,998	28,373	26,518
FTE student enrollment per FTE staff .....	146	143	154	153	137	154	153	154	155	158
Hours of student and other assistance, in thousands .....	39,950	39,552	40,068	28,360	—	—	—	—	—	—
<b>Library operating expenditures<sup>7</sup></b>										
Operating expenditures, total, in thousands .....	\$1,259,637	\$1,502,158	\$1,943,769	\$2,404,524	\$2,770,075	\$3,648,654	\$4,013,333	\$4,301,815	\$4,592,657	\$5,023,198
Salaries <sup>8</sup> .....	698,090	824,438	1,081,894	1,156,138	1,451,551	1,889,368	2,021,233	2,147,842	2,314,380	2,430,541
Hourly wages .....	68,683	79,535	100,847	—	—	—	—	—	—	—
Fringe benefits .....	—	—	—	231,209	—	—	—	—	—	271,954
Preservation .....	22,521	25,274	30,351	32,939	34,144	43,126	46,554	45,610	42,919	43,832
Furniture/equipment .....	—	—	—	—	—	—	55,915	56,128	57,013	63,459
Computer hardware/software .....	—	—	—	—	—	—	128,128	157,949	164,379	160,294
Utilities/networks/consortia .....	—	—	—	—	—	—	81,106	85,113	89,618	90,264
Information resources .....	373,699	450,180	561,199	750,282	891,281	1,197,293	1,348,933	1,499,249	1,600,995	1,822,277
Books and serial backfiles—paper .....	—	—	—	—	—	—	—	—	514,048	552,100
Books and serial backfiles—electronic .....	—	—	—	—	—	—	—	—	28,061	33,888
Current serials—paper .....	—	—	—	—	—	—	—	—	849,399	945,958
Current serials—electronic .....	—	—	—	—	—	—	—	—	125,470	203,371
Audiovisual materials .....	—	—	—	—	—	23,879	28,753	28,879	30,623	32,039
Document delivery/interlibrary loan .....	—	—	—	—	—	—	12,238	17,645	19,309	20,540
Other collection expenditures .....	373,699	450,180	561,199	750,282	891,281	1,173,414	1,307,942	1,452,725	34,086	34,381
Other library operating expenditures .....	96,643	122,731	169,478	233,957	393,099	518,867	331,463	309,925	323,354	140,579
Operating expenditures per FTE student .....	152	180	216	269	300	352	388	414	433	459
Operating expenditures per FTE student in constant 2004–05 dollars <sup>9</sup> .....	495	504	439	487	497	488	494	499	513	520
Operating expenditures, total, in percents .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Salaries <sup>8</sup> .....	55.4	54.9	55.7	48.1	52.4	51.8	50.4	49.9	50.4	48.4
Hourly wages .....	5.5	5.3	5.2	—	—	—	—	—	—	—
Fringe benefits .....	—	—	—	9.6	—	—	—	—	—	5.4
Preservation .....	1.8	1.7	1.6	1.4	1.2	1.2	1.2	1.1	0.9	0.9
Information resources .....	29.7	30.0	28.9	31.2	32.2	32.8	33.6	34.9	34.9	36.3
Other library operating expenditures <sup>10</sup> .....	7.7	8.2	8.7	9.7	14.2	14.2	14.9	14.2	13.8	9.0
Library operating expenditures as percent of total institutional expenditures for educational and general purposes .....	3.8	3.7	3.5	3.4	3.2	3.0	2.8	—	—	—

—Not available.

<sup>1</sup>Includes data for U.S. territories.

<sup>2</sup>Fall enrollment for the academic year specified.

<sup>3</sup>Includes data for schools newly added to the survey system, so end of year figure exceeds total of additions plus end of year value from previous year.

<sup>4</sup>Includes microform and electronic serials.

<sup>5</sup>Electronic files, formerly labeled "Computer files."

<sup>6</sup>Excludes student assistants.

<sup>7</sup>Excludes capital outlay.

<sup>8</sup>Includes expenditures for fringe benefits (except for 1984–85 and 1987–88), salary equivalents of contributed services staff, and hourly wages for 1996–97 and 1997–98.

<sup>9</sup>Constant dollars based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor, adjusted to a school-year basis.

<sup>10</sup>Includes furniture/equipment, computer hardware/software, and utilities/networks/consortia as well as expenditures classified as "other library operating expenditures."

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Library Statistics of Colleges and Universities*, selected years, 1976–77 through 1984–85; and 1987–88 through 1999–2000 Integrated Postsecondary Education Data System, "Academic Libraries Survey" (IPEDS-L:88–98) and "Fall Enrollment Survey" (IPEDS-EF:87–99); and Academic Libraries Survey (ALS), 2000. (This table was prepared February 2006.)

**Table 413. Collections, staff, and operating expenditures of the 60 largest college and university libraries: 1999–2000**

Institution	Rank order, by number of volumes	Number of volumes at end of year, in thousands	Full-time-equivalent staff		Operating expenditures, in thousands		Public service hours per week	Gate count per week	Reference transactions per week
			Total	Librarians	Total	Salaries and wages			
1	2	3	4	5	6	7	8	9	10
Harvard University (MA) .....	1	14,437	1,328	387	\$80,862	\$43,107	107	36,058	8,739
Yale University (CT) .....	2	10,496	655	187	47,252	19,855	111	13,517	4,000
University of Illinois, Urbana Campus .....	3	9,470	517	92	27,699	14,916	107	33,140	9,384
University of California, Berkeley .....	4	9,108	649	106	38,430	20,302	98	33,140	3,765
University of Texas, Austin .....	5	7,936	556	117	31,438	16,153	147	94,411	8,073
University of California, Los Angeles .....	6	7,517	630	143	41,267	20,978	87	83,138	3,154
University of Michigan, Ann Arbor .....	7	7,348	601	152	36,484	19,057	168	63,025	4,261
Stanford University (CA) .....	8	7,286	630	112	57,815	28,368	98	23,660	2,233
Columbia University, Main Division (NY) .....	9	7,266	524	131	34,400	16,739	104	18,910	1,428
University of Chicago (IL) .....	10	6,558	325	68	22,635	9,708	111	32,755	1,800
Indiana University, Bloomington .....	11	6,315	441	93	26,459	11,655	115	79,905	9,554
University of Wisconsin, Madison .....	12	6,057	514	171	31,292	16,575	131	98,804	5,614
University of Washington .....	13	6,051	488	129	30,784	15,317	135	33,140	6,000
University of Minnesota, Twin Cities .....	14	5,857	430	99	29,994	15,011	106	40,000	4,341
Cornell University (NY) .....	15	5,522	461	91	27,259	12,278	114	20,729	1,625
Ohio State University, Main Campus .....	16	5,394	439	91	26,275	12,627	168	36,051	10,940
Princeton University (NJ) .....	17	5,315	388	102	29,363	12,947	110	20,001	1,510
University of North Carolina, Chapel Hill .....	18	5,133	415	132	24,986	12,034	147	40,931	4,100
Duke University (NC) .....	19	4,961	368	107	24,895	10,804	122	22,183	3,329
University of Pennsylvania .....	20	4,914	395	118	30,051	12,386	115	35,500	5,200
Rutgers University (NJ) .....	21	4,737	320	71	18,716	11,371	106	61,665	1,689
University of Virginia, Main Campus .....	22	4,679	363	97	25,844	14,182	119	65,000	5,500
New York University .....	23	4,396	417	94	28,695	14,227	119	38,000	5,995
Michigan State University .....	24	4,360	280	66	18,443	8,207	143	39,817	1,371
University of Arizona .....	25	4,267	289	65	17,736	7,343	168	31,538	1,883
University of Kansas, Main Campus .....	26	4,250	262	59	14,313	6,858	98	8,741	1,206
University of Iowa .....	27	4,120	306	74	21,099	9,423	107	41,547	6,888
Northwestern University (IL) .....	28	4,083	345	92	20,667	9,683	114	12,859	2,332
University of Pittsburgh, Main Campus (PA) .....	29	3,822	344	95	20,941	8,462	122	43,663	6,000
University of Oklahoma, Norman Campus .....	30	3,703	159	28	9,797	3,486	85	16,316	1,467
University of Georgia .....	31	3,702	356	74	20,083	8,936	101	28,846	2,554
University of Southern California .....	32	3,526	369	80	25,034	12,493	159	59,154	1,203
University of Florida .....	33	3,525	404	103	23,291	10,159	110	55,979	3,182
Washington University (MO) .....	34	3,426	263	77	20,098	7,073	117	32,485	1,934
University of South Carolina at Columbia .....	35	3,222	296	78	17,221	7,591	111	50,000	3,500
University of Hawaii, Manoa .....	36	3,205	243	64	14,226	6,652	65	30,459	3,080
Arizona State University .....	37	3,191	299	83	19,111	8,628	102	43,062	3,936
Syracuse University, Main Campus (NY) .....	38	3,127	232	47	11,852	5,534	105	12,660	3,838
Wayne State University (MI) .....	39	3,117	289	47	17,878	8,615	97	61,499	11,446
Louisiana State U. & A&M & Hebert Laws Center .....	40	3,098	208	48	11,340	4,991	113	38,057	4,347
Brown University (RI) .....	41	3,082	231	60	14,278	6,833	101	24,915	54,963
University of Rochester (NY) .....	42	3,077	215	65	12,311	5,753	117	20,939	1,306
Johns Hopkins University (MD) .....	43	3,066	337	74	24,303	9,456	120	28,933	2,532
Pennsylvania State University, Main Campus .....	44	3,001	416	64	24,792	11,559	168	68,408	6,109
University of Massachusetts at Amherst .....	45	2,991	189	50	13,069	6,650	105	25,500	2,235
University of Missouri, Columbia .....	46	2,968	233	57	12,953	5,458	104	23,425	2,285
Brigham Young University (UT) .....	47	2,960	319	83	15,601	7,855	101	69,040	10,000
North Carolina State University at Raleigh .....	48	2,945	309	91	19,165	7,929	146	35,323	2,202
University of Colorado, Boulder .....	49	2,920	234	55	15,918	7,044	104	1,963	4,466
State University of New York, Buffalo .....	50	2,879	209	60	12,464	6,742	94	48,000	4,394
Kansas State University .....	51	2,863	115	35	8,737	3,833	91	11,672	2,803
University of Maryland, College Park Campus .....	52	2,850	300	115	21,553	9,289	98	69,330	6,170
University of California, Davis .....	53	2,830	260	50	15,680	8,413	95	31,800	3,120
University of Utah .....	54	2,828	382	68	20,860	9,268	115	38,406	7,003
University of Kentucky .....	55	2,826	356	85	19,641	8,528	144	42,746	2,098
Southern Illinois University, Carbondale .....	56	2,812	220	35	12,604	5,507	151	14,757	2,683
University of Notre Dame (IN) .....	57	2,795	244	53	17,225	7,218	126	26,685	685
Texas A & M University .....	58	2,748	394	84	21,851	9,567	116	65,097	1,469
Miami University, Oxford Campus (OH) .....	59	2,663	161	39	8,400	3,577	118	21,676	2,817
University of California, San Diego .....	60	2,654	321	48	20,333	10,682	106	33,157	2,907

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Academic Libraries Survey" (ALS), 2000. (This table was prepared April 2005.)

**Table 414. Selected statistics of public libraries, by population size of legal service area: Fiscal year 2002**

Selected statistic	Population of legal service area <sup>1</sup>						
	Total	Under 10,000	10,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 and over
1	2	3	4	5	6	7	8
Number of public library service outlets.....	17,359	5,718	4,280	1,793	2,194	1,165	2,209
Central libraries.....	8,986	5,405	2,644	512	289	78	58
Branch libraries.....	7,500	246	1,354	1,104	1,734	1,008	2,054
Bookmobiles.....	873	67	282	177	171	79	97
Collections, in thousands							
Books and serial volumes.....	680,195	101,725	190,977	94,227	115,668	80,521	97,079
Audio and video materials and films.....	55,712	6,673	15,497	8,128	9,655	6,515	9,242
Serial subscriptions.....	1,681	278	496	223	249	176	259
Paid staff, in full-time equivalents							
Librarians.....	44,920	6,343	11,986	5,498	6,191	4,773	10,129
Librarians with ALA-MLS <sup>2</sup> .....	30,428	1,258	7,160	3,977	4,940	3,733	9,360
Other staff.....	91,300	5,315	21,036	12,432	16,641	10,439	25,437
Income, in thousands							
Total operating income.....	\$8,585,738	\$554,775	\$1,928,637	\$1,109,796	\$1,417,605	\$983,264	\$2,591,662
Percentage distribution of operating income, by source							
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal <sup>3</sup> .....	0.6	0.8	0.4	0.5	0.8	0.4	0.6
State.....	11.7	9.5	11.8	13.3	10.8	11.8	11.8
Local.....	79.1	74.7	79.3	78.8	81.7	80.8	78.0
Other and private.....	8.7	15.0	8.5	7.5	6.8	7.1	9.6

<sup>1</sup>The number of people in the geographic area for which a public library has been established to offer services and from which (or on behalf of which) the library derives income, plus any areas served under contract for which the library is the primary service provider.  
<sup>2</sup>Librarians with a master's degree (MLS) from a graduate library education program accredited by the American Library Association (ALA).

<sup>3</sup>Excludes some federal funds received through state library agencies.  
NOTE: Detail may not sum to totals because of rounding. Data include imputations for nonresponse.  
SOURCE: U.S. Department of Education, National Center for Education Statistics, *Public Libraries in the United States: Fiscal Year 2002*. (This table was prepared March 2005.)



