

# **It's Working: People from Low-Income Families Disproportionately Use Library Computers**

A Report to the Bill & Melinda Gates Foundation  
U.S. Library Program

On a Survey of Library Patrons

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# Table of contents

<b>ABSTRACT</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
<b>METHODS</b> .....	<b>1</b>
<b>FINDINGS</b> .....	<b>4</b>
<i>Who filled out the surveys?</i> .....	4
<i>Low-Income People Disproportionately Use Library Computers</i> .....	7
<i>Other computer access</i> .....	9
<i>What differences have the library computers made to patrons?</i> .....	11
Do people at different income levels answer differently? .....	14
Does the community's income matter? .....	15
Does the population density of the community make a difference? .....	17
Are the impacts different for the earlier states? .....	18
<i>But it's not this simple</i> .....	19
<b>CONCLUSIONS</b> .....	<b>19</b>

## List of Tables

Table 1. Response by poverty level .....	2
Table 2. Response by state .....	3

## List of Figures

Figure 1. Libraries serving impoverished communities are over-represented in this study .....	3
Figure 2. As community poverty increases, so does patron response .....	4
Figure 3. Ethnic distribution of survey participants .....	4
Figure 4. People of a variety of ages responded .....	5
Figure 5. Most respondents have some higher education .....	5
Figure 6. People with varied employment statuses responded, including many students and employed people .....	6
Figure 7. Library computer use is highest among job-seekers and students; lowest among retired and homemakers .....	6
Figure 8. Library computer users report a range of incomes; disproportionately many report very low incomes .....	7
Figure 9. Many of the adult library computer users have very low incomes, even when they live in higher income neighborhoods .....	8
Figure 10. As income increases, library computer use decreases .....	8
Figure 11. Library patrons are below the state average in home access; many have computer/Internet access only at libraries .....	9
Figure 12. Home computer increases and library only access decreases as income rises .....	10
Figure 13. Home Internet access increases and library only access decreases as income rises .....	10
Figure 14. People without home computers are more likely to say they are using libraries more since the computers arrived .....	11
Figure 15. Library computers help patrons communicate, learn and create .....	12
Figure 16. African American and Hispanic patrons name more school- and work-related ways the library computers have helped them .....	13
Figure 17. People in low-income neighborhoods say library computers have helped more with work, school, and community .....	16
Figure 18. Urban dwellers say library computers have helped more with work and community information; less with medical information .....	17
Figure 19. People in earlier-Round states say the library computers have helped more in school and work tasks, and in getting some community information .....	18

## Abstract

*Preliminary analyses of recent survey data from more than 7500 library patrons in 18 states demonstrate that from the perspective of patrons, the Gates U.S. Library Program is having substantial impacts by providing computer access for low-income people in the United States. Patrons responding to our survey disproportionately report low incomes relative to their states' averages; computers in public libraries are more likely to be used by low-income respondents. Low-income library computer users are relatively unlikely to have computers at home, or to have access anywhere other than the library. Students and people looking for work, both important to the mission of the Gates Library Program, are particularly likely to utilize library computers. The longer libraries have had Gates computers, the more ways respondents report using library computers, including doing homework and preparing for and finding employment.*

## Introduction

In 1997, the Bill & Melinda Gates Foundation (BMGF)<sup>1</sup> introduced the U.S. Library Program to help libraries provide digital opportunities for those otherwise without computer and Internet access. The Foundation partnered with public libraries across the country to install 40,000 computers in over 10,000 libraries – in “packages” consisting of computers, software, training, printed reference material and technical support – so that everyone could have free access to computers and the Internet. The Foundation’s implementation strategy was to address the digital divide first in the states where it was likely to be the greatest: the states with the highest levels of poverty. Using the 1990 census, the data source that was uniformly available for all U.S. states and all the communities at the inception of the program, the states were divided into four implementation Rounds, with Round 1 states having the highest rates of poverty in 1990, and Round 4 states having the lowest. Thus “Round” represents both where the states stand regarding the year and order of Library Program implementation– already participated and completed, in process; or in a planning stage<sup>2</sup> – and it also serves as a proxy for state poverty level. The Library Program expects to complete implementation by the end of 2003 and technical support in the Round 4 states by the end of 2004.

## Methods

The Public Access Computing Project (PACP) at the University of Washington<sup>3</sup> is engaged in a multi-year, multi-method, independent research effort designed to assess the impacts of the Library Program on patrons, libraries and communities and to provide feedback to the Foundation regarding their procedures as they move into the next states. The project includes the repeated administration of questionnaires to library administrators<sup>4</sup>, staff librarians<sup>5</sup>, and library

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<sup>1</sup> Then named the Gates Learning Foundation.

<sup>2</sup> “Round” is complicated by the large systems serving more than 300,000 residents, many of which had begun public access computing programs before 1997. These systems received cash grants during the second implementation round, and not the “Gates package.” Therefore, some of the large system libraries received Gates Foundation support before their state as a whole was scheduled to receive it so that some of the libraries in the “in process” or “planning stage” states have actually already received and used a Gates Foundation grant.

<sup>3</sup> The research team is led by Andrew C. Gordon, Professor, Daniel J. Evans School of Public Affairs at the University of Washington.

<sup>4</sup> Total of 1,630 surveys to date.

<sup>5</sup> Total of 6,306 surveys to date.

patrons<sup>6</sup> in 18 focus states (3 years in some states), repeated national and state-level (in the focus states) random digit dial (RDD) telephone surveys (two years) with over samples of low-income neighborhoods residents in the focus states<sup>7</sup>; site visits to hundreds of libraries and other sites, including several on Native American reservations; focus groups with library staffs as well as foundation staff members; review of documents, and other data-gathering strategies. This paper reports some key findings from questionnaires completed by library patrons in 18 focus states in the summer of 2002.<sup>8</sup>

Library surveys – of administrators, staff and volunteers, and patrons – were sent to a sample<sup>9</sup> of libraries in the 18 states in June 2002. We asked library patrons – both computer users and non users – to tell us about their library use, their opinions about the public access (PA) computing programs at the library, how, if at all, they use the library computers, and what differences they have made to them.

Table 1 summarizes the response rate by community poverty level and Table 2 summarizes response rate by state.

**Table 1. Response rate by poverty level**

Poverty level	Number of libraries	Response rate
<15%	343	54%
15-19%	237	52%
20-29%	314	48%
30%+	285	43%

Overall, more than 7500 Patron Surveys were received from 1179 identified libraries, 51% of those asked to participate. Table 1 shows that participation rate went down as the poverty level, as calculated by the Gates Foundation, went up. This overall response rate is similar in pattern to the Fact Sheets completed by the library administrators in that the likelihood of

participation diminishes as the poverty level of the community increases. Table 2 shows that the lowest participation rates are in the Round 1 states, the states with the highest poverty levels.

<sup>6</sup> Total of 22,124 surveys to date.

<sup>7</sup> Total of 18,599 telephone surveys to date. 6,623 interviews were conducted over two years with a sample randomly selected from the focus state, with an additional sample of 4,300 individuals randomly drawn from the lowest income ZIP codes in these states, ZIP codes where the median income was below the lowest quartile for the state.

<sup>8</sup> More comprehensive reports, including detailed consideration of the qualitative data are forthcoming.

<sup>9</sup> A stratified sample of 2,317 libraries was selected from a population of 4,627 libraries in 18 states to participate in this portion of the evaluation. The states are: AL, AR, FL, ID, IL, LA, ME, MI, LO, MS, MT, ND, NH, NY, PA, TX, VT, and WA. Selection depended on the poverty rate in the library’s service area, according to the 1990 census and calculations made by Gates Foundation staff. Because of the program’s focus on libraries serving low-income communities, we designed our sampling strategy to hear from more, and a more diverse set of, libraries serving these neighborhoods. All of the libraries serving communities with a poverty rate of 30% or more were selected to participate (making our sample well representative of low-income people and libraries). Seventy percent of the libraries serving communities with 20-29% poverty were randomly selected to participate, as were 40% of libraries serving communities with 15-19% poverty and 30% of libraries serving communities with 10-14% poverty. Libraries serving communities with less than 11% poverty were not selected in this process. In addition, libraries were included if 1) they serve communities in counties identified by the USDA as “persistently impoverished” or 2) they were targeted for site visits.

