

WHAT IS THE STATE OF ADAPTIVE TECHNOLOGY IN LIBRARIES TODAY?

Many times writers advocate for causes that seem altruistic and unobtainable to the masses. On some occasions these writers appear evangelistic. To temper those viewpoints, the author also interviewed librarians and patrons to determine what is available in libraries.

To that end she requested a colleague, Everyl Yankee, to locate libraries that provide computers and Internet services, along with training for the special populations discussed in this work. Yankee then contacted them to determine:

- The types of adaptive technology that are being used by patrons
- How libraries planned for the technology
- How staff were trained and the type of training the library offered patrons
- Successful marketing tips
- Successful funding strategies
- Overall tips for success

The libraries covered the spectrum of possibilities in regard to size and location. Staff of both public and academic libraries agreed to share the information with their colleagues.

Yankee also talked to patrons with disabilities, some of whom were older, to determine what they feel makes a successful library experience. She also solicited input on if and how they used the library and the library's website.

The patrons interviewed were students, middle-aged workers, and seniors. Some used libraries because they were readers; some just wanted to find the information they needed. The readers represented a good cross-section of North America.

Many appreciated the opportunity to tell librarians what was right or wrong about the state of libraries as well as to offer suggestions for improvement. Yet some did not want to waste their time chatting since didn't think anything was in it for them.

The information Yankee gathered is abridged in the following pages. Although this survey was not conducted scientifically, it gives a picture of part of the real world.

Patrons are generally disillusioned with their libraries

Overall, patrons did not expect much from their libraries. Some felt that they were disconnected from the library because they had special needs. A few comments follow:

"They are looking for older adults to use the library, but (some) rooms are not accessible if you have a walker."

"We have one room on campus for accessibility; it has equipment and

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software, but it's always locked and impossible to schedule access to it...can't fit a wheelchair under a computer table...."

"I'm barber shop singer—we met in a senior citizen complex where they had a room called 'library,' with a large CCTV viewer. It was the first and only time I'd ever seen one anywhere for use of senior citizens."

Do not expect patrons to request adaptive equipment

When patrons were asked if they have requested adaptive equipment in their libraries, their replies were evenly split. A few patrons (younger in age) acknowledged that they should be doing more self-advocacy. Others who did advocate expressed disappointing feedback.

"I was told 'it's too expensive and not enough people would use it.'" (academic library, adult college student)

"The library did have some AT, in particular a large-screen monitor that could be used to access the Internet. As of March 1, 2004, I was told it would no longer be available as finances were limited. To date there has been no resolution. As a result we have vowed to form an organized group in opposition of any levy campaign that the library may place on the ballot."

Patrons speak on the importance of technical service staff

The biggest problem experienced by those whose library had adaptive technology was lack of technical support. For many patrons, not having technical staff who understood how and why the equipment was used, as well as knowing how to fix the equipment, was as bad as not having the equipment. They feel systems people should be involved with patrons.

"Knowing patrons personally helps them to understand the importance of why we do what we do."

"If the technology is there and broken when I get there, I need to know that some person is going to be there to help the librarian fix it."

Patrons speak on staff awareness of nontech special needs

Patrons indicated that staff unintentionally create additional barriers for them by not addressing them as people first. Patrons generally shared the need for public service staff to speak to them.

"I have lived downtown and had access to the public library, which was nice—I still use that library. However, they (library staff) do not acknowledge that you are approaching or speaking; they do not speak unless you speak first."

"If there is a line, I want to wait my turn, I don't have a problem, but they need to let me know that I'm next. They need to say 'May I help you?' If I am not in line, I'd like them to direct me to my next point. "

"It takes nine months to a year to get the book I want recorded by the NLS—I would like to use the public library like everyone else."

"I have low vision. The glare around the workstations is distracting."

A cluttered library environment erects additional barriers

Patrons who were visually impaired or blind said that the atmosphere of today's libraries make them difficult to use. Clutter, both physical and auditory, make navigation almost impossible. People who are visually impaired need to hear and feel where they are going.

"... if there's a lot of noise or commotion I can't discern where the desk might be—I am using what I hear (to figure out) where to go next or where to find someone to talk to."

Patrons speak on the need for more technology

Everyone seems to want more from organizations such as libraries. Although as a group people do not always vocally express their desires and needs people with special needs want more as well.