**Table 415. Public libraries, books and serial volumes, library visits, and reference transactions, by state: Fiscal year 2002**

State	Number of public libraries, excluding branches	Number of books and serial volumes (in thousands)	Number of books and serial volumes per capita	Library visits per capita <sup>1</sup>	Circulation per capita	Public library reference transactions per capita <sup>2</sup>
1	2	3	4	5	6	7
<b>United States .....</b>	<b>9,137</b>	<b>785,075</b>	<b>2.8</b>	<b>4.5</b>	<b>6.8</b>	<b>1.1</b>
Alabama .....	207	8,913	2.0	3.0	3.8	0.7
Alaska .....	85	2,272	3.5	4.4	5.8	0.5
Arizona .....	35	9,109	1.7	3.7	7.0	0.9
Arkansas .....	47	5,357	2.1	2.9	4.3	0.6
California .....	179	68,291	2.0	4.1	5.3	1.0
Colorado .....	115	11,469	2.7	5.8	9.9	1.3
Connecticut .....	194	14,336	4.2	6.5	8.9	1.2
Delaware .....	21	1,488	1.9	3.7	6.2	0.6
District of Columbia .....	1	2,650	4.6	3.5	2.1	1.9
Florida .....	72	30,775	1.8	4.0	5.3	1.5
Georgia .....	58	14,869	1.9	3.3	4.8	1.0
Hawaii .....	1	3,052	2.5	4.6	5.8	0.9
Idaho .....	106	3,636	3.1	5.8	7.9	0.8
Illinois .....	627	42,390	3.7	5.5	7.9	1.4
Indiana .....	239	23,667	4.2	6.3	11.7	1.3
Iowa .....	538	11,494	3.9	5.3	9.1	0.7
Kansas .....	323	10,691	4.8	5.8	10.1	1.2
Kentucky .....	116	8,154	2.0	3.6	5.4	0.5
Louisiana .....	65	11,092	2.5	2.9	4.0	1.1
Maine .....	274	6,016	5.1	5.0	7.1	0.8
Maryland .....	24	15,389	3.0	5.2	9.4	1.4
Massachusetts .....	370	30,795	4.9	5.5	7.6	0.9
Michigan .....	383	31,695	3.2	4.1	5.8	0.8
Minnesota .....	142	16,115	3.2	5.2	9.7	1.0
Mississippi .....	49	5,712	2.1	2.8	3.3	0.5
Missouri .....	148	18,204	3.6	4.5	7.7	0.9
Montana .....	79	2,652	2.9	4.0	5.7	0.5
Nebraska .....	275	6,152	4.4	5.2	8.7	0.8
Nevada .....	22	4,137	1.9	4.1	5.5	0.7
New Hampshire .....	230	5,725	4.5	4.7	7.3	0.7
New Jersey .....	309	31,203	3.7	5.1	6.3	0.9
New Mexico .....	89	4,098	2.5	3.3	4.9	0.6
New York .....	751	79,003	4.2	5.7	6.9	1.7
North Carolina .....	76	16,243	2.0	3.8	5.4	0.9
North Dakota .....	82	2,246	4.1	4.2	7.4	0.8
Ohio .....	250	48,075	4.2	6.9	14.6	1.7
Oklahoma .....	110	6,345	2.2	4.7	5.9	0.7
Oregon .....	124	8,811	2.8	5.9	13.4	0.9
Pennsylvania .....	451	28,548	2.4	3.4	5.1	0.8
Rhode Island .....	48	4,109	3.9	5.7	6.8	0.9
South Carolina .....	41	8,379	2.1	3.5	4.6	1.1
South Dakota .....	125	2,837	4.7	5.9	8.4	0.9
Tennessee .....	184	10,376	1.8	3.1	4.0	0.7
Texas .....	557	36,890	1.9	3.0	4.5	1.1
Utah .....	72	6,063	2.7	5.0	11.7	1.4
Vermont .....	189	2,739	4.7	5.2	6.7	0.8
Virginia .....	90	19,385	2.7	4.5	8.5	1.1
Washington .....	64	17,133	2.9	4.8	10.1	1.5
West Virginia .....	97	5,010	2.8	3.4	4.2	0.8
Wisconsin .....	380	18,864	3.5	5.7	9.7	1.0
Wyoming .....	23	2,420	4.9	5.6	7.8	0.9

<sup>1</sup>The total number of persons entering the library for any purpose during the year.

<sup>2</sup>A reference transaction is an information contact which involves the knowledge, use, recommendations, interpretation, or instructions in the use of one or more information sources by a member of the library staff.

NOTE: Data include imputations for nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Public Libraries in the United States: Fiscal Year 2002*. (This table was prepared March 2005.)

**Table 416. Public schools and instructional rooms with access to the Internet, by selected school characteristics: 1994 through 2003**

Schools, computers, instructional rooms, and access	All public schools	Instructional level <sup>1</sup>		Size of school enrollment			Metropolitan status				Percent of students eligible for free or reduced-price lunch <sup>2</sup>			
		Elementary	Secondary	Less than 300	300 to 999	1,000 or more	City	Urban fringe	Town	Rural	Less than 35 percent	35 to 49 percent	50 to 74 percent	75 percent or more
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Estimated total number of schools</b>														
1995	77,853	57,705	18,083	20,673	50,044	7,136	17,906	18,464	19,539	21,944	37,450	13,627	12,808	13,166
1997	79,125	59,695	19,430	20,540	51,169	7,416	21,071	23,419	12,637	21,998	37,525	12,250	16,302	12,864
1998	78,791	59,173	19,193	20,095	50,655	8,041	20,698	26,265	11,306	20,522	38,156	12,088	13,967	14,541
1999	78,399	59,575	17,110	20,018	50,389	7,992	21,034	26,245	11,235	19,885	35,653	13,908	16,099	11,993
2000	80,127	59,782	18,414	20,067	51,887	8,173	21,115	26,584	11,879	20,550	36,563	12,414	17,030	13,912
2001	81,066	61,640	17,627	20,665	51,968	8,433	17,997	26,260	10,180	26,628	34,928	14,753	16,627	14,710
2002	82,036	62,134	17,608	21,429	51,876	8,731	18,550	26,431	10,774	26,280	34,989	13,243	19,040	14,765
2003	82,232	62,298	17,889	21,623	51,952	8,657	18,803	26,485	10,597	26,347	32,501	14,869	18,577	16,285
1998 (standard error)	(333)	(293)	(220)	(479)	(467)	(165)	(88)	(98)	(182)	(273)	(1,530)	(1,185)	(991)	(1,263)
1999 (standard error)	(665)	(722)	(521)	(1,263)	(681)	(291)	(605)	(514)	(343)	(506)	(1,211)	(977)	(1,067)	(949)
2000 (standard error)	(650)	(569)	(359)	(697)	(206)	(217)	(1,380)	(1,746)	(1,323)	(1,478)	(1,215)	(792)	(1,071)	(923)
2001 (standard error)	(492)	(527)	(414)	(589)	(274)	(139)	(1,416)	(1,002)	(746)	(1,087)	(1,191)	(1,203)	(995)	(814)
2002 (standard error)	(780)	(647)	(371)	(761)	(253)	(145)	(963)	(922)	(1,080)	(1,289)	(1,194)	(1,050)	(1,134)	(862)
2003 (standard error)	(763)	(759)	(396)	(697)	(448)	(154)	(1,160)	(1,060)	(1,098)	(1,422)	(1,381)	(1,111)	(1,095)	(999)
<b>Percent of schools having access to the Internet</b>														
1994	35	30	49	30	35	58	40	38	29	35	39	35	32	18
1995	50	46	65	39	52	69	47	59	47	48	60	48	41	31
1996	65	61	77	57	66	80	64	75	61	60	74	59	53	53
1997	78	75	89	75	78	89	74	78	84	79	86	81	71	62
1998	89	88	94	87	89	95	92	85	90	92	92	93	88	79
1999	95	94	98	96	94	96	93	96	94	96	95	98	96	89
2000	98	97	<sup>3</sup> 100	96	98	99	96	98	98	99	99	99	97	94
2001	99	99	<sup>3</sup> 100	99	99	<sup>3</sup> 100	97	99	<sup>3</sup> 100	<sup>3</sup> 100	99	<sup>3</sup> 100	99	97
2002	99	99	<sup>3</sup> 100	99	<sup>3</sup> 100	<sup>3</sup> 100	99	<sup>3</sup> 100	98	98	<sup>3</sup> 100	<sup>3</sup> 100	<sup>3</sup> 100	99
2003	<sup>3</sup> 100	<sup>3</sup> 100	100	100	<sup>3</sup> 100	100	00	<sup>3</sup> 100	100	100	100	100	100	99
1998 (standard error)	(1.3)	(1.6)	(2.1)	(3.4)	(1.4)	(2)	(2)	(2.8)	(3.2)	(3.4)	(2.0)	(2.2)	(3.0)	(3.7)
1999 (standard error)	(0.8)	(1.0)	(0.8)	(1.5)	(1.0)	(2)	(2)	(1.2)	(2.5)	(1.4)	(1.1)	(0.9)	(1.7)	(3.1)
2000 (standard error)	(0.5)	(0.7)	(0.2)	(1.7)	(0.5)	(1)	(1)	(1.2)	(1.2)	(0.9)	(0.7)	(0.7)	(1.3)	(1.7)
2001 (standard error)	(0.3)	(0.4)	(0.2)	(1.0)	(0.4)	(#)	(1)	(0.5)	(#)	(0.1)	(0.6)	(#)	(0.5)	(1.1)
2002 (standard error)	(0.5)	(0.6)	(0.5)	(1.7)	(0.2)	(#)	(1)	(#)	(2.2)	(1.0)	(1.0)	(#)	(#)	(0.9)
2003 (standard error)	(0.2)	(0.2)	(#)	(#)	(0.2)	(#)	(#)	(0.5)	(#)	(#)	(#)	(#)	(#)	(0.8)
<b>Number of computers for instructional purposes, in thousands</b>														
1995 <sup>4</sup>	5,621	3,453	2,021	850	3,600	1,171	1,497	1,526	1,404	1,195	2,905	806	950	882
1997	5,959	3,701	2,258	839	3,767	1,353	1,727	2,084	934	1,214	3,154	886	1,013	890
1998	7,111	4,519	2,549	952	4,414	1,744	2,148	2,606	1,047	1,311	3,630	1,105	1,127	1,235
1999	7,806	4,923	2,728	1,021	4,952	1,834	2,320	2,975	1,022	1,489	3,900	1,245	1,429	1,170
2000	8,776	5,296	3,271	1,135	5,524	2,117	2,537	3,396	1,155	1,689	4,394	1,373	1,606	1,384
2001	10,058	6,165	3,654	1,085	6,273	2,700	2,685	3,791	1,134	2,448	4,781	1,707	1,862	1,698
2002	10,711	6,775	3,705	1,347	6,533	2,831	2,662	4,043	1,320	2,686	4,982	1,673	2,265	1,792
2003	11,180	6,879	4,087	1,275	6,709	3,196	2,825	4,188	1,357	2,810	5,049	1,923	2,248	1,960
1998 (standard error)	(183)	(145)	(94)	(53)	(136)	(106)	(74)	(129)	(58)	(77)	(198)	(114)	(89)	(155)
1999 (standard error)	(147)	(114)	(103)	(76)	(127)	(101)	(113)	(121)	(50)	(75)	(152)	(115)	(116)	(98)
2000 (standard error)	(174)	(149)	(113)	(73)	(121)	(103)	(179)	(213)	(132)	(131)	(147)	(93)	(112)	(107)
2001 (standard error)	(180)	(165)	(98)	(57)	(140)	(85)	(192)	(168)	(78)	(142)	(206)	(120)	(132)	(117)
2002 (standard error)	(237)	(187)	(105)	(101)	(181)	(101)	(158)	(173)	(172)	(164)	(170)	(172)	(137)	(136)
2003 (standard error)	(265)	(234)	(115)	(77)	(179)	(118)	(163)	(177)	(139)	(220)	(252)	(165)	(139)	(110)

See notes at end of table.

**Table 416. Public schools and instructional rooms with access to the Internet, by selected school characteristics: 1994 through 2003—Continued**

Schools, computers, instructional rooms, and access	All public schools	Instructional level <sup>1</sup>		Size of school enrollment			Metropolitan status				Percent of students eligible for free or reduced-price lunch <sup>2</sup>			
		Elementary	Secondary	Less than 300	300 to 999	1,000 or more	City	Urban fringe	Town	Rural	Less than 35 percent	35 to 49 percent	50 to 74 percent	75 percent or more
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Average number of instructional computers per school</b>														
1995 <sup>4</sup> .....	72	60	112	41	72	164	84	83	72	54	78	59	74	67
1997.....	75	62	116	41	74	183	82	89	74	55	84	72	62	69
1998.....	90	76	133	47	87	217	104	99	93	64	95	91	81	85
1999.....	100	83	159	51	98	229	110	113	91	75	109	90	89	98
2000.....	110	89	178	57	106	259	120	128	97	82	120	111	94	99
2001.....	124	100	207	52	121	320	149	144	111	92	137	116	112	115
2002.....	131	109	210	63	126	324	144	153	123	102	142	126	119	122
2003.....	136	110	228	59	129	369	150	158	128	107	155	129	121	120
1998 (standard error).....	(2.3)	(2.4)	(4.9)	(2.6)	(2.5)	(13.0)	(3.6)	(4.9)	(5.2)	(3.6)	(3.7)	(6.1)	(4.5)	(7.7)
1999 (standard error).....	(2.2)	(2.2)	(6.4)	(2.5)	(2.3)	(10.7)	(4.7)	(4.2)	(4.2)	(3.6)	(2.8)	(6.8)	(5.6)	(5.2)
2000 (standard error).....	(2.0)	(2.4)	(5.3)	(3.1)	(2.3)	(9.0)	(4.9)	(4.3)	(5.6)	(3.6)	(3.4)	(5.9)	(5.7)	(5.5)
2001 (standard error).....	(2.3)	(2.7)	(6.2)	(2.5)	(2.6)	(10.1)	(6.4)	(4.7)	(6.0)	(4.0)	(4.9)	(5.8)	(6.0)	(5.0)
2002 (standard error).....	(2.8)	(2.9)	(6.4)	(4.1)	(3.5)	(10.8)	(6.4)	(5.2)	(9.3)	(4.5)	(4.7)	(8.5)	(5.3)	(5.9)
2003 (standard error).....	(2.6)	(3.1)	(4.9)	(2.9)	(3.2)	(11.0)	(6.1)	(5.6)	(6.7)	(4.9)	(5.9)	(7.0)	(5.6)	(5.1)
<b>Number of instructional computers with access to the Internet, in thousands</b>														
1995 <sup>4</sup> .....	447	232	187	59	315	73	96	131	126	94	286	46	57	36
1998.....	3,569	2,100	1,450	407	2,276	887	1,026	1,334	481	727	2,064	608	439	458
1999.....	4,809	2,773	1,945	663	2,988	1,158	1,265	1,887	691	966	2,762	778	810	428
2000.....	6,759	3,813	2,779	882	4,191	1,686	1,782	2,688	955	1,335	3,608	1,064	1,215	858
2001.....	8,500	4,936	3,357	874	5,229	2,396	2,175	3,178	1,008	2,139	4,225	1,447	1,529	1,289
2002.....	9,658	5,912	3,525	1,214	5,827	2,618	2,329	3,677	1,222	2,431	4,586	1,474	2,049	1,549
2003.....	10,361	6,225	3,935	1,156	6,169	3,036	2,593	3,887	1,264	2,616	4,751	1,724	2,121	1,726
1998 (standard error).....	(173)	(148)	(79)	(38)	(140)	(73)	(87)	(105)	(46)	(73)	(151)	(79)	(48)	(78)
1999 (standard error).....	(145)	(111)	(89)	(60)	(132)	(68)	(94)	(93)	(50)	(70)	(140)	(59)	(79)	(55)
2000 (standard error).....	(174)	(136)	(113)	(69)	(114)	(97)	(148)	(178)	(111)	(91)	(139)	(80)	(93)	(87)
2001 (standard error).....	(176)	(144)	(92)	(61)	(139)	(89)	(164)	(150)	(74)	(137)	(196)	(105)	(114)	(101)
2002 (standard error).....	(236)	(183)	(105)	(97)	(183)	(102)	(145)	(160)	(162)	(148)	(167)	(158)	(129)	(122)
2003 (standard error).....	(270)	(237)	(117)	(71)	(186)	(122)	(160)	(168)	(128)	(217)	(244)	(158)	(134)	(107)
<b>Percent of instructional computers with access to the Internet</b>														
1995 <sup>4</sup> .....	8	7	9	7	9	6	6	9	9	8	10	6	6	4
1998.....	50	46	57	43	52	51	48	51	46	55	57	55	39	37
1999.....	62	56	71	65	60	63	55	63	68	65	71	62	57	37
2000.....	77	72	85	78	76	80	70	79	83	79	82	77	76	62
2001.....	85	80	92	81	83	89	81	84	89	87	88	85	82	76
2002.....	90	87	95	90	89	92	87	91	93	90	92	88	90	86
2003.....	93	90	96	91	92	95	92	93	93	93	95	90	94	88
1998 (standard error).....	(1.7)	(2.5)	(2.1)	(3.4)	(2.2)	(3.4)	(3.0)	(2.8)	(4.1)	(3.4)	(2.0)	(4.2)	(2.9)	(4.6)
1999 (standard error).....	(1.4)	(1.6)	(2.4)	(3.0)	(1.7)	(3.6)	(2.6)	(2.4)	(3.1)	(2.7)	(2.2)	(3.6)	(2.8)	(3.6)
2000 (standard error).....	(1.1)	(1.5)	(1.2)	(2.6)	(1.3)	(1.8)	(2.1)	(1.7)	(2.5)	(2.1)	(1.2)	(2.9)	(2.6)	(3.1)
2001 (standard error).....	(0.8)	(1.2)	(0.8)	(2.8)	(1.2)	(1.4)	(2.1)	(1.5)	(2.1)	(1.3)	(1.2)	(2.0)	(2.5)	(2.2)
2002 (standard error).....	(0.8)	(1.1)	(0.6)	(1.8)	(0.9)	(1.3)	(1.6)	(1.2)	(1.9)	(1.4)	(1.1)	(2.0)	(1.5)	(1.6)
2003 (standard error).....	(0.6)	(0.8)	(0.8)	(1.9)	(0.8)	(1.0)	(1.0)	(1.1)	(1.6)	(1.3)	(0.8)	(2.3)	(1.0)	(1.5)

See notes at end of table.