**Table 2. Response rate by state**

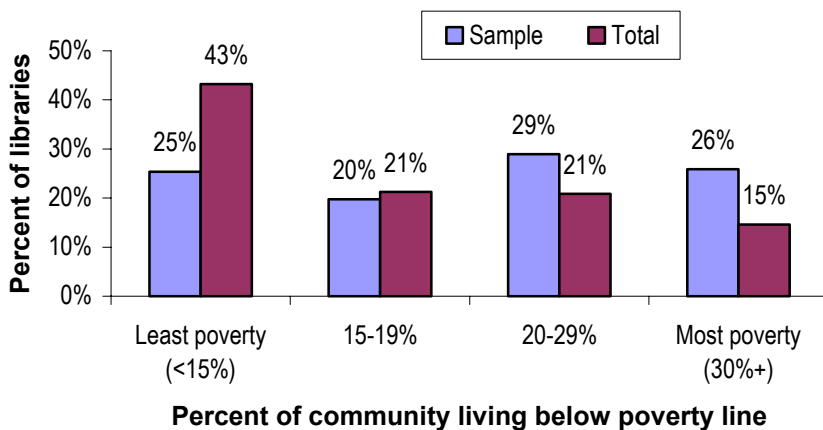
State	Response Rate	Round#
AL	37%	1
AR	47%	1
LA	34%	1
MS	35%	1
FL	62%	2
ID	67%	2
MI	40%	2
MT	57%	2
NY	55%	2
TX	57%	2
IL	40%	3
ME	45%	3
MO	63%	3
ND	45%	3
PA	54%	3
VT	48%	3
NH	27%	4
WA	54%	4

Table 2 shows the response rate by state, organized according to Round. The overall response rate from the Round 1 states is 37%, compared with 55% from the Round 2 states, 50% from the Round 3 states and 51% from the Round 4 states<sup>10</sup>.

Figure 1 compares the profiles of all the libraries in the 18 states sampled (burgundy bars) with the profile of the libraries returning Patron Surveys (blue bars). Focusing on the first bars in each set (blue bars) alone, this figure shows that the responding libraries are fairly evenly distributed across neighborhood incomes, so that about one-fourth of the libraries we heard from are in each income category. The burgundy bars show a different pattern: these bars show that more of the libraries in these states serve higher income communities. Overall, only 15% of the libraries operating in these 18 states serve the poorest communities<sup>11</sup>, compared with about one-fourth (26%) of the libraries in our sample. And 43% of the libraries statewide serve the least impoverished communities<sup>12</sup>, compared with one-fourth of the libraries that we heard from. This distribution of our

sample gives us more opportunities to examine the impact of these computers on the communities and people we expect to be most affected by them.

**Figure 1. Libraries serving impoverished communities are over-represented in this study**



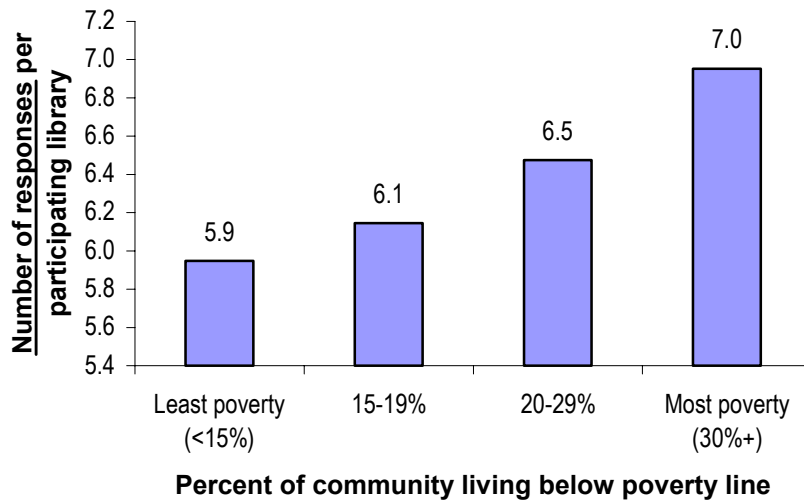
Tables 1 and 2, and Figure 1 focus on response rate at the *library* level, not at the *patron* level. We consider the library as having responded whether we receive one patron survey, or 100. It is interesting that even though Table 1 shows that as the community poverty level increases, the likelihood of any participation at all by the library decreases. However, Figure 2 shows that if the library does participate, a higher level of poverty in the community is associated with *more* individual

<sup>10</sup> In addition to being correlated with poverty, this difference may also reflect “survey fatigue” as these libraries participated in a similar survey 18 months earlier.

<sup>11</sup> The poorest communities are defined here as those in which 30% or more of the residents live below the federal poverty line.

<sup>12</sup> Defined as those in which less than 15% of the residents live below the federal poverty line.

**Figure 2. As community poverty increases, so does patron response**



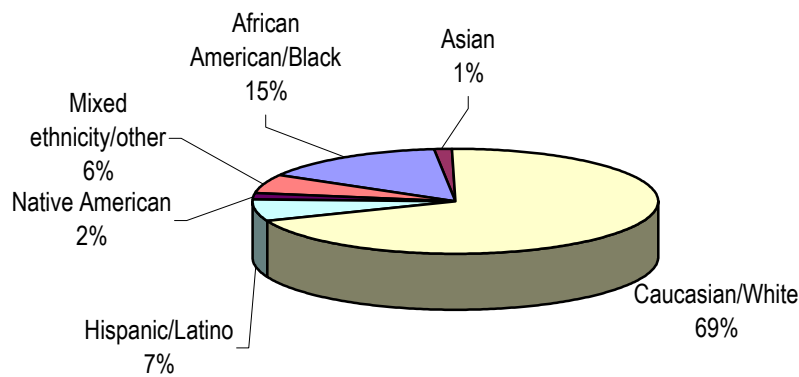
patrons completing the survey. This may mean that people with less income are more willing to participate in this research project or it may be that with nearly 40% of the lowest-income libraries serving urban communities, more people in these lowest-income communities visit the library and have the opportunity to complete a survey.

## Findings

### Who filled out the surveys?

Overall, 7,540 library patrons completed surveys this year, more women than men (64% vs. 36%). About one third (31%) of the patrons picked up a survey from an urban library, about 10% from a suburban library and about 59% responded from a rural or small town library. Even though 86% of the respondents say they use the library computers, only 20% used the online version of the survey, with the others using the paper version. More men than women report using the library computers (89% vs. 83%) and more men completed the online version of the survey (22% vs. 16%).

**Figure 3. Ethnic distribution of survey participants**



Urban and suburban respondents were also more likely to use the online version (urban and suburban: 26%; rural and small town: 16%).

Figure 3 shows the ethnic distribution of the survey respondents. Sixty-nine percent Caucasian is representative for these states, with an over-representation of lower-income communities, as is

15% African American, with 1,048 respondents. Compared with ethnicity of the random sample of the low-income neighborhoods in these states,<sup>13</sup> the percentage of Hispanic respondents in this survey is low (7% vs. 13%), and is even somewhat low compared with the state's overall random

sample (9% Hispanic). African Americans were most likely to use the paper version (86% vs. 79% of the other ethnicities.)

**Figure 4. People of a variety of ages responded**

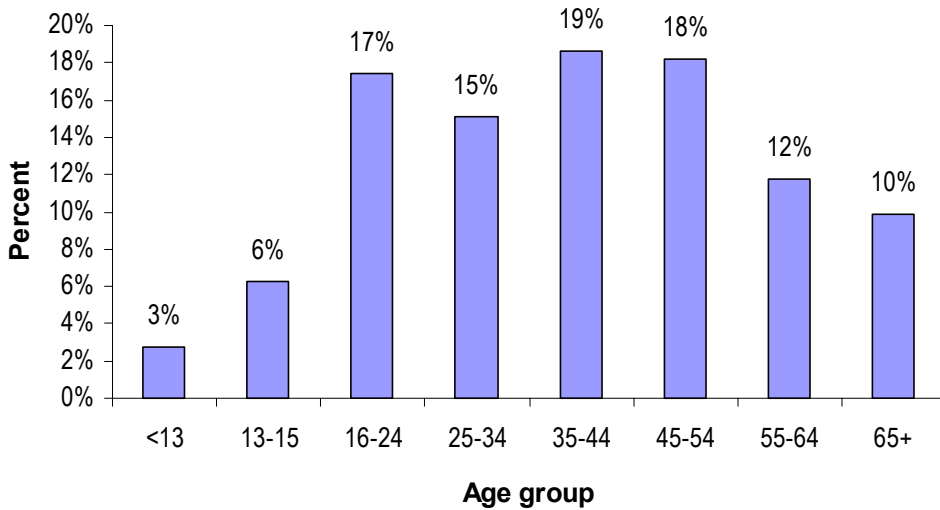
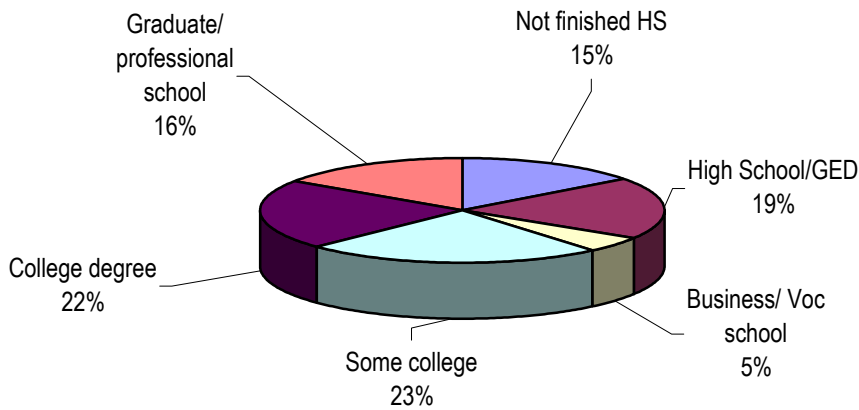


