Colorado Public Libraries & the "Digital Divide" 2002



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Public libraries in Colorado are bridging the technology gap that is symptomatic of the "digital divide." The availability of technology in public libraries fulfills a highly demanded patron need spanning all demographic groups. "The rate of growth of Internet use in the United States is currently two million new Internet users per month.... Internet use is increasing for people regardless of income, education, age, races, ethnicity or gender."¹ The technology *have-nots* are not just the poor and under-educated. People from all walks-of-life rely on the Internet access provided by public libraries. This survey shows that library patrons are teaching themselves new technology skills, communicating on a global level, and accessing online information regarding education, health, employment and volunteer opportunities. As a result, they are able to improve their personal quality of life and that of their communities.

Technology in public libraries spans all demographics and fulfills a highly demanded patron need.

Of responding public library Internet users:

- **84** % indicated that the availability of computers in the library was one of the reasons for visiting the library that day.
- **34** % have no other access to the Internet except through public Internet computers.
- **60%** of those under age 18 use public Internet computers to work on school assignments.
- **49%** use the public Internet computers for Internet access more than once a week.
- **24** % of the people indicating the use of the public Internet computers more than once a week were below poverty level.
- **42%** of those who use library computers more than once a week, have a bachelor's degree or higher.

Technology have-nots are not limited to the poor or under-educated.

Of responding public library Internet users:

- Men (53%) only slightly outnumber women (47%) in their use of public library Internet access.
- **67%** of respondents indicated college level course work and higher.
- **50%** of those who rely on Internet access through the public library were between 30 and 54 years of age.
- 71% of survey participants reported no minor children living at home.

¹ U.S. Department of Commerce. (2002) <u>A Nation Online: how Americans are expanding their use of the Internet.</u> Washington, D.C. page 1, executive summary.

Public library Internet users are teaching themselves new technology skills, communicating on a global level, and accessing online information on a wide variety of topics. With access to online information about education, health, employment and volunteer opportunities, they are improving their quality of life and that of their communities.

Of responding public library Internet users:

- **72%** identified searching for topic-specific information as their primary activity at public Internet computers.
- **38%** have used public Internet computers to look for a job.
- Patrons who improved their income via public Internet computers were twice as likely to be young adults between the ages of 18 and 29, the majority of whom made below \$18,000 annually and were predominantly male.
- **38**% of those working on college assignments were minorities; of those people, **21**% were Hispanic.
- **49%** of those seeking educational opportunities using public Internet computers were female.
- Colorado's youth were twice as likely as any other age group to use public Internet access to find volunteer opportunities. Example: **13**% of those people under 18 versus **6**% of patrons ages 30 –54 and **4**% of patrons 55 and older.
- **20%** of respondents spent time seeking health related information on public Internet computers.
- **62%** seeking health-related information were female.

Introduction

This report provides insights into how Coloradans are aided by public libraries in using information technology and how their lives are changed by access to online information. The findings are based on a sample survey of over 1,900 patrons of public libraries throughout the state. The data in this study provide a broad view of public library Internet use in Colorado both overall and for selected demographic groups.

Data on this topic is a valuable tool for public policy-makers. The Internet is becoming a primary—in some cases, the only--access point to a wide variety of government services, educational materials, health resources, communication tools and commercial activities. As more and more information becomes available only online, public Internet access becomes ever more important to ensure equal access to information for all segments of society. Outcome data helps to determine who relies on such access and how it impacts the lives of individual Coloradans as well as their communities.

This information should be useful to a wide variety of policymakers and service providers acting in the public interest. These data show that the state's public libraries have an impact on the community and provide a needed service. This service ensures equal access for all Coloradans to the advantages and opportunities available via the Internet.

Methodology

This report analyzes data from an April 2002 survey of public library Internet users conducted by the Library Research Service, a unit of the Colorado State Library and the Colorado Department of Education operated in partnership with the Library and Information Services Program of the University of Denver's College of Education. Due to extra responses beyond targeted figures, the survey's response rate exceeded 100 percent. The results were weighted to take this into account.

The survey design included outcome-based questions in order to understand the impact of Internet access provided by public libraries. Questions addressed: patron's Internet experience, points of access, newly acquired skills, styles of learning, frequency of use, online activities and overall effectiveness.

Each public library received a number of survey forms based on the size of its legal service area population. Libraries serving 10,000 or more people were sent 75 surveys with a target of 25 returns. Libraries serving populations less than 10,000 were sent 30 surveys with a target of 10 returns. Valid returns were received from 1,856 users of Internet computers in Colorado public libraries. Returns from 60 respondents who indicated that they do not use public library Internet computers were excluded from this analysis. The following table reports the number of completed surveys returned by libraries serving different size populations as well as the sub-totals of the state's legal service area population those returns were weighted to represent.

Public Library Universe and Survey Sample by Population of Legal Service Area

Libraries by population of	Sample	Sub-total of population
legal service area	Return	of legal service areas
100,000 or more	539	3,073,146
25,000-99,999	442	547,084
10,000-24,999	381	335,229
5,000-9,999	102	86,637
2,500-4,999	184	81,724
1,000-2,499	170	31,062
Less than 1,000	38	7,400
Total	1,856	4,162,282

The survey of library Internet users was handed out by library staff to adults and young adults (high school age or older.) The participating libraries were instructed to distribute the survey throughout the library covering all service areas. The surveys were to be handed out on two different days divided evenly between morning, afternoon and evening patrons. Survey responses were cross-tabulated by income, sex, age, race, and education level.

Overview

Social factors such as income, education and race/ethnicity foster the "digital divide." The relationship between Internet access and these factors has been documented in *Falling Through the Net* ² a series of studies from the National Telecommunications and Information Administration. The people most likely to be excluded from electronic access are people making less than \$20,000 per year, Blacks and Hispanics, the unemployed, the elderly, people with disabilities and people in rural communities.

