Assistive Technology in Libraries for Patrons with Disabilities:
An Annotated Bibliography

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Introduction and Scope

The following bibliography covers accessibility of libraries and library resources to people with disabilities. The articles present research from the United States, both on a national and regional level, Canada, the United Kingdom, Australia, and Greece. All articles were published in 2001 or later. Some of the topics that the articles address include social attitudes toward disability and how they have changed after national legislation such as ADA, the differences between librarian and user perception of adaptive technology, the accessibility of online resources, and the areas in which libraries still have progress to make.

Description

Since the passage of ADA legislation in 1990 and similar movements in other countries, such as the 1995 Disability Discrimination Act in the UK (Creaser, 2002), public spaces have made progress toward becoming accessible to people with disabilities. The worldwide “Web Accessibility Initiative of 1996” also ensures that online resources meet a certain level of accessibility standards. To adhere to these standards, libraries of all types in many countries have made adaptive technology and assistive devices available to patrons, and have also begun following guidelines for making their online resources accessible and compatible with the assistive technology. Examples of assistive technology are: screen magnification software, Braille printers, audio books, on-screen text and word processing readers, and speech recognition software (Sunrich & Green, 2006).
Summary of Findings

There have been a number of studies conducted in the past decade concerning the implementation, use of, and satisfaction with assistive technologies in libraries. The articles listed here were all published after 2001. For research conducted within the United States, this year coincides with the passage of Section 508 of the Rehabilitation Act, which concerns accessibility standards for information technology (Vandenbark, 2010). Other countries such as Canada, the U.K., and Australia have also seen advancement in this area in the past decade. Researchers have focused their studies on academic, school, and public libraries alike, and have reached out to the librarians and user groups that populate them.

Researchers around the world have taken many different approaches to evaluating the extent and the strengths and weaknesses of libraries’ use of assistive devices or adaptive technology. The studies, however, have mainly fallen into two categories, which are librarian/library (provider)-centered and user-centered. Some researchers have even combined methods to gain a comprehensive picture of the library services from both sides. The studies that have aimed to evaluate the prevalence of accessible library resources in a certain system, whether it be state-wide or country-wide, have mainly been conducted by surveying library directors about the types of technology available in their own libraries. User-centered studies have tended to take the form of personal interviews, in which the researcher has gathered data of a more qualitative nature about how people with disabilities perceive the services that libraries are providing to them. Another form of the user-centered study is the rating of certain services, hardware, software, or databases against pre-determined accessibility standards, an

Several researchers also provided, as a preface to their studies, a sociological view of disability and how attitudes toward disability have changed in recent years. Both Copeland (2011) and Cassner, et al (2011) used the term “differently-able” in their articles, reflecting the idea that “disability” is a socially-constructed concept and that a person “is ‘disabled’ by external forces and interactions with oppressive structures within society” (Copeland, 2011, p. 225). These ideas about disability provide background for the importance of equitable access in information technology resources.

The library/provider-centered studies take different approaches in terms of the sample size and the represented population. These studies show varying levels of assistive technology implementation in libraries. Some of the most effective studies were those done on a city-wide or state-wide level. Hill’s 2011 study of Ontario public libraries and Khailova’s 2005 study of South Carolina public libraries both demonstrated a thorough methodology for measuring library accessibility. On a national level, Koulikourdi’s 2008 study on public libraries in Greece provided contrast, as she profiled a country that was lacking both an awareness and a necessary infrastructure of assistive technologies.

Aside from physical accessibility of libraries and the resources within them, several studies from recent years have attempted to evaluate the accessibility of library websites or databases. Tatomir and Durrance (2010) designed a scale by which to rate the accessibility of academic libraries’ databases and how well they integrate with adaptive technology. The study concluded that nearly three quarters of these databases
were “marginally accessible or inaccessible” (p. 593). Vandenbark (2010) also discusses library website accessibility, and proposes that librarians responsible for website design follow a database model that would store information about accessible features and ensure that any website they create is usable by all.