Figure 4 shows that respondents of a wide variety of ages answered the survey (average age is 40 years). Not surprisingly, the library computer users are younger than the non-computer users (38 years vs. 48) and the paper responders are older than those who responded online (teens and young adults are especially likely to respond online and

those over 65 are very unlikely to respond online).

**Figure 5. Most respondents have some higher education**

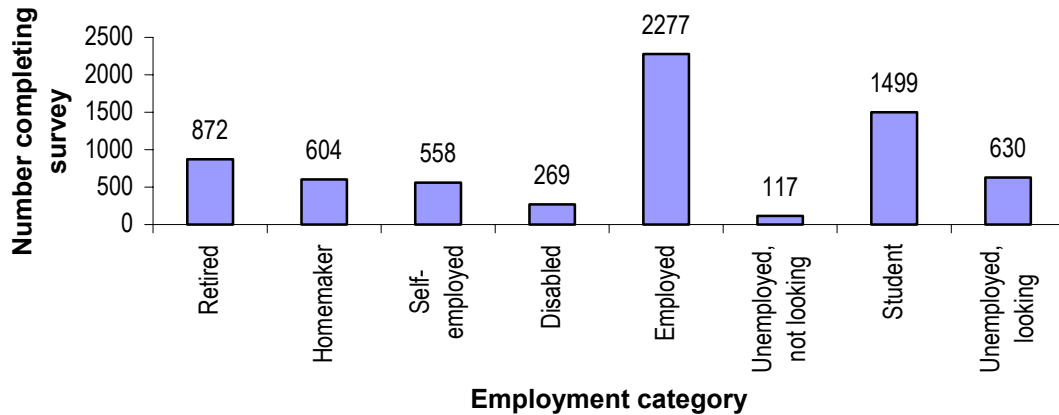


Education level has been shown to be an important factor in computer access. Figure 5 shows that 61% of the people who responded to this survey have at least "some college" education, indicating a fairly well educated sample.

<sup>13</sup> Gordon, Moore & Gordon, 2002, *Libraries, public access computers and the poor: do neighborhood factors make a difference?*

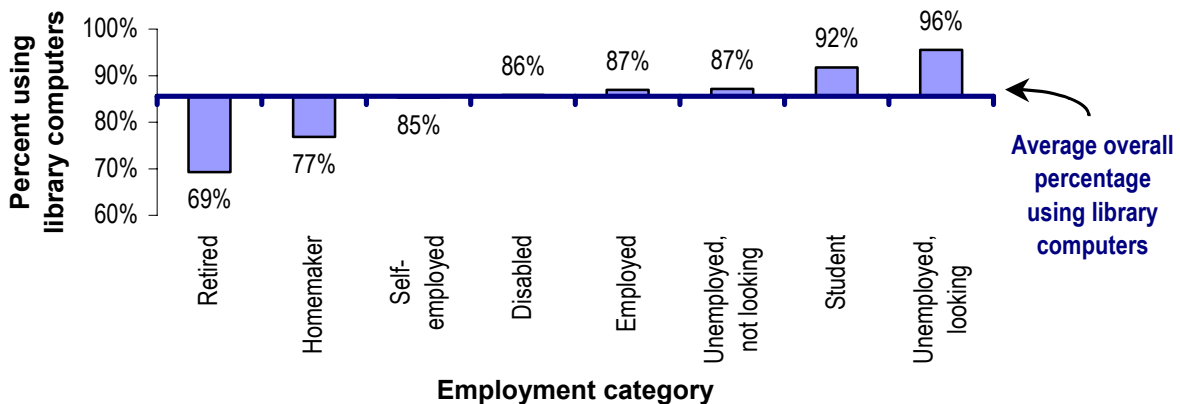
Figure 6 shows that working people responded to the survey, as did students, retired people and people looking for work.

**Figure 6. People with varied employment statuses responded, including many students and employed people**



The axis in Figure 7 draws a line through the *average* overall percentage (86%) of respondents who use the library computers. This figure shows different groups of people as being above that average, or below. Note that people looking for work and students, both fairly large groups visiting the library, are the most likely to use the library computers, while retired people and homemakers are least likely to use them.

**Figure 7. Library computer use is highest among job-seekers and students; lowest among retired and homemakers**

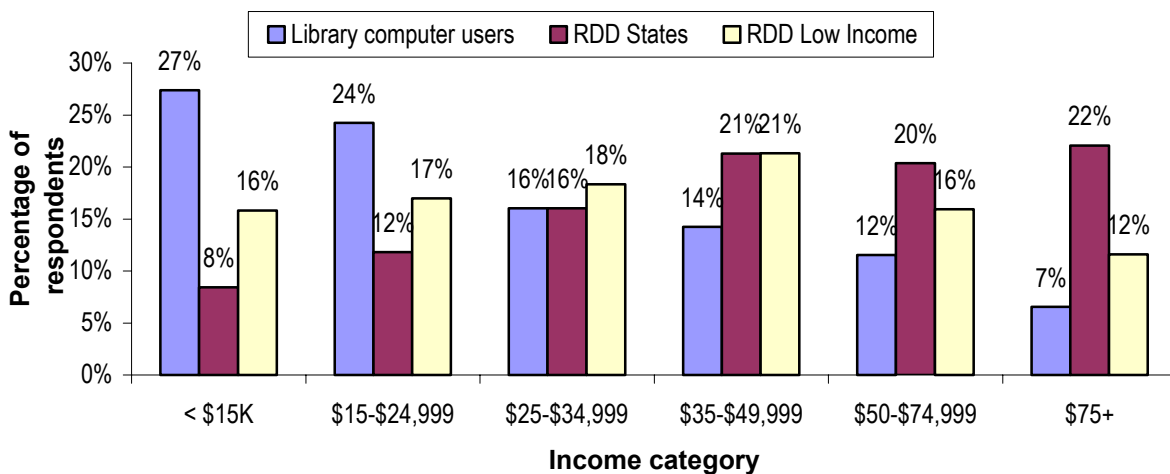




## Low-Income People Disproportionately Use Library Computers

Income is one of the most important factors in predicting computer access. Figure 8 shows that although people with a wide range of incomes visit the library, a disproportionately large percentage reports incomes below \$25,000. The first bar in each set (blue) in Figure 8 shows the percentage of *adult library computer users* at that income level. About half of the adult library computer users report household incomes of less than \$25,000 per year. The second bar in each set (burgundy) shows the percentage of a *random sample of residents* of the same states at that income level. About 20% of the general adult population in these states earns less than \$25,000. The third bar in each set (yellow) shows the percentage of a *random sample of residents of low-income neighborhoods* in the same states at that income level. One-third of the people in low-income neighborhoods report an annual household income of less than \$25,000.<sup>14</sup> *Such a significant over representation of library computer users at this income level suggests that the libraries are drawing and providing computer access to a disproportionately large percentage of the lowest income members of communities in these states, and that these individuals were willing and able to complete the survey.*

