

## 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 415 to 421) 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 419 provides institutional-level information for the 60 largest college libraries in the country.

The second part of the chapter (tables 422 to 427) provides information on the availability and use of technology at school, home, and 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 Appendix A: Guide to Sources and the publications cited in the table source notes.

### Libraries

The average number of library staff per school with a library was 1.8 at public schools in 2003–04 and 1.2 at private schools in 1999–2000 (table 415). On average, public school libraries had smaller numbers of books on a per student basis (1,803 per 100 students) than private school libraries (2,857 per 100 students) in 1999–2000. The number of books on a per student basis in public school libraries (1,891 per 100 students) in 2003–04 was not measurably different from the number in 1999–2000. In 2003–04, public elementary school libraries had larger holdings than public secondary school libraries on a per student basis (2,127 books per 100 students, compared to 1,376 books per 100 students).

Between 1991–92 and 1999–2000, the increase in college library resources was greater than the increase in enrollment; after adjustment for inflation, the library operating expenditure per student rose 6 percent during this period (table 418). Between 1999–2000 and 2001–02, library operating expendi-

tures per student dropped 5 percent. Overall, there was a net increase of 1 percent in library operating expenditures per student between 1991–92 and 2001–02. In 2001–02, the average library operating expenditure per student was \$460.

In 2004, there were 9,207 public libraries in the United States with a total of 805 million books and serial volumes. The annual number of visits per capita was 4.7, and the annual reference transactions per capita were 1.1 (table 421).

### Computers and 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 422). 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 422).

The increasing number of computers in schools has coincided with rising proportions of students using computers (table 426). The proportion of elementary and secondary school students using computers at school rose from 70 percent in 1997 to 83 percent in 2003. In 2003, the use of computers at school by elementary and secondary school students varied by age and family income. Students in elementary and secondary schools who were 10 years old or older were more likely to use computers at school than children younger than 10. In general, elementary and secondary school students from higher income families were more likely to use computers at school than students from lower income families. For example, in 2003, 80 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.

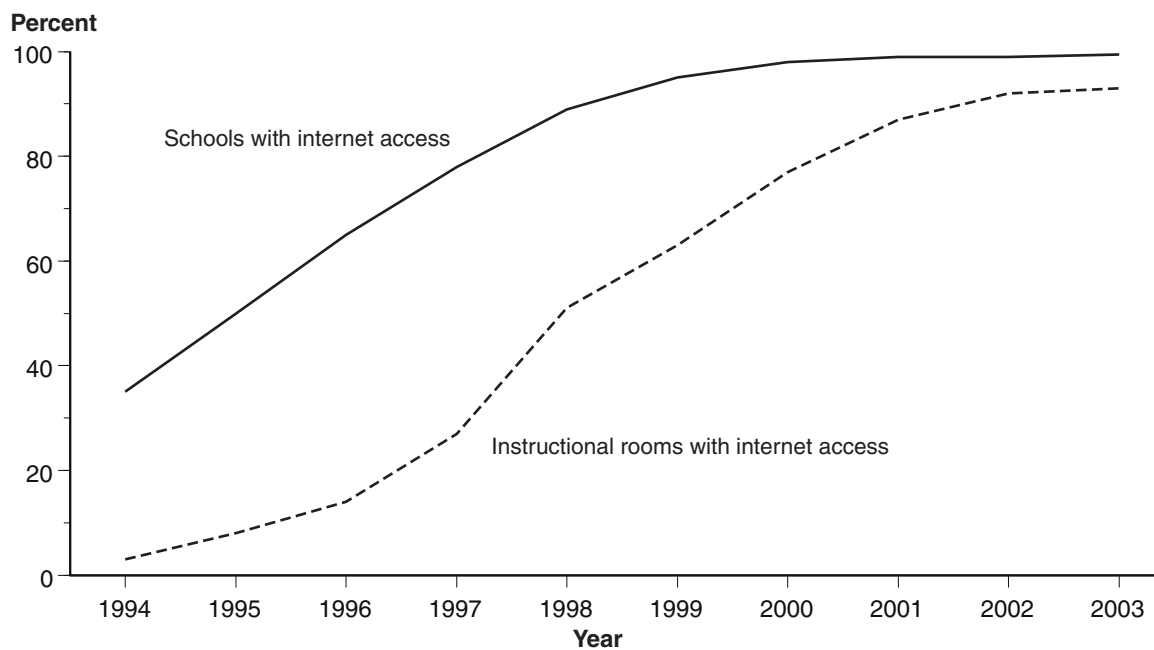
Just as large proportions of elementary and secondary students used computers at school, so a majority of students in 2003 used computers at home (table 426). In 2003, 68 percent of elementary and secondary school students used computers at home, compared to 43 percent in 1997. Between 1997 and 2003, 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 (49 vs. 46 percent). About 54 percent of

White elementary and secondary school students used computers at home for school work in 2003, compared to 35 percent of Black students and 34 percent of Hispanic students. Computer usage at home for school work was more likely among students from families with higher incomes than those from families with lower incomes. For instance, 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 at school rose from 63 percent in 1997 to 85 percent in 2003. About 76 percent used computers at home for school work in 2003 (table 426).

Computers are widely used in the workplace. In 2003, 56 percent of all workers used computers at work (table 427). More frequent use of computers at work was associated with higher levels of education and higher incomes. For example, 16 percent of high school dropouts and 40 percent of high school graduates used computers at work, compared to 82 to 87 percent of workers with bachelor's, master's, first-professional, or doctor's degrees. Among the common computer applications used by all employees using computers on the job were Internet and e-mail (75 percent), word processing/desktop publishing (68 percent), spreadsheets/databases (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 415. Selected statistics on school libraries/media centers, by control and level of school: 1999–2000 and 2003–04**