User-focused studies gained most of their qualitative results from personal interviews. Users generally expressed positive views of assistive technologies and how they can aid in enhancing information retrieval. There were, however, a few areas in which patrons expressed dissatisfaction or suggested areas of improvement. In some cases, technology was actually more of a barrier because it required a basic level of comfort with using computers and because “use of technology requires many steps” (Copeland, 2011, p. 234). A user-centered study by Creaser, Davies, and Wisdom (2006) revealed the importance of consultation from the user perspective, stating, “users need to feel that they have a voice and are being listened to” (p. 213). Finally, where many studies focused on visually impaired patrons as one large user group, Williamson, Schauder, Stockfield, Wright, and Bow, (2001) was the only study to note a difference in user perceptions between patrons who were born blind and those who became vision impaired later in life (p. 164). This is an area that could benefit from further research.

Since the passage of legislation in the U.S. and many countries around the world to make libraries and their electronic resources accessible to all users, many researchers have studied the prevalence of assistive technology and how users perceive it. As library resources evolve each day, librarians and resource developers can use these studies to evaluate the effectiveness of their own products and services as being equally accessible to all patrons.
Entry 1:


**Abstract:** “Purpose – The paper seeks to determine the state of library services to people with disabilities in the USA. It aims to use social capital theory to provide a lens to reconceptualize equal access in a global context, and to offer insights on the effects of new information technologies for re-envisioning universal access.

Design/methodology/approach – Librarians serving the National Library Service for the Blind and Physically Handicapped (NLS/BPH) were surveyed. Questions addressed clientele, services, technologies, career opportunities, library and information science education, and librarian demographics. Findings – Human resources and information technologies are identified as major challenges to the future of information access for disabled persons. Professional perspective suggests there is strong potential for technologies and the internet to bridge the information access divide if libraries commit to providing access through assistive technologies. Research limitations/implications – The survey was limited to librarians serving NLS/BPH. A similar survey distributed in other nations could expand the possibilities of future research. Practical implications – Information from this survey can aid librarians planning delivery of information services to disabled patrons. Suggestions for shifting from special access to universal access philosophy assure access for all. Results can also help library educators prepare graduates to serve an aging population that will challenge standard methods of information access.

Originality/value – The literature review demonstrates that this survey is the most recent
in three decades to determine the state of library and information services to disabled people in the USA. It is the first to address the topic in relation to new technologies, leading to better service through better understanding.”

**Annotation:** While this study provides valuable research about how librarians view the services they provide to people with disabilities, the sample is limited to those librarians working for National Libraries for the Blind and Physically Handicapped. The author provides excellent demographic data on librarians and user populations of these libraries, and it is a unique look at services from the perspective of the provider rather than the user.

**Search Strategy:** Having found good results with my initial keyword search in LISTA, I decided to attempt a controlled vocabulary search, using the thesaurus to determine appropriate descriptors. I first search for “disabilities” and selected “LIBRARIES & people with disabilities” and exploded the term, then chose to include descriptors that were relevant to my search.

**Database:** LISTA

**Method of Searching:** Controlled Vocabulary

**Search String:** DE "LIBRARIES & people with disabilities" OR DE "LIBRARIES & people with visual disabilities" OR DE "LIBRARIES & the deaf" OR DE "LIBRARIES & the hearing impaired"

**Scholarly/Refereed Status:** The article source was classified as a “Scholarly (Peer Reviewed) Journal” by LISTA. Additionally, according to Ulrich’s, *New Library World*
is a refereed journal featuring academic/scholarly content. According to the journal’s website, “Each paper is reviewed by the editor and, if it is judged suitable for this publication, then it is sent to two referees for double blind peer review.”

**Entry 2**


**Abstract:** “More than 5,000 households with a person identified as having a physical, mental, or emotional condition that impairs participation in activities were surveyed about their opinions concerning barriers to public library use and opinions about efforts by public libraries to be useful to people with disabilities. Results showed that perceptions of accessibility, collections, and presence of assistive or adaptive devices for people with disabilities were slightly more positive if someone in the household had used the public library in the past year. Data used for the study were from the October 2002 Current Population Survey, a federal survey conducted by the U.S. Census Bureau for the Bureau of Labor Statistics.”

**Annotation:** Burke cites previous studies about progress made in libraries toward becoming ADA compliant between 1995-2005. Her research in users’ perceptions towards these changes, however, is unique in that much of the prior research about user perceptions dealt with places of business or commerce. Her sample represents all 50 states, yet a limitation of the survey method is that since it targeted households, oftentimes a proxy answered questions on behalf of a person with a disability.
Search Strategy: This article was cited as a reference for the Hill article about public libraries in Ontario. I deemed the title relevant to my topic and searched for a citation/abstract in ProQuest, which confirmed the relevance. I was able to access the full text through ProQuest as well.