**Table 416. Public schools and instructional rooms with access to the Internet, by selected school characteristics: 1994 through 2003—Continued**

Schools, computers, instructional rooms, and access	All public schools	Instructional level <sup>1</sup>		Size of school enrollment			Metropolitan status				Percent of students eligible for free or reduced-price lunch <sup>2</sup>			
		Elementary	Secondary	Less than 300	300 to 999	1,000 or more	City	Urban fringe	Town	Rural	Less than 35 percent	35 to 49 percent	50 to 74 percent	75 percent or more
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Number of public school students per instructional computer with access to the Internet</b>														
1998	12.1	13.6	9.9	9.1	12.3	13.0	14.1	12.4	12.2	8.6	10.6	10.9	15.8	16.8
1999	9.1	10.6	7.0	5.7	9.4	10.0	11.4	9.1	8.2	6.6	7.6	9.0	10.0	16.8
2000	6.6	7.8	5.2	3.9	7.0	7.2	8.2	6.6	6.2	5.0	6.0	6.3	7.2	9.1
2001	5.4	6.1	4.3	4.1	5.6	5.4	5.9	5.7	5.0	4.6	4.9	5.2	5.6	6.8
2002	4.8	5.2	4.1	3.1	5.0	5.1	5.5	4.9	4.4	4.0	4.6	4.5	4.7	5.5
2003	4.4	4.9	3.8	3.2	4.7	4.3	5.0	4.6	4.1	3.8	4.2	4.4	4.4	5.1
1998 (standard error)	(0.6)	(0.9)	(0.4)	(0.7)	(0.7)	(1.0)	(1.2)	(0.9)	(1.2)	(0.8)	(0.6)	(1.2)	(1.4)	(2.5)
1999 (standard error)	(0.3)	(0.4)	(0.3)	(0.4)	(0.4)	(0.6)	(0.8)	(0.4)	(0.6)	(0.4)	(0.3)	(0.4)	(0.8)	(2.2)
2000 (standard error)	(0.1)	(0.2)	(0.2)	(0.3)	(0.2)	(0.3)	(0.4)	(0.2)	(0.3)	(0.3)	(0.2)	(0.4)	(0.4)	(0.7)
2001 (standard error)	(0.1)	(0.2)	(0.1)	(0.3)	(0.1)	(0.2)	(0.2)	(0.2)	(0.3)	(0.1)	(0.2)	(0.2)	(0.3)	(0.3)
2002 (standard error)	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.4)	(0.2)	(0.1)	(0.3)	(0.2)	(0.3)
2003 (standard error)	(0.1)	(0.2)	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.1)	(0.3)	(0.2)	(0.2)
<b>Number of instructional rooms,<sup>5</sup> in thousands</b>														
1997	2,625	1,720	906	335	1,725	566	830	902	388	505	1,336	375	462	447
1998	2,709	1,772	916	349	1,740	620	839	981	390	498	1,372	413	451	471
1999	2,811	1,830	926	360	1,805	645	857	1,049	375	530	1,325	477	541	437
2000	2,905	1,864	972	377	1,871	657	866	1,086	413	541	1,380	465	570	482
2001	2,851	1,854	929	332	1,829	690	726	1,068	339	718	1,299	486	551	510
2002	2,988	2,006	919	396	1,896	696	748	1,101	378	761	1,368	451	648	520
2003	3,004	1,998	952	378	1,919	707	777	1,104	375	748	1,281	524	626	512
1998 (standard error)	(41)	(29)	(25)	(15)	(34)	(21)	(22)	(24)	(14)	(17)	(60)	(39)	(29)	(42)
1999 (standard error)	(36)	(33)	(29)	(26)	(39)	(30)	(29)	(33)	(16)	(23)	(46)	(34)	(42)	(34)
2000 (standard error)	(35)	(28)	(24)	(22)	(23)	(23)	(56)	(61)	(47)	(39)	(46)	(28)	(36)	(29)
2001 (standard error)	(31)	(30)	(18)	(17)	(23)	(15)	(49)	(46)	(24)	(36)	(48)	(34)	(35)	(29)
2002 (standard error)	(37)	(30)	(19)	(25)	(20)	(16)	(36)	(39)	(40)	(48)	(45)	(38)	(38)	(33)
2003 (standard error)	(47)	(44)	(20)	(18)	(33)	(16)	(45)	(51)	(38)	(54)	(51)	(39)	(38)	(34)
<b>Percent of instructional rooms<sup>5</sup> with access to the Internet</b>														
1994	3	3	4	3	3	3	4	4	3	3	3	2	4	2
1995	8	8	8	9	8	4	6	8	8	8	9	6	6	3
1996	14	13	16	15	13	16	12	16	14	14	17	12	11	5
1997	27	24	32	27	28	25	20	29	34	30	33	33	20	14
1998	51	51	52	54	53	45	47	50	55	57	57	60	41	38
1999	64	62	67	71	64	58	52	67	72	71	73	69	61	38
2000	77	76	79	83	78	70	66	78	87	85	82	81	77	60
2001	87	86	88	87	87	86	82	87	91	89	90	89	87	79
2002	92	92	91	91	93	89	88	92	96	93	93	90	91	89
2003	93	93	94	93	93	94	90	94	97	94	95	93	94	90
1998 (standard error)	(1.8)	(2.3)	(2.1)	(3.7)	(2.2)	(3.9)	(3.2)	(2.9)	(4.0)	(3.6)	(2.4)	(5.1)	(3.9)	(4.3)
1999 (standard error)	(1.6)	(1.8)	(2.6)	(3.2)	(1.9)	(3.0)	(2.6)	(2.5)	(3.4)	(3.0)	(2.3)	(3.4)	(3.1)	(4.4)
2000 (standard error)	(1.1)	(1.5)	(1.6)	(2.8)	(1.5)	(2.2)	(2.2)	(2.0)	(2.6)	(1.7)	(1.5)	(2.9)	(2.8)	(3.3)
2001 (standard error)	(0.9)	(1.1)	(1.2)	(2.1)	(1.1)	(1.7)	(2.1)	(1.3)	(2.2)	(1.3)	(1.2)	(2.2)	(2.4)	(2.4)
2002 (standard error)	(0.6)	(0.8)	(1.0)	(1.9)	(0.7)	(1.7)	(1.6)	(0.9)	(1.1)	(1.0)	(0.8)	(2.1)	(1.4)	(1.9)
2003 (standard error)	(0.5)	(0.7)	(0.9)	(1.6)	(0.7)	(1.1)	(1.0)	(0.9)	(0.9)	(1.2)	(1.0)	(1.4)	(1.1)	(1.5)

#Rounds to zero.

<sup>1</sup>Excludes combined elementary/secondary schools because of small sample size.

<sup>2</sup>Excludes schools with missing data for free and reduced-price lunch participation.

<sup>3</sup>This estimate fell between 99.5 percent and 100.0 percent and therefore was rounded to 100 percent.

<sup>4</sup>Includes computers used for instructional or administrative purposes.

<sup>5</sup>Includes all classrooms, computer labs, and library/media centers.

NOTE: Data are derived from sample surveys and are subject to sampling error. Detail may not sum to totals because of rounding. Standard errors appear in parentheses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), *Internet Access in U.S. Public Schools and Classrooms: 1994–2003*; and unpublished tabulations. (This table was prepared April 2005.)

Table 417. Use of the Internet by persons 3 years old and over, by type of use and selected characteristics of students and other users: 2003

Selected characteristic	Number of persons using the Internet, in thousands	Percent using the Internet anywhere	Percent using the Internet at school	Percent of internet users using the Internet for various activities during the year <sup>1</sup>										
				School assignments	E-mail and messaging	Playing games	Online courses	Product purchases and information	News, weather, and sports	Health information <sup>2</sup>	Government information <sup>3</sup>	Conduct financial transactions <sup>3,4</sup>	Look for jobs <sup>3</sup>	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
<b>Total, all persons .....</b>	<b>161,636 (309.1)</b>	<b>58.7 (0.14)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>82.1 (0.15)</b>	<b>42.2 (0.19)</b>	<b>5.6 (0.09)</b>	<b>71.2 (0.17)</b>	<b>60.6 (0.19)</b>	<b>39.3 (0.20)</b>	<b>44.7 (0.21)</b>	<b>30.4 (0.19)</b>	<b>18.7 (0.16)</b>	
<b>Sex</b>														
Male .....	78,070 (343.4)	58.2 (0.21)	— (†)	— (†)	80.4 (0.22)	45.5 (0.27)	5.4 (0.12)	71.8 (0.25)	65.5 (0.26)	34.1 (0.28)	45.5 (0.30)	32.3 (0.28)	19.1 (0.24)	
Female .....	83,567 (348.1)	59.2 (0.20)	— (†)	— (†)	83.7 (0.20)	39.2 (0.26)	5.7 (0.12)	70.6 (0.24)	55.9 (0.26)	44.1 (0.28)	44.0 (0.29)	28.6 (0.26)	18.3 (0.22)	
<b>Race/ethnicity</b>														
White, non-Hispanic .....	122,243 (353.9)	65.1 (0.17)	— (†)	— (†)	84.8 (0.16)	41.4 (0.22)	5.5 (0.10)	74.4 (0.19)	62.9 (0.21)	41.1 (0.23)	45.9 (0.24)	31.3 (0.22)	17.4 (0.18)	
Black, non-Hispanic .....	14,898 (131.5)	45.2 (0.45)	— (†)	— (†)	71.1 (0.61)	50.2 (0.67)	5.6 (0.31)	59.7 (0.66)	50.8 (0.67)	33.6 (0.67)	41.1 (0.73)	22.3 (0.62)	25.6 (0.65)	
Hispanic .....	14,038 (132.7)	37.2 (0.43)	— (†)	— (†)	69.6 (0.68)	43.0 (0.73)	5.0 (0.32)	57.2 (0.73)	50.6 (0.74)	30.1 (0.73)	36.4 (0.81)	26.6 (0.74)	21.5 (0.69)	
Other .....	10,457 (133.9)	61.6 (0.65)	— (†)	— (†)	83.3 (0.64)	39.5 (0.84)	7.1 (0.44)	68.4 (0.79)	60.7 (0.83)	37.6 (0.87)	45.4 (0.93)	35.2 (0.89)	21.5 (0.76)	
<b>Age</b>														
3 and 4 .....	1,662 (62.5)	19.9 (0.67)	— (†)	— (†)	26.5 (1.67)	64.6 (1.81)	0.6 (0.29)	15.4 (1.36)	11.3 (1.19)	— (†)	— (†)	— (†)	— (†)	
5 to 9 .....	8,259 (137.2)	42.0 (0.54)	— (†)	— (†)	33.5 (0.80)	64.8 (0.81)	1.0 (0.17)	17.3 (0.64)	16.6 (0.63)	— (†)	— (†)	— (†)	— (†)	
10 to 14 .....	14,570 (179.4)	68.9 (0.49)	— (†)	— (†)	62.4 (0.62)	66.1 (0.60)	1.1 (0.13)	34.4 (0.61)	35.7 (0.61)	6.2 (0.38)	— (†)	— (†)	— (†)	
15 to 19 .....	15,768 (186.1)	77.7 (0.45)	— (†)	— (†)	84.0 (0.45)	61.1 (0.60)	5.0 (0.27)	61.3 (0.60)	55.4 (0.61)	13.2 (0.42)	19.3 (0.48)	8.6 (0.34)	10.5 (0.38)	
20 to 24 .....	13,800 (174.9)	69.4 (0.50)	— (†)	— (†)	87.1 (0.44)	51.9 (0.65)	8.8 (0.37)	76.4 (0.56)	65.6 (0.62)	28.4 (0.59)	36.2 (0.63)	27.6 (0.59)	30.5 (0.60)	
25 to 29 .....	12,492 (167.0)	66.7 (0.53)	— (†)	— (†)	88.7 (0.44)	42.2 (0.68)	8.0 (0.37)	83.1 (0.52)	71.0 (0.62)	44.7 (0.68)	50.2 (0.69)	41.3 (0.68)	31.5 (0.64)	
30 to 39 .....	28,580 (242.3)	69.2 (0.35)	— (†)	— (†)	88.6 (0.29)	35.9 (0.44)	7.1 (0.23)	83.6 (0.34)	70.9 (0.41)	45.0 (0.45)	49.9 (0.46)	38.8 (0.44)	23.3 (0.38)	
40 to 49 .....	29,978 (247.3)	67.5 (0.34)	— (†)	— (†)	88.3 (0.29)	33.1 (0.42)	6.3 (0.22)	83.4 (0.33)	70.1 (0.41)	48.0 (0.44)	50.9 (0.44)	34.6 (0.42)	19.0 (0.35)	
50 to 59 .....	21,911 (215.9)	62.7 (0.40)	— (†)	— (†)	89.3 (0.32)	26.9 (0.46)	5.9 (0.24)	82.1 (0.40)	66.4 (0.49)	50.5 (0.52)	51.2 (0.52)	30.0 (0.48)	12.8 (0.35)	
60 to 69 .....	9,677 (148.0)	43.9 (0.51)	— (†)	— (†)	87.5 (0.52)	27.7 (0.70)	3.7 (0.30)	77.8 (0.65)	60.2 (0.77)	49.3 (0.78)	45.6 (0.78)	24.2 (0.67)	6.1 (0.37)	
70 or older .....	4,940 (106.9)	20.1 (0.39)	— (†)	— (†)	86.7 (0.74)	27.9 (0.98)	2.9 (0.37)	67.6 (1.03)	56.8 (1.08)	47.6 (1.09)	37.8 (1.06)	19.0 (0.86)	2.4 (0.34)	
<b>Family income<sup>5</sup></b>														
Less than \$10,000 .....	5,290 (112.1)	31.5 (0.63)	— (†)	— (†)	69.3 (1.11)	48.0 (1.20)	6.4 (0.59)	60.6 (1.17)	53.3 (1.20)	33.8 (1.21)	40.4 (1.31)	22.9 (1.12)	34.5 (1.27)	
\$10,000 to \$19,999 .....	8,119 (195.6)	32.5 (0.66)	— (†)	— (†)	70.6 (1.12)	45.0 (1.22)	5.9 (0.58)	60.4 (1.20)	51.3 (1.23)	33.4 (1.23)	39.7 (1.34)	20.7 (1.11)	26.1 (1.20)	
\$20,000 to \$29,999 .....	12,830 (243.1)	43.8 (0.64)	— (†)	— (†)	75.5 (0.84)	46.1 (0.97)	5.4 (0.44)	64.3 (0.94)	54.9 (0.97)	35.8 (0.99)	39.3 (1.04)	24.8 (0.92)	23.6 (0.91)	
\$30,000 to \$39,999 .....	15,730 (267.2)	54.3 (0.65)	— (†)	— (†)	79.4 (0.71)	44.9 (0.88)	5.1 (0.39)	67.0 (0.83)	56.1 (0.88)	36.3 (0.90)	40.4 (0.95)	26.3 (0.85)	21.2 (0.79)	
\$40,000 to \$49,999 .....	13,596 (249.8)	64.8 (0.73)	— (†)	— (†)	80.2 (0.76)	43.7 (0.94)	4.8 (0.40)	70.6 (0.86)	58.0 (0.94)	37.6 (0.97)	41.9 (1.02)	27.3 (0.92)	18.5 (0.80)	
\$50,000 to \$74,999 .....	32,025 (365.2)	71.8 (0.47)	— (†)	— (†)	83.6 (0.46)	42.7 (0.61)	5.1 (0.27)	72.9 (0.55)	61.7 (0.60)	39.7 (0.63)	45.7 (0.67)	31.3 (0.62)	18.2 (0.52)	
\$75,000 or more .....	48,795 (429.4)	82.9 (0.34)	— (†)	— (†)	87.3 (0.33)	39.7 (0.49)	6.5 (0.25)	77.7 (0.42)	67.4 (0.47)	44.0 (0.52)	51.5 (0.54)	38.4 (0.53)	15.9 (0.40)	
<b>Total, all students .....</b>	<b>49,520 (300.6)</b>	<b>66.1 (0.27)</b>	<b>48.8 (0.28)</b>	<b>82.2 (0.26)</b>	<b>70.1 (0.32)</b>	<b>59.3 (0.34)</b>	<b>5.9 (0.16)</b>	<b>49.8 (0.35)</b>	<b>46.5 (0.35)</b>	<b>20.1 (0.33)</b>	<b>32.8 (0.45)</b>	<b>20.5 (0.39)</b>	<b>17.8 (0.37)</b>	
<b>Elementary/secondary<sup>6</sup> .....</b>	<b>34,636 (262.4)</b>	<b>59.4 (0.31)</b>	<b>43.3 (0.32)</b>	<b>77.9 (0.34)</b>	<b>60.6 (0.40)</b>	<b>64.2 (0.40)</b>	<b>2.0 (0.12)</b>	<b>37.1 (0.40)</b>	<b>36.0 (0.40)</b>	<b>9.3 (0.31)</b>	<b>15.8 (0.53)</b>	<b>5.6 (0.34)</b>	<b>7.0 (0.37)</b>	
3 and 4 years old .....	1,063 (50.1)	23.2 (0.96)	7.6 (0.60)	29.4 (2.15)	25.1 (2.05)	63.5 (2.27)	† (†)	12.7 (1.57)	8.5 (1.32)	— (†)	— (†)	— (†)	— (†)	
5 to 9 years old .....	8,116 (136.0)	42.7 (0.55)	26.1 (0.49)	51.6 (0.85)	33.3 (0.81)	64.9 (0.82)	1.0 (0.17)	17.3 (0.65)	16.5 (0.63)	— (†)	— (†)	— (†)	— (†)	
10 to 14 years old .....	14,422 (178.5)	69.4 (0.49)	53.4 (0.53)	85.6 (0.45)	62.4 (0.62)	66.1 (0.61)	1.0 (0.13)	34.2 (0.61)	35.5 (0.61)	5.9 (0.38)	— (†)	— (†)	— (†)	
15 year old and over .....	11,035 (157.5)	79.5 (0.53)	63.6 (0.63)	91.9 (0.40)	81.6 (0.57)	61.3 (0.71)	4.2 (0.29)	57.8 (0.72)	53.6 (0.73)	12.2 (0.48)	15.8 (0.53)	5.6 (0.34)	7.0 (0.37)	
College .....	14,884 (181.2)	89.5 (0.37)	68.1 (0.56)	92.0 (0.34)	92.4 (0.34)	47.8 (0.63)	14.9 (0.45)	79.2 (0.51)	71.1 (0.57)	34.9 (0.60)	45.4 (0.63)	31.5 (0.59)	25.8 (0.55)	
<b>Sex</b>														
Male .....	24,107 (225.2)	64.6 (0.38)	47.7 (0.40)	80.7 (0.39)	66.8 (0.47)	64.1 (0.48)	5.3 (0.22)	50.5 (0.50)	49.9 (0.50)	16.1 (0.44)	31.4 (0.65)	20.2 (0.56)	17.0 (0.52)	
<b>Elementary/ secondary<sup>6</sup> .....</b>	<b>17,519 (195.3)</b>	<b>58.4 (0.44)</b>	<b>42.2 (0.44)</b>	<b>76.6 (0.49)</b>	<b>57.2 (0.58)</b>	<b>67.5 (0.54)</b>	<b>2.1 (0.17)</b>	<b>39.4 (0.57)</b>	<b>39.3 (0.57)</b>	<b>7.6 (0.40)</b>	<b>15.4 (0.74)</b>	<b>5.6 (0.47)</b>	<b>6.4 (0.50)</b>	
3 and 4 years old .....	591 (37.4)	24.2 (1.34)	7.2 (0.81)	26.9 (2.81)	23.7 (2.69)	66.4 (2.99)	† (†)	11.4 (2.01)	8.7 (1.79)	— (†)	— (†)	— (†)	— (†)	
5 to 9 years old .....	4,051 (97.0)	41.8 (0.77)	25.1 (0.68)	50.4 (1.21)	30.2 (1.11)	66.8 (1.14)	1.2 (0.27)	18.9 (0.95)	17.8 (0.93)	— (†)	— (†)	— (†)	— (†)	
10 to 14 years old .....	7,233 (128.7)	68.1 (0.70)	51.9 (0.75)	84.0 (0.66)	58.0 (0.89)	68.9 (0.84)	1.4 (0.21)	37.6 (0.88)	38.1 (0.88)	4.6 (0.48)	— (†)	— (†)	— (†)	
15 year old and over .....	5,645 (114.1)	77.9 (0.75)	62.8 (0.87)	91.2 (0.58)	79.1 (0.83)	66.3 (0.97)	3.9 (0.40)	59.5 (1.01)	59.6 (1.01)	9.9 (0.61)	15.4 (0.74)	5.6 (0.47)	6.4 (0.50)	
College .....	6,587 (123.0)	90.0 (0.54)	70.2 (0.82)	91.4 (0.53)	92.3 (0.51)	55.1 (0.94)	13.6 (0.65)	79.8 (0.76)	77.9 (0.79)	29.2 (0.86)	45.0 (0.94)	32.7 (0.89)	26.0 (0.83)	