**Figure 8. Library computer users report a range of incomes; disproportionately many report very low incomes**



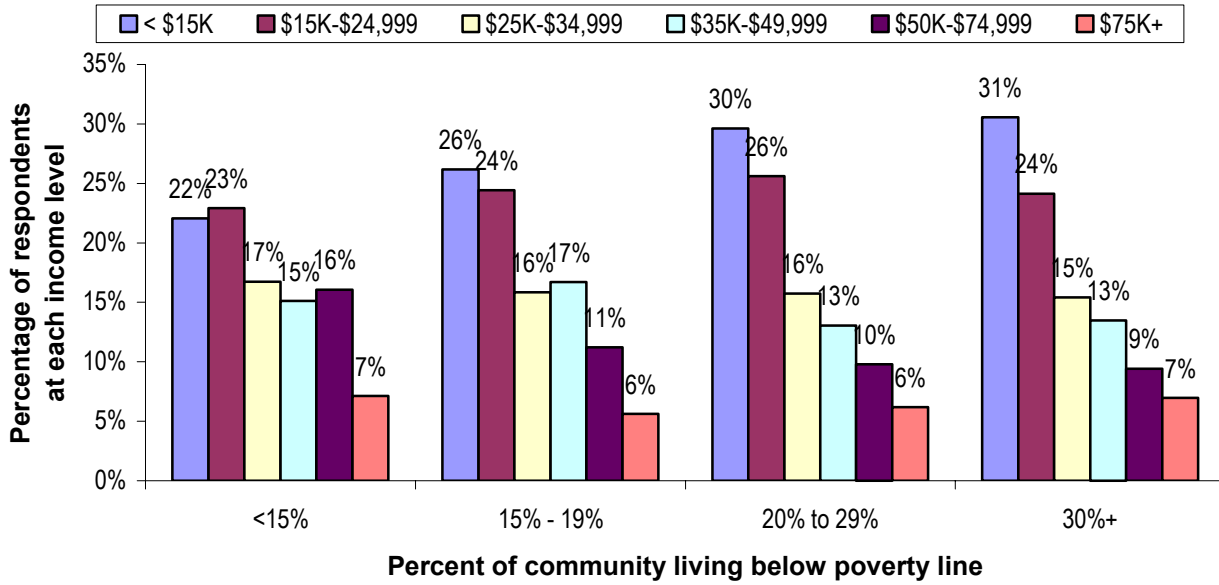
A possible explanation of this finding is that the data simply reflect our sampling scheme – if we over-sample libraries serving low-income communities, we should expect an over-representation of low-income individuals to be using the library computers. However, note that the percentage of library computer users with incomes below \$25,000 is far greater than the percentage of people living in low-income neighborhoods with this income level (51% vs. 33%), well beyond what can be expected from our sampling scheme alone.

Additionally, Figure 9 shows that this pattern holds in all types of neighborhoods and is *not* restricted to the lower-income communities. At each community income level,<sup>15</sup> between 45% and 56% of the respondents have family incomes below \$25,000 per year. *A large percentage of library patrons have low incomes, regardless of the poverty level of the communities they live in.*

<sup>14</sup> The random samples referred to in this paragraph are RDD surveys.

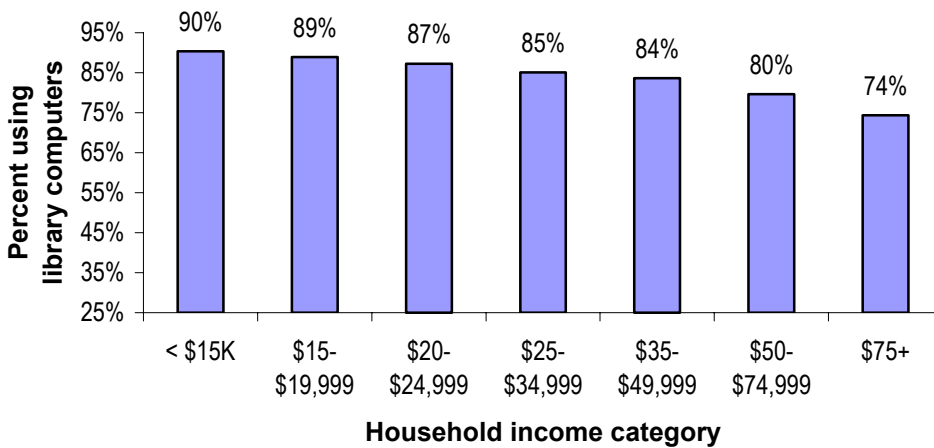
<sup>15</sup> <15% living in poverty; 15%-19% in poverty; 20%-29% in poverty; 30%+ in poverty.

**Figure 9. Many of the adult library computer users have very low incomes, even when they live in higher-income neighborhoods**



Most reports of the relationship between computer use and income show that as income increases, so does the likelihood of being a computer user. *Figure 10 shows that at the library, the opposite pattern holds – it is the people with lower incomes who are most likely to be library computer users and as income increases, the patrons are less likely to use those computers, presumably because of other access.*

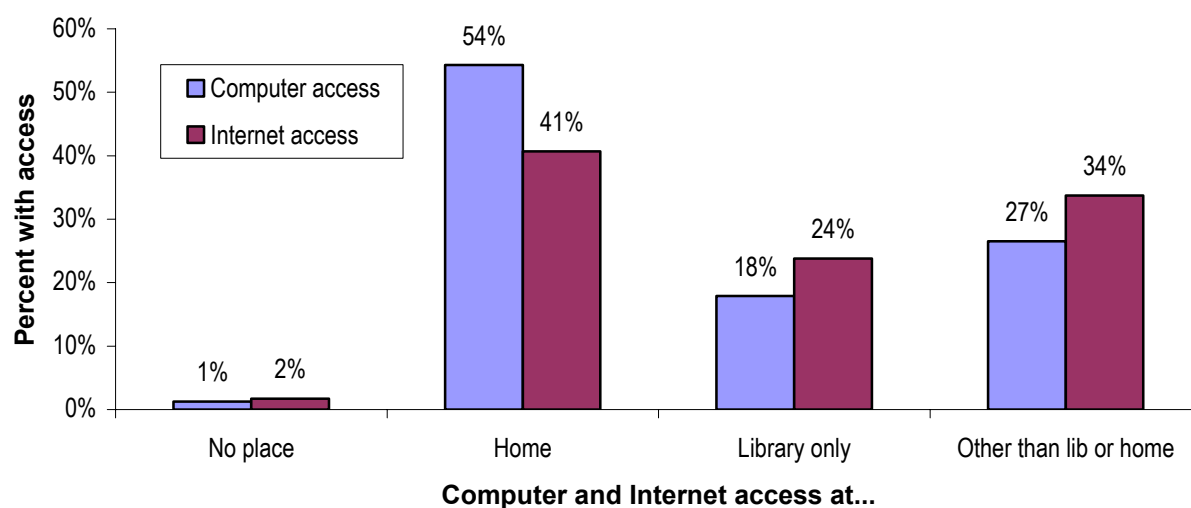
**Figure 10. As income increases, library computer use decreases**



## Other computer access

In 2001, 72% of the randomly selected households in these same states said they have computer access at home, and 62% said they have Internet access at home.<sup>16</sup> In the low-income sample in those states, the figures were lower with 61% saying they have home computer access and 51% saying they have home Internet access.<sup>17</sup> Figure 11 shows that the home access of the library patrons lags behind even those residing in the low-income neighborhoods in these states, with 54% saying they have a computer at home and 41% saying they have the Internet at home.

**Figure 11. Library patrons are below the state average in home computer/Internet access; many have access only at libraries**



For about one-fifth (18%) of the responding library patrons, the library provides their *only* computer access; and for about one-fourth (24%) the library provides their *only* Internet access. *This figure shows that people otherwise in the digital divide are coming to the library and gaining computer and Internet access there.*

Figures 12 and 13 show home computer access and home Internet access at the different household income levels.