Surveys done since 1998 conclude that libraries have been able to increase online access to multimedia information through discounted telecommunications rates (i.e., E-rates), Library Services and Technology Act grants, Gates Library Foundation awards, and local resources. Libraries have been able to upgrade their infrastructures and expand their network services throughout urban and rural areas. Public Internet access expands the types of services and collections available from libraries in smaller, poorer, and more isolated areas. It also encourages partnerships between those libraries and other cultural institutions and technology organizations. All of these forces working together bridge the digital divide.

Findings of this survey are consistent with those of previous federal studies. The Colorado study shows that the digital divide affects all income, education, age and racial/ethnic groups. The first part of this report examines the responses to each question and highlights the significant findings. The second section looks at the cross tabulation of race / ethnicity, age, education, and Internet use for respondents below poverty³ level. The survey questionnaire is appended along with a list of all participating libraries.

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http://www.ntia.doc.gov/

Census Bureau Poverty Guidelines. Family of 2 - \$11,940; Family of 4 – 18,100 http://aspe.hhs.gov/poverty/02poverty.htm

1) How many years have you been using the Internet?

Less than 1
year
13.7%

years
34.6%

1 -2 years
17.5%

3 - 5 years
34.2%

Figure 1.1 - Years of Internet Use - Overall

• **34.2**% of Internet patrons indicated **3 –5 years** of Internet use. (See Figure 1.1)

Significant demographic factors found in response to years of Internet use were...

Age:

 Of all age groups, respondents ages 18-29 were most likely to report more than 5 years of Internet experience.

Race / Ethnicity:

• Out of all respondents, Black and Hispanic Internet patrons had less experience with the Internet. **19**% of Black people indicated less than one year of use and **42**% of Hispanic people, two years or less.

Education:

• Internet patrons with more than five years of Internet experience were more likely to be college graduates. 52% of respondents using the Internet more than five years had a Bachelors degree compared to 6% of those people without high school diplomas

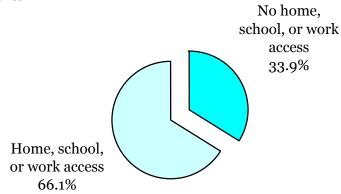
Income:

• Internet patrons with less than a year of Internet experience were more likely to have low incomes. **30%** of this group earn **less than \$12,000** a year compared with only **10%** who earn **\$50,000** or more.

Gender was not found to significantly affect years of Internet use.

2) Please rank the following locations based on how often you use the Internet at each location.

Figure 1.2 Access to the Internet Beyond the Library Overall



• **33.9**% of the survey respondents indicated that the library was the only place used to access the Internet. (See Figure 1.2)

Significant demographic factors found in response to Internet access through public libraries compared to other possible locations were...

Age:

Public libraries provide the only access to the Internet for a substantial portion of every age group of library Internet users. 15% of those under 18, 34% of those between 18 – 54, and 50% of those 55 and older rely on public library for Internet access.

Education:

• **33**% of library patrons relying on public libraries for access to the Internet have a **Bachelors degree or higher.**

Income:

• Of respondents without other Internet access, **33**% have incomes **below \$12,000**; only **11**% have incomes of **\$50,000** or **more**.

Race/ethnicity:

• **Hispanic** respondents were **less likely to have access** to the Internet other than at the library than African-Americans, Asians/Pacific Islanders, and American Indians (almost a third versus one out of five).

Gender was not found to significantly affect the dependency on library access to the Internet.

3) Is the availability of computers in the library one of the reasons you visited the library today?

• **84**% of responding library Internet users said **yes**.

Gender:

• **Men** were slightly **more likely than women** (87% versus 81%) to report visiting the library that day because computers were available.

Education:

• Nine out of 10 Internet patrons with a bachelor's degree or more (88.4%) said the availability of computers in the library was a reason for visiting that day. Eight out of 10 Internet patrons with less education (81-82%) said that. This is a significant—if questionably meaningful—difference.

Income:

• **25%** of people who visited libraries because of computer availability were **below poverty level**.

Age and **race** did not influence this reason for visiting the library.

4) Which of the following technology skills have you acquired via the library?

Online search 58.9% strategies New Technology Skill 43.3% **Email** Word-19.5% processing Web 10.5% development 0.0% 25.0% 50.0% **75.0**%

Figure 1.3 - Developing New Technology Skills Overall

- **62%** of all respondents **improved their search strategies.** (See
- 45% of all respondents improved their email skills. (See Figure 1.3)

Percent of Respondents

Significant demographic factors found to influence types of technology skills learned through public libraries were...

Age:

Figure 1.3)

- 26% of respondents under the age of 18 were improving word processing skills via the library.
- 22% of respondents under the age of 18 used public Internet computers to work on web development skills, twice as much as any other age group.

Race:

- Two-thirds of all minority respondents improved search strategies.
- 52% of Hispanic respondents improved email skills.
- 35% of Black respondents improved word processing skills, twice the amount of white respondents.

 23% of Black respondents used public access computers to improve web development skills, nearly three-times more than white respondents.

Education:

 People with a **Bachelors degree or higher** were the **least likely** to improve or acquire new search, email, word processing, or webdevelopment skills through the library.

Income:

- 31% of those people improving email skills were below poverty level.
- **27**% of respondents improving **word processing** skills at the library were **below poverty level. 14**% of those respondents made **over \$50,000**.

Gender had no significant impact on the types of new technology skills learned at public library computers.

5) How did you acquire the skills marked in the previous question?