Database: N/A

Method of Searching: Footnote Chasing

Search String: Referenced in:


Scholarly/Refereed Status: According to Ulrich’s, The Reference Librarian is a reviewed and refereed journal with academic/scholarly content. The journal’s website states: “All articles in The Reference Librarian have undergone editorial screening and peer review.”

Entry 3:


Abstract: “This research is based on the Library Services for People with Disabilities Policy, which was approved by the American Library Association in 2001. The policy
identified focus areas for libraries including library services, facilities, collections, and assistive technology. Library websites frequently convey this information to users. Our study examined and compared academic library websites for the differently able. What services do academic libraries offer to the differently able? Is there a basic level of services that libraries identify or should offer? Are websites for people with disabilities easily located from the library’s home page?”

**Annotation:** Though not immediately evident from the article’s title, the research presented here provides study results concerning assistive technology in libraries. Findings are presented in a chart by disability category, with descriptions of assistive technology software, hardware and equipment, and facilities and rooms, also taking into account whether this technology is listed on a library’s website. The study is a unique approach to academic library accessibility through the web rather than in the physical facility, an important and relevant topic in the age of distance learning.

**Search Strategy:** I used the ERIC thesaurus to find descriptors for “disability” and for “assistive technology,” and selected the descriptors I wanted to include in my search. When I added AND “library” to this search string, my search was too narrow and only turned up one result. I instead searched the descriptors that I had chosen for disabilities and assistive technology, and narrowed down those results by doing a keyword search for “librar*”

**Database:** ERIC

**Method of Searching:** Controlled Vocabulary, then results narrowed down with keyword.
Search String: ((Thesaurus Descriptors:"Academic Accommodations (Disabilities)"
OR Thesaurus Descriptors:"Disabilities"OR Thesaurus Descriptors:"Physical Disabilities")
and (Thesaurus Descriptors:"Assistive Technology"
OR Thesaurus Descriptors:"Assistive Technology")
and (Keywords:librar*))

Scholarly/Refereed Status: According to Ulrich’s, Behavioral & Social Sciences Librarian contains academic/scholarly content and is a refereed journal. The journal’s website states: “All research articles in Behavioral & Social Sciences Librarian have undergone rigorous peer review, based on initial editor screening and anonymous refereeing by two anonymous referees.”

Entry 4


Abstract: “This article explores library services and accessibility in public, school, and academic libraries from the perspective(s) of patrons who are differently-able. For this study, five individuals, each of whom has unique experiences with disability and society, participated in in-depth interviews. Qualitative data analysis revealed the following themes: love for libraries and reading; disability as a socially-constructed phenomenon; physical limitations and barriers to library accessibility and services; technology and adaptation; and legislative compliance versus compassion. Through participants’ voices, the study lends understanding to the “lived experiences” of library patrons who are differently-able and offers suggestions on how library accessibility may be improved.”
Annotation: The author does acknowledge limitations of the study, which were that the participants were purposely selected and not necessarily diverse. As a result, all had at least a master’s degree and were over 35 years of age, therefore eliminating any views of current college students or adults with a lesser degree of education. Regardless, the firsthand experiences presented in this qualitative study are a unique approach to the fairly unexamined issue of library accessibility from the perspective of a differently-able person.

Search Strategy: I retrieved this from my initial keyword search in LISTA. In addition to the relevance of the title, I chose this article because it had an extensive reference list, which I then planned to use for a footnote-chasing approach.

Database: LISTA

Method of Searching: Keyword Searching

Search String: (disabilit? OR impaired) AND librar? AND (technolog? OR assistive OR adaptive technolog?)