Selected statistic	Public, 1999–2000		Public, 2003–04				Private, 1999–2000											
			Total	Elementary	Secondary	Combined elementary/ secondary	Total	Elementary	Secondary	Combined elementary/ secondary								
1	2	3	4	5	6	7	8	9	10									
<b>Number of schools with libraries</b> .....	<b>77,288</b>	<b>(420.6)</b>	<b>78,257</b>	<b>(548.2)</b>	<b>57,404</b>	<b>(439.8)</b>	<b>16,268</b>	<b>(313.4)</b>	<b>4,586</b>	<b>(201.4)</b>	<b>17,054</b>	<b>(323.2)</b>	<b>10,961</b>	<b>(251.4)</b>	<b>1,955</b>	<b>(91.2)</b>	<b>4,138</b>	<b>(173.8)</b>
Average number of staff per library.....	1.89	(0.018)	1.76	(0.014)	1.66	(0.018)	2.09	(0.025)	1.74	(0.116)	1.18	(0.026)	1.01	(0.032)	1.80	(0.083)	1.33	(0.055)
Certified library/media specialists.....	0.81	(0.007)	0.79	(0.009)	0.73	(0.012)	1.03	(0.018)	0.73	(0.023)	0.23	(0.011)	0.13	(0.009)	0.55	(0.027)	0.35	(0.027)
Full-time .....	0.65	(0.007)	0.65	(0.009)	0.58	(0.010)	0.92	(0.018)	0.55	(0.027)	0.17	(0.009)	0.07	(0.007)	0.47	(0.025)	0.27	(0.022)
Part-time .....	0.16	(0.006)	0.14	(0.007)	0.15	(0.009)	0.11	(0.009)	0.18	(0.020)	0.06	(0.005)	0.06	(0.006)	0.07	(0.010)	0.08	(0.013)
Other professional staff.....	0.17	(0.007)	0.19	(0.008)	0.19	(0.011)	0.14	(0.010)	0.28	(0.036)	0.48	(0.014)	0.47	(0.020)	0.53	(0.039)	0.46	(0.024)
Full-time .....	0.12	(0.005)	0.13	(0.007)	0.14	(0.009)	0.11	(0.009)	0.16	(0.022)	0.22	(0.009)	0.19	(0.012)	0.33	(0.023)	0.27	(0.020)
Part-time .....	0.06	(0.004)	0.05	(0.005)	0.05	(0.006)	0.03	(0.004)	0.11	(0.031)	0.25	(0.012)	0.29	(0.017)	0.20	(0.029)	0.19	(0.017)
Other paid employees.....	0.91	(0.014)	0.78	(0.011)	0.75	(0.013)	0.93	(0.017)	0.73	(0.085)	0.48	(0.014)	0.41	(0.020)	0.72	(0.048)	0.52	(0.030)
Full-time .....	0.49	(0.008)	0.46	(0.009)	0.41	(0.011)	0.65	(0.017)	0.35	(0.028)	0.14	(0.009)	0.11	(0.011)	0.24	(0.024)	0.18	(0.015)
Part-time .....	0.41	(0.014)	0.33	(0.012)	0.34	(0.014)	0.28	(0.014)	0.38	(0.085)	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)	90.5	(0.55)	89.9	(0.69)	95.3	(0.62)	82.1	(1.94)	53.2	(1.48)	45.3	(2.02)	78.2	(2.67)	62.3	(2.25)
Fax machine.....	11.5	(0.43)	10.9	(0.50)	6.9	(0.64)	23.1	(1.08)	17.0	(1.94)	6.7	(0.64)	4.8	(0.82)	13.6	(1.38)	8.7	(1.50)
Automated catalog.....	72.8	(0.69)	82.7	(0.66)	81.9	(0.89)	90.6	(0.76)	63.7	(2.59)	34.2	(1.25)	28.1	(1.54)	55.8	(2.61)	39.9	(2.25)
Automated circulation system.....	74.4	(0.65)	86.9	(0.61)	86.7	(0.82)	92.8	(0.80)	68.8	(2.45)	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)	44.1	(0.84)	39.3	(1.02)	61.3	(1.47)	43.2	(2.21)	12.7	(0.67)	10.4	(0.99)	21.2	(1.79)	15.0	(1.40)
Connection to Internet.....	90.1	(0.57)	95.1	(0.35)	94.1	(0.48)	99.2	(0.22)	92.6	(1.40)	60.6	(1.37)	55.1	(1.77)	81.6	(2.46)	65.2	(2.05)
Video cassette recorders (VCR).....	—	(†)	86.3	(0.65)	85.4	(0.77)	89.4	(1.21)	86.8	(1.69)	—	(†)	—	(†)	—	(†)	—	(†)
Disability assistance technologies, such as TDD.....	—	(†)	11.9	(0.50)	10.2	(0.61)	18.0	(0.79)	11.7	(1.34)	—	(†)	—	(†)	—	(†)	—	(†)
Percentage of schools with certain services																		
Students permitted to check out computer hardware.....	2.2	(0.14)	5.2	(0.37)	3.5	(0.45)	10.1	(0.77)	9.6	(1.34)	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)	11.7	(0.44)	7.6	(0.56)	23.5	(1.05)	21.7	(2.22)	6.9	(0.57)	3.8	(0.50)	16.6	(1.53)	10.5	(1.59)
Number of library computer stations per 100 students.....	—	(†)	2.3	(0.04)	2.2	(0.05)	2.5	(0.05)	2.7	(0.17)	—	(†)	—	(†)	—	(†)	—	(†)
Average holdings per 100 students at the end of the school year <sup>1</sup>																		
Books (number of volumes).....	1,803	(19.7)	1,891	(45.1)	2,127	(70.2)	1,376	(20.0)	2,407	(117.7)	2,857	(84.8)	2,801	(86.0)	2,737	(178.3)	3,043	(213.2)
Video materials (tape and disc).....	51	(0.8)	68	(3.5)	70	(5.3)	61	(2.1)	87	(13.2)	71	(2.5)	66	(3.3)	72	(6.0)	81	(5.8)
CD-ROM titles.....	8	(0.3)	12	(0.9)	16	(1.4)	4	(0.3)	10	(1.7)	10	(0.6)	10	(0.8)	10	(1.3)	10	(1.0)
Average additions per 100 students during the school year <sup>1</sup>																		
Books (number of volumes).....	—	(†)	99.3	(2.08)	118.4	(3.13)	61.2	(1.75)	109.2	(8.40)	—	(†)	—	(†)	—	(†)	—	(†)
Video materials (tape and disc).....	—	(†)	4.3	(0.17)	4.4	(0.23)	4.1	(0.19)	5.9	(0.75)	—	(†)	—	(†)	—	(†)	—	(†)
CD-ROM titles.....	—	(†)	0.7	(0.09)	0.9	(0.14)	0.3	(0.03)	1.0	(0.23)	—	(†)	—	(†)	—	(†)	—	(†)
Total expenditures for library/media materials per pupil <sup>1,2</sup> .....	\$23.37	(0.438)	\$16.24	(0.322)	\$16.00	(0.469)	\$16.11	(0.320)	\$21.24	(2.498)	\$29.02	(1.050)	\$23.60	(1.646)	\$38.72	(1.582)	\$33.40	(1.831)
Books.....	9.97	(0.153)	10.99	(0.299)	11.72	(0.452)	9.68	(0.275)	10.19	(0.631)	10.57	(0.625)	9.29	(1.115)	11.18	(0.472)	12.68	(0.834)
Video materials.....	1.07	(0.022)	0.97	(0.042)	0.91	(0.046)	1.01	(0.061)	1.76	(0.617)	1.34	(0.051)	1.04	(0.057)	1.51	(0.106)	1.83	(0.153)
CD-ROM titles.....	0.59	(0.020)	0.17	(0.016)	0.21	(0.026)	0.10	(0.011)	0.20	(0.040)	0.82	(0.056)	0.72	(0.081)	1.15	(0.109)	0.81	(0.081)
Current serial subscriptions.....	1.26	(0.016)	1.38	(0.025)	1.06	(0.031)	1.87	(0.049)	2.50	(0.148)	1.34	(0.035)	0.62	(0.030)	2.71	(0.120)	1.86	(0.098)
Electronic subscriptions.....	0.81	(0.018)	0.88	(0.033)	0.39	(0.042)	1.79	(0.061)	1.25	(0.249)	1.35	(0.056)	0.17	(0.036)	3.85	(0.213)	2.08	(0.124)
Value of donated computers, A/V equipment, and other items per student <sup>1,3</sup> .....	—	(†)	\$1.56	(0.083)	\$1.64	(0.108)	\$1.12	(0.074)	\$3.88	(0.761)	—	(†)	—	(†)	—	(†)	—	(†)

—Not available.

†Not applicable.

<sup>1</sup>Data are for the prior school year.

<sup>2</sup>Includes other expenditures not separately shown.

<sup>3</sup>Includes grants and other contributions.

NOTE: Percentages are based on schools that have library/media centers. 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, Schools and Staffing Survey (SASS), "Public School Library Media Center Questionnaire," 1999–2000 and 2003–04; "Charter School Questionnaire," 1999–2000; and "Private School Library Media Center Questionnaire," 1999–2000, unpublished tabulations. (This table was prepared September 2006.)

**Table 416. Selected statistics on public school libraries/media centers, by level and enrollment size of school: 2003–04**