Self taught
Staff help
Library course
Other

11.1%

0%
25%
50%
75%

Percent of Respondents

Figure 1.4 - How Library Patrons Learn New Skills

- Overall, 62% of Internet patrons acquire new technology skills through self-teaching at public access computers. (See Figure 1.4)
- **Staff assistance** is used to learn new skills nearly **20%** of the time. (See Figure 1.4)

Significant demographic factors found to influence how people learn new technology skills at the library were...

Age:

- Internet patrons age **55 and older** are **3 times as likely** as younger patrons **to learn** new technology skills **through a library course**.
- Those **age 55 and older** are **twice as likely** to learn new technology skills with **staff assistance** than those **under age 30.**

Race:

• **18% of Asian Pacific Islanders** utilized **library courses** to acquire new skills, **2 – 3 times more** often **than any other group**.

Education:

- As educational attainment increases, patrons were more likely to ask staff for help or enroll in a library computer course.
- Of those patrons **lacking high school diplomas**, **68%** indicated that new technology skills were **self-taught** (learned without staff assistance) compared to **50%** of those with a **bachelor's degree or higher**.

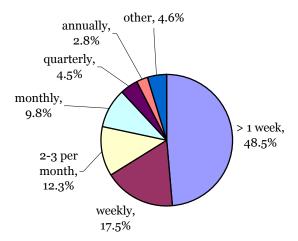
Income:

• 11% of respondents learning new skills through a library course are below poverty level.

Gender had no significant impact on how new technology skills were learned at public libraries.

6) How often do you use public Internet computers for Internet access?

Figure 1.5 Frequency of Library Computer Use Overall



• **Almost half** of responding library Internet patrons use public Internet computers **more than once a week.** (See Figure 1.5)

Significant demographic factors found to influence how frequently people use Internet computers at the library were...

Gender:

• Both men and women were likeliest to report using public Internet terminals more than once a week. But men (54%) were more likely than women (43%) to give this response.

Age:

As age increases frequency of use increases. 53% of those respondents ages 30-54 use public Internet computers more than once a week, 45% of people 18 -29 and 37% for people 18 and under.

Education:

• **42%** of the respondents using public Internet computers more than once a week have a **bachelor's degree or higher**.

Income:

• **46%** of the respondents **below poverty level** use public terminals to access the Internet **more than once a week**.

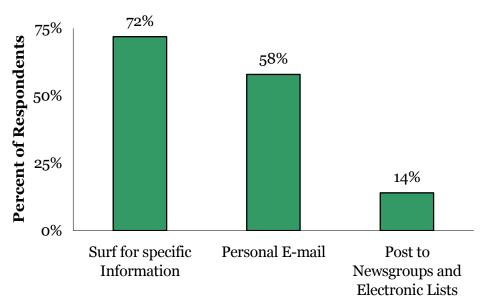
Race/ethnicity:

 White and Hispanic respondents were more likely than African-American respondents to utilize public Internet terminals more than once a week.

7) As a result of my recent use of the library I was able to...

- > 72% Look for information on a specific topic
- > **58%** E-mail
- **48%** Surf the web
- > 39% Stay in touch with someone
- > 38% Look for a job
- ➤ **20%** –Seek educational opportunities
- **20%** Find health related information for self, friend, or relative

Figure 1.6 - General Information Survey Results



General Information Use

- Searching for topic-specific information was the most common activity at public Internet computers. (See Figure 1.6)
- Posting to newsgroups, bulletin boards and electronic lists was the least common general information activity. Only 14% of overall respondents reported it. (See Figure 1.6)

8) Were you able to locate the information you were seeking online?

85% of responding library Internet users indicated that they were successful in locating needed information online.

Race / ethnicity, age, education and income are inter-related factors that influence how the Internet is used in public libraries. Gender differences are minimal and will be excluded from this report since they add little to the overall picture. A single demographic factor cannot account for variations in the activities addressed here. Each factor changes the user need, the level of use, and the impact this service has on Colorado communities. Examining library Internet users according to race and ethnic background helps to portray the needs and uses of different cultural communities. This report will look at the three largest respondent communities, White, Hispanic, and Black.

Internet activities for White respondents (74.3% of responding Internet patrons)

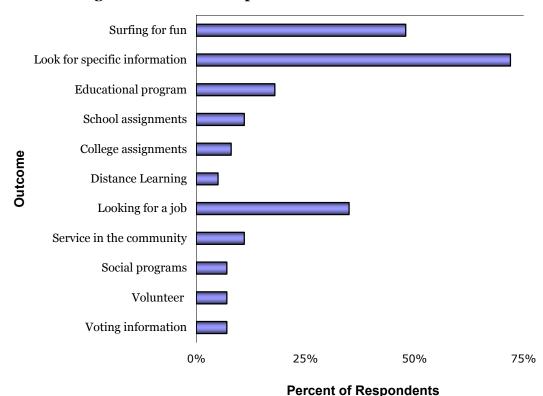


Figure 2.1 - White Respondents - Internet Activities

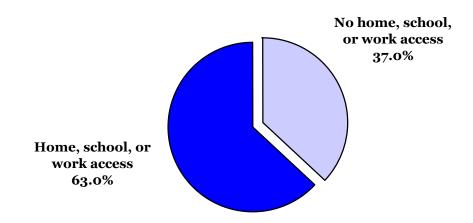
Of White respondents:

- **72%** search the web for specific information
- **48%** surf the web for fun
- **36%** look for employment
- **18%** look for educational programs
- 10% look for services in the community
- 11% work on or complete a school assignment
- 8% work on or complete a college assignment

- **8%** find volunteer opportunities
- 7% locate information about candidates and issues for voting
- 7% look for information on social programs
- **6%** participate in distance learning

85% of White respondents indicated that the computers were one of the reasons for visiting the library that day. **60**% were able to learn or improve Internet **search strategies** at public computers. **19**% learned new technology skill through **staff assistance**.