Scholarly/Refereed Status: Technical Services Quarterly is listed under Scholarly/Peer Reviewed Journals on LISTA. According to Ulrich’s, it is reviewed and refereed. According to the journal’s website, The journal accepts original research, theoretical, and implementation articles pertaining to technical services, automation, networking, document delivery, information technology, library instruction and information literacy, reference and bibliography, case studies, cost analysis, staffing, space, organizational behavior and leadership, and collection development and management.”
Entry 5:


**Abstract:** “Research undertaken by the Centre for Research in Library and Information Management has sought to enhance understanding of information seeking behaviour of blind and visually impaired people when using digital resources. The Non-Visual Access to the Digital Library project (NoVA) aimed to develop further understanding of user behaviour with web based resources, with particular reference to retrieval of information by blind and visually impaired people. Using a sample of 20 sighted and 20 visually impaired people, users undertook a number of information seeking tasks using four different electronic resources. Each step of the information seeking process was logged (at keystroke or equivalent level) and pre-task and post-task questions were asked in order to gather qualitative data. Results revealed that visually impaired users spend more time searching or browsing the web with times varying considerably depending on the design of the site. Overall, visually impaired users have to spend more time navigating around each page, especially if, for example, the page contains a lot of information or has many links. Observations revealed that people with more experience with the assistive technology they were using were more successful with the task. Whereas designers may assume that everyone has access to the new versions of assistive technology, this is not always the case. Designers, therefore, will have to take such realities into account.”
Annotation: Craven’s research provides insight to how visually impaired people access online resources, especially those used in libraries such as a search engine, an OPAC, and a directory. The author used both sighted and visually impaired people to increase the reliability of results. Results are measured both by observed actions and personal interviews, and provide a foundation for future research in accessibility of online resources.

Search Strategy: I decided to try an author search in LISTA because I saw this name cited pretty regularly in relevant literature. I first went to an article that she co-authored but that was not immediately relative to my topic to find the proper indexing of her name, and clicked on it to perform an author search which brought up seventeen results all related to library accessibility for people with disabilities.

Database: LISTA

Method of Searching: Author Search

Search String: AU "Craven, Jenny"

Scholarly/Refereed Status: Information Research is, according to Ulrich’s, a reviewed and refereed online journal featuring academic/scholarly content.

Entry 6:

Abstract: “Reports the key findings from a project, undertaken by the Library and Information Statistics Unit, Loughborough University (LISU) and funded by Resource: The Council for Museums Archives and Libraries, under the auspices of the Share the Vision Programme, to conduct an extensive survey of visually impaired people in the UK, with a view to determining their perceptions, opinions and activities regarding relevant information sources and library services that are available to them. It was hoped that the statistics and findings from the survey would provide useful input to evidence-based decision making and would be acted upon positively. A full report detailing the methodology, findings and recommendations was published in large print and on the World Wide Web http://www.lboro.ac.uk/departments/dils/lisu/pub-lic.html. A total of 582 interviews was obtained from a sample of people, the vast majority of whom were registered as either blind or partially sighted. The survey was carried out using a structured interview technique, either face to face with visually impaired people in clubs and drop-in centres across the UK, or by telephone. The survey focused on: levels of use; alternative formats; use of information technology; and user satisfaction. Concludes that there are opportunities for greater cooperation between the various agencies since, in 1999, less than one third of public library authorities reported having working relationships with any of the other providers considered in this study, and this picture had not changed for some years.”

Annotation: The research presented in this article from the UK is unique in that many previous studies have offered an evaluation of accessibility services from the perspective of those working to provide these services. The population interviewed in this survey includes users, former users, and non-users of library services to the blind and visually
impaired, and therefore provides comprehensive results. Findings include qualitative data about usage and quantitative data concerning user satisfaction.

**Search Strategy:** I used footnote chasing from the Epp article (which had a long list of useful references) to find this article. I thought it might be relevant from the title, and so after performing an author search and locating the record with a citation/abstract in ProQuest, I decided it was relevant to my topic and accessed the full text from ProQuest.

**Database:** N/A

**Method of Searching:** Footnote Chasing

**Search String:** Referenced in:


**Scholarly/Refereed Status:** According to Ulrich’s, the *Journal of Librarianship and Information Science* is both refereed and reviewed, and the content type is Academic/Scholarly.

**Entry 7:**


**Abstract:** “The aims of this survey of 4,939 clients of the Utah State Library for the Blind and Disabled were to determine who would use assistive technology (AT) in their public libraries, to profile factors influencing its use, and to evaluate the level of
awareness of available services. Less than a quarter of the participants reported that AT was available in their public libraries, and a higher proportion of younger than older people would use it if it were available.”