Selected statistic	All public school libraries/media centers	Elementary school libraries					Secondary school 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
<b>Number of schools with libraries.....</b>	<b>78,257 (548.2)</b>	<b>57,404 (439.8)</b>	<b>3,227 (273.1)</b>	<b>29,803 (594.0)</b>	<b>15,735 (540.8)</b>	<b>8,639 (343.2)</b>	<b>16,268 (313.4)</b>	<b>5,444 (243.4)</b>	<b>2,914 (148.8)</b>	<b>4,933 (190.9)</b>	<b>2,976 (155.6)</b>
Average number of staff per library	1.76 (0.014)	1.66 (0.018)	1.21 (0.094)	1.62 (0.023)	1.71 (0.029)	1.91 (0.040)	2.09 (0.025)	1.56 (0.040)	1.83 (0.045)	2.25 (0.040)	3.06 (0.088)
Certified library/media specialists.....	0.79 (0.009)	0.73 (0.012)	0.51 (0.052)	0.70 (0.019)	0.76 (0.019)	0.83 (0.024)	1.03 (0.018)	0.78 (0.032)	0.96 (0.031)	1.12 (0.025)	1.38 (0.050)
Full-time.....	0.65 (0.009)	0.58 (0.010)	0.16 (0.027)	0.51 (0.016)	0.68 (0.019)	0.76 (0.023)	0.92 (0.018)	0.61 (0.029)	0.88 (0.027)	1.04 (0.025)	1.33 (0.047)
Part-time.....	0.14 (0.007)	0.15 (0.009)	0.36 (0.044)	0.19 (0.015)	0.08 (0.011)	0.07 (0.014)	0.11 (0.009)	0.17 (0.017)	0.08 (0.017)	0.08 (0.015)	0.06 (0.010)
Other professional staff.....	0.19 (0.008)	0.19 (0.011)	0.17 (0.048)	0.21 (0.017)	0.18 (0.016)	0.16 (0.018)	0.14 (0.010)	0.15 (0.019)	0.13 (0.020)	0.13 (0.016)	0.15 (0.024)
Full-time.....	0.13 (0.007)	0.14 (0.009)	0.08 (0.044)	0.15 (0.014)	0.14 (0.015)	0.13 (0.016)	0.11 (0.009)	0.11 (0.016)	0.11 (0.018)	0.11 (0.017)	0.12 (0.023)
Part-time.....	0.05 (0.005)	0.05 (0.006)	0.09 (0.024)	0.06 (0.008)	0.05 (0.010)	0.04 (0.010)	0.03 (0.004)	0.04 (0.008)	0.02 (0.008)	0.02 (0.004)	0.04 (0.016)
Other paid employees.....	0.78 (0.011)	0.75 (0.013)	0.53 (0.059)	0.72 (0.018)	0.76 (0.027)	0.91 (0.031)	0.93 (0.017)	0.63 (0.028)	0.74 (0.047)	1.00 (0.033)	1.53 (0.058)
Full-time.....	0.46 (0.009)	0.41 (0.011)	0.20 (0.036)	0.37 (0.017)	0.43 (0.024)	0.61 (0.028)	0.65 (0.017)	0.39 (0.028)	0.46 (0.031)	0.74 (0.032)	1.16 (0.053)
Part-time.....	0.33 (0.012)	0.34 (0.014)	0.33 (0.062)	0.35 (0.020)	0.33 (0.024)	0.31 (0.029)	0.28 (0.014)	0.24 (0.025)	0.28 (0.047)	0.26 (0.023)	0.36 (0.032)
Percentage of schools' library media centers with certain media equipment											
Telephone.....	90.5 (0.55)	89.9 (0.69)	76.4 (4.00)	87.5 (0.99)	93.6 (0.92)	96.2 (0.88)	95.3 (0.62)	88.3 (1.69)	96.6 (1.37)	99.7 (0.10)	99.5 (0.32)
Fax machine.....	10.9 (0.50)	6.9 (0.64)	12.2 (5.01)	4.9 (0.69)	8.1 (1.24)	9.6 (1.41)	23.1 (1.08)	15.0 (1.71)	17.8 (2.04)	27.4 (1.79)	36.2 (2.31)
Automated catalog.....	82.7 (0.66)	81.9 (0.89)	54.2 (4.94)	79.6 (1.37)	89.7 (1.08)	85.9 (2.00)	90.6 (0.76)	79.3 (1.89)	92.3 (1.41)	96.7 (0.64)	99.6 (0.20)
Automated circulation system.....	86.9 (0.61)	86.7 (0.82)	54.6 (4.74)	84.9 (1.18)	93.1 (0.92)	93.4 (1.17)	92.8 (0.80)	83.9 (1.89)	94.3 (1.65)	97.7 (0.48)	99.5 (0.23)
Video laser disc or DVD.....	44.1 (0.84)	39.3 (1.02)	17.7 (4.56)	38.3 (1.42)	39.6 (1.72)	50.5 (2.51)	61.3 (1.47)	53.4 (3.10)	65.6 (2.86)	63.2 (1.89)	68.7 (2.43)
Connection to Internet.....	95.1 (0.35)	94.1 (0.48)	81.3 (3.62)	94.4 (0.69)	96.3 (0.83)	94.0 (1.16)	99.2 (0.22)	97.7 (0.66)	99.9 (0.06)	100.0 (#)	99.8 (0.20)
Video cassette recorders (VCR).....	86.3 (0.65)	85.4 (0.77)	76.1 (4.11)	84.8 (1.15)	87.7 (1.16)	87.1 (1.40)	89.4 (1.21)	88.4 (2.87)	88.6 (2.36)	91.2 (1.45)	89.0 (1.82)
Disability assistance technologies, such as TDD.....	11.9 (0.50)	10.2 (0.61)	5.5 (2.03)	8.6 (0.90)	11.5 (1.24)	14.9 (1.95)	18.0 (0.79)	14.1 (1.56)	16.5 (2.17)	18.9 (1.28)	25.0 (2.09)
Percentage of schools with certain services											
Students permitted to check out computer hardware.....	5.2 (0.37)	3.5 (0.45)	9.4 (4.01)	3.7 (0.69)	1.8 (0.54)	3.7 (1.06)	10.1 (0.77)	13.0 (1.70)	9.2 (1.85)	7.3 (0.86)	10.3 (1.60)
Students permitted to check out computer software.....	11.7 (0.44)	7.6 (0.56)	15.2 (5.09)	7.5 (0.79)	5.7 (0.85)	8.6 (1.54)	23.5 (1.05)	21.6 (1.86)	22.5 (2.30)	23.9 (1.73)	27.3 (2.33)
Number of library computer stations per 100 students.....	2.3 (0.04)	2.2 (0.05)	6.2 (0.69)	3.0 (0.11)	1.9 (0.07)	1.4 (0.05)	2.5 (0.05)	4.9 (0.25)	3.0 (0.12)	2.4 (0.06)	1.7 (0.06)
Average holdings per 100 students at the end of the school year <sup>1</sup>											
Books (number of volumes).....	1,891 (45.1)	2,127 (70.2)	5,996 (404.4)	2,818 (188.7)	1,937 (46.1)	1,386 (42.3)	1,376 (20.0)	2,886 (97.1)	1,726 (43.4)	1,291 (22.0)	975 (25.5)
Video materials (tape and disc).....	68 (3.5)	70 (5.3)	131 (20.0)	88 (13.8)	69 (4.9)	47 (2.8)	61 (2.1)	114 (10.6)	70 (4.8)	62 (3.3)	45 (3.4)
CD-ROM titles.....	12 (0.9)	16 (1.4)	34 (8.6)	18 (1.9)	19 (3.1)	10 (1.8)	4 (0.3)	13 (2.6)	5 (0.7)	3 (0.4)	2 (0.2)
Average additions per 100 students during the school year <sup>1</sup>											
Books (number of volumes).....	99.3 (2.08)	118.4 (3.13)	264.7 (27.02)	144.1 (5.57)	114.5 (5.21)	87.4 (4.91)	61.2 (1.75)	125.7 (7.33)	68.6 (3.18)	60.4 (3.32)	43.8 (2.43)
Video materials (tape and disc).....	4.3 (0.17)	4.4 (0.23)	11.7 (2.30)	5.4 (0.46)	4.0 (0.35)	3.3 (0.26)	4.1 (0.19)	7.5 (0.98)	4.8 (0.39)	4.4 (0.39)	2.8 (0.21)
CD-ROM titles.....	0.7 (0.09)	0.9 (0.14)	4.2 (1.92)	1.3 (0.31)	0.9 (0.20)	0.5 (0.17)	0.3 (0.03)	0.9 (0.16)	0.4 (0.10)	0.3 (0.04)	0.2 (0.03)
Total expenditures for library/media materials per pupil <sup>1,2</sup> .....	\$16.24 (0.322)	\$16.00 (0.469)	\$37.51 (5.208)	\$19.35 (0.825)	\$15.45 (0.859)	\$11.90 (0.558)	\$16.11 (0.320)	\$25.80 (1.109)	\$18.09 (0.838)	\$16.71 (0.675)	\$12.64 (0.507)
Books.....	10.99 (0.299)	11.72 (0.452)	21.69 (3.274)	14.08 (0.745)	11.40 (0.898)	8.94 (0.491)	9.68 (0.275)	14.97 (0.732)	11.25 (0.685)	9.85 (0.523)	7.77 (0.457)
Video materials.....	0.97 (0.042)	0.91 (0.046)	1.25 (0.208)	0.99 (0.077)	0.91 (0.087)	0.79 (0.065)	1.01 (0.061)	1.58 (0.175)	1.10 (0.093)	1.02 (0.100)	0.84 (0.117)
CD-ROM titles.....	0.17 (0.016)	0.21 (0.026)	0.37 (0.121)	0.31 (0.061)	0.20 (0.046)	0.08 (0.012)	0.10 (0.011)	0.24 (0.051)	0.10 (0.022)	0.10 (0.011)	0.07 (0.017)
Current serial subscriptions.....	1.38 (0.025)	1.06 (0.031)	3.02 (0.409)	1.32 (0.064)	0.94 (0.032)	0.82 (0.067)	1.87 (0.049)	3.76 (0.198)	2.28 (0.120)	1.92 (0.076)	1.24 (0.063)
Electronic subscriptions.....	0.88 (0.033)	0.39 (0.042)	1.02 (0.362)	0.50 (0.096)	0.33 (0.057)	0.31 (0.048)	1.79 (0.061)	2.15 (0.197)	1.85 (0.202)	1.90 (0.108)	1.59 (0.107)
Value of donated computers, A/V equipment, and other items per student <sup>1,3</sup> .....	\$1.56 (0.083)	\$1.64 (0.108)	\$7.47 (1.785)	\$2.24 (0.167)	\$1.56 (0.202)	\$0.83 (0.118)	\$1.12 (0.074)	\$3.05 (0.328)	\$1.68 (0.201)	\$0.98 (0.115)	\$0.60 (0.113)

#Rounds to zero.

<sup>1</sup>Data are for the prior school year.

<sup>2</sup>Includes other expenditures not separately shown.

<sup>3</sup>Includes grants and other contributions.

NOTE: Percentages are based on schools that have library/media centers. 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, Schools and Staffing Survey (SASS).

"Public School Library Media Center Questionnaire," 2003–04. (This table was prepared September 2006.)