"If the library had more adaptive technology that I could use—computers, a screen reader and an OCR program—I'd use these. I use an OCR, scanner, and Braille printer at work, but I'm sure the public library doesn't have these (items)."

"Readily available adaptive equipment that works and someone human to help me get started on it."

"I am a graduate student and since there is only the one computer with JAWS on it at the school library, I tend to do most of my research from home."

What libraries are doing right

In spite of everything that was deemed wrong with the library, patrons were asked to share what the library was doing right. Providing access to equipment and information, as well as providing training in general, topped everyone's list.

"While not necessarily life changing, it did make me feel more included and less isolated from my peers...I feel more in touch with the world."

"As an adult with CP, I wanted to enter the work world again, but was limited to using the computer on the floor, laying down. The librarians helped me find IntelliKeys and a KeyGuard. I practiced with it three times, and purchased it, [practiced with it] and am now working in a local agency—it really opened my world."

"Our state library has adaptive technology. We got lessons from (the librarian). He gave us lessons on Kurzweil back when we were computer illiterate. He took time to work with us."

Patrons share how they learned about the available library technology

Often libraries purchase equipment but fail to let special populations know that it is available. The majority of the patrons who used libraries and technology said that they found out about library services from friends or relatives who noticed it in the library. Others said:

"I learned to use adaptive equipment in school [or from community services training] and sought it out in the library."

"There was effective outreach program that made me aware of it."

"I attended a meeting and heard about the equipment from community services."

The library's Web page

Inasmuch as the library's website was an extension of the library, patrons were asked what they thought of it. Most visually disabled participants surveyed had not even tried to use their library's webpage for electronic access. Most patrons did not feel the website offered anything they could use. This perception is unfortunate as Internet AT access was better than patrons thought but unusable because they were not aware of it.

"I fantasized about being a librarian ever since I was a kid but thought it was impossible since I couldn't even use a library independently. Now because of [electronic databases] I'm looking into grad school and searching for scholarships to get my MLS."

A blind lawyer from the South said that it had never occurred to her that the library might have accessible services, including accessible databases. "I use the Internet as a resource and am just now exploring the idea of the library online as a resource."

What do patrons want from adaptive technology

Blind and low-vision patrons were asked to make a wish list of equipment they want and would use. Overall they are enthusiastic about the following, listed in order of popularity:

- CCTV
- Large monitors
- JAWS
- ZoomText
- Kurzweil 3000

Librarians share what works

The librarians interviewed are all involved at some level of providing services to people with disabilities or seniors. Most learned by trial and error as to what works and what does not. A third of these librarians work in libraries that were recipients of a grant of a wide array of adaptive technology from the Hewlett Packard–Library Technology Access (HP-LTA) Grant in 2002.

HP grant, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/index.html

Selecting equipment

When asked what librarians wishing to buy equipment should buy first, the answers varied by individual library success stories. If the library had a lot of users who were learning disabled, they said “Kurzweil 3000.” If they used a piece of equipment that resulted in a life-changing event for a patron, that made the list. Thus the most succinct advice for knowing what to buy was summed up by this librarian:

“Contact the organizations in your community that are working with disabilities. Talk to the experts and find out what the people need. What works in my community won’t help the person in your community... Working with advocacy groups is a great starting point.”

“Visit rehabilitation centers and poll the clients and service providers and find out what would people come in to use—what AT would make them want to come to your library.”

Most library staff stated that they felt the correct ergonomic furniture was essential. Their recommended technology items include the following:

- ZoomText and JAWS
- Alternative inputs
- CCTV and large screens
- Kurzweil 3000
- Printers
- Daisy Technology
- Dragon Naturally Speaking

Staff training

The librarians interviewed were asked about the need for staff training, in regard to general public interactions and learning how to use the adaptive technologies. Most realized the importance that good training staff played in making programs.

“Adaptive technology brings in another population. You have to prepare staff to be sensitive to this population. Not all staff were aware of how to help the patron seeking adaptive technology.”

“The main thing is a trained and willing staff...sensitively trained...[to be] able to treat all patrons as individuals and not disabilities. People with special needs are people first.”

“We emphasize that staff should go up and meet the patron no matter what their limitations are—wanted to defer to the lead person, resistance, took a while to get beyond it. Make it clear—proactive stance, training and written materials, time off the desk to practice. Make it part of your service, especially for the business service at central library versus branches and more personalized service there. We want them to be welcome.”