Figure 2.2 - White Respondents Internet Access Beyond the Library



Over one-third (37%) of responding White Internet patrons indicated the public library was their **only source for Internet access.** (See Figure 2.2)

Internet activities for Hispanic respondents (14.7% of responding Internet patrons)

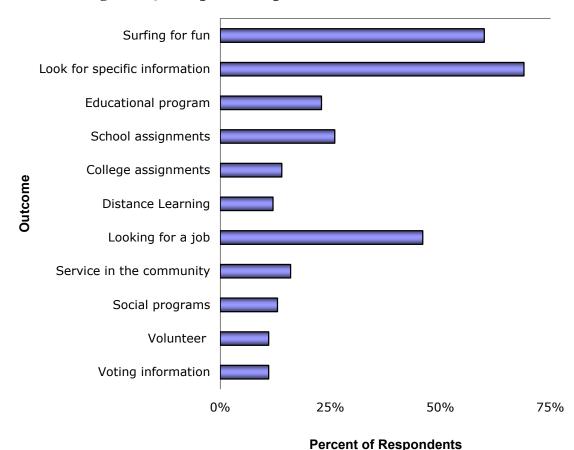


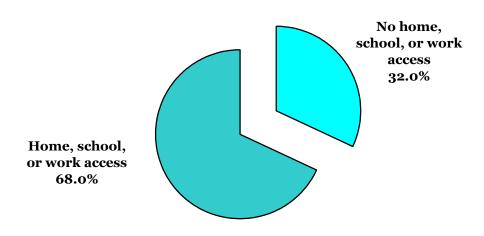
Figure 2.3 - Hispanic Respondents - Internet Activities

Of Hispanic respondents:

- **69%** search the web for specific information
- **60%** surf the web for fun
- 47% looking for employment
- **26%** work on or complete a school assignment
- **23%** look for educational programs
- **17%** look for services in the community
- 14% work on or complete a college assignment
- **14%** look for information on social programs
- 12% participate in distance learning
- 11% locate information about candidates and issues for voting
- **11%** find volunteer opportunities

80% of Hispanic respondents indicated that the computers were one of the reasons for visiting the library that day. **65**% improved **search strategies**, **51**% improved or learned **email skills**, and **26**% worked on **word processing** skills, at public library computers. Only **13**% learned new skills through **staff assistance** and **5**% through **library courses**. This might indicate a patron need for bi-lingual assistance in technology areas.

Figure 2.4 - Hispanic Respondents Internet Access



Nearly one-third (32%) of responding Hispanic Internet patrons indicated the public library was their **only source for Internet access**. (See Figure 2.4)

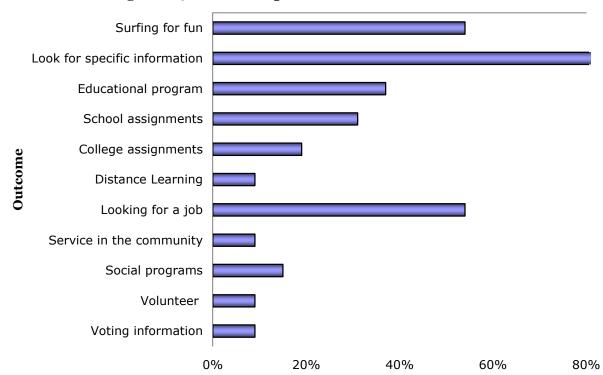


Figure 2.5 - Black Respondents - Internet Activities

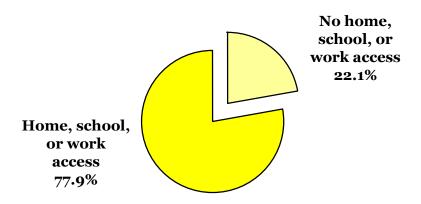
Percent of Respondents

Of Black respondents:

- **81%** search the web for specific information
- **54%** look for employment
- **49%** surf the web for fun
- 37% look for educational programs
- **31%** work on or complete a school assignment
- 19% work on or complete a college assignment
- **15%** look for information on social programs
- **9%** look for services in the community
- **9%** participate in distance learning
- **9%** find volunteer opportunities
- 9% locating information about candidates and issues for voting

81% of Black respondents indicated that the computers were one of the **reasons for visiting the library that day**. **68%** were able to improve **search strategies**. **35%** improved **word processing** skills. **31%** worked on **email**. **24%** improved or learned **web development** at public library computers. **16%** learned these new technology skills **through staff assistance**.

Figure 2.6 - Black Respondents Internet Access Beyond the Library



More than one out of five responding Black Internet patrons (22%) indicated the public library was their only source for Internet access. (See Figure 2.6)

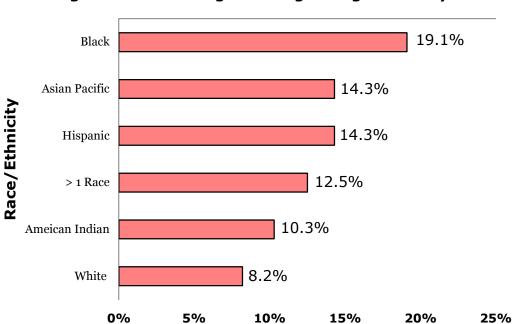


Figure 2.7 - Working on college assignments by race

Percent of Respondents

- 36% of all respondents working on college assignments were minorities.
- 19% of **Black respondents** use public Internet computers to **complete college assignments**, more than twice as much as white respondents. (See Figure 2.7)

For charts of all Internet activities by activity type and race / ethnicity refer to **Appendix A**.

