

Melissa Fortson
LS 531: Academic Libraries
Academic Library Literature Evaluation
July 7, 2009

Academic Library Literature and Access to Library Databases for People with Disabilities

As the availability and use of electronic resources in libraries continues to increase, librarians and other information professionals are coming to realize the importance of making these resources accessible to people with disabilities. An examination of articles on the topic provides an overview of key issues and concerns surrounding access to online databases. Comparison of the topic's treatment in three different journals reflects the diverse nature of both academic library literature and the field of library and information science.

The Articles

Stewart, Ron, Vivek Narendra, and Axel Schmetzke. "Accessibility and Usability of Online Library Databases." Library Hi Tech 23.2 (2005): 265-286.

In their 2005 Library Hi Tech article, Oregon State University's Ron Stewart and Vivek Narendra and the University of Wisconsin-Stevens Point's Axel Schmetzke describe a study in which they investigated the accessibility and usability of web-based indexes and databases for people with print disabilities using adaptive software. In what they describe as "the first published study that systematically explores the accessibility of the major library databases for people with disabilities" (265), the authors evaluated all of the major research databases on the Oregon State University Library website and three additional databases offered by Emerald, ProQuest, and Wilson (270). In addition to examining the database interfaces' compliance with common accessibility guidelines, the investigators tested interface functionality by asking

subjects to perform routine search-related tasks while using adaptive software. Using document format as a gauge, they also judged the content accessibility of full-text articles. In regards to standards compliance, the authors found that most of the sites contained “some features affecting their usability for people with disabilities,” but the detrimental impact on functionality was limited, as basic search tasks could be performed by assistive technology users (274). They caution, however, that “functional usability, as measured in this study, is thus not to be equated with user-friendliness,” because “the bar for performing a search-related task successfully was set extremely low” (274). Tasks were recorded as being successfully conducted simply if the subject managed to complete it, no matter how long it took or how many difficulties were encountered. Still, the authors note, as the “first print-published study that employs the same evaluation procedure to a large set of commercial interfaces” (275), its data, “more recent than any of the other published data” (275), can provide “librarians, vendors and assistive technology support staff with much needed current information about product accessibility” (270).

The article’s strengths reflect the strengths of the research it describes. The authors state that designs that comply with accessibility standards are not always usable, and their research methods demonstrate an interest in examining both standards compliance and functional usability. Along the same lines, the article’s weaker points derive from weaknesses in the research. The study made use of sighted evaluators trained to have “a beginner’s level of familiarity with the various adaptive software products” (271). The authors assert that this level is representative of entry-level OSU students with disabilities, as “less than 5 percent of OSU students with disabilities have full mastery of their adaptive devices” (271). This is a bold

statement, as the study data derives from the evaluators' work, yet the authors do not cite the source of this information and therefore fail to justify their use of sighted evaluators. Another weak point is the study's definition of a successfully completed task, which leads to results that "do not say anything about the ease with which specific search tasks could be performed. The data merely indicate whether the evaluators were able, somehow, to accomplish the tasks" (273). The authors' self-criticism in asking "whether this study's approach toward evaluating usability is worth repeating" (274) and their suggestions for future research mitigate the effects of the study's weaknesses, though, and the authors succeed in providing data of use to librarians and designers. The appended accessibility evaluation criteria and findings can be used by designers to gauge their products' accessibility and by librarians making purchasing decisions or assisting screen reader users.

The author guidelines on [Library Hi Tech's](#) website state that "references to other publications must be in Harvard style." While this reader was unable to locate an official guide to Harvard style, it is my understanding that "Harvard style" refers to the use of parenthetical citations that include author and date. The Stewart, Navendra, and Schmetzke article reflects these conventions. The author guidelines also specify how authors are to format their reference lists for publication in [Library Hi Tech](#).

Power, Rebecca and Chris LeBeau. "How Well Do Academic Library Web Sites Address the Needs of Database Users with Visual Disabilities?" *The Reference Librarian* 50.1 (2009): 55-72.

In a 2009 The Reference Librarian article, the University of Missouri–Kansas City’s Rebecca Power and Chris LeBeau discuss research which seeks to answer the question of “how well do academic library web sites address the needs of database users with visual disabilities?” The authors examined two aspects of a sampling of academic library websites: how well libraries guide “visually impaired”, or “VI,” users in the use of library databases and how well libraries serve people with visual disabilities through their websites (56); this literature evaluation focuses on the latter. After exploring the legislation surrounding accessibility and libraries, the authors describe how they “randomly selected” 23 schools from a list provided by the Education Trust databank and 10 schools from a magazine article on “disability friendly” schools (57). The authors then examined the libraries’ database access pages and disability services pages to determine “how many offered access to text-only versions of the databases and emphasized this access for visually impaired users” (58). Power and LeBeau found that “surprisingly few” of the libraries studied mentioned database accessibility on their web sites and that, when statements were made, they “fell far short of truly helpful information” (59). After examining eight database vendors’ claims regarding product accessibility, the researchers found that only three offered text-only interfaces; when they examined the libraries’ database access pages, they found that only one offered a direct link to the text-only option (60). The authors go on to offer recommendations to librarians both generally and in four specific areas: vendor feedback, screen reader software, reference services, and the library web site. They conclude with recommendations for further research: a “new, comprehensive study that evaluates databases on their ease of use and identifies barriers to use specific to each

database” (68); “evaluation of usability beyond the initial search function” (68); and examination of both the accessibility of the full-text articles offered by the databases and other online library resources, such as catalogs, serial linkers, and federated search engines (68).