**Annotation:** This article focuses on the specific population of visually impaired people in the state of Utah, and it is also unique because it focuses on the need for assistive technology rather than the use of that which is already in existence. Eggett’s research provides quantitative data about willingness to use assistive technology if it were available. She presents comprehensive results from a diverse sample—all respondents are considered legally blind, yet there was quite a varied range of other factors such as age, current library use, awareness, and proximity to a library.

**Search Strategy:** I decided to try the Web of Science database and search for keywords I had deemed useful in the title field of articles. I did a title search for anything containing “disabled” or “disability” or any form of these words, and linked these terms with AND to the keywords library/libraries and technology. I then refined my results by checking off the Web of Science category “Information Science Library Science”

**Database:** Web of Science

**Method of Searching:** Title Searching

**Search String:**

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TS=(disabilit* or disable*) AND TS=(librar* AND technolog*)
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Timespan=All Years. Databases=SCI-EXPANDED, SSCI, A&HCI.

Lemmatization=On
**Scholarly/Refereed Status:** According to Ulrich’s, *Journal of Visual Impairment & Blindness* is both refereed and reviewed, and contains academic/scholarly content. According to the journal’s website, it is peer-reviewed and features current research.

**Entry 8:**


**Abstract:** “Experts estimate that only 5 percent of the world’s publishing output is made accessible in alternate formats for people who cannot use print. While some popular commercial digital audio and textual products are available to people with print disabilities, many people do not have equal access to reading materials and other resources. People who cannot use print due to a visual, physical, neurological, or perceptual disability need libraries to provide the equitable access. Libraries need strategic partnerships, improved public policy, and international agreements to fulfill the promise. Equity laws, union catalogs, new technology, standards for production and resource sharing, postal subsidies, and commercial production of alternate formats have all helped. This article focuses on key elements that affect library resource sharing for people with disabilities in the United States, Canada, and the United Kingdom. Challenges include attitudes, organizational isolation, diversity of alternate formats, nonadherence to standards, inaccessible online services, an uncooperative publishing industry, inconsistent access to equipment, and inadequate training. Recommendations are made to improve the legal framework, develop sharing library communities, and apply universal design principles.”
Annotation: This article presents the author’s extensive research across the U.S., Canada, and the UK about the collaborative efforts to provide non-text resources to library patrons, including consortia, non-profit organizations, and partnerships with commercial publishers. Epp evaluates the effectiveness of these efforts and compares services in the three countries. Epp also provides a useful list of the adaptive technologies for print resources that exist today, both in the text of the article and the appendix.

Search Strategy: This article was cited at the end of the Copeland article and looked promising, so I used footnote chasing to find the full article. The citation was hyperlinked and it brought me to the full record for the article, and then I was able to use Drexel full text services to retrieve the article.

Database: N/A

Method of Searching: Footnote Chasing

Search String: Referenced in:


Scholarly/Refereed Status: Library Trends, according to Ulrich’s, is both Reviewed and Refereed and contains content that is Scholarly/Academic.
Entry 9:


Abstract: “The Access for Ontarians with Disabilities Act is developing standards for accessibility across the province. The Canadian Library Association has had service standards in place since 1997, so addressing accessibility in Ontario libraries is nothing new. However, public libraries are addressing new challenges to providing service as they transition from non-binding library association policy to binding legislation. This paper outlines a study of accessibility in Ontario public libraries through a capability-approach lens as described by Amartya Sen.”

Annotation: Hill offers a unique perspective, as there is not a wealth of previous research about library accessibility issues in Canada; rather, most literature comes from the U.S. or U.K. Hill’s approach offers a comprehensive view of accessibility issues, and her choice to survey public libraries, examine their websites, and then conduct one-on-one interviews with users covers a wide range of topics, expressed through both qualitative and quantitative data.

Search Strategy: I used Web of Science and did a citation search to find articles that have cited the Epp article. First I used author finder to identify the author, who is indexed as Epps MA. I then searched for the author, identified the correct article, and selected
“Times Cited” in Web of Science to find later articles that have cited her 2006 piece. This is how I came upon the piece by Hill from the Canadian journal.