“At least one person went through the training sessions—but the software is not frequently used—so six months goes by and you are supposed to help with the ZoomText program, so you might be you are little leery.”

“AT liaisons from our branches meet and learn to use equipment. They play with it and they’ve got it. They remember how to use it and appreciate the training.”

“We work with library staff who request training.”

Training patrons to use the equipment

A library’s commitment to training varied by institution. Some libraries that did not offer training for nondisabled patrons felt they were not obligated to expend any time training with patrons with disabilities. Others felt that providing the tools for self-teaching was all they could do. Still others offered one-on-one training.

Hands-on approach

The libraries that felt training was important commented:

“The librarian provides hands-on training with equipment and occasionally will do sensitivity training also.”

“The AT is concentrated in one area—a small number of staff members interact with the patrons. One member is in charge of the equipment, staff training, etc. Other staff know just enough to get someone started. We can’t expect staff to remember all details—just the basics.”

“Early on, we knew that we could not train the public. We started a ‘reciprocity agreement’—we refer people who need training to community partners...they refer trained people who need access to the library.”

Helping patrons self-train

“We provide simple training at the beginning of the school year (desktop shortcuts). Other training is scheduled through the Disability Services Office.”

“We have workbooks (Braille, large print, etc.) for students. We can start patrons off but not much more.”

“...We have PowerPoint presentations that run continuously. The Braille station gives a brief outline of the Braille embossed keyboard, Braille translator, refreshable Braille display, and JAWS.”

“We hand a patron a manual but we had to say, ‘the librarians...cannot train you because they don’t have the time...(they can) give you the books and a start. You can train yourself, with books or tapes.”

Some librarians felt adamant about *not* instructing patrons. Their reasons follow:

“Our state has excellent junior college and college courses—you can learn in the labs about computers, JAWS, and Open Book. I tell them if they have not used a computer, they will learn.”

“Our library staff is to know *where* they can send the person, how to start the machine, and give a short explanation and provide books and computers. We stress that our computers are for the computer literate.”

“We provide library services, not disability services.”

Involve technology staff

Librarians admitted they were indeed librarians and valued the contributions of the Automation Services staff. When involved, the automation staff learned the importance of the adaptive technology in the lives of the patrons.

“Our system person comes to weekly staff meetings and has been introduced to patrons on a one-to-one basis. He is included in our potluck parties too.”

Raise community awareness to availability (aka marketing)

To have a successful adaptive technology program, you must advertise. Most stressed the need to share the presence of the technology with co-workers or faculty. Most of all, they stressed the need to be persistent and not to undervalue word-of-mouth as an advertising tool.

“We are small. Two or three times a year we host an open house at Disability Services.”

“For the 13th anniversary of the passing of the ADA Legislation we had a mini-barbecue. Several hundred people showed up.”

“We also have regular marketing routines—writing press release now and again. We send a lot of brochures to the public library; they work with senior citizens, so we send information over there.”

“We gave several faculty demos to the dean of the law school—he was interested...in a small place (like here) it goes far.”

“We have offered to check keyboards out to faculty and the circulation department (whose hands get cramped) to see what peripheral equipment would be helpful to them.”

“In our Education Department this technology wows everybody. [They can] try using this for testing for students.”

"We stress: 'You don't have to have dyslexia to be aided by this kind of equipment.'"

"We value in using the [informative] outreach approach. People who cannot easily get to the library need to know that it will be worth the effort."

"We have an online catalog with pictures of the adaptive equipment that is available."

"We aren't sitting back now, we send reminders. A new supply of brochures is ready for mailing. We want to keep the library and workstations in front of everybody."

Financing equipment

A burning question to organizations that have technology is, "How did you/do you finance equipment?" Answers were succinct and helpful:

"Grants!"

"Recently the Lions Club has offered money for adaptive technology—we'd try to do something for the vision impaired with it. We don't expect to put in full-blown stations but something limited in some way for the vision impaired."

"We received the computers from the Gates Foundation; then staff worked the funding for the software into the state budget."

"Our Adaptive Technology collection—it was for the most part started with a grant, but then we got a bequest from a Talking Books patron, and donations go into that fund for AT devices."