See notes at end of table.

**Table 417. Use of the Internet by persons 3 years old and over, by type of use and selected characteristics of students and other users: 2003—Continued**

Selected characteristic	Number of persons using the Internet, in thousands	Percent using the Internet anywhere	Percent using the Internet at school	Percent of internet users using the Internet for various activities during the year <sup>1</sup>										
				School assignments	E-mail and messaging	Playing games	Online courses	Product purchases and information	News, weather, and sports	Health information <sup>2</sup>	Government information <sup>3</sup>	Conduct financial transactions <sup>3,4</sup>	Look for jobs <sup>3</sup>	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Female.....	25,413 (230.4)	67.6 (0.37)	49.9 (0.40)	83.6 (0.36)	73.3 (0.43)	54.7 (0.48)	6.5 (0.24)	49.1 (0.48)	43.4 (0.48)	23.8 (0.48)	34.1 (0.62)	20.7 (0.53)	18.6 (0.51)	
Elementary/ secondary <sup>6</sup> .....	17,117 (193.2)	60.5 (0.45)	44.4 (0.45)	79.3 (0.48)	64.0 (0.56)	60.8 (0.57)	1.9 (0.16)	34.8 (0.56)	32.6 (0.55)	11.1 (0.48)	16.2 (0.77)	5.7 (0.48)	7.6 (0.56)	
3 and 4 years old....	472 (33.4)	21.9 (1.37)	8.0 (0.90)	32.5 (3.32)	26.8 (3.14)	60.0 (3.47)	‡ (†)	14.3 (2.48)	8.3 (1.95)	— (†)	— (†)	— (†)	— (†)	
5 to 9 years old.....	4,065 (97.2)	43.7 (0.79)	27.1 (0.71)	52.9 (1.21)	36.3 (1.16)	62.9 (1.17)	0.7 (0.20)	15.7 (0.88)	15.1 (0.86)	— (†)	— (†)	— (†)	— (†)	
10 to 14 years old....	7,189 (128.3)	70.7 (0.69)	54.9 (0.76)	87.3 (0.60)	66.9 (0.85)	63.3 (0.87)	0.7 (0.15)	30.9 (0.84)	32.9 (0.85)	7.1 (0.57)	— (†)	— (†)	— (†)	
15 year old and over	5,390 (111.6)	81.2 (0.74)	64.5 (0.90)	92.6 (0.55)	84.1 (0.77)	56.0 (1.04)	4.4 (0.43)	56.1 (1.04)	47.4 (1.05)	14.6 (0.74)	16.2 (0.77)	5.7 (0.48)	7.6 (0.56)	
College.....	8,297 (137.5)	89.0 (0.50)	66.4 (0.75)	92.4 (0.45)	92.4 (0.45)	42.0 (0.83)	15.9 (0.62)	78.8 (0.69)	65.7 (0.80)	39.4 (0.83)	45.8 (0.84)	30.4 (0.78)	25.7 (0.74)	
Race/ethnicity														
White, non-Hispanic.....	34,066 (260.6)	73.4 (0.32)	54.0 (0.36)	82.6 (0.32)	74.0 (0.37)	60.1 (0.41)	6.0 (0.20)	52.9 (0.42)	48.8 (0.42)	20.8 (0.40)	34.6 (0.55)	21.9 (0.48)	16.7 (0.43)	
Elementary/ secondary <sup>6</sup> .....	23,592 (223.1)	67.1 (0.39)	48.7 (0.41)	78.2 (0.41)	65.1 (0.48)	65.7 (0.48)	1.9 (0.14)	39.9 (0.49)	38.0 (0.49)	9.5 (0.38)	17.3 (0.68)	6.7 (0.45)	5.8 (0.42)	
3 and 4 years old....	769 (42.6)	26.8 (1.27)	7.2 (0.74)	23.9 (2.37)	24.1 (2.37)	63.5 (2.67)	‡ (†)	9.9 (1.66)	6.5 (1.37)	— (†)	— (†)	— (†)	— (†)	
5 to 9 years old.....	5,557 (113.2)	49.6 (0.73)	30.4 (0.67)	49.7 (1.03)	35.4 (0.99)	65.5 (0.98)	0.9 (0.19)	17.4 (0.78)	17.2 (0.78)	— (†)	— (†)	— (†)	— (†)	
10 to 14 years old....	9,836 (149.1)	78.2 (0.57)	60.4 (0.67)	87.4 (0.52)	68.5 (0.72)	67.8 (0.72)	0.8 (0.14)	37.0 (0.75)	37.6 (0.75)	5.4 (0.44)	— (†)	— (†)	— (†)	
15 year old and over	7,430 (130.4)	87.4 (0.55)	69.6 (0.77)	92.9 (0.46)	87.2 (0.60)	63.4 (0.86)	4.1 (0.36)	63.5 (0.86)	57.4 (0.88)	12.9 (0.60)	17.3 (0.68)	6.7 (0.45)	5.8 (0.42)	
College.....	10,475 (153.6)	92.7 (0.38)	70.3 (0.66)	92.4 (0.40)	94.0 (0.36)	47.5 (0.75)	15.4 (0.54)	82.3 (0.57)	73.1 (0.67)	35.7 (0.72)	46.8 (0.75)	32.7 (0.71)	24.4 (0.65)	
Black, non-Hispanic.....	5,810 (110.1)	53.0 (0.78)	40.8 (0.77)	82.6 (0.81)	57.4 (1.06)	61.5 (1.05)	5.9 (0.51)	41.9 (1.06)	39.3 (1.05)	18.8 (0.99)	28.2 (1.33)	12.7 (0.99)	22.8 (1.24)	
Elementary/ secondary <sup>6</sup> .....	4,137 (96.7)	46.6 (0.87)	36.2 (0.83)	79.1 (1.04)	46.8 (1.27)	64.9 (1.21)	2.0 (0.36)	31.0 (1.18)	31.2 (1.18)	8.7 (0.92)	11.7 (1.42)	1.6 (0.55)	11.5 (1.41)	
3 and 4 years old....	103 (16.6)	15.0 (2.24)	7.2 (1.62)	51.6 (8.06)	32.5 (7.55)	56.8 (7.99)	‡ (†)	35.3 (7.70)	20.0 (6.45)	— (†)	— (†)	— (†)	— (†)	
5 to 9 years old.....	925 (48.9)	33.1 (1.46)	21.5 (1.27)	58.2 (2.65)	27.1 (2.39)	65.6 (2.56)	0.6 (0.40)	20.0 (2.15)	16.3 (1.99)	— (†)	— (†)	— (†)	— (†)	
10 to 14 years old....	1,732 (65.8)	53.6 (1.44)	42.7 (1.42)	83.8 (1.45)	45.5 (1.96)	68.6 (1.83)	2.1 (0.57)	29.0 (1.79)	31.6 (1.83)	8.2 (1.33)	— (†)	— (†)	— (†)	
15 year old and over	1,377 (59.1)	63.6 (1.69)	54.5 (1.75)	89.2 (1.37)	62.7 (2.13)	60.4 (2.16)	3.1 (0.76)	40.5 (2.17)	41.6 (2.17)	9.2 (1.27)	11.7 (1.42)	1.6 (0.55)	11.5 (1.41)	
College.....	1,673 (64.8)	80.0 (1.43)	60.7 (1.75)	91.4 (1.12)	83.5 (1.48)	53.0 (2.00)	15.4 (1.45)	68.9 (1.85)	59.4 (1.97)	33.9 (1.89)	41.9 (1.97)	21.8 (1.65)	32.2 (1.87)	
Hispanic.....	5,862 (116.2)	49.1 (0.80)	34.9 (0.76)	77.6 (0.95)	58.0 (1.13)	53.3 (1.14)	4.9 (0.49)	38.7 (1.11)	38.1 (1.11)	16.2 (1.02)	27.3 (1.47)	15.9 (1.21)	18.6 (1.29)	
Elementary/ secondary <sup>6</sup> .....	4,517 (105.7)	44.2 (0.86)	31.2 (0.80)	74.5 (1.13)	49.1 (1.30)	56.1 (1.29)	2.8 (0.43)	29.1 (1.18)	30.3 (1.19)	8.6 (0.95)	13.9 (1.58)	3.7 (0.87)	9.0 (1.31)	
3 and 4 years old....	114 (18.6)	15.6 (2.35)	7.2 (1.67)	41.4 (8.08)	16.2 (6.04)	71.0 (7.44)	‡ (†)	7.0 (4.19)	10.6 (5.04)	— (†)	— (†)	— (†)	— (†)	
5 to 9 years old.....	1,095 (56.5)	30.3 (1.33)	17.9 (1.11)	53.6 (2.63)	26.6 (2.33)	59.9 (2.59)	1.8 (0.70)	15.2 (1.89)	15.5 (1.91)	— (†)	— (†)	— (†)	— (†)	
10 to 14 years old....	1,855 (72.3)	51.9 (1.46)	38.7 (1.42)	78.5 (1.67)	48.2 (2.03)	54.9 (2.02)	1.4 (0.48)	25.5 (1.77)	28.1 (1.82)	6.5 (1.23)	— (†)	— (†)	— (†)	
15 year old and over	1,454 (64.5)	63.2 (1.76)	47.9 (1.82)	87.6 (1.51)	69.8 (2.10)	53.7 (2.28)	5.3 (1.02)	45.8 (2.28)	45.8 (2.28)	10.3 (1.39)	13.9 (1.58)	3.7 (0.87)	9.0 (1.31)	
College.....	1,344 (62.2)	78.4 (1.74)	56.9 (2.09)	88.2 (1.54)	88.1 (1.54)	43.9 (2.36)	12.0 (1.55)	71.2 (2.16)	64.2 (2.28)	31.5 (2.21)	41.8 (2.35)	29.0 (2.16)	29.0 (2.16)	
Family income <sup>5</sup>														
Less than \$10,000.....	2,642 (84.7)	51.9 (1.22)	41.1 (1.21)	81.4 (1.32)	64.0 (1.63)	56.0 (1.69)	7.9 (0.92)	51.9 (1.70)	50.3 (1.70)	27.1 (1.71)	39.2 (2.07)	25.4 (1.85)	32.9 (1.99)	
\$10,000 to \$19,999.....	3,477 (95.2)	52.8 (1.07)	41.8 (1.06)	82.2 (1.13)	60.8 (1.45)	52.5 (1.48)	6.9 (0.75)	46.7 (1.48)	42.6 (1.46)	22.6 (1.44)	37.2 (1.90)	19.8 (1.57)	21.4 (1.62)	
\$20,000 to \$29,999.....	4,226 (103.0)	55.8 (1.00)	42.8 (0.99)	79.7 (1.08)	64.5 (1.29)	56.5 (1.33)	6.8 (0.68)	47.3 (1.34)	43.4 (1.33)	22.8 (1.32)	35.4 (1.75)	19.3 (1.44)	21.7 (1.51)	
\$30,000 to \$39,999.....	4,860 (108.7)	62.8 (0.96)	45.1 (0.99)	78.5 (1.03)	66.8 (1.18)	60.9 (1.22)	6.6 (0.62)	45.1 (1.25)	41.4 (1.23)	20.5 (1.23)	31.9 (1.68)	20.7 (1.46)	19.1 (1.41)	
\$40,000 to \$49,999.....	3,812 (98.9)	69.0 (1.09)	49.7 (1.17)	80.2 (1.13)	65.5 (1.35)	60.1 (1.39)	5.5 (0.64)	48.2 (1.41)	41.2 (1.39)	18.7 (1.33)	28.2 (1.82)	17.4 (1.53)	14.8 (1.43)	
\$50,000 to \$74,999.....	9,038 (130.9)	72.1 (0.70)	51.6 (0.78)	82.0 (0.71)	71.5 (0.83)	60.9 (0.90)	5.0 (0.40)	49.9 (0.92)	46.9 (0.92)	20.2 (0.88)	35.0 (1.23)	20.5 (1.04)	17.2 (0.98)	
\$75,000 or more.....	14,314 (132.1)	79.5 (0.53)	57.3 (0.64)	84.3 (0.53)	76.2 (0.62)	61.9 (0.71)	5.9 (0.34)	54.0 (0.73)	51.3 (0.73)	18.6 (0.69)	32.9 (0.97)	22.4 (0.86)	14.6 (0.73)	