<sup>16</sup> Moore, Gordon & Gordon, 2002, *Sorting out the impacts: Data show U.S. Library Program affecting computer access, awareness, locations for use.*

<sup>17</sup> Gordon, Moore & Gordon, 2002, *Libraries, Public Access Computers and the Poor: Do Neighborhood Factors Make a Difference?*

**Figure 12. Home computer access *increases* and library only access *decreases* as income rises**

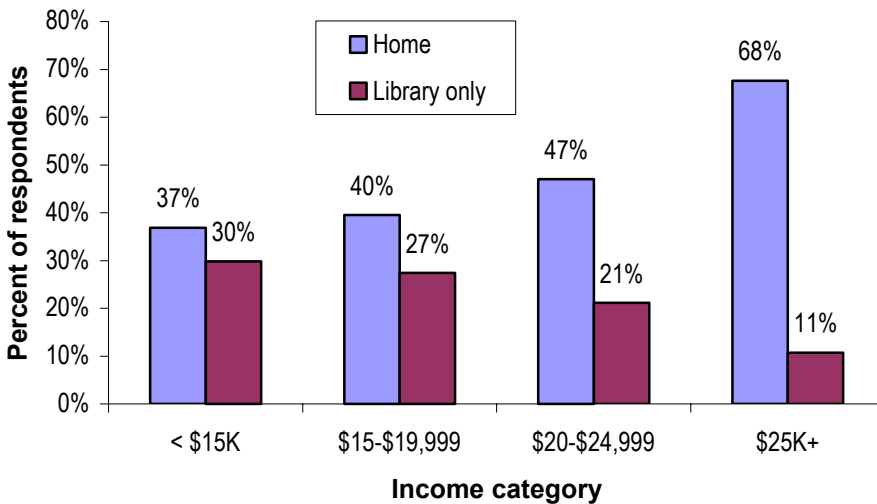
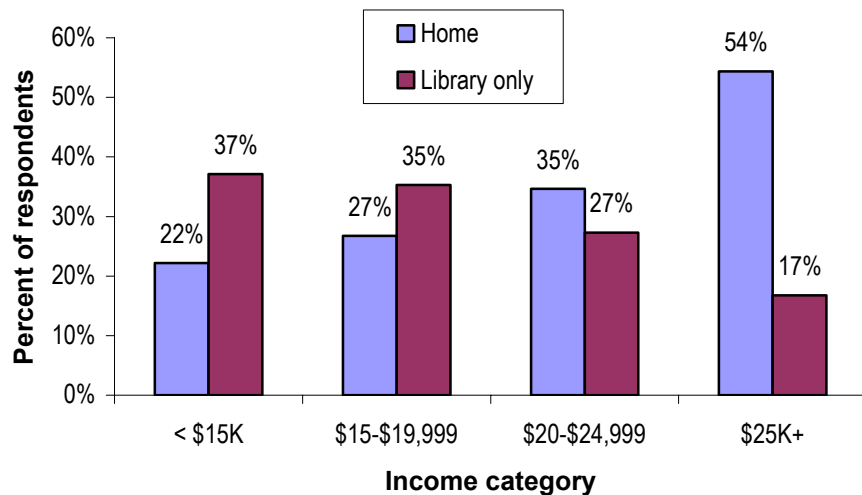


Figure 12 compares responses from people at different household income levels. Of those with household incomes below \$15,000 a year, 37% say they have home computers while 30% say that their only computer access is at libraries. Of those with incomes above \$25,000, 68% say they have home computers, and 11% say their only access is at libraries.

A similar pattern emerges for Internet access that is more extreme: even fewer of the lower income families have home Internet access and even more rely on the library for their only access to the Internet. In the lowest income families, 22% say they have home Internet access and 37% say their only access to the Internet is at the library. In the higher-income group, 54% say they have home Internet access and 17% say their only Internet access is at the library.

**Figure 13. Home Internet access *increases* and library only access *decreases* as income rises**

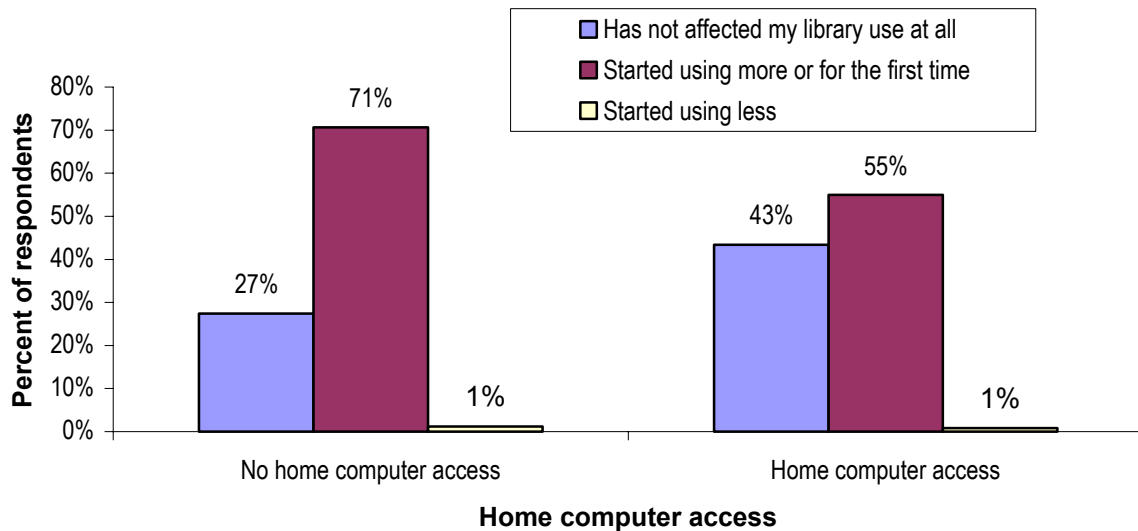


*These figures show that efforts to provide public access computing in libraries are successfully attracting large numbers of people who otherwise have no access to computers and the Internet, even in the most disadvantaged communities.*

Those living in urban communities report more choices in places to access computers, with 30% saying that even though they don't have a home computer, they have access in places other than the library, compared with about 25% of the people living in other types of communities. This is not surprising considering that because of the concentration of population in urban settings, more resources are available for a wider variety of opportunities for the residents.

We asked people how the library computers have affected their library use. Nearly two-thirds (62%) said they started using the library more often, or that they hadn't used the libraries at all before they got their computers and 36% said it hasn't affected their library use at all. Figure 14 shows that 71% of the people without home computer access said that they either started using the library, or started using it more since the computers became available. This compares with 55% of the people with home computer access. *It seems that the public access computers at libraries are drawing new patrons, especially disadvantaged patrons – and bringing them back often.* It is also important to recognize that more than half of those with home computer access are also using the library more, as are 19% of those who don't use the library computers. Increased use by these groups, presumably not drawn by the computer access, corresponds to observations by librarians and the community of more general changes at the library since the computers were installed, such as more library visibility and improved reputation of the library.

**Figure 14. People without home computers are more likely to say they are using libraries more since the computers arrived**



It is also interesting to note that more men are coming to the library since the computers have been installed: 72% of the men and 57% of the women say they're using the libraries more or for the first time. This, too, corresponds to observations made by librarians about the shifting demographics of library patrons.

### ***What differences have the library computers made to patrons?***

We asked the patrons to check boxes telling us how, if at all, the library computers have helped them or their families. *The box entitled "No help" was checked by only three percent of the respondents, about the same percentages at the different income levels, in the different types of communities, and at the different stages of the Library Program.* (The percentage indicating "no help" is higher – but not significantly so – in the Round 4 states, where the Library Program has yet to arrive.)