"Grant money is available. It's a great time to get grant money because people with disabilities are having more of a voice—or perhaps it is because people are listening more. Whenever you are going to serve a diverse population you will find will find the possibility of grant money."

"We are unusual because we have a very strong tax base here and a kind of well-off community."

"The city helps us with technology costs and we get help from corporations occasionally."

"Ask patrons to get involved. One patron was so thrilled with the adaptive technology that he has taken up the cause himself by going to a board meeting at my local town library. He also followed up by asking local organizations like the Lions who sometimes give money for projects like this."

General tips

Library staff members were individually asked to give their best piece of advice regardless of category. Their advice follows:

"Purchase the best possible PC, i.e., most amount of RAM, fastest processor, and expansion space to survive three years."

“MAGic is offered but never gets uses—many are more used to ZoomText and perhaps agencies offer ZoomText so it’s more familiar to users.”

“Purchase computers with the speakers or headphone jack on top of the PC level versus behind the PC unit. It’s easier for patrons to plug them in.”

“Advertise within the library—make sure the adaptive equipment is visible or that some (visual) reference is there to raise awareness of its availability. Have at least one computer with an adaptive keyboard prominently displayed. Children and grandchildren see the equipment and tell (the) seniors that the equipment is in the library.”

“Plan how you will offer this. Take a little longer if needed to get ready to ensure staff is ready to work with public. Rotate the service desk staff to ensure everyone is comfortable.”

“If you are starting out, go and visit libraries that have established their systems. Play with the software; get a feel for the physical setup—workstations; it makes a real difference in how useful an area can be. Don’t reinvent the wheel.”

Many librarians suggested that the screen be in a line of sight with a staffed desk.

“My advice: advertise AT to the entire staff first, before you sell it to the public. ...it has to be part of the library, just like a book or CD is part of the library. We are such a little redheaded stepchild over here. We are the answer for anything about disabilities—adaptive computers...pocket talkers...”

Grow continuously

Most of the libraries interviewed advised libraries just coming on board to be ready to grow—with the increased visibility of adaptive equipment comes expansion for your library:

“We are putting equipment into six branches of 30. It’s ZoomText for sure, large-print keyboards, and big screens (19-inch screens). We plan to retrofit 75% of the existing branches and all of the new branches with big screens and large-print keyboards.”

“We are adding...Zoom Text, Open Book, and JAWS; a headset for sound; and CCTV. Every new branch that has been built gets set up, and there’s something in each regional branch.”

HP LTA Project

Hewlett Packard’s Library Technology Access (LTA) Program funded adaptive technology workstations for six libraries in 2002. The project director, Michael Takemura, said, “The response was incredible. We had over 100 libraries send applications, and we’d planned for six libraries for this initial pilot.”

Building blocks of AT

Goodies

Computer software

Computer-adaptive technology

Computer hardware

Physical setups including workstations, desks, chairs

Environmental conditions

Staff awareness including resource availability

Technical support and involvement with patrons or specific needs

HP, <http://hp.com/hpinfo/abouthp/accessibility/partnerships/ala/index.html>

HP orientation guide, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_library_orientation_guide.pdf

Cleveland Public Library, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_cleveland.html

Johnson County Library, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_johnson_county.html

Milwaukee Public Library, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_project_milwaukee.html

San Diego Public Library, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_san_diego.html

Arizona State University, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_arizona_state.html

University of South Dakota, www.hp.com/hpinfo/abouthp/accessibility/partnerships/ala/lta_southdakota.html

Takemura said that two winning criteria were:

- A demonstrated commitment to accessibility and adaptive technology previously from the library
- An area set aside for accessibility as well as a commitment to set aside space for equipment.

The application process required the submission of a letters in support of the project from the library's director, the head of the automation services department, and two consumer groups.

The letter from the director was a statement that he or she would allow staff to be trained in the use of the equipment. The automation services staff agreed to install and maintain the equipment as needed.

When Takemura was asked why HP chose to require a letter of commitment from the Automation Services staff he replied, "It isn't the complexity with the adaptive technology itself—the tutorials are designed to help with that. The complexity is with the LAN/IT infrastructure...when it's on their LAN, they own it—we had to be sure they bought into it. Librarians are not IT experts."

A letter of commitment was requested from patron consumer groups to demonstrate that they are part of making it all work. As users, they can broaden the usage of the equipment.