—Not available.

†Not applicable.

‡Reporting standards not met.

<sup>1</sup>Individuals may be counted in more than one internet activity.

<sup>2</sup>Data are for persons 12 years old and over.

<sup>3</sup>Data are for persons 15 years old and over.

<sup>4</sup>Includes online banking and stock and securities transactions.

<sup>5</sup>Excludes persons whose income data were not available.

<sup>6</sup>Includes prekindergarten through grade 12.

NOTE: Data are based on a sample survey of households and are subject to sampling and nonsampling error. Detail may not sum to totals because of rounding. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2003, unpublished tabulations. (This table was prepared May 2005.)

**Table 418. Number and percentage of home computer users, by type of application and selected characteristics: 1997 and 2003**

Selected characteristic	1997				2003												
	Number of home computer users, in thousands		Percent of persons using computers at home		Number of home computer users, in thousands		Percent of persons using computers at home		Percent of home computer users using specific applications <sup>1</sup>								
									Word processing	Connect to Internet	E-mail	Spreadsheets/databases <sup>2</sup>	Graphics/design <sup>2</sup>	School assignments <sup>3</sup>	Household records/finances <sup>2</sup>	Games	
1	2	3	4	5	6	7	8	9	10	11	12	13					
<b>Total, age 3 and over</b> .....	<b>81,013</b> (600.0)	<b>31.7</b> (0.16)	<b>156,744</b> (954.0)	<b>56.9</b> (0.16)	<b>53.1</b> (0.22)	<b>82.7</b> (0.17)	<b>72.7</b> (0.19)	<b>32.0</b> (0.23)	<b>37.6</b> (0.24)	<b>75.9</b> (0.29)	<b>30.8</b> (0.22)	<b>58.5</b> (0.22)					
<b>Sex</b>																	
Male.....	41,260 (412.6)	33.1 (0.22)	76,777 (637.8)	57.2 (0.22)	49.5 (0.30)	82.4 (0.23)	70.5 (0.27)	33.7 (0.32)	39.5 (0.33)	73.9 (0.42)	31.6 (0.31)	61.5 (0.29)					
Female.....	39,753 (384.7)	30.3 (0.20)	79,967 (627.8)	56.7 (0.21)	56.7 (0.28)	83.0 (0.21)	74.8 (0.24)	30.3 (0.29)	35.9 (0.30)	77.8 (0.39)	30.1 (0.29)	55.6 (0.28)					
<b>Race/ethnicity</b>																	
White, non-Hispanic.....	68,026 (543.7)	36.9 (0.19)	119,495 (801.4)	63.7 (0.19)	53.9 (0.25)	84.9 (0.18)	75.4 (0.22)	32.6 (0.26)	38.6 (0.27)	75.4 (0.34)	31.8 (0.26)	58.0 (0.25)					
Black, non-Hispanic.....	4,943 (136.3)	15.6 (0.36)	13,457 (254.7)	40.8 (0.48)	50.5 (0.76)	74.4 (0.67)	62.5 (0.74)	26.8 (0.77)	33.4 (0.82)	79.3 (0.89)	26.9 (0.78)	64.8 (0.73)					
Hispanic.....	4,081 (139.0)	14.5 (0.41)	13,497 (300.2)	35.8 (0.49)	46.6 (0.85)	72.4 (0.76)	59.4 (0.83)	27.8 (0.90)	31.4 (0.93)	74.9 (0.97)	25.1 (0.87)	59.5 (0.83)					
Other.....	3,963 (136.6)	34.8 (0.88)	10,296 (248.9)	60.7 (0.74)	56.3 (0.96)	81.1 (0.76)	71.6 (0.88)	36.4 (1.06)	39.3 (1.07)	76.7 (1.14)	31.4 (1.02)	54.2 (0.97)					
<b>Age</b>																	
3 to 14.....	18,774 (249.8)	39.1 (0.39)	30,772 (330.0)	62.6 (0.38)	37.9 (0.48)	57.6 (0.49)	34.5 (0.47)	— (†)	— (†)	61.9 (0.44)	— (†)	86.0 (0.34)					
15 and over.....	62,239 (505.5)	30.0 (0.17)	125,972 (813.4)	55.7 (0.18)	56.8 (0.24)	88.8 (0.15)	82.0 (0.19)	32.0 (0.23)	37.6 (0.24)	92.8 (0.29)	30.8 (0.22)	51.8 (0.24)					
15 to 19.....	8,395 (162.3)	43.1 (0.61)	14,656 (218.2)	72.2 (0.54)	68.9 (0.66)	86.6 (0.49)	77.9 (0.59)	23.2 (0.60)	43.8 (0.71)	93.1 (0.34)	6.2 (0.34)	72.4 (0.64)					
20 to 24.....	4,975 (123.7)	28.5 (0.59)	11,848 (194.7)	59.6 (0.60)	63.7 (0.76)	86.4 (0.54)	80.6 (0.63)	29.9 (0.73)	40.9 (0.78)	94.5 (0.53)	20.5 (0.64)	61.9 (0.77)					
25 to 29.....	5,963 (135.8)	31.7 (0.59)	11,059 (187.7)	59.0 (0.62)	56.0 (0.82)	88.5 (0.52)	83.7 (0.61)	36.2 (0.79)	42.1 (0.81)	94.2 (0.96)	37.1 (0.79)	54.2 (0.82)					
30 to 39.....	15,393 (224.1)	35.8 (0.40)	26,407 (302.3)	64.0 (0.41)	54.3 (0.53)	89.7 (0.32)	83.3 (0.40)	35.5 (0.51)	40.6 (0.52)	89.0 (1.26)	37.6 (0.52)	50.4 (0.53)					
40 to 49.....	15,346 (223.7)	38.3 (0.42)	27,660 (310.4)	62.3 (0.40)	55.4 (0.52)	90.1 (0.31)	82.7 (0.39)	35.3 (0.50)	37.3 (0.50)	88.6 (1.67)	37.5 (0.50)	47.3 (0.52)					
50 to 59.....	7,679 (154.9)	28.5 (0.48)	19,976 (258.5)	57.2 (0.46)	55.4 (0.61)	90.7 (0.35)	83.4 (0.45)	32.5 (0.57)	33.6 (0.58)	90.0 (2.49)	34.4 (0.58)	41.9 (0.60)					
60 to 69.....	3,162 (98.1)	16.2 (0.46)	9,233 (170.6)	41.8 (0.57)	51.8 (0.90)	87.9 (0.59)	81.9 (0.69)	28.5 (0.81)	29.0 (0.82)	69.8 (9.14)	31.8 (0.84)	44.3 (0.89)					
70 or older.....	1,327 (63.2)	5.9 (0.27)	5,134 (125.7)	20.9 (0.45)	43.9 (1.20)	84.5 (0.87)	78.1 (1.00)	20.5 (0.97)	20.6 (0.98)	† (†)	25.4 (1.05)	47.0 (1.20)					
<b>Family income<sup>4</sup></b>																	
Under \$20,000.....	7,374 (151.6)	11.0 (0.21)	11,951 (195.6)	28.6 (0.38)	48.5 (0.79)	70.1 (0.72)	59.9 (0.77)	23.2 (0.75)	31.5 (0.83)	78.5 (0.85)	22.5 (0.75)	64.4 (0.76)					
\$20,000 to \$29,999.....	7,819 (156.3)	19.9 (0.35)	12,136 (197.2)	41.4 (0.50)	47.7 (0.78)	74.0 (0.69)	64.5 (0.75)	25.6 (0.77)	32.4 (0.82)	74.8 (1.02)	24.7 (0.76)	63.6 (0.75)					
\$30,000 to \$39,999.....	10,370 (181.4)	28.5 (0.41)	15,176 (222.4)	52.4 (0.51)	45.6 (0.70)	78.9 (0.57)	68.7 (0.65)	24.9 (0.68)	31.8 (0.73)	72.8 (0.95)	27.1 (0.70)	62.8 (0.68)					
\$40,000 to \$49,999.....	9,627 (174.4)	36.9 (0.52)	13,300 (207.1)	63.4 (0.57)	50.1 (0.75)	81.9 (0.58)	71.6 (0.68)	28.5 (0.75)	35.6 (0.80)	74.9 (1.03)	28.8 (0.76)	61.5 (0.73)					
\$50,000 to \$74,999.....	21,685 (270.5)	46.5 (0.40)	31,581 (335.0)	70.8 (0.37)	51.9 (0.49)	85.6 (0.34)	74.8 (0.42)	30.8 (0.50)	37.4 (0.52)	74.9 (0.66)	30.5 (0.50)	59.3 (0.48)					
\$75,000 or more.....	24,138 (287.3)	60.3 (0.42)	48,583 (433.0)	82.5 (0.27)	61.3 (0.38)	89.7 (0.24)	79.8 (0.31)	41.2 (0.43)	45.1 (0.43)	77.0 (0.51)	37.8 (0.42)	55.0 (0.39)					

—Not available.

†Not applicable.

‡Reporting standards not met.

<sup>1</sup>Individuals may be counted in more than one computer activity.

<sup>2</sup>Data are for persons 15 years old and over.

<sup>3</sup>Data are for students only.

<sup>4</sup>Excludes persons whose income data were not available.

NOTE: Excludes persons under age 3. Detail may not sum to totals because of rounding. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1997 and October 2003, unpublished tabulations. (This table was prepared August 2004.)

**Table 419. Number and percentage of student home computer users, by type of application and selected characteristics: 2003**