**Table 417. Selected statistics on public school libraries/media centers, by state: 2003–04**

State	Percent of centers offering selected services/equipment								Average number of staff per library <sup>1</sup>	Books held at end of year per 100 students <sup>2</sup>	Books acquired during year per 100 students <sup>2</sup>	Total expenditure for materials per student <sup>2</sup>		Value of donated computers, A/V equipment, and other items per student <sup>2,3</sup>				
	Automated catalog	Automated circulation system	Connection to the Internet	Digital video disk (DVD)														
1	2	3	4	5	6	7	8	9	10									
<b>United States .....</b>	<b>82.7</b>	<b>(0.66)</b>	<b>86.9</b>	<b>(0.61)</b>	<b>95.1</b>	<b>(0.35)</b>	<b>44.1</b>	<b>(0.84)</b>	<b>1.8</b>	<b>(0.01)</b>	<b>1,891</b>	<b>(45.1)</b>	<b>99</b>	<b>(2.1)</b>	<b>\$16.2</b>	<b>(0.32)</b>	<b>\$1.6</b>	<b>(0.08)</b>
Alabama.....	87.6	(2.83)	95.9	(1.73)	100.0	(†)	44.0	(4.27)	1.7	(0.07)	1,713	(82.8)	99	(8.0)	15.2	(1.13)	2.6	(0.65)
Alaska.....	68.5	(4.60)	73.3	(5.55)	86.9	(4.69)	39.5	(5.90)	1.4	(0.08)	3,580	(230.9)	152	(24.2)	19.6	(2.30)	3.0	(1.03)
Arizona.....	81.5	(2.74)	90.5	(2.74)	93.3	(2.03)	38.8	(4.12)	1.8	(0.08)	2,298	(274.6)	121	(17.1)	15.3	(1.39)	0.9	(0.41)
Arkansas.....	86.7	(3.02)	93.0	(1.97)	97.0	(1.43)	44.0	(3.98)	1.7	(0.06)	1,931	(101.7)	89	(6.4)	18.1	(1.24)	2.3	(0.51)
California.....	81.6	(2.42)	87.9	(2.19)	88.7	(2.29)	31.4	(3.10)	1.4	(0.05)	1,488	(62.8)	108	(8.2)	16.5	(0.84)	1.1	(0.26)
Colorado.....	87.5	(3.96)	87.4	(3.44)	97.4	(1.77)	50.8	(5.03)	1.8	(0.09)	2,289	(423.3)	112	(13.4)	16.1	(1.30)	2.1	(0.64)
Connecticut.....	66.7	(5.42)	67.7	(5.41)	95.6	(2.46)	55.9	(5.08)	2.0	(0.10)	2,145	(105.2)	113	(17.5)	19.5	(2.16)	1.6	(0.43)
Delaware.....	97.3	(2.35)	97.8	(1.82)	97.3	(1.99)	29.9	(4.91)	1.6	(0.11)	1,702	(80.8)	75	(6.2)	12.9	(0.83)	1.9	(0.43)
District of Columbia.....	62.3	(7.68)	77.7	(5.90)	97.5	(2.20)	23.3	(6.71)	1.1	(0.04)	1,715	(307.5)	46	(8.8)	9.3	(2.17)	2.5	(0.74)
Florida.....	92.4	(2.27)	96.8	(1.72)	96.4	(2.01)	51.9	(4.84)	2.0	(0.08)	1,476	(79.3)	87	(8.6)	13.1	(0.97)	0.9	(0.18)
Georgia.....	96.4	(2.47)	97.7	(2.05)	98.6	(1.42)	50.8	(5.59)	2.2	(0.06)	1,653	(57.4)	76	(9.1)	14.2	(1.24)	1.4	(0.44)
Hawaii.....	94.6	(6.01)	95.5	(6.02)	98.1	(0.86)	42.9	(4.78)	1.5	(0.11)	2,029	(147.8)	71	(6.2)	11.5	(2.46)	1.2	(0.23)
Idaho.....	83.2	(3.01)	89.5	(2.75)	92.7	(2.20)	33.5	(3.84)	1.5	(0.06)	2,340	(102.7)	83	(9.9)	11.9	(1.16)	0.7	(0.18)
Illinois.....	66.4	(5.04)	70.8	(4.32)	89.2	(3.46)	38.0	(5.47)	2.1	(0.17)	1,703	(82.2)	118	(16.2)	13.7	(1.27)	1.8	(0.44)
Indiana.....	91.1	(2.83)	93.3	(2.52)	94.6	(2.97)	50.4	(5.76)	1.7	(0.07)	1,977	(95.4)	84	(9.1)	14.9	(0.97)	0.9	(0.30)
Iowa.....	74.9	(3.43)	78.0	(3.65)	90.6	(3.18)	51.9	(5.11)	2.0	(0.06)	2,605	(121.1)	100	(6.4)	13.9	(0.78)	1.6	(0.52)
Kansas.....	84.9	(3.50)	86.8	(3.70)	97.2	(1.48)	46.5	(4.24)	1.9	(0.07)	3,059	(142.5)	140	(12.0)	22.2	(2.14)	1.5	(0.35)
Kentucky.....	89.6	(2.82)	94.1	(2.40)	98.8	(1.02)	56.0	(4.88)	1.7	(0.07)	1,709	(77.6)	91	(8.8)	13.3	(0.65)	0.8	(0.25)
Louisiana.....	71.1	(4.00)	80.1	(3.26)	96.8	(1.64)	44.5	(4.61)	1.3	(0.05)	1,944	(131.2)	54	(4.6)	15.2	(3.54)	1.9	(0.42)
Maine.....	62.9	(4.83)	62.7	(4.41)	90.4	(3.73)	30.6	(4.03)	1.6	(0.10)	2,796	(260.5)	102	(8.7)	24.1	(2.68)	2.5	(0.98)
Maryland.....	82.8	(4.14)	91.0	(3.19)	98.7	(1.50)	46.9	(4.61)	1.6	(0.06)	1,507	(62.8)	125	(24.9)	17.3	(1.74)	1.3	(0.30)
Massachusetts.....	71.0	(6.43)	70.4	(6.35)	88.0	(5.02)	45.7	(5.69)	1.7	(0.12)	1,841	(126.0)	85	(14.8)	12.5	(1.33)	1.6	(0.44)
Michigan.....	83.8	(4.23)	82.8	(4.39)	100.0	(†)	48.8	(5.31)	1.8	(0.08)	3,010	(1,266.5)	88	(13.7)	12.8	(1.57)	1.1	(0.47)
Minnesota.....	92.0	(2.86)	94.6	(2.38)	97.2	(1.41)	59.7	(4.28)	2.1	(0.07)	2,509	(143.1)	111	(9.7)	15.2	(1.08)	2.1	(0.47)
Mississippi.....	73.2	(4.38)	86.5	(3.43)	95.5	(1.64)	35.6	(4.52)	1.6	(0.06)	1,476	(56.6)	102	(11.2)	14.9	(1.53)	1.4	(0.31)
Missouri.....	85.8	(3.59)	88.0	(3.33)	96.0	(1.67)	45.0	(4.73)	1.7	(0.06)	2,047	(62.0)	120	(9.0)	22.1	(1.01)	3.3	(0.96)
Montana.....	62.9	(3.53)	69.2	(3.32)	86.6	(3.56)	37.2	(3.37)	1.5	(0.08)	3,372	(214.8)	147	(17.7)	22.6	(1.40)	3.5	(0.75)
Nebraska.....	71.8	(4.35)	73.7	(4.27)	82.6	(3.89)	42.4	(5.55)	1.9	(0.09)	3,160	(228.1)	129	(10.4)	21.3	(1.38)	3.5	(0.71)
Nevada.....	92.2	(4.13)	88.6	(5.05)	93.9	(3.10)	44.2	(4.72)	1.5	(0.06)	1,616	(80.0)	114	(14.3)	13.5	(1.65)	1.4	(0.40)
New Hampshire.....	65.5	(4.11)	70.6	(4.04)	93.9	(3.02)	45.6	(5.04)	1.8	(0.07)	1,817	(78.5)	96	(11.2)	19.7	(1.28)	1.9	(0.68)
New Jersey.....	70.0	(6.08)	71.4	(6.08)	97.7	(2.04)	43.1	(6.13)	1.8	(0.08)	2,110	(142.1)	85	(13.6)	21.0	(2.72)	1.1	(0.30)
New Mexico.....	77.8	(3.58)	85.7	(3.12)	94.0	(1.81)	25.1	(2.74)	1.4	(0.06)	2,153	(105.1)	131	(10.7)	20.7	(1.66)	1.9	(0.43)
New York.....	76.0	(4.05)	83.9	(3.74)	94.9	(2.59)	47.7	(4.37)	2.2	(0.07)	1,626	(88.6)	95	(7.5)	19.8	(1.93)	2.2	(0.51)
North Carolina.....	93.3	(2.76)	97.0	(1.95)	96.3	(2.20)	53.0	(5.12)	1.9	(0.08)	1,622	(46.3)	110	(11.9)	18.3	(1.57)	1.1	(0.26)
North Dakota.....	51.8	(3.25)	53.4	(3.25)	90.1	(2.54)	30.1	(3.17)	1.6	(0.06)	3,710	(168.3)	146	(13.0)	26.1	(1.75)	1.3	(0.42)
Ohio.....	82.2	(3.47)	82.7	(3.40)	95.9	(2.10)	49.6	(4.89)	1.5	(0.08)	1,669	(78.4)	75	(9.4)	10.9	(0.78)	1.9	(0.46)
Oklahoma.....	75.5	(2.73)	89.8	(1.87)	95.6	(1.25)	35.0	(2.46)	1.8	(0.04)	2,159	(114.6)	99	(6.2)	15.5	(1.08)	2.5	(0.37)
Oregon.....	81.1	(4.49)	82.0	(4.69)	100.0	(†)	33.0	(4.61)	1.6	(0.08)	2,631	(221.4)	85	(10.5)	10.7	(0.96)	2.9	(1.11)
Pennsylvania.....	81.7	(3.59)	87.1	(4.16)	94.8	(3.09)	37.4	(3.87)	1.8	(0.08)	1,961	(83.9)	88	(10.0)	15.1	(0.91)	0.6	(0.16)
Rhode Island.....	72.3	(4.54)	83.5	(3.79)	98.9	(1.13)	26.4	(5.06)	1.8	(0.08)	1,538	(95.6)	84	(14.5)	16.9	(2.56)	1.5	(0.70)
South Carolina.....	98.2	(1.69)	99.9	(0.10)	100.0	(†)	46.6	(4.13)	2.1	(0.05)	1,674	(56.6)	94	(11.8)	15.7	(1.16)	2.0	(0.41)
South Dakota.....	53.6	(4.24)	53.6	(3.92)	89.5	(3.34)	42.6	(4.36)	1.5	(0.08)	3,105	(204.0)	173	(27.6)	22.3	(1.40)	2.1	(0.55)
Tennessee.....	81.2	(3.63)	89.3	(2.94)	98.6	(0.96)	47.1	(4.72)	1.6	(0.06)	1,652	(56.4)	94	(10.7)	13.0	(1.25)	1.8	(0.33)
Texas.....	93.7	(1.77)	98.3	(0.71)	99.0	(0.48)	42.4	(4.30)	1.7	(0.06)	1,779	(63.3)	106	(8.6)	18.8	(2.04)	1.6	(0.33)
Utah.....	87.2	(3.22)	94.8	(2.31)	86.2	(3.96)	51.0	(3.97)	1.4	(0.05)	1,651	(95.2)	84	(7.8)	9.8	(0.56)	1.4	(0.30)
Vermont.....	74.6	(5.33)	73.5	(5.29)	96.8	(2.06)	38.0	(4.20)	1.7	(0.10)	2,939	(127.9)	138	(10.3)	29.8	(1.27)	1.5	(0.69)
Virginia.....	95.2	(2.13)	99.5	(0.42)	95.5	(2.14)	52.6	(4.21)	1.9	(0.06)	1,717	(61.9)	88	(6.5)	16.2	(0.70)	1.3	(0.24)
Washington.....	92.9	(1.78)	96.0	(1.72)	98.9	(1.20)	46.5	(4.30)	2.0	(0.05)	2,060	(93.3)	92	(7.3)	15.7	(2.49)	1.8	(0.47)
West Virginia.....	42.7	(5.50)	54.6	(5.54)	86.8	(4.34)	33.4	(5.28)	0.9	(0.06)	1,594	(99.8)	74	(10.1)	8.9	(0.65)	1.6	(0.58)
Wisconsin.....	92.7	(3.07)	91.4	(3.67)	100.0	(†)	55.4	(4.43)	2.1	(0.06)	2,545	(141.8)	121	(8.5)	25.0	(1.26)	1.5	(0.59)
Wyoming.....	91.2	(3.40)	94.3	(2.92)	96.3	(2.72)	49.7	(5.02)	1.8	(0.07)	3,125	(142.3)	156	(22.4)	21.8	(1.59)	3.1	(0.87)