**Figure 15. Library computers help patrons communicate, learn, and create**

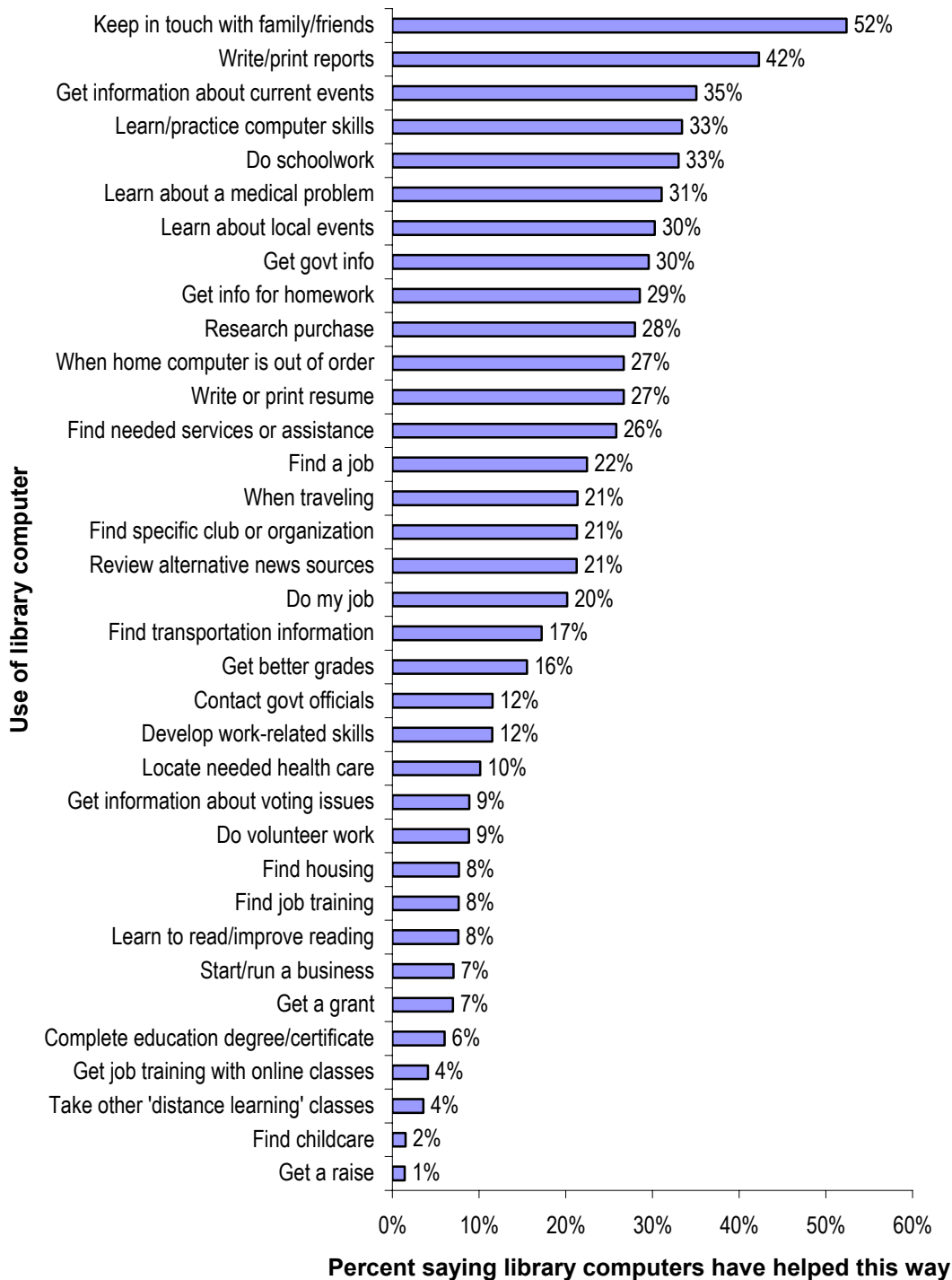


Figure 15 shows that more than half of the respondents indicate that their library computers help them to keep in touch with distant family and friends. In this way, communication technology can be seen as putting back together what transportation technologies have helped to scatter.

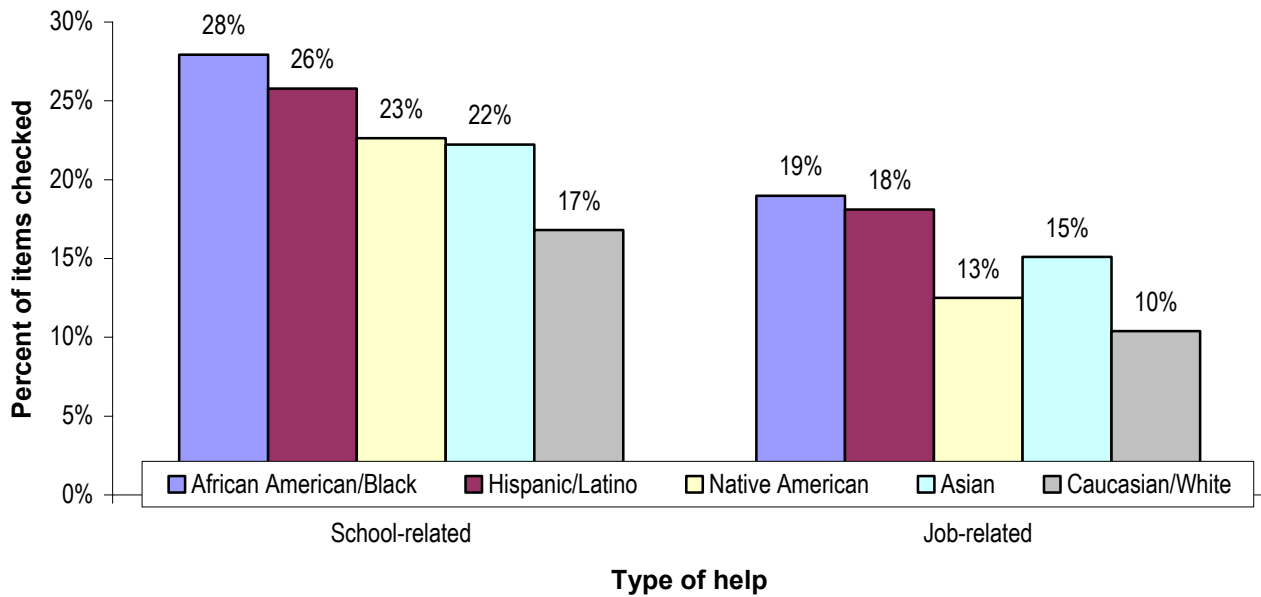
People have found a wide variety of ways to derive service from these library computers. A large percentage say they use the library computers for work/school-related tasks, such as writing or printing reports or a resume, doing schoolwork or doing job-related work, getting information for homework, improving work-related skills, or finding a job or getting better grades. A large percentage (33%) use library computers to learn or practice computer skills – the fourth

most common use named – a figure that corresponds to the increasing percentage of community members who say they first learned to use computers at the library.<sup>18</sup>

People also make significant use of the Internet to keep up on current events or find out about local events or medical problems. These computers seem to be providing an important variety of services to the community members who use them.

Figure 16 shows that patrons of color, especially African American and Hispanic patrons, make significant use of the library computers for school and work-related tasks. On average, the African American patrons checked more than one-fourth of the school-related items, indicating that the library computers had helped them on an average of two or three school-related tasks, and between one and two work-related tasks.

**Figure 16. African American and Hispanic patrons name more school- and work-related ways the library computers have helped them**



<sup>18</sup> Moore, Gordon & Gordon, 2002 *Sorting out the impacts: data show U.S. Library Program affecting computer access, awareness, locations for use.*

## Do people at different income levels answer differently?

### Patrons say...

- *I live in a very poor community. I am a single parent of a 7 year old. Last year I made a little over \$3,000. Most people here cannot afford computers of their own. So, a lot of people depend on the computer (we only have one) at the library. I have used the computer to get a Pell Grant, and to type up a resume: I wish we had more than one computer so I could spend more time on it finding more money to go to school. If I could find more money (for bills) then I could go to college full-time!*
- *I was thrilled to learn when I came to this little town that I could have an email address for free – The cost of owning my own computer is a bit much on social security. This service has been so helpful in keeping in contact with far-away grandchildren. It helps me to find out about healthy living also.*
- *Recently divorced, and without any computer exposure, the library and the librarian help was my bridge to the computer world and enabled me to gain familiarity and finally skill enough to become employable. Now I have a computer at home and use it every day in my work. Without the libraries help I'd have been far set back.*
- *I had, for my job, to learn the computer. Without the library computers I would have been in trouble. I have no computer at home and did not even know how to turn one on. Thanks to the Riggins Library services (computers) and with a great deal of help from the librarian I was able to learn the computer and take classes.*
- *Computers at library are very important to me, through the use of library computers I learned enough skills that I was able to find work, otherwise I would have had no computer experience or knowledge. Computers have been most instrumental for me at the library.*
- *I got an A+ on homework report because of research I got off the computer.*

The quotes that appear in this paper are verbatim and representative of the issues and points of view expressed by other respondents.

People with lower incomes are more likely to say that the library computers helped them with specific job preparation tasks, including:

- Finding a job (28% vs. 22% of those with higher incomes),
- Writing or printing a resume (up to 33% in the lower income groups vs. 25% of those with incomes above \$25,000), and
- Finding job training (up to 11% in the lowest income categories vs. 6% of those with more income).

But people with *more* income are *more* likely to say that the computers help them to *do* their job (25% vs. no more than 20% at incomes below \$20,000).

Those at the lowest income levels are more likely to say they use the library computers to help them with specific learning tasks, including:

- Getting better grades (16% vs. up to 12% of those with higher incomes),
- Learning or practicing their computer skills on the library computers (38% vs. 31% for those earning over \$25,000), and
- Learning to read or improving reading (9% vs. 5%).

People with higher incomes are also more likely to say they use the library computers to help them do things that require money, such as:

- Having computer access when traveling (27% vs. up to 20%);
- Researching buying decisions (about one-third vs. about one-fourth at the lowest income levels);
- Standing in for home computers when they are out of order (about 30% vs. about 22%).

People with higher incomes are also less likely to say they use the library computers to help them stay in touch with family and friends (47% vs. up to 59%).