Selected characteristic of students	Number in thousands	Number using computers at home, in thousands	Percent using computers at home	Percent of home computer users using specific applications <sup>1</sup>							
				Games	Internet	School assignments	E-mail	Word processing	Graphics and design	Spreadsheets and databases	Personal finances
1	2	3	4	5	6	7	8	9	10	11	12
<b>Total, all students</b> .....	<b>74,911 (340.2)</b>	<b>52,942 (307.6)</b>	<b>70.7 (0.26)</b>	<b>76.2 (0.28)</b>	<b>72.3 (0.30)</b>	<b>75.9 (0.29)</b>	<b>56.5 (0.33)</b>	<b>55.1 (0.33)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>— (†)</b>
Elementary/secondary.....	58,273 (317.3)	39,364 (276.1)	67.6 (0.30)	82.8 (0.29)	66.0 (0.37)	69.9 (0.36)	46.2 (0.39)	46.8 (0.39)	— (†)	— (†)	— (†)
Under age 5.....	4,590 (103.2)	2,291 (73.3)	49.9 (1.14)	84.3 (1.17)	29.2 (1.46)	15.1 (1.15)	8.9 (0.91)	9.4 (0.94)	— (†)	— (†)	— (†)
Ages 5 to 9.....	19,015 (202.7)	11,887 (163.1)	62.5 (0.54)	87.6 (0.47)	45.9 (0.70)	42.0 (0.70)	18.8 (0.55)	22.6 (0.59)	— (†)	— (†)	— (†)
Ages 10 to 14.....	20,788 (210.9)	14,875 (181.1)	71.6 (0.48)	85.3 (0.45)	74.1 (0.55)	85.1 (0.45)	53.0 (0.63)	56.5 (0.63)	— (†)	— (†)	— (†)
15 years old or over.....	13,880 (175.4)	10,311 (152.5)	74.3 (0.57)	73.4 (0.67)	85.8 (0.53)	92.4 (0.40)	76.3 (0.64)	69.1 (0.70)	43.1 (0.75)	21.1 (0.62)	4.5 (0.32)
White, non-Hispanic.....	8,500 (139.1)	7,186 (128.3)	84.5 (0.60)	75.3 (0.78)	90.2 (0.54)	93.3 (0.45)	81.5 (0.71)	72.1 (0.81)	46.3 (0.91)	22.1 (0.75)	4.7 (0.38)
Black, non-Hispanic.....	2,164 (73.0)	1,073 (52.5)	49.6 (1.76)	73.5 (2.21)	73.6 (2.20)	90.3 (1.48)	60.7 (2.44)	59.0 (2.46)	38.9 (2.44)	15.9 (1.83)	3.5 (0.92)
Hispanic.....	2,298 (79.6)	1,280 (60.8)	55.7 (1.81)	68.2 (2.27)	72.0 (2.19)	87.8 (1.60)	60.8 (2.38)	59.9 (2.39)	30.0 (2.24)	18.2 (1.88)	6.1 (1.17)
Other.....	918 (51.9)	771 (47.7)	83.9 (2.12)	64.5 (3.01)	83.7 (2.33)	94.3 (1.46)	75.3 (2.71)	69.9 (2.89)	41.4 (3.10)	24.2 (2.70)	2.2 (0.93)
Undergraduate.....	13,370 (172.4)	10,701 (155.2)	80.0 (0.53)	60.5 (0.73)	89.6 (0.45)	92.8 (0.39)	84.8 (0.53)	77.1 (0.63)	46.5 (0.74)	36.8 (0.72)	21.4 (0.61)
White, non-Hispanic.....	8,964 (142.7)	7,551 (131.4)	84.2 (0.59)	60.8 (0.86)	91.1 (0.51)	93.0 (0.45)	86.5 (0.61)	78.7 (0.73)	48.9 (0.89)	37.8 (0.86)	21.1 (0.72)
Black, non-Hispanic.....	1,766 (66.4)	1,151 (54.3)	65.2 (1.86)	62.1 (2.34)	83.2 (1.80)	91.1 (1.37)	77.0 (2.03)	72.4 (2.16)	37.7 (2.34)	32.0 (2.25)	23.0 (2.03)
Hispanic.....	1,544 (66.4)	1,102 (56.6)	71.4 (2.01)	56.8 (2.61)	86.7 (1.79)	92.1 (1.42)	80.5 (2.09)	68.6 (2.44)	38.8 (2.56)	33.4 (2.48)	19.8 (2.10)
Other.....	1,095 (56.5)	898 (51.4)	82.0 (2.03)	61.5 (2.84)	89.5 (1.79)	94.0 (1.38)	86.3 (2.01)	80.3 (2.32)	47.3 (2.91)	39.4 (2.85)	23.7 (2.48)
Graduate.....	3,268 (84.9)	2,876 (81.4)	88.0 (0.98)	43.6 (1.60)	93.7 (0.79)	94.6 (0.73)	91.7 (0.89)	86.1 (1.12)	52.2 (1.61)	56.2 (1.60)	45.4 (1.61)
<b>Males</b> .....	<b>37,323 (270.4)</b>	<b>26,168 (233.4)</b>	<b>70.1 (0.36)</b>	<b>80.1 (0.38)</b>	<b>71.2 (0.43)</b>	<b>73.9 (0.42)</b>	<b>53.0 (0.47)</b>	<b>51.7 (0.48)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>— (†)</b>
Elementary/secondary.....	30,005 (247.3)	20,050 (207.5)	66.8 (0.42)	84.9 (0.39)	65.3 (0.52)	68.3 (0.51)	43.1 (0.54)	44.2 (0.54)	— (†)	— (†)	— (†)
Under age 5.....	2,437 (75.5)	1,222 (53.7)	50.2 (1.56)	85.3 (1.56)	30.3 (2.02)	14.9 (1.57)	10.7 (1.36)	9.1 (1.26)	— (†)	— (†)	— (†)
Ages 5 to 9.....	9,703 (148.2)	6,060 (118.1)	62.5 (0.76)	88.5 (0.63)	44.6 (0.98)	40.7 (0.97)	16.6 (0.74)	20.9 (0.80)	— (†)	— (†)	— (†)
Ages 10 to 14.....	10,622 (154.7)	7,453 (130.6)	70.2 (0.68)	87.5 (0.59)	73.9 (0.78)	83.3 (0.66)	48.0 (0.89)	53.0 (0.89)	— (†)	— (†)	— (†)
15 years old or over.....	7,243 (128.8)	5,313 (110.8)	73.4 (0.80)	77.1 (0.89)	84.8 (0.76)	90.9 (0.61)	73.8 (0.93)	66.4 (1.00)	43.3 (1.05)	21.0 (0.86)	4.2 (0.42)
Undergraduate.....	5,902 (116.6)	4,859 (106.1)	82.3 (0.76)	68.6 (1.02)	89.7 (0.67)	91.7 (0.61)	84.0 (0.81)	75.1 (0.96)	50.2 (1.10)	37.6 (1.07)	22.3 (0.92)
Graduate.....	1,416 (57.7)	1,259 (54.5)	88.9 (1.29)	48.9 (2.17)	93.8 (1.04)	94.1 (1.02)	91.6 (1.21)	81.2 (1.70)	53.0 (2.16)	58.3 (2.14)	46.9 (2.16)
<b>Females</b> .....	<b>37,588 (271.1)</b>	<b>26,774 (235.7)</b>	<b>71.2 (0.36)</b>	<b>72.3 (0.42)</b>	<b>73.4 (0.42)</b>	<b>77.8 (0.39)</b>	<b>59.8 (0.46)</b>	<b>58.4 (0.46)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>— (†)</b>
Elementary/secondary.....	28,269 (241.2)	19,315 (204.1)	68.3 (0.43)	80.7 (0.44)	66.8 (0.52)	71.6 (0.50)	49.4 (0.55)	49.5 (0.55)	— (†)	— (†)	— (†)
Under age 5.....	2,154 (71.1)	1,069 (50.2)	49.6 (1.66)	83.2 (1.76)	28.0 (2.11)	15.3 (1.69)	6.8 (1.18)	9.8 (1.40)	— (†)	— (†)	— (†)
Ages 5 to 9.....	9,312 (145.3)	5,827 (115.9)	62.6 (0.77)	86.7 (0.69)	47.1 (1.01)	43.3 (1.00)	21.0 (0.82)	24.4 (0.87)	— (†)	— (†)	— (†)
Ages 10 to 14.....	10,166 (151.5)	7,422 (130.3)	73.0 (0.68)	83.1 (0.67)	74.4 (0.78)	86.8 (0.60)	57.9 (0.88)	60.0 (0.88)	— (†)	— (†)	— (†)
15 years old or over.....	6,637 (123.4)	4,997 (107.5)	75.3 (0.81)	69.6 (1.00)	86.7 (0.74)	94.0 (0.52)	78.9 (0.89)	71.8 (0.98)	42.9 (1.08)	21.3 (0.89)	4.9 (0.47)
Undergraduate.....	7,468 (130.7)	5,842 (116.0)	78.2 (0.74)	53.9 (1.00)	89.6 (0.62)	93.7 (0.49)	85.5 (0.71)	78.8 (0.82)	43.4 (1.00)	36.2 (0.97)	20.6 (0.81)
Graduate.....	1,852 (65.9)	1,617 (61.7)	87.3 (1.19)	39.5 (1.87)	93.5 (0.94)	95.1 (0.83)	91.8 (1.05)	90.0 (1.15)	51.5 (1.91)	54.5 (1.91)	44.3 (1.90)

—Not available.

†Not applicable.

<sup>1</sup>Individuals may be counted in more than one computer activity.

NOTE: Standard errors appear in parentheses. Estimates as of October 1. Detail may not sum to totals because of rounding.  
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2003, unpublished tabulations. (This table was prepared May 2005.)



**Table 420. Student use of computers, by level of enrollment, age, and student and school characteristics: 1993, 1997, and 2003**

Student and school characteristic	1993			1997			2003						
	Total	Elementary and secondary <sup>1</sup>	College <sup>2</sup>	Total	Elementary and secondary <sup>1</sup>	College <sup>2</sup>	Total	Elementary and secondary <sup>1</sup>					
								Total	Under 5	5 to 9 years	10 to 14 years	15 years old or over	College <sup>2</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Percent of students using computers at school													
<b>Total</b> .....	<b>59.0 (0.32)</b>	<b>60.1 (0.38)</b>	<b>54.7 (0.71)</b>	<b>68.8 (0.27)</b>	<b>70.4 (0.32)</b>	<b>62.9 (0.60)</b>	<b>83.8 (0.20)</b>	<b>83.5 (0.24)</b>	<b>42.6 (1.14)</b>	<b>80.1 (0.45)</b>	<b>90.3 (0.32)</b>	<b>91.2 (0.35)</b>	<b>84.9 (0.41)</b>
Sex													
Male .....	59.4 (0.44)	59.9 (0.53)	57.4 (1.04)	70.1 (0.37)	71.0 (0.44)	66.3 (0.88)	83.7 (0.28)	83.4 (0.34)	43.5 (1.57)	79.7 (0.64)	90.1 (0.45)	91.8 (0.47)	85.3 (0.60)
Female .....	58.7 (0.45)	60.5 (0.54)	52.4 (0.96)	67.6 (0.38)	69.9 (0.46)	60.2 (0.81)	83.8 (0.28)	83.5 (0.35)	41.5 (1.66)	80.7 (0.64)	90.6 (0.45)	90.5 (0.53)	84.6 (0.55)
Race/ethnicity													
White, non-Hispanic .....	61.6 (0.37)	63.8 (0.45)	54.0 (0.81)	71.1 (0.32)	73.9 (0.38)	62.1 (0.70)	85.0 (0.24)	84.9 (0.30)	41.1 (1.44)	82.5 (0.56)	92.4 (0.37)	91.9 (0.43)	85.0 (0.49)
Black, non-Hispanic .....	51.5 (0.98)	50.6 (0.98)	57.0 (2.54)	66.3 (0.74)	66.1 (0.75)	66.8 (1.78)	82.7 (0.56)	82.5 (0.67)	49.4 (3.18)	78.5 (1.30)	88.0 (0.95)	89.9 (1.01)	83.8 (1.25)
Hispanic .....	52.3 (1.50)	52.3 (1.16)	52.1 (4.06)	61.5 (0.89)	61.3 (0.69)	62.6 (2.38)	80.3 (0.60)	79.8 (0.71)	39.5 (3.22)	75.6 (1.27)	86.8 (1.01)	88.5 (1.10)	83.0 (1.50)
Other .....	59.0 (2.24)	57.7 (2.50)	62.7 (4.20)	65.3 (1.32)	65.6 (1.45)	64.6 (2.56)	83.3 (0.77)	81.7 (1.01)	48.9 (4.78)	76.3 (1.89)	86.1 (1.54)	94.1 (1.20)	87.6 (1.30)
Family income <sup>3</sup>													
Less than \$5,000 .....	51.2 (1.32)	48.1 (1.50)	62.4 (2.73)	62.1 (1.21)	61.6 (1.41)	63.4 (2.36)	80.9 (1.87)	79.5 (2.31)	42.4 (9.47)	78.3 (3.82)	86.9 (3.39)	86.5 (4.37)	83.8 (3.12)
\$5,000 to \$9,999 .....	53.3 (1.06)	53.1 (1.17)	54.3 (2.51)	63.5 (1.02)	61.9 (1.14)	70.4 (2.20)	84.4 (1.43)	82.4 (1.74)	49.2 (7.71)	77.8 (3.30)	91.3 (2.18)	88.3 (3.04)	90.1 (2.35)
\$10,000 to \$14,999 .....	56.4 (1.03)	56.7 (1.13)	55.1 (2.50)	66.2 (0.96)	66.4 (1.06)	65.2 (2.26)	81.7 (1.37)	80.0 (1.61)	50.1 (7.20)	74.1 (3.11)	84.6 (2.41)	90.4 (2.40)	88.0 (2.48)
\$15,000 to \$19,999 .....	58.1 (1.18)	59.4 (1.30)	52.3 (2.77)	65.9 (1.10)	66.5 (1.21)	63.2 (2.72)	81.3 (1.57)	79.8 (1.84)	26.6 (7.08)	77.0 (3.27)	89.1 (2.38)	89.2 (3.09)	86.7 (2.92)
\$20,000 to \$24,999 .....	56.4 (1.07)	56.3 (1.18)	56.6 (2.58)	66.9 (0.99)	67.5 (1.10)	64.3 (2.24)	81.3 (1.41)	80.3 (1.61)	43.7 (7.03)	73.0 (3.00)	88.9 (2.16)	92.6 (2.31)	85.3 (2.81)
\$25,000 to \$29,999 .....	60.0 (1.13)	61.9 (1.25)	52.4 (2.61)	68.5 (1.01)	70.4 (1.11)	61.2 (2.37)	81.9 (1.32)	81.3 (1.48)	35.6 (7.03)	78.0 (2.66)	87.0 (2.21)	90.8 (2.21)	84.4 (2.90)
\$30,000 to \$34,999 .....	59.1 (1.08)	61.3 (1.20)	50.5 (2.46)	67.6 (0.97)	71.0 (1.05)	53.9 (2.31)	82.2 (1.33)	82.5 (1.46)	40.1 (7.16)	78.5 (2.67)	90.6 (1.86)	88.8 (2.59)	80.9 (3.17)
\$35,000 to \$39,999 .....	60.7 (1.11)	63.3 (1.21)	49.0 (2.67)	69.0 (0.98)	71.1 (1.08)	60.4 (2.35)	87.1 (1.17)	87.5 (1.30)	54.8 (7.43)	85.2 (2.37)	94.0 (1.53)	90.4 (2.48)	85.7 (2.69)
\$40,000 to \$49,999 .....	59.3 (0.94)	60.8 (1.04)	53.1 (2.12)	70.5 (0.79)	72.6 (0.85)	60.9 (1.99)	83.5 (1.08)	84.2 (1.18)	47.1 (6.20)	80.0 (2.29)	90.8 (1.56)	90.3 (1.94)	80.4 (2.63)
\$50,000 to \$74,999 .....	62.6 (0.73)	64.9 (0.82)	55.0 (1.58)	71.7 (0.57)	74.2 (0.63)	63.2 (1.28)	83.8 (0.71)	84.0 (0.80)	35.7 (3.64)	80.5 (1.53)	92.6 (0.94)	92.4 (1.21)	83.1 (1.56)
\$75,000 or more .....	64.6 (0.90)	67.0 (1.04)	58.2 (1.78)	72.1 (0.60)	75.1 (0.68)	63.9 (1.25)	85.6 (0.57)	85.6 (0.65)	39.2 (2.98)	85.3 (1.15)	92.7 (0.81)	93.2 (0.96)	85.8 (1.16)
Control of school													
Public .....	60.2 (0.34)	61.6 (0.40)	54.0 (0.80)	70.2 (0.28)	72.1 (0.33)	62.3 (0.68)	85.2 (0.21)	85.4 (0.25)	47.7 (1.61)	80.5 (0.48)	90.5 (0.34)	91.2 (0.36)	84.6 (0.46)
Private .....	52.1 (0.85)	49.8 (1.10)	57.3 (1.52)	60.7 (0.73)	58.6 (0.96)	65.2 (1.27)	75.4 (0.60)	70.5 (0.82)	37.1 (1.61)	77.5 (1.33)	89.1 (1.09)	90.5 (1.36)	86.1 (0.85)
Percent of students using computers at home													
<b>Total</b> .....	<b>27.0 (0.28)</b>	<b>24.5 (0.33)</b>	<b>36.2 (0.65)</b>	<b>45.1 (0.29)</b>	<b>42.8 (0.34)</b>	<b>53.2 (0.62)</b>	<b>70.7 (0.24)</b>	<b>67.6 (0.30)</b>	<b>49.9 (1.16)</b>	<b>62.5 (0.55)</b>	<b>71.6 (0.49)</b>	<b>74.3 (0.54)</b>	<b>81.6 (0.44)</b>
Sex													
Male .....	27.4 (0.39)	24.3 (0.45)	40.1 (0.99)	45.2 (0.40)	43.2 (0.48)	53.7 (0.93)	70.1 (0.35)	66.8 (0.43)	50.2 (1.59)	62.5 (0.77)	70.2 (0.70)	73.4 (0.76)	83.6 (0.63)
Female .....	26.6 (0.39)	24.7 (0.47)	33.0 (0.87)	44.9 (0.40)	42.5 (0.49)	52.8 (0.83)	71.2 (0.34)	68.3 (0.43)	49.6 (1.69)	62.6 (0.79)	73.0 (0.69)	75.3 (0.77)	80.0 (0.60)
Race/ethnicity													
White, non-Hispanic .....	32.8 (0.35)	30.8 (0.42)	39.2 (0.76)	54.9 (0.35)	53.9 (0.43)	58.2 (0.72)	80.1 (0.27)	78.3 (0.34)	59.6 (1.43)	74.6 (0.64)	81.8 (0.54)	84.5 (0.57)	85.4 (0.49)
Black, non-Hispanic .....	10.9 (0.59)	8.7 (0.54)	22.7 (2.01)	21.1 (0.64)	19.1 (0.62)	31.0 (1.75)	50.2 (0.74)	46.2 (0.88)	31.7 (2.96)	41.6 (1.55)	50.8 (1.46)	49.6 (1.67)	67.5 (1.59)
Hispanic .....	10.4 (0.90)	7.9 (0.62)	25.0 (3.31)	21.1 (0.74)	18.3 (0.54)	38.8 (2.40)	51.1 (0.76)	47.5 (0.88)	25.8 (2.88)	41.7 (1.46)	52.5 (1.48)	55.7 (1.72)	72.5 (1.79)
Other .....	28.7 (2.00)	25.8 (2.16)	36.0 (3.99)	49.1 (1.38)	46.5 (1.52)	56.3 (2.66)	74.6 (0.91)	71.3 (1.19)	57.5 (4.73)	61.6 (2.16)	75.7 (1.90)	83.9 (1.88)	83.1 (1.48)

See notes at end of table.