**Database:** Web of Science

**Method of Searching:** Citation Searching

**Search String:**
- Author=(Epp, MA)
- Timespan=All Years.
- Databases=SCI-EXPANDED, A&HCI, SSCI.

Then selected “Times Cited” in Web of Science for the record:


**Scholarly/Refereed Status:** The *Canadian Journal of Information and Library Science* is both refereed and reviewed according to Ulrich’s, and its content is academic/scholarly. Additionally, the journal’s website reports that “all manuscripts are evaluated by at least two expert referees.”

**Entry 10:**


**Abstract:** “Since passage of the Americans with Disabilities Act (ADA) of 1990, no overall data has been collected on the accessibility of library services and facilities to
people with disabilities. This research study responds to this lack of statistics. Using a survey questionnaire, the researcher gathered data on ADA accommodations made by the entire system of 48 South Carolinian public libraries and their 137 branches in three categories: (I) Physical Access; (II) Collections and Services, and (III) Users, Staff, and Policymaking. One hundred and six (57.29%) libraries completed the questionnaire. After testing their answers for statistical significance, the researcher concluded that South Carolinian public libraries made the greatest degree of accommodation in the area of physical access, with some shortcomings in terms of telephones, service desks, alarms and signs, toilet mirrors, and urinals. In contrast, urgent improvements are needed in Category II and Category III, which competed for the position of least compliance. Specifically, a majority of the libraries need to conduct user surveys to identify people with disabilities in their communities and to develop written policies related to the needs of these people. While formulating these, special attention should be given to the provision of special services and staff training, as well as to assistive devices to access both digital and non-electronic materials. The researcher also tested three hypotheses about possible correlates between library's location, (re)construction date and type on one hand and its ADA compliance on the other. The data showed that the (re)construction date had the most impact, with post-1992 libraries providing greater physical access. Of importance was also the library's location, with rural libraries being less ADA compliant in terms of their toilet facilities, drinking fountains, provision of materials in alternative formats, special services, and staff training. The variable of the library being a main or branch library had little effect on its accessibility.”
Annotation: Khailova’s research fills an area that was lacking at the time of the study. Her review of literature reveals that most of the previous articles only offer generalized suggestions about accessibility in libraries. This study is also unique because it focuses on all the public libraries in the state of South Carolina, and thus provides insight into the differences between rural and non-rural areas, an issue not previously addressed. Khailova’s research is unique in that it is the only study to offer hypotheses. Her data is heavily statistical.

Search Strategy: I noticed that this article was referenced by two later articles (both Hill and Burke) that both provided excellent original research, so I searched by author in ProQuest where I was able to access the full text.

Database: N/A

Search Method: Footnote chasing

Search String: Referenced in:


Also Referenced in:

Scholarly/Refereed Status: According to Ulrich’s, *Public Library Quarterly* is a refereed journal with academic/scholarly content. The journal’s website states: “All articles in *Public Library Quarterly* have undergone editorial screening and peer review.”

Entry 11:


Abstract: “Purpose - To investigate the current use of assistive technologies (AT) in Greek libraries, unveil the relationship between AT suppliers and library authorities and achieve a better understanding of companies' and libraries' perspective.

Design/methodology/approach - Survey methodology has been used as the basic research tool by sending mailed questionnaires to AT enterprises and libraries. Findings - Overall, the study stresses the lack of AT in Greek libraries. It depicts that the current legal and regulatory framework as regards AT is insufficient and concludes that libraries are not interested in such products and services. Research limitations/implications - Several libraries chose not to participate in this research probably because they were totally unaware and unfamiliar with disability and AT issues and consequently, they did not have anything to state. Originality/value - This paper is useful for information professionals who seek a greater understanding of the extent to which AT products are used in library authorities of Greece, since there is almost no literature and research relevant to this topic.”

Annotation: The author’s research presents a unique view of the state of assistive technology in libraries, as it focuses on the country of Greece, while most previous
literature has been from the U.S., Canada, or the U.K. The survey results are somewhat limited because of the lack of response, but can provide valuable insight into the emergence of assistive technology in a country where there are no current standards and a limited awareness of the types of technology available.