## Does the community's income matter?

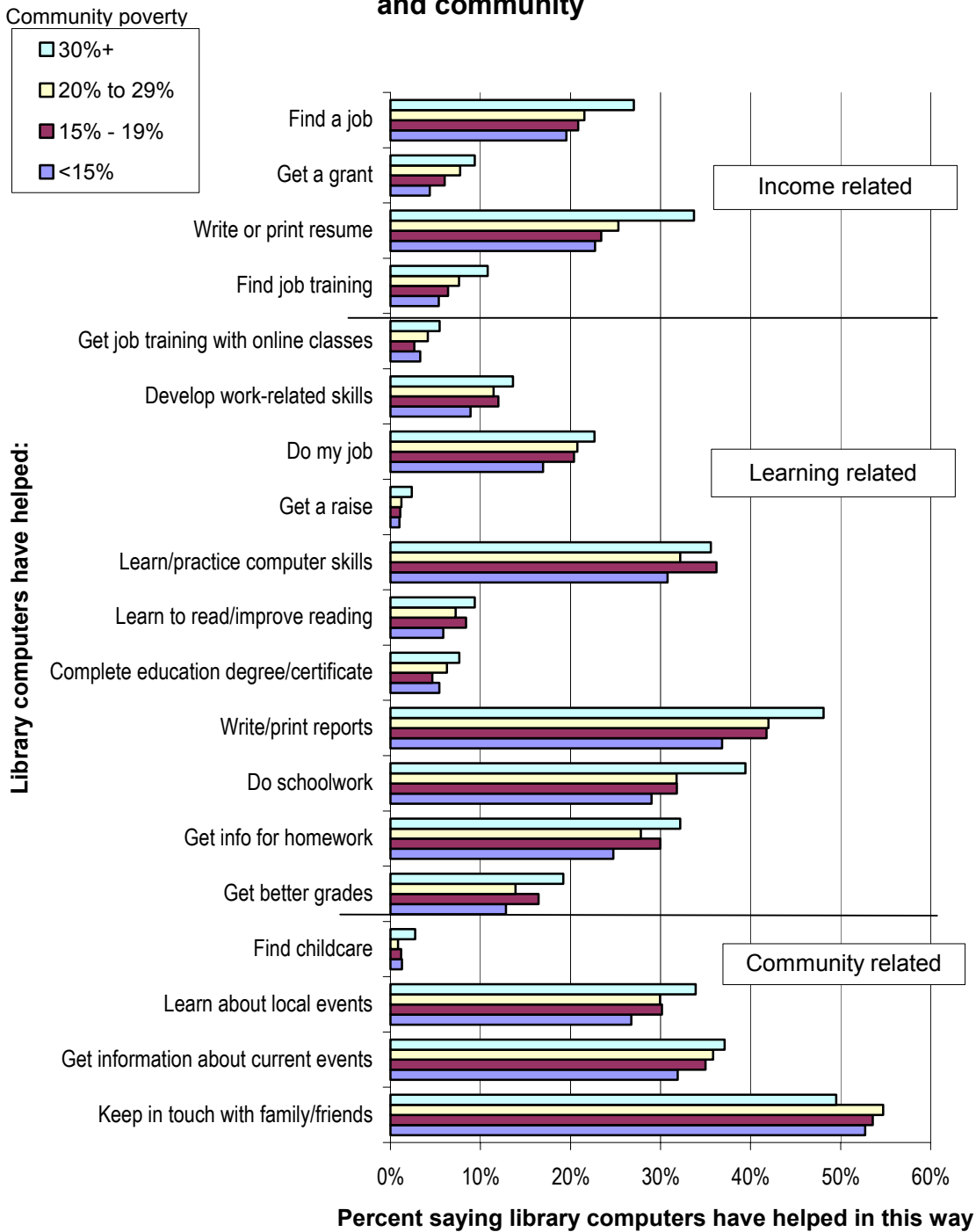
- *I have found employment several times using the computers available at the library. If not for the availability of these computers I would still be searching. Using email saves money on faxing service etc.*
- *I have also been looking for a new job and I do not have a computer at home so I have had to use the library computers to work on my résumé and complete letters of application*
- *Not only was I able to complete all assignments neatly and on time for college due to my computer access at the library, but I was able to graduate and get my degree.*
- *All through high school I had many assignments which required computer usage. May it be for research or simply to type a report. At the time I did not have a computer at home, therefore I had to use the library's computers. I strongly believe that if the library would not have had computers then, I would not have been able to graduate due to lack of work. And as an added bonus, the librarians were always kind, generous, and very helpful.*
- *Last June, after many years, I decided to finish my education. My first class, after 20 years, ended up having all the class work on the computer. I didn't know what to do, so I went to our library and the girls helped me every step of the way. I didn't even know how to log on at the time. I've also entered my financial aid on the computer. Since then, I have managed to get a computer at home, get my associates, and am now pursuing my bachelors in chemistry. It wouldn't have been possible without the computers at our libraries. I have to commute 45 miles, so it makes it easier having access here.*
- *I'm glad that our town has put computers in the library. It has so far help[ed] me find the college I want to attend in the fall. It has help me fill out financial aid on the Internet and when I was in high school it helped me with research.*
- *Like myself, more people will pursue education and training through distance options. Libraries can perform an invaluable service to those who don't have adequate hardware at home, need multiple resources simultaneously, or just need a place to get away from the kids. Library Internet access also gives me the option of carrying on my coursework in thousands of locations, urban and rural – even internationally. Home schooling is also gaining in popularity and libraries are well poised to play a critical role in meeting the needs of this group.*

People living in lower-income communities checked a larger number of ways in which the library computers have helped them or their family than those in better-off neighborhoods. Overall, people in lower-income communities were more likely to indicate that the library computers had helped them prepare for, find, or do jobs; learn and get better grades; and keep up with local events and current events.

Figure 17 illustrates these specific results, echoing the findings for individual income levels above. To review, *individuals* with less income are more likely to say they use the library computers to help them with school or other learning activities, and work – primarily finding and preparing for work.

Patrons from low-income *neighborhoods*, regardless of their individual incomes gave similar, but not identical, responses. These people are more likely than people from better-off neighborhoods to say they use the computers to help them with their schoolwork or other learning (including learning to read or learning computer skills or job training), and preparing for and finding a job (or a grant), as well as *doing* the job. People in low-income neighborhoods are also more likely to say they use the library computers to help them within their communities, for example when trying to locate childcare or keep up with local events or current events. The complex findings about income and using library computers to keep in touch warrant further exploration.

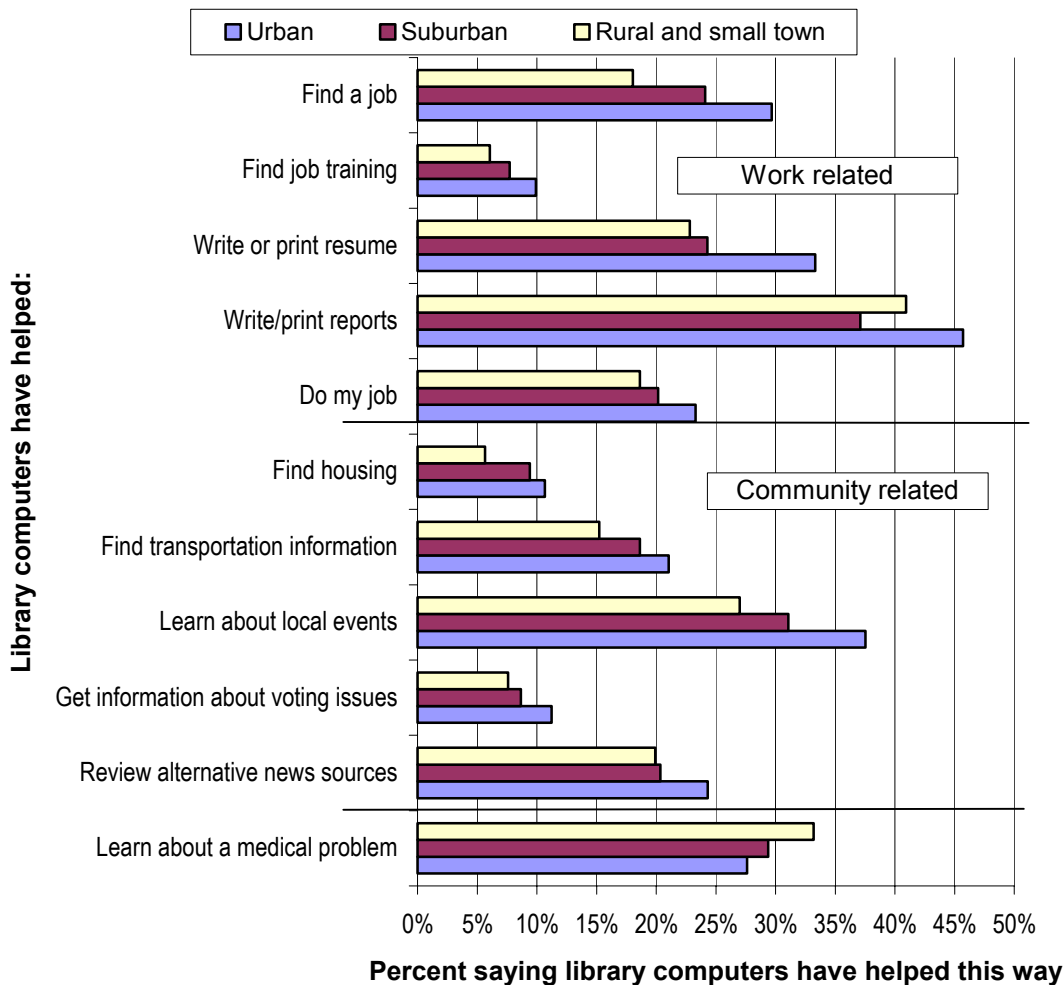
**Figure 17. People in low-income neighborhoods say library computers have helped more with work, school, and community**