**Table 420. Student use of computers, by level of enrollment, age, and student and school characteristics: 1993, 1997, and 2003—Continued**

Student and school characteristic	1993			1997			2003						
	Total	Elementary and secondary <sup>1</sup>	College <sup>2</sup>	Total	Elementary and secondary <sup>1</sup>	College <sup>2</sup>	Total	Elementary and secondary <sup>1</sup>					College <sup>2</sup>
								Total	Under 5	5 to 9 years	10 to 14 years	15 years old or over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Family income<sup>3</sup></b>													
Less than \$5,000 .....	9.7 (0.76)	4.3 (0.59)	28.3 (2.43)	22.6 (1.04)	15.2 (1.04)	43.7 (2.43)	44.1 (2.36)	29.8 (2.62)	20.5 (7.74)	29.9 (4.24)	29.5 (4.58)	34.2 (6.07)	75.2 (3.65)
\$5,000 to \$9,999 .....	8.0 (0.56)	4.2 (0.46)	25.0 (2.08)	15.8 (0.77)	9.3 (0.68)	42.9 (2.39)	47.0 (1.97)	36.6 (2.20)	31.0 (7.14)	30.7 (3.66)	41.3 (3.82)	40.1 (4.65)	77.7 (3.27)
\$10,000 to \$14,999 .....	11.4 (0.64)	6.7 (0.56)	33.4 (2.26)	18.4 (0.78)	13.6 (0.77)	39.7 (2.32)	47.0 (1.77)	39.3 (1.96)	36.4 (6.93)	32.8 (3.33)	43.2 (3.31)	42.9 (4.03)	75.2 (3.30)
\$15,000 to \$19,999 .....	15.1 (0.84)	11.2 (0.82)	31.0 (2.44)	20.7 (0.94)	16.5 (0.95)	41.2 (2.77)	48.3 (2.02)	40.8 (2.25)	16.5 (5.95)	33.4 (3.67)	49.1 (3.82)	48.4 (4.97)	74.6 (3.73)
\$20,000 to \$24,999 .....	16.8 (0.79)	13.6 (0.80)	31.0 (2.27)	30.5 (0.97)	26.2 (1.04)	47.5 (2.34)	53.1 (1.80)	46.6 (2.02)	27.1 (6.29)	41.1 (3.33)	52.5 (3.43)	53.9 (4.39)	77.8 (3.29)
\$25,000 to \$29,999 .....	21.1 (0.92)	19.1 (0.99)	29.0 (2.28)	34.6 (1.03)	32.0 (1.13)	45.0 (2.42)	59.0 (1.69)	54.7 (1.89)	40.6 (7.21)	47.7 (3.21)	59.5 (3.22)	61.9 (3.72)	78.3 (3.30)
\$30,000 to \$34,999 .....	24.1 (0.92)	22.6 (1.02)	29.7 (2.15)	38.7 (1.01)	36.1 (1.11)	49.2 (2.32)	64.2 (1.66)	61.5 (1.87)	41.4 (7.19)	54.7 (3.23)	64.9 (3.04)	72.9 (3.66)	76.1 (3.43)
\$35,000 to \$39,999 .....	27.1 (0.99)	24.9 (1.08)	36.1 (2.44)	44.1 (1.06)	42.6 (1.17)	50.5 (2.40)	70.0 (1.60)	67.8 (1.83)	49.0 (7.46)	63.0 (3.23)	71.9 (2.91)	74.6 (3.66)	78.5 (3.16)
\$40,000 to \$49,999 .....	32.2 (0.87)	31.6 (0.98)	34.4 (1.92)	50.6 (0.86)	50.4 (0.95)	51.7 (2.04)	75.9 (1.25)	73.4 (1.43)	54.6 (6.18)	68.9 (2.65)	77.5 (2.24)	78.2 (2.70)	86.6 (2.26)
\$50,000 to \$74,999 .....	43.0 (0.74)	42.9 (0.84)	43.5 (1.52)	61.7 (0.62)	62.2 (0.70)	59.9 (1.30)	81.3 (0.75)	79.5 (0.88)	58.9 (3.74)	74.9 (1.67)	83.8 (1.33)	86.5 (1.56)	87.8 (1.36)
\$75,000 or more .....	56.1 (0.92)	58.1 (1.08)	50.9 (1.74)	74.2 (0.59)	77.2 (0.66)	65.8 (1.23)	88.6 (0.51)	87.6 (0.61)	66.1 (2.89)	85.3 (1.15)	91.0 (0.89)	94.1 (0.90)	91.7 (0.92)
<b>Control of school</b>													
Public .....	25.3 (0.29)	23.0 (0.34)	34.5 (0.73)	43.2 (0.31)	40.9 (0.37)	52.4 (0.70)	69.3 (0.27)	66.3 (0.33)	41.1 (1.58)	60.4 (0.59)	70.1 (0.52)	73.1 (0.57)	80.9 (0.50)
Private .....	37.4 (0.80)	35.0 (1.03)	42.5 (1.45)	56.1 (0.75)	56.1 (0.97)	56.1 (1.32)	78.3 (0.57)	75.6 (0.77)	59.3 (1.63)	77.3 (1.34)	84.7 (1.26)	89.3 (1.43)	84.1 (0.90)
<b>Percent of students using computers at home for school work</b>													
<b>Total .....</b>	<b>14.8 (0.22)</b>	<b>12.0 (0.25)</b>	<b>25.0 (0.59)</b>	<b>28.6 (0.26)</b>	<b>24.8 (0.30)</b>	<b>42.5 (0.61)</b>	<b>53.6 (0.27)</b>	<b>47.2 (0.32)</b>	<b>7.5 (0.61)</b>	<b>26.2 (0.50)</b>	<b>60.9 (0.53)</b>	<b>68.6 (0.57)</b>	<b>76.0 (0.48)</b>
<b>Sex</b>													
Male .....	14.7 (0.31)	11.4 (0.34)	28.2 (0.91)	28.3 (0.37)	24.7 (0.42)	43.3 (0.92)	51.8 (0.38)	45.6 (0.45)	7.5 (0.83)	25.4 (0.69)	58.5 (0.75)	66.7 (0.81)	77.1 (0.72)
Female .....	14.8 (0.32)	12.5 (0.36)	22.4 (0.77)	28.9 (0.37)	24.9 (0.43)	41.9 (0.82)	55.4 (0.37)	48.9 (0.47)	7.6 (0.89)	27.1 (0.72)	63.4 (0.75)	70.8 (0.82)	75.2 (0.65)
<b>Race</b>													
White, non-Hispanic .....	18.0 (0.29)	15.1 (0.33)	27.4 (0.70)	35.0 (0.34)	31.3 (0.40)	47.0 (0.72)	60.4 (0.33)	54.1 (0.42)	7.3 (0.76)	29.1 (0.67)	70.5 (0.64)	78.9 (0.65)	79.8 (0.55)
Black, non-Hispanic .....	5.7 (0.44)	4.3 (0.39)	13.4 (1.64)	12.5 (0.51)	10.4 (0.48)	22.8 (1.59)	39.8 (0.73)	34.6 (0.84)	8.2 (1.75)	22.5 (1.32)	43.7 (1.45)	44.8 (1.66)	62.2 (1.65)
Hispanic .....	5.6 (0.68)	3.6 (0.42)	17.8 (2.92)	12.5 (0.60)	9.8 (0.42)	29.2 (2.24)	38.3 (0.74)	33.5 (0.83)	6.7 (1.65)	20.2 (1.19)	42.6 (1.47)	48.9 (1.73)	66.7 (1.89)
Other .....	15.8 (1.61)	12.4 (1.63)	24.5 (3.57)	33.6 (1.31)	29.3 (1.39)	45.3 (2.67)	57.2 (1.03)	49.4 (1.31)	10.3 (2.91)	26.8 (1.97)	60.9 (2.16)	79.1 (2.08)	77.8 (1.65)
<b>Family income<sup>3</sup></b>													
Less than \$5,000 .....	6.6 (0.64)	2.4 (0.45)	21.1 (2.20)	15.1 (0.89)	8.0 (0.79)	35.5 (2.35)	36.5 (2.29)	19.4 (2.27)	4.2 (3.83)	14.4 (3.25)	22.7 (4.21)	30.4 (5.88)	73.8 (3.72)
\$5,000 to \$9,999 .....	4.7 (0.44)	1.5 (0.28)	18.8 (1.88)	10.4 (0.65)	4.2 (0.47)	36.5 (2.32)	36.5 (1.90)	24.1 (1.96)	4.0 (3.01)	14.0 (2.75)	32.3 (3.62)	34.1 (4.49)	72.8 (3.49)
\$10,000 to \$14,999 .....	7.2 (0.52)	3.0 (0.38)	27.1 (2.14)	11.4 (0.64)	6.7 (0.56)	32.4 (2.22)	36.9 (1.71)	27.1 (1.78)	14.3 (5.04)	14.4 (2.49)	34.6 (3.18)	36.8 (3.93)	72.2 (3.42)
\$15,000 to \$19,999 .....	8.5 (0.65)	5.6 (0.60)	20.5 (2.12)	13.2 (0.79)	8.5 (0.72)	36.0 (2.70)	37.2 (1.95)	27.4 (2.04)	0.7 (1.36)	10.8 (2.42)	40.2 (3.75)	42.9 (4.92)	71.5 (3.87)
\$20,000 to \$24,999 .....	9.7 (0.62)	6.3 (0.57)	24.5 (2.11)	19.4 (0.83)	15.0 (0.84)	37.1 (2.26)	40.5 (1.77)	31.9 (1.89)	8.2 (3.89)	18.9 (2.65)	40.7 (3.38)	48.8 (4.40)	73.4 (3.50)
\$25,000 to \$29,999 .....	10.3 (0.69)	7.5 (0.66)	21.4 (2.06)	21.9 (0.90)	18.4 (0.94)	35.7 (2.33)	43.4 (1.70)	36.9 (1.84)	8.3 (4.05)	18.0 (2.47)	48.9 (3.28)	55.2 (3.81)	72.2 (3.58)
\$30,000 to \$34,999 .....	12.9 (0.72)	10.8 (0.75)	20.8 (1.91)	24.4 (0.89)	20.3 (0.93)	40.5 (2.28)	46.8 (1.73)	41.8 (1.89)	8.8 (4.13)	20.4 (2.61)	55.4 (3.17)	64.1 (3.95)	69.0 (3.73)
\$35,000 to \$39,999 .....	15.2 (0.80)	12.9 (0.83)	24.6 (2.20)	26.5 (0.94)	22.8 (0.99)	41.7 (2.37)	50.9 (1.75)	45.5 (1.96)	7.0 (3.82)	25.9 (2.93)	58.4 (3.19)	66.7 (3.96)	71.8 (3.46)
\$40,000 to \$49,999 .....	17.1 (0.70)	15.4 (0.76)	23.3 (1.71)	30.1 (0.79)	28.3 (0.86)	38.5 (1.99)	56.9 (1.44)	51.6 (1.62)	12.9 (4.16)	26.3 (2.52)	67.6 (2.51)	71.4 (2.95)	79.0 (2.70)
\$50,000 to \$74,999 .....	23.1 (0.63)	21.4 (0.70)	28.7 (1.38)	39.3 (0.62)	36.7 (0.70)	48.2 (1.32)	60.9 (0.94)	55.0 (1.09)	4.8 (1.63)	30.2 (1.77)	71.6 (1.62)	81.0 (1.79)	82.4 (1.58)
\$75,000 or more .....	30.2 (0.85)	29.5 (1.00)	32.0 (1.63)	48.3 (0.67)	47.3 (0.78)	51.3 (1.30)	68.2 (0.75)	62.8 (0.89)	6.5 (1.51)	36.2 (1.56)	83.6 (1.15)	90.0 (1.14)	85.7 (1.16)
<b>Control of school</b>													
Public .....	14.1 (0.24)	11.7 (0.26)	24.1 (0.66)	27.9 (0.28)	24.5 (0.32)	41.9 (0.69)	53.4 (0.29)	47.8 (0.35)	8.0 (0.87)	25.4 (0.53)	59.2 (0.56)	67.5 (0.60)	75.1 (0.55)
Private .....	18.5 (0.65)	13.8 (0.75)	28.5 (1.33)	32.6 (0.70)	26.9 (0.87)	44.6 (1.32)	54.7 (0.69)	43.3 (0.89)	7.1 (0.85)	32.3 (1.50)	76.5 (1.48)	83.3 (1.73)	79.3 (1.00)

<sup>1</sup>Includes students enrolled in prekindergarten through grade 12, ages 3 and above.

<sup>2</sup>Includes students enrolled at the undergraduate and postbaccalaureate levels.

<sup>3</sup>Excludes persons whose income data were not available.

NOTE: Data are based on a sample survey of households and are subject to sampling and nonsampling error. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1993, October 1997, and October 2003, unpublished tabulations. (This table was prepared May 2005.)