†Not applicable.

<sup>1</sup>Includes professional and nonprofessional staff.

<sup>2</sup>Data are for the prior school year.

<sup>3</sup>Includes grants and other contributions.

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," 2003–04. (This table was prepared September 2006.)

**Table 418. Collections, staff, and operating expenditures of degree-granting institution libraries: Selected years, 1976–77 through 2001–02**

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	2001–02
1	2	3	4	5	6	7	8	9	10	11	12
Number of libraries .....	3,058	3,122	3,104	3,322	3,438	3,274	3,303	3,408	3,658	3,527	3,568
Number of circulation transactions (in thousands) ..	—	—	—	—	—	—	231,503	230,733	216,067	193,948	189,248
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	15,928
Full-time-equivalent enrollment <sup>2</sup> .....	8,313	8,348	9,015	8,952	9,230	10,361	10,348	10,402	10,615	10,944	11,766
<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	954,030
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	24,574
Number of serial subscriptions at end of year .....	4,670	4,775	4,890	6,317	6,416	6,966	6,212	5,709	10,908 <sup>4</sup>	7,499	9,855
Microform units at end of year .....	—	—	—	—	—	—	—	—	1,062,082	1,111,389	1,143,678
Electronic units at end of year <sup>5</sup> .....	—	—	—	—	—	—	465	983	3,473	—	—
<b>Full-time-equivalent (FTE) library staff</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	69,526
Librarians and professional staff .....	23,308	23,676	23,816	21,822	25,115	26,341	26,726	27,268	30,041	31,001	32,053
Other paid staff .....	33,779	34,740	34,660	38,026	40,733	40,421	40,381	40,022	38,026	37,893	37,473
Contributed services .....	—	—	—	—	1,403	404	326	291	270	229	—
Student assistants .....	—	—	—	—	33,821	29,075	28,411	27,998	28,373	26,518	25,305
FTE student enrollment per FTE staff member ...	146	143	154	153	137	154	153	154	155	158	169
Hours of student and other assistance (in thousands) .....	39,950	39,552	40,068	28,360	—	—	—	—	—	—	—
<b>Library operating expenditures<sup>7</sup></b>											
Total operating expenditures (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	\$5,416,716
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	2,753,404
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	46,499
Furniture/equipment .....	—	—	—	—	—	—	55,915	56,128	57,013	63,459	—
Computer hardware/software .....	—	—	—	—	—	—	128,128	157,949	164,379	160,294	155,791
Utilities/networks/consortia .....	—	—	—	—	—	—	81,106	85,113	89,618	90,264	92,242
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	1,944,490
Books and serial backfiles—paper .....	—	—	—	—	—	—	—	—	514,048	552,100	563,007
Books and serial backfiles—electronic .....	—	—	—	—	—	—	—	—	28,061	33,888	44,792
Current serials—paper .....	—	—	—	—	—	—	—	—	849,399	945,958	926,105
Current serials—electronic .....	—	—	—	—	—	—	—	—	125,470	203,371	297,657
Audiovisual materials .....	—	—	—	—	—	23,879	28,753	28,879	30,623	32,039	37,041
Document delivery/interlibrary loan .....	—	—	—	—	—	—	12,238	17,645	19,309	20,540	22,913
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	52,976
Other library operating expenditures .....	96,643	122,731	169,478	233,957	393,099	518,867	331,463	309,925	323,354	140,579	424,290
Operating expenditures per FTE student .....	152	180	216	269	300	352	388	414	433	459	460
Operating expenditures per FTE student in constant 2005–06 dollars <sup>9</sup> .....	514	523	456	505	516	507	513	518	532	540	514
<b>Operating expenditures (percentage distribution)</b>											
Salaries <sup>8</sup> .....	55.4	54.9	55.7	48.1	52.4	51.8	50.4	49.9	50.4	48.4	50.8
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	0.9
Information resources .....	29.7	30.0	28.9	31.2	32.2	32.8	33.6	34.9	34.9	36.3	35.9
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	12.4
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: Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. (See Guide to Sources for details.) 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; 1987–88 through 2001–02 Integrated Postsecondary Education Data System, "Academic Libraries Survey" (IPEDS-L:88–98), "Fall Enrollment Survey" (IPEDS-EF:87–99), and Spring 2002; and Academic Libraries Survey (ALS), 2000 and 2002. (This table was prepared September 2006.)

**Table 419. Collections, staff, and operating expenditures of the 60 largest college and university libraries: 2001–02**