## Does the population density of the community make a difference?

People living in urban communities checked significantly more ways in which the library computers have helped them or their families. Urban dwellers are more likely to use the library computers to help them extend their “reach” across their more complex, more diverse, and more information- and opportunity-laden environments. The Internet may help urban dwellers organize the information in their environments so that it approaches the manageability of the information facing small town and rural residents. For example, urban dwellers are more likely to use the library computers to help them find a job or job training, find housing, or learn about local events, transportation and voting issues. In the rural and small town environments, the more informal communication networks that are in place are more able to meet these local information

**Figure 18. Urban dwellers say library computers have helped more with work, and community information; less with medical information**



needs. Further, services such as transportation and job training are far more likely to be available in an urban setting, so that urban dwellers would be more likely to try to locate these services. Urban dwellers are also more likely to use the library computers to help them create resumes or produce reports, tasks that might be more relevant to an urban work environment than a rural or small town work environment. For example, resumes may be less important in communities where people are more likely to

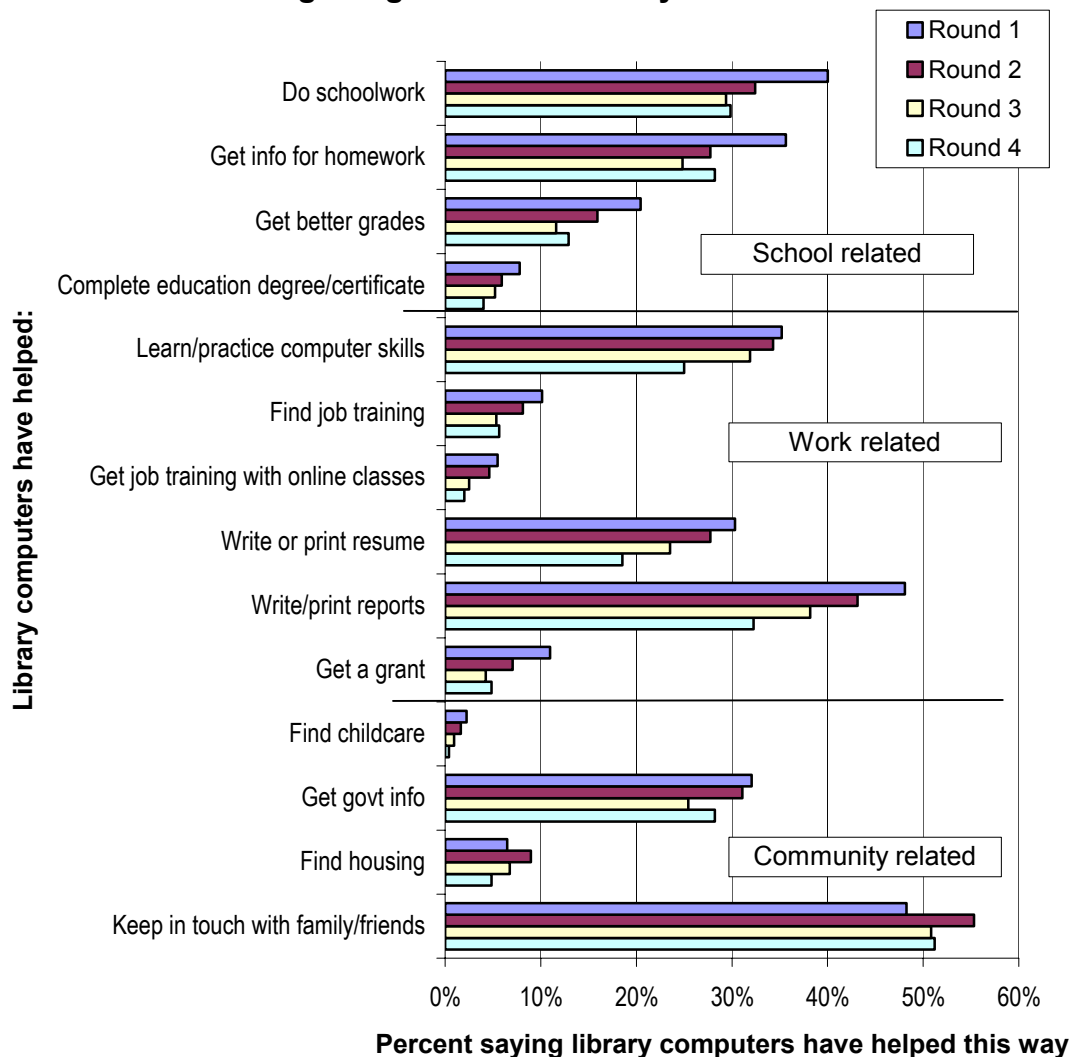
know one another. Rural and small town respondents, with fewer local medical resources, were more likely to check “learn about a medical problem” than urban or suburban respondents.

## Are the impacts different for the earlier states?

They are. Echoing the reports of the library directors, patrons in the early-Round states are more likely to say that the library computers help them with schoolwork, getting information for homework, getting better grades, and for some people, completing an educational degree or certificate. Because the earliest states were the poorest, it is not possible to completely separate out the effects of poverty and length of time with Gates computers.

But it is clearly the case that people from early-Round states say they use the computers for important tasks, such as finding job training, preparing resumes, producing reports, getting grants, and engaging in online job training. Further, the respondents from the Round 4 states (the states that have yet to receive their Gates computers) are less likely to even answer these

**Figure 19. People in earlier-Round states say the library computers have helped more in school and work tasks, and in getting some community information**



questions, suggesting that the questions may be less relevant in these states.

Respondents in the states that have had the Gates computers for the longest endorsed the most items. Thus, the evidence mounts that the decision to place computers initially in the poorest states was a wise one, and that the computers are being used for the intended tasks.

Figure 19 shows that the library computers located in the earlier states get used for more tasks, particularly tasks that can lead to improving patrons' lives, such as education and job training.

### ***But it's not this simple***

While these findings tell us in broad strokes about the kinds of differences these computers are making, and for which groups of people, it is actually more complicated, and much of the most telling information is embedded in higher-order interactions. For example, the library computers are important for helping people in the early-Round states to learn or practice computer skills. But deeper analyses show that this difference holds only for the urban communities, where the differences are striking (41% of the urban dwellers in the Round 1 states say that library computers have helped them with their computer skills, compared with 34% of their counterparts in the Round 2 states, 33% in the Round 3 states and 20% in the Round 4 states).

There are many other interactions that will help us better understand the complex impacts of these computers and the populations most affected by them. These results will be described and discussed in future reports.

### **Conclusions**

These early findings from our survey of more than 7500 library patrons in 18 states across the country show that low-income people are using the library computers, whether they live in low-income communities or communities with less poverty. Overall, the library computer users are much less likely to have home computers than the average person in these states, or even than the average person in the low-income communities in these states. Many don't have any access other than at the library, and those who don't have home computers go to their libraries more often once the public access computers are there. Many respondents, especially those with lower incomes, tell us that they use the computers to help them stay in contact with distant friends and relatives, and to improve their opportunities and their lives, through improved schoolwork, and preparing for and finding work. These initial results point to the conclusion that the Gates Foundation Library Program, in partnership with the community libraries, is successfully helping to provide digital opportunities, especially in states and communities where the digital divide is the greatest.