**Table 421. Percentage of workers, 18 years old and over, using computers on the job, by type of computer application and selected characteristics: 1993, 1997, and 2003**

Selected characteristic	Percent using computers at work, 1993	Percent using computers at work, 1997	2003												
			Percent using computers at work	Number using computers at work, in thousands	Percent of on-the-job computer users using specific computer applications <sup>1</sup>									Using 4 or more categories	
					Spreadsheets/databases	Internet/e-mail	Calendar/schedule	Graphics/design	Programming	Word processing/desktop publishing	Other uses only				
1	2	3	4	5	6	7	8	9	10	11	12	13			
<b>Total</b> .....	<b>45.8</b>	<b>49.4 (0.24)</b>	<b>56.1 (0.19)</b>	<b>76,570</b>	<b>64.4 (0.30)</b>	<b>75.4 (0.27)</b>	<b>57.0 (0.31)</b>	<b>29.7 (0.29)</b>	<b>16.4 (0.23)</b>	<b>67.8 (0.29)</b>	<b>8.2 (0.17)</b>	<b>45.3 (0.31)</b>			
<b>Age</b>															
18 to 24.....	34.4	37.1 (0.66)	38.5 (0.55)	6,575	56.0 (1.06)	62.1 (1.03)	48.9 (1.07)	21.7 (0.88)	12.4 (0.70)	57.9 (1.05)	14.2 (0.74)	33.0 (1.00)			
25 to 29.....	48.3	52.5 (0.70)	56.9 (0.57)	8,203	66.2 (0.90)	75.6 (0.82)	58.3 (0.94)	30.3 (0.88)	18.8 (0.75)	67.8 (0.89)	8.5 (0.53)	47.2 (0.95)			
30 to 39.....	50.7	53.3 (0.46)	59.0 (0.37)	19,225	68.0 (0.58)	78.3 (0.51)	61.8 (0.61)	31.7 (0.58)	18.0 (0.48)	69.8 (0.57)	6.8 (0.31)	49.6 (0.62)			
40 to 49.....	51.3	54.9 (0.47)	60.8 (0.35)	21,772	66.9 (0.55)	77.1 (0.49)	59.0 (0.58)	31.8 (0.55)	17.7 (0.45)	69.7 (0.54)	7.1 (0.30)	48.4 (0.59)			
50 to 59.....	43.9	50.7 (0.61)	60.1 (0.42)	15,423	62.5 (0.67)	76.5 (0.59)	54.6 (0.69)	29.7 (0.64)	15.1 (0.50)	68.1 (0.65)	8.0 (0.38)	43.7 (0.69)			
60 or older.....	27.2	32.6 (0.88)	48.5 (0.67)	5,373	53.8 (1.18)	71.2 (1.07)	46.1 (1.18)	23.5 (1.00)	10.6 (0.72)	63.7 (1.13)	11.1 (0.74)	35.0 (1.12)			
<b>Educational attainment and sex</b>															
Not high school completer.....	10.0	11.9 (0.48)	15.6 (0.50)	2,149	44.1 (1.85)	49.7 (1.86)	40.4 (1.83)	15.3 (1.34)	11.7 (1.20)	43.2 (1.85)	21.6 (1.53)	21.4 (1.53)			
High school completer.....	34.2	36.4 (0.40)	40.4 (0.35)	16,914	53.3 (0.66)	61.4 (0.65)	47.7 (0.66)	18.5 (0.52)	11.8 (0.43)	52.4 (0.66)	14.6 (0.47)	29.3 (0.60)			
Some college.....	50.4	53.6 (0.53)	55.7 (0.42)	15,060	61.5 (0.68)	70.2 (0.64)	53.6 (0.70)	25.3 (0.61)	14.5 (0.50)	62.5 (0.68)	10.0 (0.42)	39.6 (0.69)			
Associate's degree.....	58.2	60.7 (0.81)	62.9 (0.59)	7,813	61.1 (0.95)	71.7 (0.88)	54.4 (0.97)	26.1 (0.86)	15.4 (0.71)	62.6 (0.95)	9.9 (0.58)	39.8 (0.96)			
Bachelor's degree.....	68.8	73.9 (0.50)	82.0 (0.30)	22,540	73.3 (0.51)	85.6 (0.40)	64.2 (0.55)	37.4 (0.56)	20.1 (0.46)	78.0 (0.48)	3.7 (0.22)	57.3 (0.57)			
Master's degree.....	71.2	78.7 (0.81)	87.2 (0.43)	8,292	73.8 (0.83)	90.0 (0.57)	64.9 (0.91)	43.3 (0.94)	20.4 (0.77)	85.6 (0.67)	1.8 (0.25)	62.2 (0.92)			
Doctor's or professional degree.....	66.9	74.6 (1.24)	85.4 (0.67)	3,803	68.8 (1.30)	88.0 (0.91)	66.1 (1.33)	37.5 (1.36)	19.3 (1.11)	81.7 (1.08)	2.9 (0.47)	56.9 (1.39)			
<b>Male</b> .....	<b>40.3</b>	<b>44.1 (0.31)</b>	<b>50.5 (0.25)</b>	<b>36,976</b>	<b>67.2 (0.42)</b>	<b>77.7 (0.37)</b>	<b>58.6 (0.44)</b>	<b>33.8 (0.42)</b>	<b>21.4 (0.37)</b>	<b>65.6 (0.43)</b>	<b>7.8 (0.24)</b>	<b>48.8 (0.45)</b>			
Not high school completer.....	8.5	9.8 (0.53)	12.5 (0.55)	1,095	44.4 (2.59)	48.7 (2.61)	39.4 (2.55)	18.2 (2.01)	13.6 (1.79)	39.7 (2.56)	23.3 (2.21)	20.5 (2.11)			
High school completer.....	24.2	27.1 (0.49)	31.9 (0.45)	7,305	52.1 (1.01)	60.1 (0.99)	45.0 (1.01)	21.6 (0.83)	14.9 (0.72)	45.0 (1.01)	16.1 (0.74)	28.3 (0.91)			
Some college.....	42.8	46.0 (0.71)	49.2 (0.58)	6,718	62.0 (1.02)	71.4 (0.95)	53.0 (1.05)	29.3 (0.96)	18.7 (0.82)	58.2 (1.04)	10.6 (0.65)	40.8 (1.04)			
Associate's degree.....	52.6	55.2 (1.16)	56.9 (0.86)	3,326	64.8 (1.43)	74.1 (1.31)	53.5 (1.49)	33.2 (1.41)	22.1 (1.24)	60.5 (1.46)	9.9 (0.90)	43.7 (1.49)			
Bachelor's degree.....	69.8	74.3 (0.65)	82.5 (0.39)	11,787	77.6 (0.66)	88.4 (0.51)	68.0 (0.74)	40.4 (0.78)	25.6 (0.69)	76.9 (0.67)	2.6 (0.25)	61.7 (0.77)			
Master's degree.....	75.4	79.8 (1.05)	88.0 (0.57)	4,186	78.7 (1.09)	92.1 (0.72)	69.0 (1.23)	44.9 (1.33)	26.8 (1.18)	83.5 (0.99)	1.3 (0.31)	66.2 (1.26)			
Doctor's or professional degree.....	66.5	73.4 (1.43)	85.5 (0.78)	2,559	70.9 (1.55)	88.9 (1.08)	66.5 (1.61)	38.7 (1.66)	21.7 (1.41)	80.1 (1.36)	2.5 (0.53)	58.5 (1.68)			
<b>Female</b> .....	<b>52.4</b>	<b>56.5 (0.32)</b>	<b>62.5 (0.24)</b>	<b>39,594</b>	<b>61.7 (0.42)</b>	<b>73.3 (0.38)</b>	<b>55.5 (0.43)</b>	<b>26.0 (0.38)</b>	<b>11.8 (0.28)</b>	<b>69.8 (0.40)</b>	<b>8.6 (0.24)</b>	<b>42.2 (0.43)</b>			
Not high school completer.....	12.5	15.4 (0.80)	21.0 (0.83)	1,054	43.7 (2.64)	50.7 (2.66)	41.4 (2.62)	12.4 (1.75)	9.7 (1.58)	46.8 (2.66)	19.8 (2.12)	22.3 (2.21)			
High school completer.....	45.2	46.9 (0.56)	50.7 (0.47)	9,609	54.2 (0.88)	62.4 (0.85)	49.7 (0.88)	16.2 (0.65)	9.5 (0.52)	58.0 (0.87)	13.4 (0.60)	30.1 (0.81)			
Some college.....	58.6	61.5 (0.68)	62.4 (0.52)	8,341	61.2 (0.92)	69.3 (0.87)	54.2 (0.94)	22.2 (0.79)	11.1 (0.59)	66.0 (0.90)	9.6 (0.56)	38.5 (0.92)			
Associate's degree.....	63.7	65.4 (0.99)	68.3 (0.70)	4,487	58.4 (1.27)	70.0 (1.18)	55.1 (1.28)	20.7 (1.05)	10.4 (0.79)	64.2 (1.24)	9.9 (0.77)	36.9 (1.24)			
Bachelor's degree.....	67.6	73.5 (0.67)	81.5 (0.40)	10,752	68.7 (0.77)	82.6 (0.63)	60.1 (0.82)	34.1 (0.79)	14.0 (0.58)	79.2 (0.68)	4.9 (0.36)	52.5 (0.83)			
Master's degree.....	66.5	77.5 (1.10)	86.3 (0.58)	4,106	68.9 (1.25)	87.7 (0.88)	60.7 (1.32)	41.7 (1.33)	13.9 (0.93)	87.7 (0.89)	2.3 (0.41)	58.0 (1.33)			
Doctor's or professional degree.....	68.2	77.6 (2.06)	85.1 (1.09)	1,244	64.5 (2.34)	86.2 (1.69)	65.3 (2.33)	34.9 (2.34)	14.3 (1.72)	85.0 (1.75)	3.9 (0.95)	53.6 (2.44)			
<b>Race/ethnicity</b>															
White, non-Hispanic.....	48.7	53.8 (0.28)	61.6 (0.21)	59,806	65.5 (0.34)	76.6 (0.30)	56.7 (0.35)	30.7 (0.33)	16.0 (0.26)	68.6 (0.33)	7.8 (0.19)	46.2 (0.35)			
Black, non-Hispanic.....	36.2	40.0 (0.74)	46.5 (0.61)	6,556	55.4 (1.09)	67.8 (1.02)	56.8 (1.08)	24.2 (0.94)	16.7 (0.82)	61.7 (1.06)	11.6 (0.70)	38.0 (1.06)			
Hispanic.....	29.3	30.2 (0.80)	31.2 (0.61)	5,421	58.9 (1.32)	68.1 (1.25)	56.5 (1.33)	24.8 (1.16)	15.6 (0.97)	63.0 (1.29)	10.4 (0.82)	39.6 (1.31)			
Other.....	—	— (†)	59.4 (0.86)	4,786	68.7 (1.32)	79.2 (1.16)	60.9 (1.39)	31.3 (1.32)	22.9 (1.20)	71.1 (1.29)	6.6 (0.71)	51.0 (1.43)			

See notes at end of table.

**Table 421. Percentage of workers, 18 years old and over, using computers on the job, by type of computer application and selected characteristics: 1993, 1997, and 2003—Continued**

Selected characteristic	Percent using computers at work, 1993	Percent using computers at work, 1997	2003										
			Percent using computers at work	Number using computers at work, in thousands	Percent of on-the-job computer users using specific computer applications <sup>1</sup>								
					Spreadsheets/databases	Internet/e-mail	Calendar/schedule	Graphics/design	Programming	Word processing/desktop publishing	Other uses only	Using 4 or more categories	
1	2	3	4	5	6	7	8	9	10	11	12	13	
<b>Occupational group</b>													
Management, business, and financial...	2	2	( <sup>2</sup> )	80.8 (0.36)	15,840	79.8 (0.55)	88.0 (0.45)	69.1 (0.63)	35.8 (0.66)	18.5 (0.53)	79.9 (0.55)	2.8 (0.23)	61.3 (0.67)
Professional and related occupations...	2	2	( <sup>2</sup> )	78.8 (0.31)	22,517	64.4 (0.55)	81.9 (0.44)	58.7 (0.57)	38.9 (0.56)	22.1 (0.48)	74.8 (0.50)	5.2 (0.25)	51.8 (0.58)
Service occupations.....	23.2	26.4	(0.51)	28.2 (0.48)	5,898	48.8 (1.12)	58.4 (1.11)	48.9 (1.12)	20.0 (0.90)	12.0 (0.73)	55.3 (1.12)	15.7 (0.82)	29.7 (1.03)
Sales and related occupations.....	44.5	51.7	(0.68)	61.1 (0.53)	9,464	61.4 (0.86)	73.0 (0.79)	53.6 (0.89)	26.4 (0.78)	11.7 (0.57)	60.9 (0.87)	11.5 (0.57)	41.0 (0.87)
Office and administrative support .....	2	2	( <sup>2</sup> )	73.9 (0.41)	14,206	63.2 (0.70)	70.4 (0.66)	54.4 (0.72)	19.3 (0.57)	11.5 (0.46)	66.0 (0.69)	8.5 (0.40)	37.5 (0.70)
Farming, fishing, and forestry .....	7.9	8.6	(0.80)	10.8 (1.46)	132	55.5 (7.49)	57.7 (7.44)	42.2 (7.44)	20.7 (6.10)	6.5 (3.71)	55.3 (7.49)	9.4 (4.39)	26.1 (6.61)
Construction and extraction .....	16.4	18.7	(0.73)	19.0 (0.68)	1,585	56.7 (2.15)	66.0 (2.06)	44.0 (2.15)	25.8 (1.90)	12.7 (1.44)	61.1 (2.12)	9.9 (1.30)	31.8 (2.02)
Installation, maintenance, and repair ....	11.7	12.6	(0.79)	42.0 (0.98)	2,229	50.8 (1.83)	61.4 (1.78)	44.5 (1.82)	21.1 (1.49)	18.3 (1.41)	44.4 (1.82)	17.9 (1.40)	29.7 (1.67)
Production occupations .....	21.8	23.7	(0.60)	29.6 (0.70)	2,869	52.4 (1.61)	54.9 (1.61)	43.0 (1.60)	26.0 (1.41)	14.9 (1.15)	42.0 (1.59)	17.4 (1.22)	27.5 (1.44)
Transportation and material moving.....	11.8	15.1	(0.80)	22.1 (0.71)	1,830	46.4 (2.01)	51.5 (2.02)	43.4 (2.00)	14.5 (1.42)	11.2 (1.27)	40.1 (1.98)	23.1 (1.70)	21.7 (1.66)
<b>Family income<sup>3</sup></b>													
Less than \$20,000 .....	25.1	26.7	(0.51)	30.1 (0.62)	3,814	51.6 (1.40)	60.1 (1.37)	44.2 (1.39)	22.6 (1.17)	14.0 (0.97)	54.9 (1.39)	16.0 (1.03)	30.6 (1.29)
\$20,000 to \$29,999.....	38.4	38.4	(0.61)	38.8 (0.63)	4,944	56.6 (1.22)	63.2 (1.18)	46.8 (1.23)	21.4 (1.01)	12.9 (0.82)	59.4 (1.21)	12.8 (0.82)	32.0 (1.15)
\$30,000 to \$39,999.....	45.7	45.8	(0.62)	47.0 (0.59)	6,775	57.5 (1.04)	68.0 (0.98)	49.9 (1.05)	23.5 (0.89)	13.4 (0.72)	61.0 (1.02)	12.0 (0.68)	36.5 (1.01)
\$40,000 to \$49,999.....	51.9	52.3	(0.71)	54.3 (0.64)	6,290	61.6 (1.06)	70.9 (0.99)	52.9 (1.09)	26.6 (0.96)	14.4 (0.76)	63.9 (1.05)	9.8 (0.65)	39.3 (1.06)
\$50,000 to \$74,999.....	60.6	59.9	(0.50)	62.2 (0.41)	16,195	63.6 (0.65)	74.8 (0.59)	56.1 (0.67)	28.5 (0.61)	16.5 (0.50)	65.4 (0.65)	8.3 (0.38)	43.6 (0.67)
\$75,000 or more .....	65.9	69.7	(0.51)	75.0 (0.30)	26,732	72.4 (0.47)	84.3 (0.38)	64.3 (0.51)	36.4 (0.51)	19.2 (0.42)	76.4 (0.45)	4.5 (0.22)	56.3 (0.52)

—Not available.

†Not applicable.

<sup>1</sup>Individuals may be counted in more than one computer activity.

<sup>2</sup>Due to changes in occupational definitions, older data are not comparable to 2003.

<sup>3</sup>Excludes persons whose income data were not available.

NOTE: Data are based on a sample survey of households and are subject to sampling and nonsampling error. Standard errors appear in parentheses.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1993, October 1997, and October 2003, unpublished tabulations. (This table was prepared May 2005.)