**Search Strategy:** continuing from my results list produced by the Web of Science title search, but applied limits of Web of Science categories: “Library Science Information Science” and “Computer Science Information System”

**Database:** Web of Science

**Method of Searching:** Title Searching

**Search String:** TS=(disabilit* or disable*) AND TS=(librar* AND technolog*)

Refined by: Web of Science Categories=( INFORMATION SCIENCE LIBRARY SCIENCE OR COMPUTER SCIENCE INFORMATION SYSTEMS )

Timespan=All Years. Databases=SCI-EXPANDED, SSCI, A&HCI.

Lemmatization=On

**Scholarly/Refereed Status:** According to Ulrich’s, *Library Hi Tech* is both refereed and reviewed, and contains scholarly/academic content. According to the journal’s website, the article selection process is as follows: “Each paper is reviewed by the editor and, if it is judged suitable for this publication, it is then sent to two independent referees for double blind peer review.”
Entry 12:


**Abstract:** “This study provides an overview of the various products available for library patrons with blindness or visual impairments. To provide some insight into the status of library services for patrons with blindness, a sample of American universities that are recognized for their programs for students with visual impairments was surveyed to discern which assistive technology products are available in their libraries. The results of the study are analyzed and conclusions are offered.”

**Annotation:** The author’s research involved a survey distributed to 25 colleges and universities, asking about the extent of available assistive technology. In addition to a literature review, the author provided a very informative review of 15 assistive technology products. Results of the study lacked elaboration; they did however reveal some disappointing truths about existence of assistive technology in libraries.

**Search Strategy:** This article was retrieved from an initial keyword search in the LISTA database. I thought it might be relevant based on the title and abstract, but there was no online access to full text. I was able to retrieve the full text through inter-library loan.

**Database:** LISTA

**Method of Searching:** Keyword searching

**Search String:** (disabilit? OR impaired) AND librar? AND (technolog? OR assistive OR adaptive technolog?)
**Scholarly/Refereed Status:** Journal of Access Services is classified as a scholarly journal in the LISTA database. According to Ulrich’s, it is a refereed journal with Academic/Scholarly content. According to the journal’s website, “Manuscripts submitted to this journal undergo editorial screening and peer review by anonymous reviewers.”

**Entry 13:**


**Abstract:** “Purpose – The purpose of this study is to address problems associated with the accessibility of academic library databases. Design/methodology/approach – This study evaluates 32 databases and measures their accessibility to users of adaptive technology. Findings – Based on the results of this study, 72 percent of the evaluated databases were rated as marginally accessible or inaccessible, reflecting a low level of compliance to federal web accessibility legislation and international web accessibility standards. To measure database accessibility to adaptive technology users, this study operationalized accessibility into ten component parts as the Tatomir Accessibility Checklist (TAC) and tested each database on each component. Originality/value – Findings of this study can be used both by those who purchase and manage databases in libraries to identify the most accessible databases and by designers of the databases to improve specific features.”

**Annotation:** Like Craven’s study, this article is another evaluation of accessibility factors, though it focuses specifically on academic databases and involves an author-designed evaluation scale rather than actual users performing tasks. The article cites
relevant research on accessibility and provides a detailed outline of the author’s own criteria for determining a database’s accessibility when used in conjunction with certain assistive devices.

**Search Strategy:** I searched “related records” on Web of Science for the Vandenbark article. I first found the original article by searching “Vandenbark R” in the Web of Science author finder, which brought one result, the correct article. I then clicked on the record for this article and followed the “related records” link. I found the Tatomir article while browsing the list of related records.

**Database:** Web of Science

**Method of Searching:** Browsing

**Search String:** Related record of:


**Scholarly/Refereed Status:** According to Ulrich’s, *Library Hi Tech* is both refereed and reviewed, and contains scholarly/academic content.

**Entry 14:**


**Abstract:** “Nearly one-fifth of Americans have some form of disability, and accessibility guidelines and standards that apply to libraries are complicated, unclear, and difficult to
achieve. Understanding how persons with disabilities access Web-based content is critical to accessible design. Recent research supports the use of a database-driven model for library Web development. Existing technologies offer a variety of tools to meet disabled patrons' needs, and resources exist to assist library professionals in obtaining and evaluating product accessibility information from vendors. Librarians in charge of technology can best serve these patrons by proactively updating and adapting services as assistive technologies improve.”

**Annotation:** This article provides an introduction to U.N sanctioned ADA standards and more specifically, Section 508 of the Rehabilitation Act, dealing with information technology. Citing research about how a person with disabilities experiences the web environment, he recommends a “database-driven” approach to web design, which would ensure that all websites designed by librarians are accessible. This article offers a good foundation for understanding current regulations and offers innovative and original ideas about accessible web design.