Age affects how long you have been using the Internet, how often and for what purpose.

- 43% of Internet patrons 18 to 29 years old indicated more than 5 years of Internet use. Only 23% of those under 18 and 27% of those 55 and older indicated the same level of experience.
- As age increases frequency of use increases. 53% of respondents ages 30-54 use public library computers more than once a week compared with 46% of respondents 18 -29, and 37% of those under 18.

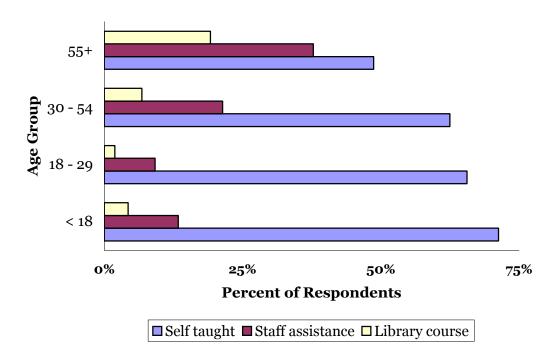
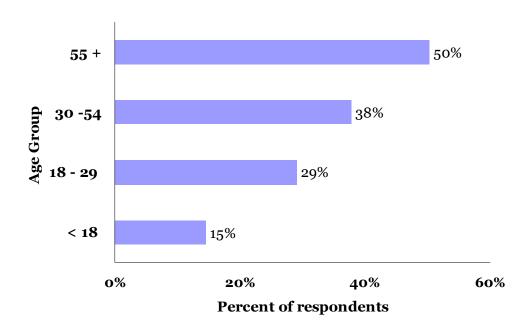


Figure 3.1 - How New Skills are Learned by Age

- While most library Internet users are self-taught, those age 55 and older are more likely to learn new skills through library courses and more likely to use staff assistance than any other age group. (See Figure 3.1)
- **60%** of respondents **under the age of 18** use public Internet computers to work on **school assignments**.

- 11% of respondents age 55 and older used the Internet to improve their health compared with 4% of people ages 18 to 29 and 6% for those under 18.
- Respondents **under the age of eighteen** are **twice as likely to listen to music** online as older respondents. Example: **22**% of people **under 18** listen to music at library terminal versus **10**% of people between **18 and 29**.

Figure 3.2 - No Home, School, or Work Access to the Internet by Age



As mentioned earlier public libraries provide the only Internet access for a substantial portion of every age group of library Internet users. (See Figure 3.2) Older Internet patrons with less computer experience rely on Internet access through public libraries, staff assistance and library courses more than any other group. This might suggest that people age 55 and older use public library technology more than any other age group because of the help available.

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Educational level impacts how long people have been using the Internet and the activities that they engage in at public library terminals.

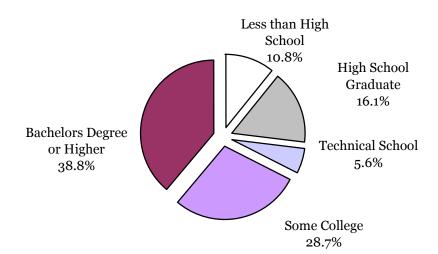


Figure 4.1 - Educational Levels Overall

Of responding library Internet users

- 39% have a bachelors degree or higher
- 29% indicate some college
- 6% have attended a tech school
- 16% are high school graduates
- 11% have less than high school education
- 47% of all respondents with a bachelors degree or higher have been using the Internet more than 5 years. 20% of people without a high school diploma, 26% of high school graduates, and 32% of respondents indicating some college had comparable levels of experience.

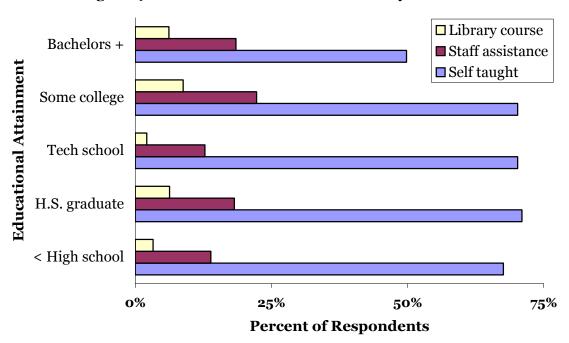


Figure 4.2 - How New Skills are Learned by Education

- As educational attainment increases, patrons are more likely to ask staff for help or sign up for a library course. (See Figure 4.2)
- Two-thirds of Internet patrons without high school diplomas are self-taught new technology skills compared to half of those with bachelors degree or higher. (See Figure 4.2)

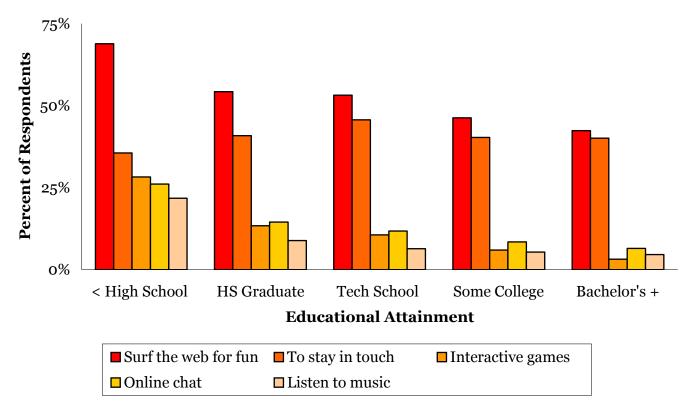


Figure 4.3 - Recreational Use by Education

Education affects what library patrons do with Internet time. **69**% of Internet patrons **without high school diplomas surf for fun**, while only **42**% of people with **bachelor's degree or higher do so. Online chat** at public Internet computers is **2-3 times more likely** for people who **didn't go to college**. Interactive gaming and streaming music also declines when education increases. (See Figure 4.3)

- 44% of those **looking for a job** via public Internet computers have a **bachelor's degree or higher.**
- 45% of people using public Internet computers to locate services within the community had a bachelor's degree or higher.