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	14,615	1,307	420	96,454	51,702	107	37,243	8,154
Yale University (CT) .....	2	10,707	632	163	54,518	22,388	111	13,961	2,559
University of Illinois, Urbana Campus.....	3	9,709	522	88	31,458	16,906	107	33,233	7,516
University of California, Berkeley.....	4	9,389	688	119	51,649	26,191	98	27,000	3,489
University of Texas, Austin.....	5	8,230	562	118	36,480	18,106	103	110,114	4,104
University of Michigan, Ann Arbor.....	6	7,643	643	167	43,358	19,307	168	63,202	4,194
Stanford University (CA).....	7	7,616	629	114	54,785	21,915	98	24,438	2,084
Columbia University in the City of NY.....	8	7,557	535	140	39,114	18,628	106	69,000	5,000
University of California, Los Angeles.....	9	7,445	601	142	37,671	—	96	89,092	3,819
Cornell University (NY).....	10	6,964	590	133	39,162	18,764	114	20,092	2,462
University of Chicago (IL).....	11	6,833	344	71	25,416	10,677	146	41,100	1,154
Indiana University, Bloomington.....	12	6,512	458	95	30,067	13,075	115	75,546	7,573
University of Washington, Seattle.....	13	6,274	506	128	31,568	17,742	135	87,877	6,500
University of Wisconsin, Madison.....	14	6,216	513	190	33,614	18,491	131	83,419	4,718
University of Minnesota, Twin Cities.....	15	6,082	423	99	32,444	16,089	106	41,548	3,648
Princeton University (NJ).....	16	5,990	371	100	31,006	14,297	110	13,642	970
Ohio State University, Main Campus.....	17	5,603	433	92	27,822	13,101	168	50,696	6,990
University of North Carolina, Chapel Hill.....	18	5,366	429	133	26,413	13,465	146	41,046	4,294
Duke University (NC).....	19	5,234	343	109	30,589	12,166	122	56,872	2,516
University of Pennsylvania.....	20	5,153	403	119	30,651	13,702	111	36,000	6,254
University of Virginia, Main Campus.....	21	4,868	349	94	28,625	15,786	149	71,206	4,550
Rutgers University, New Brunswick (NJ).....	22	4,832	316	69	20,619	12,263	108	57,909	1,879
New York University.....	23	4,645	427	120	33,054	15,703	119	38,000	3,419
University of Pittsburgh, Main Campus (PA) ..	24	4,553	344	75	25,177	9,864	123	23,971	5,326
Michigan State University.....	25	4,504	284	63	19,461	9,182	148	39,929	1,720
University of Kansas, Main Campus.....	26	4,447	269	65	16,022	7,878	140	32,914	2,673
University of Arizona.....	27	4,442	290	77	20,201	8,025	168	29,157	836
University of Iowa.....	28	4,303	308	70	20,165	10,421	123	50,145	6,603
Northwestern University (IL).....	29	4,217	340	91	22,663	10,443	116	18,646	2,176
University of Oklahoma, Norman Campus.....	30	3,951	159	41	12,246	3,893	107	20,277	1,202
University of Florida.....	31	3,950	407	103	24,138	10,993	110	42,569	2,919
University of Georgia.....	32	3,873	364	87	21,546	9,655	101	26,206	2,428
University of Southern California.....	33	3,740	339	73	27,512	12,891	159	55,838	1,365
Washington University in St Louis (MO).....	34	3,548	285	95	26,328	9,815	120	33,000	1,500
Johns Hopkins University (MD).....	35	3,509	338	69	26,698	11,576	120	28,933	2,398
University of Hawaii, Manoa.....	36	3,421	238	63	15,299	7,251	94	31,379	2,980
Arizona State University, Main Campus.....	37	3,360	306	85	20,181	9,337	106	60,272	3,486
University of South Carolina at Columbia.....	38	3,334	292	78	17,003	7,216	111	25,000	3,700
Brigham Young University (UT).....	39	3,305	350	87	20,294	9,549	101	70,000	2,400
Wayne State University (MI).....	40	3,296	309	50	18,558	8,925	142	56,471	13,435
State University of New York, Buffalo.....	41	3,288	249	80	17,822	8,906	97	12,600	1,400
University of Rochester (NY).....	42	3,277	208	66	13,918	6,272	117	4,000	1,252
University of California, Santa Barbara.....	43	3,207	236	45	16,245	8,113	103	33,381	1,956
State University of New York, Stony Brook.....	44	3,200	164	36	12,666	5,674	100	17,967	5,755
Brown University (RI).....	45	3,192	217	60	16,318	7,565	101	17,762	54,032
Louisiana State U. & A&M & Hebert Laws Center	46	3,175	205	49	12,763	5,632	93	39,944	2,595
North Carolina State University at Raleigh.....	47	3,144	264	97	21,672	9,628	146	39,005	2,042
Pennsylvania State University, Main Campus	48	3,118	438	77	29,457	15,328	168	53,469	4,416
University of Missouri, Columbia.....	49	3,111	222	56	14,390	5,763	104	30,000	2,080
University of Massachusetts, Amherst.....	50	3,089	170	49	11,406	6,926	93	20,750	1,775
University of Oregon.....	51	3,030	215	39	14,066	6,780	96	15,553	2,826
Southern Illinois University, Carbondale.....	52	3,030	236	42	14,318	6,707	150	15,275	2,206
University of Colorado at Boulder.....	53	3,023	236	51	18,143	7,840	104	1,969	4,062
University of Kentucky.....	54	2,989	290	73	20,091	8,178	160	32,000	1,948
Kansas State University.....	55	2,979	117	37	10,564	4,496	105	13,714	611
University of Utah.....	56	2,978	365	69	21,783	10,648	115	39,686	7,584
University of Notre Dame (IN).....	57	2,976	272	59	18,456	8,444	126	18,001	571
University of California, Davis.....	58	2,958	272	52	18,935	8,912	95	32,225	2,181
University of Maryland, College Park Campus..	59	2,957	296	124	23,689	11,237	110	53,029	5,428
University of California, San Diego.....	60	2,938	341	52	24,272	12,606	112	40,514	2,022

—Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Academic Libraries Survey (ALS), 2002. (This table was prepared September 2006.)

**Table 420. Selected statistics of public libraries, by population size of legal service area: Fiscal year 2004**

Selected statistic	Population of legal service area <sup>1</sup>											
	Total	Less than 1,000	1,000 to 2,499	2,500 to 4,999	5,000 to 9,999	10,000 to 24,999	25,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 to 999,999	1,000,000 or more
1	2	3	4	5	6	7	8	9	10	11	12	13
Public library service outlets, total	17,393	1,031	1,642	1,396	1,678	2,398	1,843	1,793	2,181	1,159	1,204	1,068
Central libraries.....	9,047	1,023	1,613	1,336	1,468	1,752	908	516	292	79	42	18
Branch libraries.....	7,502	5	20	47	171	516	800	1,101	1,725	1,005	1,094	1,018
Bookmobiles.....	844	3	9	13	39	130	135	176	164	75	68	32
Collections, in thousands												
Books and serial volumes.....	804,943	8,961	21,849	28,028	47,377	98,875	96,685	95,662	117,016	84,097	106,612	99,780
Audio and video materials and films.....	74,737	549	1,505	2,117	4,020	8,911	9,186	9,240	11,256	7,700	9,940	10,313
Serial subscriptions.....	1,822	20	53	69	122	241	212	187	250	185	225	258
Public-use internet terminals, total..	170,782	2,708	5,935	6,726	11,151	21,025	19,117	20,726	26,885	16,174	20,153	20,182
Average per stationary outlet.....	10.3	2.6	3.6	4.9	6.8	9.3	11.2	12.8	13.3	14.9	17.7	19.5
Per 5,000 population.....	3.0	23.0	11.3	7.0	5.3	3.8	3.0	2.8	2.6	2.4	2.6	2.3
Uses of electronic resources per year, in thousands.....	343,013	984	3,492	5,653	12,760	34,929	37,995	46,499	56,539	40,456	58,537	45,168
Per capita.....	1.2	1.7	1.3	1.2	1.2	1.3	1.2	1.2	1.1	1.2	1.5	1.0
Paid staff, in full-time equivalents												
Librarians.....	45,037	469	1,380	1,763	2,928	6,127	5,896	5,523	6,138	4,568	5,474	4,771
Librarians with ALA-MLS <sup>2</sup> .....	30,560	20	102	267	940	3,223	4,012	3,983	4,912	3,804	4,728	4,571
Other staff.....	90,977	150	563	1,236	3,556	9,543	11,436	12,361	16,529	10,692	13,332	11,579
Total operating income, in thousands.....	\$9,129,588	\$20,514	\$80,543	\$141,148	\$338,645	\$942,575	\$1,117,968	\$1,155,771	\$1,491,431	\$1,079,238	\$1,378,322	\$1,383,432
Percentage distribution of operating income, by source, total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal <sup>3</sup> .....	0.5	1.0	1.1	0.7	0.5	0.4	0.4	0.5	0.6	0.4	0.5	0.6
State.....	10.0	6.7	5.2	7.4	11.2	8.9	10.2	11.8	9.8	12.2	11.1	6.6
Local.....	81.5	72.4	74.4	76.8	77.7	81.8	82.4	81.3	83.0	81.2	81.9	80.9
Other and private.....	8.0	19.9	19.3	15.1	10.6	8.9	7.0	6.4	6.6	6.2	6.5	12.0

<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: Data include imputations for nonresponse. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Public Libraries Survey (PLS), fiscal year 2004, *Public Libraries in the United States: Fiscal Year 2004*. (This table was prepared September 2006.)



