# Making Electronic Resources Accessible in Libraries

As a result of medical advancements, legislation, and changing attitudes, more individuals with disabilities are pursuing postsecondary studies, succeeding in careers, and participating in community life. Technology plays a role in their level of success. However, some individuals who have assistive technology do not have access to all Internet content and other electronic resources because of their inaccessible design. Inaccessible products include library websites, online catalogs, electronic books, indexes to literature, full-text journal articles, and electronic reserve services.

Early on, libraries recognized their role in providing information resources to everyone in the community. They have been leaders in accommodating individuals with disabilities within their physical spaces. Within these facilities it is usually easy for a librarian to identify individuals with disabilities who need assistance. They come only when the library is open to the public and therefore staff are available to help. When a person arrives at the library using a wheelchair or a white cane, the librarian has a sense of what types of accommodations he might need in order to access specific library holdings. When a person who is blind uses speech output technology within a library but cannot access certain resources because of their inaccessible design, library staff members can observe the patron having diff culty and make themselves available to read screen content.

Libraries now support patrons from all over the world via the Internet. As far as electronic resources are concerned, the library is "open" twenty-four hours a day, seven days a week. Librarians do not know how many of their electronic visitors have disabilities that impact access to resources. A new level of awareness regarding the accessibility of information technology (IT) is needed. Just as steps without a corresponding ramp or elevator can make a library's physical resources inaccessible to some patrons, poor design of electronic resources erects barriers for some online visitors.

This publication focuses on how libraries can ensure that everyone has access to their electronic resources. It discusses access, legal, and

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for people who are blind to make sense of the content. Individuals whose visual impairment prevents them from seeing small images may use special software to enlarge screen images. Because they see only small parts of the website at a time, cluttered web pages and page layouts that are inconsistent from page to page can be diff cult for them to navigate.

Students with some types of learning disabilities also benef t when pages are orderly and consistent from page to page. People who are colorblind can become lost when navigation choices require the ability to distinguish one color from another. Similarly, when websites include audio output without providing captions or transcriptions, individuals with hearing impairments cannot access the content. Health impairments can also affect web access. For example, web pages that include f ashes at certain rates (between 2 to 55 hertz) can induce seizures for people who are susceptible to them.

## Legal Issues

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 and its amendments mandate that qualif ed people with disabilities have access to public programs and services. According to these laws, no otherwise qualif ed individuals with disabilities shall, solely by reason of their disabilities, be excluded from the participation in, be denied the benef ts of, or be subjected to discrimination in these programs and services, unless it would pose an undue burden to do so. Although Section 504 and the ADA do not specifically address access to technology, the United States Department of Justice and the U.S. Off ce of Civil Rights have clarif ed that the ADA accessibility requirements apply to electronic resources. Court cases and complaints about the accessibility of online content to the Off ce of Civil Rights continue to increase. Dealing with complaints and litigation that result from inaccessible services can be unpleasant and costly.

## **Universal Design**

Planning for access to electronic resources as they are being developed can be easier and therefore less expensive than developing accommodation strategies once a person with a disability needs access. When design decisions are made to ensure that electronic resources are accessible to people with a wide range of abilities, disabilities, and other characteristics, the process is called "universal design." Considered user characteristics include, but are not limited to, age, race/ethnicity, size, gender, native language, and level of ability to move, hear, or see. Universal design is defined by the Center for Universal Design (CUD)

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People who have situational limitations that are similar to limitations imposed by dis-

Procure accessible products.



For example, the ACRL could set a positive example by assigning a committee to revise its *Guidelines for Distance Learning Library Services* to include a commitment to accessibility; to adopt standards for accessibility; and for the procurement, development and use of accessible electronic and information technology; to review its web pages to make sure they are models of accessibility; include disability-related content in their conferences; and to develop sample accessibility policies, standards and procedures for its members.

#### Conclusion

Providing access to information technology helps libraries comply with legal mandates as well as address concerns related to equity and marginalization. Libraries can provide a model of accessibility in policies and practices, encourage professional organizations to promote accessibility, and pressure producers of electronic products to provide accessible formats.

#### **Additional Resources**

To learn more about accessible information technology, consult DO-IT's *Technology and Universal Design* page at *www.uw.edu/doit/Resources/technology.html*. For more information about applications of universal design, consult *The Center for Universal Design in Education* at *www.uw.edu/doit/CUDE/.* 

#### **About DO-IT**

DO-IT (Disabilities, Opportunities, Internetworking, and Technology) serves to increase the successful participation of individuals with disabilities in challenging academic programs and careers such as those in science, engineering, mathematics, and technology.

For further information, to be placed on the DO-IT mailing list, request materials in an alternate format, or to make comments or suggestions about DO-IT publications or web pages, contact:

DO-IT
University of Washington
Box 354842
Seattle, WA 98195-4842
doit@uw.edu
www.uw.edu/doit/
206-685-DOIT (3648) (voice/TTY)
888-972-DOIT (3648) (toll free voice/TTY)
509-328-9331 (voice/TTY) Spokane off ce
206-221-4171 (fax)
Founder and Director: Sheryl Burgstahler, Ph.D.

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