This suggests that increased education can lead to more focused use of the Internet at public library computers.

Income

Descriptive statistics do not suffice to explain completely why one group of individuals has higher or lower rates of computer use and Internet use. Two things that appear to influence Internet activity are income and level of education. *A Nation Online: How Americans Are Expanding Their Use of the Internet*, reports that education and income have independent effects on Internet use. "People who have lower education but live in households with high family incomes are less likely to be Internet users than those who have high levels of education and live in households with low family income." One out of four Colorado respondents was below poverty level. Costs of hardware, software licensing, and network capabilities are still very high and one of the obvious elements of digital exclusion. Responding to this need is one of the most important aspects of digital inclusion.

- 53% of responding Internet patrons making less than \$12,000 annually improved e-mail skills through library access.
- Most recreational Internet use at public Internet computers is directly affected by income and education. Once income exceeds \$25,000, most recreational uses of the Internet decline markedly. (See Figure 5.1)

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⁴ National Telecommunications and Information Administration and Economics and Statistics Administration. (2001) <u>A Nation Online: How Americans are expanding their use of the Internet</u>. Washington, D.C.

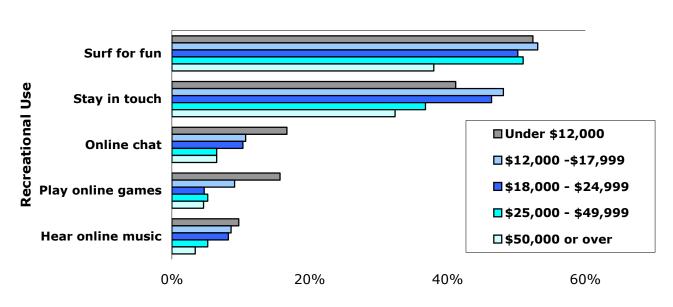


Figure 5.1 Recreational use by income level

Percent of Respondents

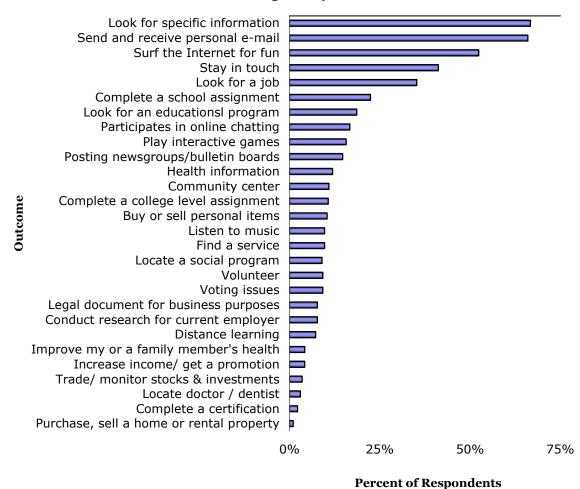
Poor respondents use the **Internet for recreation** more than any other group. **52% surf the web for fun. 17% participate in online chat, 16% play interactive games,** and **10% listen to music.** (See Figure 5.1)

- **27**% of respondents using public Internet computers to **stay in touch** with someone were **below poverty level**.
- **66% of poor** respondents use public Internet computers to **send and receive e-mail**, more than any other income group. This would indicate that e-mail is a growing form of communication for people with lower incomes.
- **22%** of poor respondents used the public Internet computers to **complete a school assignment.**
- 44% of respondents **looking for educational programs** on public library computers have annual **incomes less than \$18,000.**
- 29% of respondents using public library terminals for distance education were below poverty level.

- 23% of Internet patrons who looked for a job were below poverty level.
- 25% of those looking for community services were below poverty level.
- 27% of those looking for volunteer opportunities were below poverty level.
- 28% of those seeking information on social programs were below poverty level

Poor people in Colorado are taking advantage of the resources offered online; however, like most people using public Internet access they are unlikely to ask for staff assistance or enroll in a library course. The majority of poor respondents use the Internet to look for information, surf for fun, as a means of communication, and to look for employment. (See Figure 5.2) Well-trained and knowledgeable library staff regarding current online resources for, economic, and social improvement will help to maximize the usefulness of public Internet computers.

Figure 5.2 - Internet use for respondents below poverty level



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Conclusion

Computers and the Internet are vital parts of everyday life. They provide a doorway to information on a global level and expand the reach of every community. Ensuring each community member access to electronic resources and developing the technical skills to participate in the global economy are important contributions of public libraries to their communities and to the state.

Colorado public libraries provide 2,297 computers for public use, of which 1,492 provide Internet access, costing \$2,576,885 annually. Internet access through public libraries is an active step in bridging the "Digital Divide." Community members who would otherwise continue to lag behind are taking advantage of this public resource. More than two-thirds of the library Internet patrons polled have no other access to the Internet except through public Internet computers. Coloradans from all demographics rely on Internet access at public libraries. They are learning new technology skills from library staff members and library courses as well as teaching themselves and learning from friends and family.

