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Internet Demographics: Recent Trends and Implications for Libraries

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Internet Demographics:
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While most people associate libraries with books, we who work in the profession know that libraries are actually about providing access to information in whatever format it happens to come. The book remains the most widely used container for conveying information, whether for recreational, avocational or professional purposes. However, as personal computers and Internet technology have become more widely used over the past two decades, libraries have increasingly incorporated digital resources into their mix of tools for providing the information sought by library users. Thus, it is important for library professionals to be aware of demographic trends in the use of digital technology in order to plan future library services, market those services effectively, and respond appropriately to the changing needs and capabilities of our users. This article surveys the recent research on computer and Internet usage in the United States and draws some conclusions about the implications for libraries.

Recent data confirm what we already knew intuitively: more Americans are using computers and going online than ever before, and spending more time online when they do so. Data from the U.S. Census Bureau show that in August 2000, over half of the households in the United States (51 percent) had at least one computer in the house, up from 42 percent in December 1998 and 36.6 percent in 1997. (United States Bureau of the Census, 2001). If the trend continues, 71 percent of households will have a computer by 2003. The same report noted that 41.5 percent of households had Internet access in 2000. The Current Population survey showed a marked increase in the percentage of Americans who use the Internet either from home or elsewhere: from 22 percent in 1997 to 54 percent in 2001 (United States National Telecommunications & Information Administration, 2002). Moreover, as the number of people who go online has increased dra-

matically, the average amount of time each individual spends online has increased as well, rising from 9.4 hours per week in 2000 to 9.8 hours per week in 2001. (UCLA Center for Communication Policy, 2001). Furthermore, the amount of time one spends online increases with experience level, with those who have been on the Internet for five years or more spending an average of 13.2 hours per week online, as opposed to 6.5 hours per week for those with less than 1 year of online experience.

While the national-level data shows a striking increase in the use of technology in recent years, the state-level data for Oregon is even more impressive. According to the National Telecommunications & Information Administration, the percentage of households in Oregon with computers in 2001 was 65.8 percent, the fifth-highest of any state. The percentage of Oregon households with Internet access in 2001 was 58.2 percent, the fourth-highest of any state. (United States National Telecommunications & Information Administration, 2002). This would indicate that whatever ramifications the data hold for the U.S. as a whole are magnified in the case of our own state.

Historically, the use of computer and Internet technology rises with educational attainment and income. Known as the "digital divide," the differing degrees of access to technology among socio-economic groups has been well documented. U.S. government data from the mid-1990s showed that use of the Internet varied considerably by income. In 1998, the figures ranged from 12.1 percent of those with incomes between $5,000 and $9,999 to 58.9 percent for persons with household incomes above $75,000. (United States National Telecommunications & Information Administration, 1999). Furthermore, those with lower incomes who did access the Internet were much more likely to access it solely from outside the home (work, school, library) than were those with higher incomes, who often had access both at home and else-

where. While the most recent data show that use of the Internet remains strongly correlated to family income, the rate of increase among those with less education and income is faster than for the traditionally heavy user groups. For example, Internet use among people who live in households where family income is less than $15,000 grew at an annual rate of 25 percent between December 1998 and September 2001. Over the same period, Internet use grew at an annual rate of 11 percent among people living in households where family income was $75,000 or more. (United States National Telecommunications & Information Administration, 2002). As the technology matures, we are likely to see fewer differences in usage among socio-economic groups, as was the case with earlier media technologies such as telephones, radio, and television.

Computer and Internet use has always been strongly correlated with age. Younger persons are the most likely to be users of technology. Both computer and Internet use are highest among those in their late teens, with elderly populations (those over age 60) the least likely to use the technology. However, as current generations of computer and Internet users age, we are likely to see dramatic increases in the number of older users.

What are the implications of these data for libraries? Librarians have recognized from the beginning that we have an important role to play in providing access to online information for those who cannot afford to purchase access for themselves. Furthermore, since many of our users in both academic and public libraries came to us with little background and understanding of the technology, we knew we had to do a lot of teaching of our patrons, showing them how to use the new technological tools to get at the data they were seeking. As the most recent surveys show, a user who comes into our libraries in Oregon now is more likely than not to have access

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to a computer and the Internet at home. This is particularly true of young people and students, a core constituency of both public and academic libraries. Thus, we can expect to spend less time teaching users how to use a mouse or save a file, and more time focusing on how to find and interpret information. What technological training we *will* be called upon to provide must be at a higher level, i.e., teaching how to understand the various file formats used for data, or the different approaches needed to search a subscription database such as *MasterFILE Premier.* Nevertheless, we must remain sensitive to the special needs of those who are still less familiar with the technology and/or are intimidated by it.

An additional factor to consider is what Internet users actually *do* online. Survey results show that new users are more likely than experienced users to spend time doing "entertainment" type functions such as participating in chat rooms, playing online games, or just browsing. More experienced users spend a greater percentage of their online time accessing information: performing banking and financial transactions, reading news, or doing school or professional work (UCLA Center for Communication Policy, 2001). Among all user groups,

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however, by far the most popular online activity is electronic mail. This means that even "experienced" Internet users may come to the library with very few skills in actually using the Internet to find information. The ability of the reference librarian to locate and retrieve information should remain just as critical to our users in the online environment as it has been in the past.

With the increasing likelihood that our users have access to online information from the home and other places outside the library, we must be increasingly prepared to offer services to users from a remote location. A recent survey by the Digital Library Federation showed that academic library users of all kinds are going to the physical library less, in favor of conducting research online. (Greenstein and Healy, 2002). This is not to say that users are no longer using library resources. In many cases, they are accessing the library catalogs and other library-provided databases from their residences and offices. This would imply that libraries should consider placing more emphasis on such tasks as database maintenance and developing online tutorials and pathfinders as opposed to the provision of physical services in the library. Electronic reference service has been a topic of discussion in libraries for some time now, but many libraries have yet to develop an effective way to integrate such services into their normal routines. The time may not be very far off when libraries will be expected to provide online reference service in real time via synchronous online communications, not just by monitoring an e-mail in-box on a once-a-day basis. Planning for such an eventuality should be on every library's agenda right now.

As our users become more sophisticated and experienced in the use of digital technology and communications, libraries must work to stay ahead of the technological curve in understanding how our users access information online and how we can facilitate such access, both by providing training and by selecting and organizing appropriate resources for our users. Our success in doing so will go a long way toward determining our effectiveness in performing our role as the providers of access to information for our communities in the digital future. ❧

References

Greenstein D. and Healy L., 2002. National Survey Documents Effects of Internet Use on Libraries. *CLIR Issues* 27. Online: http://www.clir.org/pubs/issues/issues27.html#national.

UCLA Center for Communication Policy, 2001. *The UCLA Internet Report 2001: Surveying the Digital Future.* Online: http://ccp.ucla.edu/pages/internet-report.asp.

United States Bureau of the Census, 2001. Home Computers and Internet Use in the United States. *Current Population Reports:* 23–207.

United States National Telecommunications & Information Administration, 1999. *Falling Through the Net: A Report on the Telecommunications and Information Technology Gap in America.* Online: http://www.ntia.doc.gov/ntiahome/digitaldivide/.

United States National Telecommunications & Information Administration, 2002. *A Nation Online: How Americans Are Expanding Their Use of the Internet.* Online: http://www.ntia.doc.gov/ntiahome/dn/index.html.