Power and LeBeau’s research methods seem questionable, especially when compared to those described in the [Library Hi Tech](#) article. For example, they selected the library websites studied by printing an alphabetical list of schools and choosing “from the middle of each page” (57). They do not cite a source or method by which they determined the eight “larger database vendors” studied (57). They criticize vendors for not providing text-only versions of databases and libraries for not linking to them, not acknowledging that a visual interface built to accessible content standards can meet the needs of screen reader users. Finally, much of the information Power and LeBeau used to judge database accessibility came from vendor websites or vendor responses to e-mail requests, sources which are not entirely objective. The authors acknowledge some of these deficiencies in their further research recommendations, though, and their suggestions for librarians and extensive collection of related resources are appropriate and useful.

Power and LeBeau appear to use the [Chicago Manual of Style](#) documentation style. This assessment is supported by the “Manuscripts” section of [The Reference Librarian](#) website which states that “overall style should conform to that found in these pages and outlined in the latest volume of The Chicago Manual of Style.”

Riley, Cheryl. "The Electronic Resources (ER) Librarian and Patrons with Disabilities." Collection Management 34.1 (2008): 83-98.

With her article published in a 2008 edition of Collection Management, professor and librarian Cheryl Riley (Central Missouri State University) addresses the need for Electronic Resource (ER) librarians to ensure access for people with disabilities (83). Riley discusses library accessibility and the law, shares guidelines for accessible web design, and addresses practices for designing accessible web pages. She shares the findings of earlier studies on the accessibility of online library resources and suggests ways in which libraries can address users with disabilities' needs through assistive technology and other services. The author lists a number of print and online resources that may be of interest to ER librarians and encourages librarians to take advantage of continuing education opportunities. Riley notes that the ER librarian should "have sufficient confidence to reach a logical and well-considered decision about the accessibility of a Web page or Web-based product" (90). It is the librarian's responsibility to develop professionally in this area, as "this is the type of skill and knowledge which is not, routinely, acquired in library school" (90). Riley concludes with a reminder that the Electronic Resource librarian is responsible for ensuring access to library resources for all users, regardless of ability: providing this "usable and accessible environment for library patrons with disabilities takes a committed, library community and the hard work of ER librarians who work with vendor/publishers to proactively advocate for ER which are accessible to all" (95).

While all three articles address accessibility and the law, Riley provides both the simplest and most complete coverage. For example, Riley describes the Architectural Barriers Act of 1968, which neither of the other articles include, and provides a more useful explanation

of Section 504 of the Rehabilitation Act of 1973 than Power and LeBeau (86). Unlike the other articles, Riley's does not present her own original research; rather, it is a synthesis of others' work and a compilation of information about and suggestions for accessible online library resources.

Riley's article appears to use the Chicago Manual of Style (CMS) documentation style in which notes for a journal include the author's name, the article title, journal title and issue information and, as stated on The OWL at Purdue's "Chicago Manual of Style: Periodicals" web page, "notes include the author's name as listed in the article." This assessment is supported by the [Collection Management](#) website's "Instructions for Authors," which state: "references, citations, and general style of manuscripts should be prepared in accordance with the Chicago Manual of Style."

The Journals

Ulrich's Periodicals Directory describes Collection Management as a refereed quarterly journal for an academic/ scholarly audience. According to Ulrich's, the journal "focuses on all aspects of collection management and development that affect college, university, and research libraries of all types." This reader agrees with Ulrich's assessment; the Riley article's focus of electronic resources is an aspect of collection management. The topic is certainly applicable to any library that offers electronic resources, but especially academic libraries, as they tend to offer more robust database offerings than public and school libraries. The Collection Management article examined here does not present original research; rather, it describes a problem (access to electronic resources for people with disabilities), reports research findings, and makes recommendations for practitioners. This is in keeping with the statement on the publication website's "Instructions for Authors" page that Collection Management "seeks to present practical, research based information about building, administering, preserving, assessing, and organizing library collections." The article's objective is to educate and share best practices, and its professional yet colloquial tone is appropriate for both the author and the journal's intended audience. The journal's Ulrich's entry includes a Magazines for Libraries review that recommends the title "for collections supporting library and information science graduate study." Riley's remarks about the LIS curriculum are an example of how library literature like Collection Management can benefit LIS programs, instructors, and students.