As education and income rise, use of the Internet also rises, leading to increased access to global information. Properly trained library staff will increase awareness to valuable online resources and help the technologically disadvantaged form new skills that can be used daily in an information age. By providing public access to the Internet, Colorado public libraries are fulfilling a mission to "Give instruction unto those who cannot procure it for themselves." (*Confucius*)

Stay-n-touch

Music

Interactive games

Online chat

Surf for fun

0%

25%

50%

75%

■ American Indian ■ Asian/Pacific Islander ■ Black ■ Hispanic ■ White

Figure 6.1 - Recreational activities



Percentage within race / ethnicity

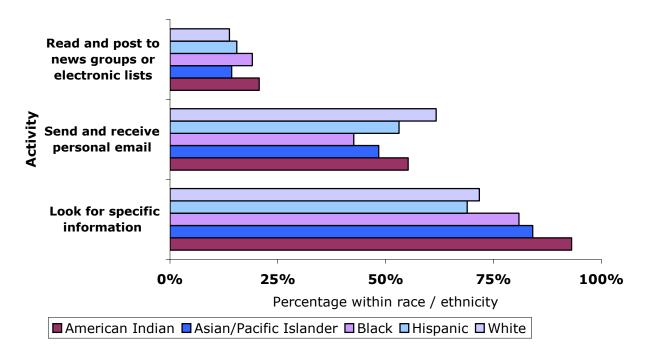


Figure 6.3 - Education

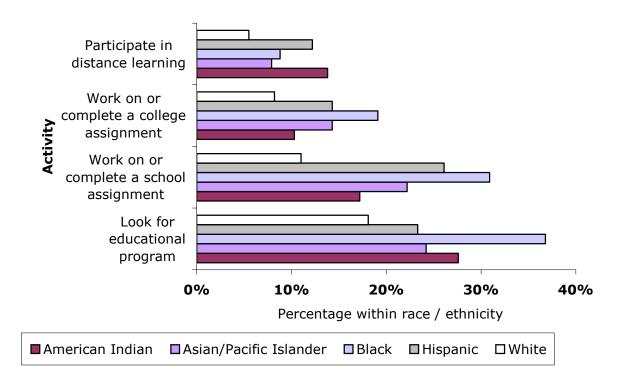


Figure 6.4 - Business / Career

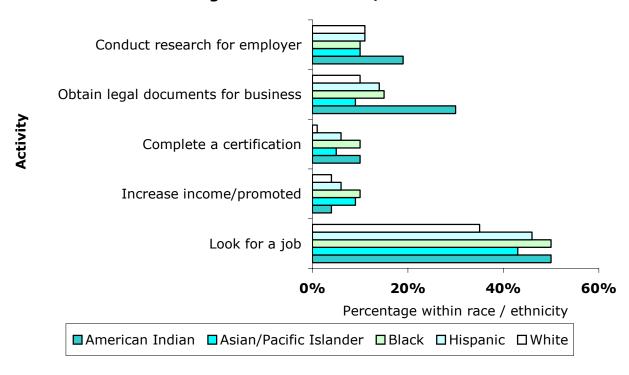


Figure 6.5 - Consumer / Personal Finance

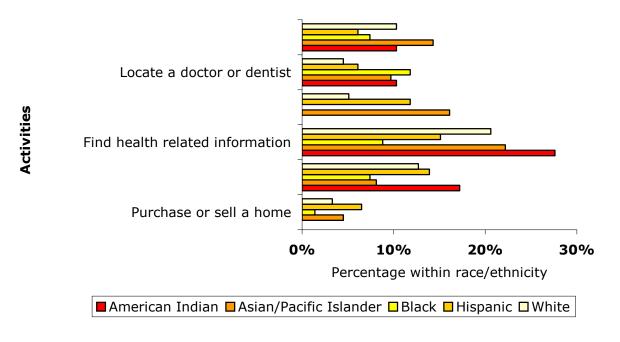
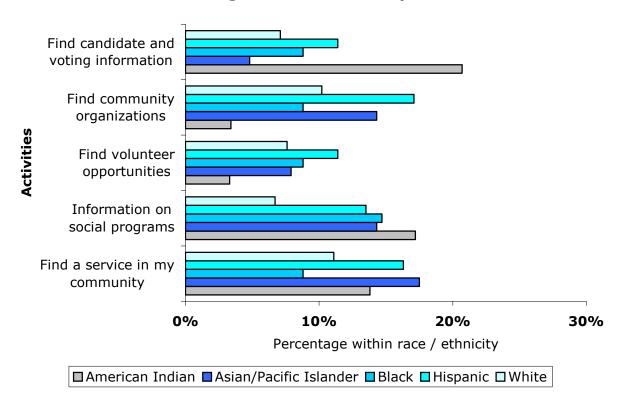


Figure 6.6 - Community



Participating Public Libraries

Library	City
Adams County Library System	Thornton
Aguilar Public Library	Aguilar
Alamosa/Southern Peaks Public Library	Alamosa
Arapahoe Library District	Littleton
Aurora Public Library	Aurora
Baca County Public Library	Springfield
Basalt Regional Library District	Basalt
Berthoud Public Library	Berthoud
Boulder Public Library	Boulder
Broomfield/Eisenhower Public Library	Broomfield
Canon City Public Library	Canon City
Conejos County Public Library	La Jara
Cortez Public Library	Cortez
Craig-Moffat County Library	Craig
Delta County Public Library District	Delta
Denver Public Library	Denver
Dolores County School/Public Library/Dove Creek	Dove Creek
Dolores Library District/Montezuma County	Dolores
Douglas Public Library District	Castle Rock
East Cheyenne County Library District	Cheyenne Wells
East Morgan County Library District/Brush	Brush
East Routt Library District	Steamboat Springs
Englewood Public Library	Englewood
Fleming Community Library	Fleming
Florence Public Library	Florence
Fort Collins Public Library	Fort Collins
Fort Morgan Public Library	Fort Morgan
Garfield County Public Library System	New Castle
Gilpin County Library District	Black Hawk
Grand County Library District	Granby
Haxtun Public Library	Haxtun
Hugo Public Library	Hugo
Jefferson County Public Library	Lakewood
Kiowa County Public Library District	Eads
La Veta Public Library District	La Veta
Lake County Public Library	Leadville
Lamar Public Library	Lamar
Littleton/Bemis Public Library	Littleton