HP contracted with a third party to act as trainers for the six libraries awarded the workstations. They covered topics such as working with people with disabilities, how to use each piece of equipment, how to access online tutorials. Trainers stressed the importance and promise of the project in relation to the patrons.

The disabilities accommodated with the two workstations include the following: blind, low vision, deafness, hard of hearing, upper mobility (muscular dystrophy, arthritis spinal problems, carpal/repetitive, tremors), and learning and cognitive disabilities.

Comments from the HP/LTA Libraries

To find out what difference a generously equipped program can make in the community, we also asked HP grant recipients how the workstations have caused the overall general public's perception of the library's mission to change and what has been the feedback from the actual workstation users:

"It has not changed the perception of our mission, but it has changed perception of being a welcoming place. Having technology is now a way of life for many people and part of a standard procedure—part of our day to day business now....part of our core services."

"In our education classes on campus there is a section on adaptive equipment; someone goes, speaks and shows hardware and software. In one large class, a large number of students came in and said they thought they were ADD—they'd never thought about it. The professor made it an assignment and a video of the AT area to was made show to the class."

"We cannot replicate the HP stations in our neighborhood libraries, but we have a strategic plan so that a patron doesn't always have to come downtown to have access."

"We had a comment from our community partner about a patron with very, very little sight. The patron, a trainer, and a whiz working with programs came in to see the HP workstations—they were incredibly impressed with what had been provided. They said that it's working well, and

it's state-of-the-art technology for the community—the community was lucky to have it—and we agree.”

You can't win them all, but you can try!

Librarians cautioned that you won't reach everyone. Some patrons will be stymied by lack of transportation, so ensure the library's other services reach into the community. Others will become disillusioned and choose not to become computer users.

Still others will quickly learn how to use the computers and simply not return to the library as they found a way to buy their own equipment. Although they may not remember to say thank you or good-bye, let them soar!

RESOURCES

The resources presented are by no means complete and are the admitted favorites of the author. Readers are encouraged to start with these and move on to their own favorites.

Demographics

American Association Homes and Services for the Aging (ASHSA) presents an overview on demographics concerning the aging: www.aahsa.org/public/agingbkg.htm.

U.S. Census Bureau. Disability Status: 2000 Census Brief. March 2003. Washington, D.C. Also online, www.census.gov/hhes/www/disability.html.

General accessibility issues

American Library Association Sections-OLOS and ASCLA (LSSPS). ALA's Office for Literacy and Outreach Services (OLOS) provides support for libraries needing guidance in promoting literacy and equity of information access initiatives for traditionally underserved populations. Supports a diversity fair highlighting best practices at annual conference. The section also supports "What's Happening in Outreach @ Your Library" an on-line site that allows visitors to share their outreach activities. Great place for networking and learning, www.ala.org/ala/olos/aboutolos/About_OLOS1.htm.

Association of Specialized and Cooperative Library Association (ASCLA), Libraries Serving Special Populations Section (LSSPS) has historically provided guidance and directions for library services for persons with disabilities and those with special information needs. Programs are presented at conference. Great networking possibilities, www.ala.org/ala/ascla/asclaourassoc/asclasections/lssps/lssps.htm.

HP accessibility Web page: Learn More About Disability Laws, 508 Product Compliance, link to HP Orientation Guide to Accessibility, www.hp.com/hpinfo/abouthp/accessibility.

Internet Instruction for Librarians Serving People with Disabilities: Workshop presentation designed by Dr. Marilyn Irwin of the Indiana Institute on Disability and Community at Indiana University to be used by librarians working with patrons who are disabled, www.thearclink.org/forLibrarians/default.htm.

Adults with Special Needs: A Resource and Planning Guide for Wisconsin's Public Libraries: Although prepared for the State of Wisconsin, this wonderful handbook gives librarians guidance on working with people who are experiencing a variety of physical infirmities, as well as information on working with seniors and effective strategies for working with adults affected by poverty or illiteracy, www.dpi.state.wi.us/dlcl/pld/specialasn.html.

Equal Access to Software and Information (EASI): Interviews with authors who address access needs of people with disabilities, AT advocates, AT designers, and

WC3 members. Topics covered include creating barrier-free virtual libraries, distance learning considerations, laws, accessibility evaluators, www.rit.edu/~easi/webcast/weekarch.htm.