**Table 421. Public libraries, books and serial volumes, library visits, circulation, and reference transactions, by state: Fiscal year 2004**

State	Number of public libraries	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>9,207</b> <sup>3</sup>	<b>804,943</b>	<b>2.8</b>	<b>4.7</b>	<b>7.1</b>	<b>1.1</b>
Alabama .....	208	9,125	2.0	3.2	4.1	0.8
Alaska .....	88	2,236	3.4	5.2	6.3	0.5
Arizona .....	91	9,512	1.8	4.0	7.5	0.9
Arkansas .....	48	5,706	2.1	3.1	4.4	0.7
California .....	179	77,776	2.2	4.2	5.5	1.0
Colorado .....	115	11,546	2.6	6.7	10.6	1.3
Connecticut .....	194	14,778	4.2	6.6	9.2	1.3
Delaware .....	21	1,628	2.1	4.5	6.4	0.6
District of Columbia .....	1	2,436	4.4	3.5	1.9	2.0
Florida .....	70	32,599	1.9	4.0	5.4	1.3
Georgia .....	58	15,027	1.8	3.7	4.7	0.9
Hawaii .....	1	3,177	2.5	4.4	5.0	0.7
Idaho .....	104	3,785	3.1	6.0	8.2	0.8
Illinois .....	626	43,172	3.8	5.7	8.3	1.5
Indiana .....	239	23,906	4.2	6.7	11.9	1.3
Iowa .....	540	12,066	4.1	5.5	9.1	0.6
Kansas .....	325	10,818	4.7	6.2	10.7	1.2
Kentucky .....	116	8,254	2.0	3.8	5.7	0.6
Louisiana .....	66	11,581	2.6	3.1	4.3	1.2
Maine .....	269	6,294	5.3	5.4	7.3	0.7
Maryland .....	24	14,825	2.7	5.1	9.4	1.3
Massachusetts .....	370	31,571	4.9	5.8	7.7	0.9
Michigan .....	384	33,258	3.4	4.5	6.3	0.8
Minnesota .....	140	16,160	3.2	5.0	9.9	0.9
Mississippi .....	49	5,728	2.0	2.8	3.2	0.5
Missouri .....	151	18,165	3.6	4.8	8.7	0.9
Montana .....	79	2,695	3.0	4.1	6.0	0.5
Nebraska .....	276	6,446	4.6	5.4	8.8	0.8
Nevada .....	22	4,037	1.7	4.1	6.2	0.7
New Hampshire .....	231	5,986	4.6	4.8	7.6	0.7
New Jersey .....	306	31,030	3.7	5.1	6.4	0.9
New Mexico .....	92	4,228	2.6	3.7	5.3	0.9
New York .....	753	73,771	3.9	5.7	7.1	1.5
North Carolina .....	75	16,134	1.9	3.9	5.3	1.2
North Dakota .....	83	2,314	4.2	4.7	7.5	0.7
Ohio .....	250	48,610	4.2	7.2	14.8	1.6
Oklahoma .....	112	6,830	2.4	4.6	6.4	0.7
Oregon .....	125	9,005	2.8	6.2	14.5	0.9
Pennsylvania .....	455	29,263	2.4	3.6	5.2	0.7
Rhode Island .....	48	4,212	3.9	5.8	6.7	0.9
South Carolina .....	42	8,698	2.1	3.4	4.9	1.2
South Dakota .....	125	3,199	5.5	6.4	9.0	0.9
Tennessee .....	184	11,038	1.9	3.2	4.1	0.8
Texas .....	555	39,749	2.0	3.2	4.8	1.1
Utah .....	72	6,391	2.7	6.7	12.5	1.6
Vermont .....	189	2,855	5.0	5.4	7.3	0.8
Virginia .....	90	19,353	2.6	4.5	8.4	1.1
Washington .....	66	17,274	2.9	5.9	10.8	1.0
West Virginia .....	97	4,822	2.7	3.4	4.3	0.6
Wisconsin .....	380	19,462	3.5	6.0	10.2	1.0
Wyoming .....	23	2,409	4.8	6.0	8.3	1.2

<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 that involves the knowledge, use, recommendations, interpretation, or instructions in the use of one or more information sources by a member of the library staff.

<sup>3</sup>Excludes branches that are associated with a central library. Consists of 7,441 single-outlet libraries and 1,766 multiple-outlet libraries. Some single-outlet libraries are bookmobiles, and some multiple-outlet libraries consist of or include bookmobiles.

NOTE: Data include imputations for nonresponse. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Public Libraries Survey (PLS), fiscal year 2004, *Public Libraries in the United States: Fiscal Year 2004*. (This table was prepared September 2006.)

**Table 422. 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	100 <sup>3</sup>	96	98	99	96	98	98	99	99	99	97	94
2001.....	99	99	100 <sup>3</sup>	99	99	100 <sup>3</sup>	97	99	100 <sup>3</sup>	100 <sup>3</sup>	99	100 <sup>3</sup>	99	97
2002.....	99	99	100 <sup>3</sup>	99	100 <sup>3</sup>	100 <sup>3</sup>	99	100 <sup>3</sup>	98	98	98	100 <sup>3</sup>	100 <sup>3</sup>	99
2003.....	100 <sup>3</sup>	100 <sup>3</sup>	100	100	100 <sup>3</sup>	100	100	100 <sup>3</sup>	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)	(†)	(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)	(†)	(1.0)	(0.4)	(†)	(1)	(0.5)	(†)	(†)	(0.6)	(†)	(0.5)	(1.1)
2002 (standard error).....	(0.5)	(0.6)	(†)	(1.7)	(†)	(†)	(1)	(†)	(2.2)	(1.0)	(1.0)	(†)	(†)	(0.9)
2003 (standard error).....	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(†)	(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 422. 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)	(114)	(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)
<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

See notes at end of table.

**Table 422. 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
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)
Number of instructional rooms, <sup>3</sup> in thousands														
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)	(17)	(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)
Percent of instructional rooms <sup>4</sup> with access to the Internet														
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)

†Not applicable.

<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: Detail may not sum to totals because of rounding. Standard errors appear in parentheses. Standard errors for some years were not available.