Library	City
Longmont Public Library	Longmont
Louisville Public Library	Louisville
Loveland Public Library	Loveland
Lyons Depot Library	Lyons
Mancos Public Library District	Mancos
Manzanola School/Public Library	Manzanola
Mesa County Public Library District	Grand Junction
Ouray Library District	Ouray
Park County Public Library	Bailey
Penrose Library District	Penrose
Pikes Peak Library District	Colorado Springs
Pueblo City-County Library District	Pueblo
Rio Grande Library District	Monte Vista
Rocky Ford Public Library	Rocky Ford
Saguache County Public Library	Saguache
San Miguel Library District #1/Telluride	Telluride
Security Public Library	Security
Silverton Public Library	Silverton
Southern Teller County School/Public Library District	Cripple Creek
Stratton Public Library	Stratton
Summit County Library	Frisco
Trinidad/Carnegie Public Library	Trinidad
Upper San Juan Library District	Pagosa Springs
Weld Library District	Greeley
Wellington Public Library	Wellington
West Custer County Library District	Westcliffe
West Routt Library District/Hayden	Hayden
Westminster Public Library	Westminster
Windsor-Severance Library District	Windsor

A Survey of Users of Public Access Internet Computers in Colorado Public Libraries

Please take a minute or two to help us learn how often you utilize public access Internet computers at the library, how the library has helped you to improve your Internet skills, and how use of these computers makes a difference in your life.

1)	How many years have you been using the Internet? (Mark one.)							
		Less than 1 year	☐ 1 – 2 years		□ 3-5	years	☐ More than 5 years	
2)							the Internet at each location: (1 = the location is a rely or never used location.)	пе
	Hor Cyb	me per café	Work Laptop/notebook	no specif	School _ ic location	on)	Library	
	Oth	er—Please specify loc	ation:					
3)	Is the availability of computers in the library one of the reasons you visited the library today?							
							☐ Yes ☐ No	
4)	Wh	ich of the following n	ew technology sk	ills have	you acc	quired	via the library? (Mark all that apply.)	ı
		Online search strategie Web development		□ E-mai □ Word-			nce	
5)	How did you acquire the skills marked in the previous question? (Mark all that apply.)				(Mark all that apply.)			
		On your own Through a library cours					assistance fy:	
6)	How often do you use public library terminals for Internet access? (Mark one.)							
		More than once a weel Weekly 2 – 3 times per month		☐ Month☐ Quarto☐ Annua	erly	□ Otl	her – Please specify:	
7)	As a result of my recent use of the Internet at this library I was able to (Check all that apply.)							
		Recreat	ion		Cons	umer/F	Personal Finance	
		Surf the Internet for fur. Participate in online of Play interactive game Listen to music. Stay in touch with some wouldn't be possible. General Information Surf the web for information Send and receive per Read and post to new or electronic lists. Education Work on or complete Work on or complete work on or complete assignment. Participate in a distan Business/	hatting. s. neone that otherwis rmation mation on a specific sonal e-mail. rsgroups, bulletin b ion al program. a school assignme a college level ce learning activity	c topic. oards, nt.	Comm	I Buy I Find rela I Imp I Loc I Trac nunity I Find Mea I Loc proc star hou I Find I Loc othe	d a service in my community such as d/elder care facility, public transportate als on Wheels, etc. eate information concerning social grams; such as applying for Medicaid mps, Kids in Need of Dentistry, or secusing. d volunteer opportunities. eate community center, church, club, cer community-based organization.	d, a d, a its. tion, food tion 8
		Look for a job. Increase my income/g Complete a certificatio Obtain legal documen purposes.	on.	ness			ate information about candidates and ues before voting.	(over)

□ Conduct research for current employer.

8)	Were you abl	e to locate the information you were seeking online?			
9)	9) Were you able to find information on the Internet that was unavailable from traditional library sources? (Example of traditional sources might include: Books, magazines, newspapers, reference books, etc.) o Yes o No				
		About You			
		(Mark one in each box.)			
Age Gro	Age Group: ☐ Under 18 ☐ 18–29 ☐ 30–54 ☐ 55 and older				
Education:		☐ Less than high school ☐ High school graduate ☐ Some college			
		☐ Technical school ☐ Bachelor's degree or higher			
Gender:		☐ Male ☐ Female			
Number	of minor ch	Idren (under age 18) in your home (enter number):			
ncome	Level:	□ Under \$12,000 □ \$12,000–17,999 □ \$18,000–24,999			
		□ \$25,000–49,999 □ \$50,000 or over			
Race/Et	hnicity:	□ American Indian/ Alaskan Native □ Asian/Pacific Islander			

■ White

□ Black □ Hispanic

Athena Alliance. (2002) Extending the Information Revolution. Born digital Web Address: http://www.digitaldividenetwork.org/content/stories/index.cfm?key=233

National Telecommunications and Information Administration. (1997) <u>Falling Through</u> the Net II: New data on the digital divide. Washington, D.C.

Web Address: http://www.ntia.doc.gov/ntiahome/net2/falling.html

United States Department of Commerce. (1995) Falling Through the Net: A Survey of the "Have Nots" in Rural and Urban America

United States Department of Commerce. (2000) <u>Falling Through the Net: Toward</u> Digital Inclusion Washington, D.C.

Web Addresses: http://www.esa.doc.gov/fttnoo.html

http://www.ntia.doc.gov/ntiahome/fttnoo/chartscontents.html