Crossing digital divide

PBS Digital Divide Series: Overview of the Digital Divide and teaching tools are included. Links to statistical studies and resources that help address issues concerning the digital divide, www.pbs.org/digitaldivide/links.html#ve.

Adaptive technology

CNIB technical aids: An overview of technical aids and links to websites of manufacturers of various adaptive technologies, www.cnib.ca/tech_aids.

Mates, Barbara T. *Adaptive Technology for the Internet; Making Electronic Resources Accessible to All*. American Library Association: Chicago. 2000.

A complete guide to making Internet resources accessible: www.ala.org/ala/products/books/editions/adaptivetechnology.htm.

NLS Reference Circular: Assistive Devices for Use With a Personal Computer. 2001.

An overview of technical aids and links to websites of manufacturer's various adaptive technologies, www.loc.gov/nls/reference/circulars/assistive2001.html.

Website and database design

WebAim: In addition to providing links to many website validators (including one in Spanish), browsers, and so on, this site provides a tremendous amount of information about Web design. A video presentation, "Keeping Web Accessibility in Mind," which enlists the aid of people with disabilities discussing problems they encounter when using the adaptive technology with the Web, also is available on this site, www.webaim.org.

Schmetzke, Axel. "Accessibility of Web-based Information Resources for People With Disabilities," *Library Hi Tech*. Two parts, vol. 20, no. 2 and 4, 2002. Guest editor Axel Schmetzke provides well-documented information on the accessibility of special information resources such as electronic database, e-journals, and online references.

Working with seniors and computers

Mates, Barbara. *5 Star Programming for Your 55 Plus Library Customers*. American Library Association: Chicago. 2003. Covers the basic information on working with seniors. Chapter included on teaching seniors to use the Internet. Senior links library included, plus examples of successful senior library programs.

Working with patrons for whom English is a second language

When Working with ESL Students (Queens University): Tips for professionals working with students and people who ESL, <http://qsilver.queensu.ca/~wcentre/handouts/ESL.pdf>.

Library Services for Latino Community Members: Presented by the State Library of Ohio the website provided link to resources that help libraries provide services to the Latino community, www.winslo.state.oh.us/services/LPD/tk_latino.html.

Libraries

The libraries that follow have made an extra effort to extend services to special populations. The list is provided to give novices a starting point in creating new services.

One of the areas that is almost totally neglected by libraries is service to people with developmental disabilities. The San Diego and Dunellen public libraries are striving to make a difference by using computer technology.

San Diego Public Library

San Diego Public Library recently received grants that enable five branches along with the local school districts to help 18- to 22-year-olds transition from high school to community. The library staff members are installing software programs that help users improve their literacy and daily living skills.

In addition to improving skills, another of the program's goals is that the person with developmental disabilities recognize that a library is a place to go to use computers, learn, refresh skills, and do peer tutoring.

The library staff provides equipment and the school district provides training. Students in the program will be trained; however, future patrons in this program must come in with someone who is already trained.

Dunellen Public Library

Dunellen Public Library in New Jersey provides services to the developmentally disabled by providing materials, hardware and software, and support for computer training.

The philosophy is that "developmentally disabled individuals could use computers for self-learning programs plus learn important living skills." The skills include how to count money and how to use a bus.

Puskarich Public Library

Puskarich Public Library in Ohio used LSTA grant money to establish a barrier-free computer environment for the community. Large 21-inch monitors, head phones, and a Kensington trackball mouse form the workstation's foundation.

Patrons with various developmental disabilities visit the regularly to check their horoscopes and the weather. The oversized monitors appear to enable the patrons to more easily read the information displayed.

Staff plan to use the array library's adaptive technology equipment with the patrons with the goal of enabling them to independently use the computers.

San Diego Public Library, www.sannet.gov/public-library/services/disability.shtml

Dunellen Public Library, www.lmxac.org/dunellen/index.html

Puskarich Public Library, www.harrison.lib.oh.us

Websites for seniors

National Institute for Senior Health

Although not a library website, this website demonstrates what is possible in regards to creating an accessible and usable senior site. Visitors are able to enlarge text, adjust contrast, and use speech attribute. Additional software is not required.

http://NIH_SeniorHealth.gov

North Coast SeniorsConnect.org

North Coast Seniors Connect is a Cuyahoga County (Ohio) website designed for older adults and those who care for and about them. The website is funded by the United Way's Community Senior Vision Council and created and maintained by Cleveland Public Library.

www.SeniorsConnect@cpl.org

In addition to being able to link to a senior help line, this accessible and usable website encourages seniors to sign up for an e-mail account. An orientation guide and trainers manual is included online.