Like Collection Management, Ulrich's also describes Library Hi Tech as a refereed quarterly journal for an academic/scholarly audience. Its focus, however, is "substantive

coverage of computing and technology for the library community worldwide” (Ulrich’s Periodicals Directory). The journal’s inclusion of the Stewart, Narendra, and Schmetzke article supports this statement, and, as LHT is one of leading journals of library technology, it was actually difficult for this reader to find articles on the topic published elsewhere. While both the Library Hi Tech and The Reference Librarian articles reported original research, the LHT article exhibited higher research quality. It was also the easiest to read “at a glance,” as the publication clearly delineates the author’s affiliation, keywords related to the article, and the abstract. In this particular article, the abstract was further broken down into eight sections: Purpose, Design/methodology/approach, Findings, Research limitations/implementations, Practical implications, Originality/value, and Paper type. Its tone was scholarly but approachable, which reflects the publisher’s website’s statement that Library Hi Tech’s key journal audiences include practicing librarians and academics, senior management and students. The Magazines for Libraries review included in the Ulrich’s entry supports this with its description of the title as “highly recommended for academic libraries.” The Ulrich’s entry indicated that the title is indexed more widely than The Reference Librarian and Collection Management; it is available in general, LIS, computing, technology, and other databases.

Like the previous titles, The Reference Librarian is also a refereed journal for an academic/scholarly audience (Ulrich’s). Unlike Collection Management and Library Hi Tech, however, it is published semi-annually (Ulrich’s). Its audience, as described in the Ulrich’s entry and its included Magazines for Libraries review, is reference librarians, which is narrower than those of the other publications. However, if the article examined here is representative of the publication, its contents may be of interest to the academic library community as a whole.

Power and LeBeau's research methods seem less reliable than the research presented in other library literature and certainly less rigorous than the research presented in Library Hi Tech. Perhaps this is reflective of the intended audience, as the contents of "How Well Do Academic Library Web Sites Address the Needs of Database Users with Visual Disabilities?" are still applicable to the academic library setting and of use to reference librarians. This particular article's language is professional yet fairly informal, which makes the article easy for even beginning librarians and library researchers to understand. It is worth noting that some of the language used in the article could be alienating to the disability community. Riley and Stewart, Navendra, and Schmetzke use "People First" language, which puts the person before the disability, as in "people with print disabilities." Power and LeBeau refer to the "visually impaired" as a "specially challenged population" (55). This is not in keeping with current practice.

While all three journal articles address access to library databases and people with disabilities, each approaches the topic in a different way, from the rigorous and scholarly (Stewart et. al.), to the casual yet comprehensive (Power and LeBeau), and in between (Riley).

Works Cited

- "Aims & Scope." Collection Management. Informaworld. 05 July 2009
<<http://www.informaworld.com/smpp/title~db=all~content=t792303985~tab=summary>>.
- "Aims & Scope." The Reference Librarian. Informaworld. 05 July 2009
<<http://www.informaworld.com/smpp/title~db=all~content=g904830241~tab=summary>>.
- "Collection Management." Ulrichsweb.com. Ulrich's International Periodicals Directory. 05 July 2009 <http://www.ulrichsweb.com.libdata.lib.ua.edu/ulrichsweb/Search/fullCitation.asp?navPage=1&tab=1&serial_uid=67186&issn=01462679>
- "Instructions for Authors." Collection Management. Informaworld. 05 July 2009
<http://www.informaworld.com/smpp/title~db=all~content=t792303985~tab=submitmode=paper_submission_instructions>.
- "Instructions for Authors." The Reference Librarian. Informaworld. 05 July 2009
<<http://www.informaworld.com/smpp/title~db=all~content=g904830241~tab=summary>>.
- "Library Hi Tech." Ulrichsweb.com. Ulrich's International Periodicals Directory. 05 July 2009
<http://www.ulrichsweb.com.libdata.lib.ua.edu/ulrichsweb/Search/fullCitation.asp?navPage=1&tab=1&serial_uid=137737&issn=07378831>
- "Library Hi Tech information." Emerald. 05 July 2009.
<<http://info.emeraldinsight.com/products/journals/journals.htm?PHPSESSID=d7nu238h9en1e3roml7agb70r3&id=lht>>.
- Power, Rebecca and Chris LeBeau. "How Well Do Academic Library Web Sites Address the Needs of Database Users with Visual Disabilities?" The Reference Librarian 50.1 (2009): 55-72.
- The Purdue OWL Family of Sites. The Writing Lab and OWL at Purdue and Purdue University. 05 July 2009 <<http://owl.english.purdue.edu>>.
- "The Reference Librarian." Ulrichsweb.com. Ulrich's International Periodicals Directory. 05 July 2009 <http://www.ulrichsweb.com.libdata.lib.ua.edu/ulrichsweb/Search/fullCitation.asp?navPage=1&tab=1&serial_uid=129991&issn=02763877>
- Riley, Cheryl. "The Electronic Resources (ER) Librarian and Patrons with Disabilities." Collection Management 34.1 (2008): 83-98.
- Stewart, Ron, Vivek Narendra, and Axel Schmetzke. "Accessibility and Usability of Online Library Databases." Library Hi Tech 23.2 (2005): 265-286.