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 423. 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>5</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 .....	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 .....	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 (0.22)	83.6 (0.34)	70.9 (0.61)	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 (0.23)	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 years 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)
<b>College</b> .....	<b>14,884 (181.2)</b>	<b>89.5 (0.37)</b>	<b>68.1 (0.56)</b>	<b>92.0 (0.34)</b>	<b>92.4 (0.34)</b>	<b>47.8 (0.63)</b>	<b>14.9 (0.45)</b>	<b>79.2 (0.51)</b>	<b>71.1 (0.57)</b>	<b>34.9 (0.60)</b>	<b>45.4 (0.63)</b>	<b>31.5 (0.59)</b>	<b>25.8 (0.55)</b>
<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 years 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 423. 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>5</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 years 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.....	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 years 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.....	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 years 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 years 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. Race categories exclude persons of Hispanic origin. 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 424. 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		Percent of home computer users using specific applications <sup>1</sup>									Household records/finances <sup>2</sup>		Games	
					Word processing	Connect to Internet	E-mail	Spreadsheets/databases <sup>2</sup>	Graphics/design <sup>2</sup>	School assignments <sup>3</sup>							
1	2	3	4	5	6	7	8	9	10	11	12	13					
<b>Total, age 3 and over</b> .....	<b>81,013 (600.0)</b>	<b>31.7 (0.16)</b>	<b>156,744 (954.0)</b>	<b>56.9 (0.16)</b>	<b>53.1 (0.22)</b>	<b>82.7 (0.17)</b>	<b>72.7 (0.19)</b>	<b>32.0 (0.23)</b>	<b>37.6 (0.24)</b>	<b>75.9 (0.29)</b>	<b>30.8 (0.22)</b>	<b>58.5 (0.22)</b>					
<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.....	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.....	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. Race categories exclude persons of Hispanic origin. 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 425. 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
				5	6	7	8	9	10	11	12
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>Total, all students .....</b>	<b>74,911 (312.9)</b>	<b>52,942 (286.3)</b>	<b>70.7 (0.24)</b>	<b>76.2 (0.27)</b>	<b>72.3 (0.28)</b>	<b>75.9 (0.27)</b>	<b>56.5 (0.31)</b>	<b>55.1 (0.32)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>— (†)</b>
Elementary/secondary.....	58,273 (324.9)	39,364 (282.0)	67.6 (0.30)	82.8 (0.30)	66.0 (0.37)	69.9 (0.36)	46.2 (0.39)	46.8 (0.39)	— (†)	— (†)	— (†)
Under age 5 .....	4,590 (105.0)	2,291 (74.6)	49.9 (1.16)	84.3 (1.19)	29.2 (1.49)	15.1 (1.17)	8.9 (0.93)	9.4 (0.96)	— (†)	— (†)	— (†)
Ages 5 to 9 .....	19,015 (206.6)	11,887 (166.1)	62.5 (0.55)	87.6 (0.47)	45.9 (0.72)	42.0 (0.71)	18.8 (0.56)	22.6 (0.60)	— (†)	— (†)	— (†)
Ages 10 to 14 .....	20,788 (215.0)	14,875 (184.5)	71.6 (0.49)	85.3 (0.45)	74.1 (0.56)	85.1 (0.46)	53.0 (0.64)	56.5 (0.64)	— (†)	— (†)	— (†)
15 years old or over .....	13,880 (165.7)	10,311 (144.2)	74.3 (0.54)	73.4 (0.64)	85.8 (0.50)	92.4 (0.38)	76.3 (0.61)	69.1 (0.66)	43.1 (0.71)	21.1 (0.59)	4.5 (0.30)
White .....	8,500 (131.6)	7,186 (121.4)	84.5 (0.57)	75.3 (0.74)	90.2 (0.51)	93.3 (0.43)	81.5 (0.67)	72.1 (0.77)	46.3 (0.86)	22.1 (0.71)	4.7 (0.36)
Black .....	2,164 (68.8)	1,073 (49.7)	49.6 (1.67)	73.5 (2.09)	73.6 (2.09)	90.3 (1.40)	60.7 (2.31)	59.0 (2.33)	38.9 (2.31)	15.9 (1.73)	3.5 (0.88)
Hispanic .....	2,298 (75.0)	1,280 (57.5)	55.7 (1.72)	68.2 (2.16)	72.0 (2.08)	87.8 (1.51)	60.8 (2.26)	59.9 (2.27)	30.0 (2.12)	18.2 (1.78)	6.1 (1.11)
Other .....	918 (45.9)	771 (42.2)	83.9 (1.88)	64.5 (2.68)	83.7 (2.07)	94.3 (1.30)	75.3 (2.41)	69.9 (2.57)	41.4 (2.75)	24.2 (2.40)	2.2 (0.82)
Undergraduate.....	13,370 (162.9)	10,701 (146.8)	80.0 (0.50)	60.5 (0.69)	89.6 (0.43)	92.8 (0.37)	84.8 (0.51)	77.1 (0.59)	46.5 (0.70)	36.8 (0.68)	21.4 (0.58)
White.....	8,964 (135.0)	7,551 (124.4)	84.2 (0.56)	60.8 (0.82)	91.1 (0.48)	93.0 (0.43)	86.5 (0.57)	78.7 (0.69)	48.9 (0.84)	37.8 (0.81)	21.1 (0.69)
Black.....	1,766 (62.8)	1,151 (51.4)	65.2 (1.76)	62.1 (2.22)	83.2 (1.71)	91.1 (1.30)	77.0 (1.93)	72.4 (2.05)	37.7 (2.22)	32.0 (2.13)	23.0 (1.93)
Hispanic.....	1,544 (62.7)	1,102 (53.6)	71.4 (1.91)	56.8 (2.47)	86.7 (1.69)	92.1 (1.34)	80.5 (1.98)	68.6 (2.32)	38.8 (2.43)	33.4 (2.35)	19.8 (1.99)
Other.....	1,095 (49.9)	898 (45.4)	82.0 (1.80)	61.5 (2.52)	89.5 (1.59)	94.0 (1.23)	86.3 (1.78)	80.3 (2.06)	47.3 (2.59)	39.4 (2.53)	23.7 (2.20)
Graduate.....	3,268 (66.0)	2,876 (64.1)	88.0 (0.83)	43.6 (1.35)	93.7 (0.66)	94.6 (0.61)	91.7 (0.75)	86.1 (0.94)	52.2 (1.36)	56.2 (1.35)	45.4 (1.36)
<b>Males.....</b>	<b>37,323 (253.4)</b>	<b>26,168 (219.6)</b>	<b>70.1 (0.35)</b>	<b>80.1 (0.36)</b>	<b>71.2 (0.41)</b>	<b>73.9 (0.40)</b>	<b>53.0 (0.45)</b>	<b>51.7 (0.45)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>— (†)</b>
Elementary/secondary.....	30,005 (252.4)	20,050 (211.6)	66.8 (0.43)	84.9 (0.40)	65.3 (0.53)	68.3 (0.51)	43.1 (0.55)	44.2 (0.55)	— (†)	— (†)	— (†)
Under age 5 .....	2,437 (76.9)	1,222 (54.6)	50.2 (1.59)	85.3 (1.59)	30.3 (2.06)	14.9 (1.60)	10.7 (1.38)	9.1 (1.29)	— (†)	— (†)	— (†)
Ages 5 to 9 .....	9,703 (150.9)	6,060 (120.3)	62.5 (0.77)	88.5 (0.64)	44.6 (1.00)	40.7 (0.99)	16.6 (0.75)	20.9 (0.82)	— (†)	— (†)	— (†)
Ages 10 to 14 .....	10,622 (157.5)	7,453 (132.9)	70.2 (0.70)	87.5 (0.60)	73.9 (0.80)	83.3 (0.68)	48.0 (0.91)	53.0 (0.91)	— (†)	— (†)	— (†)
15 years old or over .....	7,243 (121.9)	5,313 (104.9)	73.4 (0.76)	77.1 (0.84)	84.8 (0.72)	90.9 (0.58)	73.8 (0.88)	66.4 (0.95)	43.3 (0.99)	21.0 (0.82)	4.2 (0.40)
Undergraduate.....	5,902 (110.4)	4,859 (100.5)	82.3 (0.72)	68.6 (0.97)	89.7 (0.64)	91.7 (0.58)	84.0 (0.77)	75.1 (0.91)	50.2 (1.05)	37.6 (1.01)	22.3 (0.87)
Graduate.....	1,416 (54.7)	1,259 (51.6)	88.9 (1.22)	48.9 (2.06)	93.8 (0.99)	94.1 (0.97)	91.6 (1.14)	81.2 (1.61)	53.0 (2.05)	58.3 (2.03)	46.9 (2.05)
<b>Females.....</b>	<b>37,588 (254.1)</b>	<b>26,774 (221.7)</b>	<b>71.2 (0.34)</b>	<b>72.3 (0.40)</b>	<b>73.4 (0.39)</b>	<b>77.8 (0.37)</b>	<b>59.8 (0.44)</b>	<b>58.4 (0.44)</b>	<b>— (†)</b>	<b>— (†)</b>	<b>— (†)</b>
Elementary/secondary.....	28,269 (246.1)	19,315 (208.0)	68.3 (0.43)	80.7 (0.45)	66.8 (0.53)	71.6 (0.51)	49.4 (0.56)	49.5 (0.56)	— (†)	— (†)	— (†)
Under age 5 .....	2,154 (72.3)	1,069 (51.1)	49.6 (1.69)	83.2 (1.79)	28.0 (2.15)	15.3 (1.72)	6.8 (1.21)	9.8 (1.43)	— (†)	— (†)	— (†)
Ages 5 to 9 .....	9,312 (147.9)	5,827 (118.0)	62.6 (0.79)	86.7 (0.70)	47.1 (1.02)	43.3 (1.02)	21.0 (0.84)	24.4 (0.88)	— (†)	— (†)	— (†)
Ages 10 to 14 .....	10,166 (154.3)	7,422 (132.7)	73.0 (0.69)	83.1 (0.68)	74.4 (0.79)	86.8 (0.62)	57.9 (0.90)	60.0 (0.89)	— (†)	— (†)	— (†)
15 years old or over .....	6,637 (116.9)	4,997 (101.9)	75.3 (0.77)	69.6 (0.95)	86.7 (0.70)	94.0 (0.49)	78.9 (0.84)	71.8 (0.93)	42.9 (1.02)	21.3 (0.85)	4.9 (0.45)
Undergraduate.....	7,468 (123.7)	5,842 (109.9)	78.2 (0.70)	53.9 (0.95)	89.6 (0.58)	93.7 (0.47)	85.5 (0.67)	78.8 (0.78)	43.4 (0.95)	36.2 (0.92)	20.6 (0.77)
Graduate.....	1,852 (62.5)	1,617 (58.5)	87.3 (1.13)	39.5 (1.77)	93.5 (0.89)	95.1 (0.78)	91.8 (0.99)	90.0 (1.09)	51.5 (1.81)	54.5 (1.81)	44.3 (1.80)

—Not available.

†Not applicable.

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

NOTE: Estimates as of October 1. Race categories exclude persons of Hispanic origin. 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 426. 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 years old	5 to 9 years old	10 to 14 years old	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.....	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.....	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.....	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.....	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 426. 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>					
								Total	Under 5 years old	5 to 9 years old	10 to 14 years old	15 years old or over	College <sup>2</sup>
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 .....	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 .....	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. Race categories exclude persons of Hispanic origin. 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 427. 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>																		
					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>Total</b> .....	<b>45.8</b>	<b>49.4</b>	<b>(0.24)</b>	<b>56.1</b>	<b>(0.19)</b>	<b>76,570</b>	<b>64.4</b>	<b>(0.30)</b>	<b>75.4</b>	<b>(0.27)</b>	<b>57.0</b>	<b>(0.31)</b>	<b>29.7</b>	<b>(0.29)</b>	<b>16.4</b>	<b>(0.23)</b>	<b>67.8</b>	<b>(0.29)</b>	<b>8.2</b>	<b>(0.17)</b>	<b>45.3</b>	<b>(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> .....	40.3	44.1	(0.31)	50.5	(0.25)	36,976	67.2	(0.42)	77.7	(0.37)	58.6	(0.44)	33.8	(0.42)	21.4	(0.37)	65.6	(0.43)	7.8	(0.24)	48.8	(0.45)	
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> .....	52.4	56.5	(0.32)	62.5	(0.24)	39,594	61.7	(0.42)	73.3	(0.38)	55.5	(0.43)	26.0	(0.38)	11.8	(0.28)	69.8	(0.40)	8.6	(0.24)	42.2	(0.43)	
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.....	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.....	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 427. 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...	[?]	[?]	(?)	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...	[?]	[?]	(?)	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 .....	[?]	[?]	(?)	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 data.

<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. Race categories exclude persons of Hispanic origin. 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.)