English as a second language and cultural electronic initiatives

National Library of Canada

The National Library of Canada (NLC) offers many services and programs for members of diverse cultural communities. These services include specialized reference assistance, digital projects, access to images that reflect ethnic history, databases of writers, artists, and immigration records, and specialized help in genealogical searches.

www.nlc-bnc.ca/multicultural/r25-200-e.html

NLC aims to provide all Canadians access to their history, which includes multi-lingual book, photograph, and newspaper collections. Also available are finding aids in the archives geared toward immigration records.

The toolkit provided for libraries developing multicultural/multilingual collections and services is invaluable. The toolkit contains many resources for libraries to assist in collection development, Web design, language issues, and more.

Norwalk Public Library (Connecticut)

Provides Spanish-speaking people with access to the library's website, catalog, and computer classes. It includes a Web page for Spanish-speaking children.

www.norwalklib.org/spanish/index.htm

Westchester County Library System (New York)

In addition to offering a text only interface (link correctly placed in upper left-hand side of the page the library provides a virtual Spanish language library resource and links to resources that help new residents live and cope in New York.

www.westchesterlibraries.org/recursos/bibliotecavirtual.html

Wisconsin State Law Library

Although the site focuses on the legal needs of Native Americans, who are part of the digital divide, additional links to cultural resources of Native Americans are included. Additionally, it includes links to resources for children.

<http://wsll.state.wi.us/triballaw.html>

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Paula Kiely, Milwaukee Public Library, Milwaukee, Wisc.

Donna Lauffer, Associate Director Johnson County Library, Shawnee Mission, Kan.

Ginny Sylvester, head of access services, and Jody Milam, Arizona State University, library supervisor for ADA Services Tempe, Ariz.

Chris Bloss, assistant professor/instructional services librarian, University of South Dakota, Vermillion, S.D.

Kathleen Olsen, director of the I CAN! Center, San Diego Public Library, San Diego, Calif.
Elona McCaffrey, manager, Talking Book Service, Alexandria Public Library, Alexandria, Va.

Marylou Tuckwiller, head, Talking Book Program, Lee County Public Library, Fort Myers, Calif.

Bob Peasley, manager, and Greg Platko, automation support coordinator, Virtual Village, Public Library of Charlotte & Mecklenburg County, Charlotte, N.C.

William M. Robins, director, Dunellen Public Library Dunellen, N.J.

Karen A. Myers, assistant dean of students, director, Disability Services Center, University of California, Irvine, Irvine, Calif.

Robert Espero, adaptive technology expert, University of California, Irvine, Calif.

Margaret Londergan, vice president, Information Technology, Indiana University Bloomington, Ind.

Simon Healy, Philadelphia Public Library, Philadelphia, Pa.

Sean Miller, adaptive technology specialist, Adaptive Tech Training Center, Ohio State University, Columbus, Ohio

Nathalie Lynn Soini, acting coordinator acting special readers' services coordinator, Queens University—Kingston, Ontario, Canada

Sandra Fernandez, Houston Public Library, Houston, Texas

Mary Murphy, learning centre administrator, Surrey Public Library Electronic, Surrey, British Columbia, Canada

Wendy Jang, Librarian, Multi-Lingual Services, Richmond Public Library. Richmond, British Columbia, Canada

Mary Blocher, automation services coordinator, Dauphin County Library System, Harrisburg, Pa.

Carolyn Neal, Seniors Connect, Cleveland Public Library, Cleveland, Ohio

Sandi Thompson, director, Puskarich Public Library, Puskarich, Ohio

Marie Groark, spokesperson, Bill & Melinda Gates Foundation, Seattle, Wash.

Dagmar Amntman, research assistant professor, Department of Rehabilitation Medicine, School of Medicine; assistant director, U.W. Center for Technology and Disability Studies, University of Washington, Seattle, Wash.

Michael Takemura, Hewlett-Packard, director, Accessibility Program, Houston, Texas