**Search Strategy:** I started my search with the Library, Information Science and Technology Abstracts database and since this was an initial search in the database I did a keyword search for the three main concepts I was looking for: disabilities, libraries, and technology.

**Database:** LISTA (Library, Information Science and Technology Abstracts)

**Method of Searching:** Keyword Searching

**Search String:** (disabilit? OR impaired) AND librar? AND (technolog? OR assistive OR adaptive technolog?)
**Scholarly/Refereed Status:** According to Ulrich’s, *Information Technology & Libraries* is a reviewed and refereed journal. It was listed under Scholarly/Peer Reviewed Journals on LISTA, and according to the journal’s website, it features “high-quality articles that have undergone a rigorous peer-review process.”

**Entry 15:**


**Abstract:** “Reports on two separate studies which focus on related issues concerned with online access for people with disabilities in the context of information and library provision. The first project concerns the potentialities of online services for people who are blind and sight impaired and has a particular emphasis on information seeking behaviour. The second project concerns online services for people with disabilities in Australian public libraries and focuses on evaluation of adaptive equipment, associated training and strategies for improving access. Four research questions, relevant to one or both of the projects, are selected for discussion in the article: what are the information needs of people with disabilities, particularly people who are blind and sight impaired; what are the recreational interests of people with a diverse range of disabilities; what role can the Internet play in meeting information needs and in serving recreational interests; and how can public libraries assist people with disabilities to use the Internet and thus address issues of access and equity for this group of people? Reviews the literature in relation to the four questions, describes the interpretivist conceptual framework used for
both studies and outlines the research method used for each. The results of the two studies, relevant to each of the questions, are presented. Concludes that the development of partnerships between public libraries and local disability groups is likely to result in significant benefits for people with disabilities.”

**Annotation:** This article from Australia represents yet another country’s attitudes and progress toward public libraries as places where people with disabilities can help achieve their information needs. This is the only research article to provide data about disabled patrons’ ratings of assistive devices, as well as recreational interests outside of the library. Results may be limited in that of the 102 people surveyed, only 17 were library patrons with disabilities, while the remainder were librarians without disabilities.

**Search Strategy:** After locating the citation of the Khailova article, I noticed a sidebar with the option to browse similar articles in ProQuest, and so I selected the subjects “Public libraries,” “Adaptive technology,” and “Disabled people.” I found the Williamson article while browsing this list as it has many similar subject headings.

**Database:** ProQuest (Library and Information Science Abstracts)

**Search Method:** Browsing

**Search String:** Related record of:


**Scholarly/Refereed Status:** According to Ulrich’s, *The Australian Library Journal* is both refereed and reviewed and contains academic/scholarly content. The journal’s
website states: “All substantial articles offered to ALJ go through a double-blind peer review process.” Additionally, there is a statement preceding the text of the article informing readers that it is a refereed article.
Conclusion and Personal Statement

When I was first introduced to adaptive technology at the public library about a year ago, I was amazed at the capabilities of screen-magnifiers, specialized keyboards and mice, and word-processing devices that read as you type. Researching the topic for this bibliography has shown me how widespread the use of this technology is and how it continues to improve each day. I was especially pleased that I was able to find research from so many different countries to include on the list.

When searching for articles, I discovered that the most common topic for research in this field involves people with visual impairments. Reading through the articles has changed the way I think about library resources, especially websites. I never before considered that websites should be able to meet certain specifications so that they are easily read and understood by all, for example, there needs to be an indicator of an important word or phrase other than color, so that a person who is colorblind can distinguish the elements of a website from one another. Also, the more I researched, I began to notice that some of the very articles I was accessing from ProQuest gave me the option of an on-screen text reader--I even tried it out to see what it would sound like.

While I did use the commonly accepted terms “disabled” and “disability” in my keyword and subject searches, I have now taken a different view of the word after reading a few of the articles that talked about the social construction of this idea. I appreciate the use of “differently-able” by a few of the authors and hope to see the use of this word becoming more widespread.

Overall, I am impressed with the dedication of these researchers who strive to provide original scholarship that can help to improve library access for all.