Collection Development, E-Resources, and Meeting the Needs of People with Disabilities

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Abstract

Access barriers do not only exist in the physical environment but also online. Just as certain architectural design features make it possible, or impossible, for people with certain disabilities to move about independently, so does design of the electronic environment, which includes all the library e-resources, creates either enabling or disabling conditions for certain individuals. Recently conducted research reveals a rather grim picture: while policy statements issued by professional library organization call for inclusive selection and procurement procedures, books on collection development do not cover the issue adequately. When librarians make decision about the selection of specific e-resources, the needs of people with disabilities are rarely on their radar screen. Collection development policies requiring conformance to established accessibility standards, Section 508 and WCAG 2.0, are the exception rather than the rule. One of the exceptions is California State University (CSU). Driven by CSU policy, a systemwide Accessible Technology Initiative has been put into place to remove access barriers over time. Profit driven database vendors such as Cengage Learning are extremely sensitive to what current and prospective customers want. Responding to demands for accessible products, the company seeks to conform to WCAG 2.0. For efforts to continue, it is important that vendors hear from their customers. Generally speaking, vendors appreciate specific suggestions on how to improve their product. As with all suggestions, prioritization is a matter of competing pressures. The more often vendors hear about certain issues, the more likely these are to gain priority over competing demands.

Introduction

Access barriers do not only exist in the physical environment but also online. Just as certain architectural design features make it possible, or impossible, for people with certain disabilities to move about independently, so do certain design components in the electronic environment, which includes all the library e-resources, create either enabling or disabling conditions for individuals. Hence, when librarians get together and decide to procure a specific online information resource, they not only determine what new content is to be put out there, but also (often unknowingly) who will, and will not, have access to this content.

In order to create an accessible online environment, it is important that librarians

- Adopt a policy in which accessibility is included among the selection criteria.

- Actually consider accessibility during the selection process.

- Inquire about product accessibility when communicating with vendors.

- Provide feedback to vendors about the reasons why a product got selected or not (especially if accessibility was a factor).

Librarians might also want to

- Add an accessibility requirement to the licensing agreement.

- Collaborate with the assistive technology unit on their campus to obtain a vendor-independent assessment of a product accessibility/usability.

Accessibility Awareness among Collection Developers

Several professional library organizations have recognized the need to include accessibility

among the criteria to be considered during the selection process or to address it in the licensing language. For example, in 2009, the American Library Association (ALA) Council issued a resolution demanding that "all libraries purchasing, procuring, and contracting for electronic resources and services require vendors to certify that they comply with Section 508 regulations, Web Content Accessibility Guidelines 2.0, or other criteria that become widely accepted as standards of accessibility evolve." ARL endorses model licensing language "designed to permit libraries to make content in their collections fully accessible." The same organization also published a *Report of the ARL Joint Task Force on Services to Patrons with Print Disabilities* (2012), which urges libraries to exercise their buying power to motivate vendors to make their product more accessible and suggests that including "language in publisher and vendor contracts specifically addressing accessibility requirements could have a significant impact if broadly adopted."

Unfortunately, recent research indicates that consideration for the needs of people with disabilities is the exception, rather than the rule, when collection decisions are made. While no data are available that would show whether the collection development courses taught at our nation's library schools cover this aspect of selection, a recent content analysis of pertinent books on the subject reveals that, for the most part, its readers—students enrolled in collection development classes as well as already practicing librarians—are unlikely to receive adequate guidance (Schmetzke, in preparation). Of the 46 books included in the study, published between 2000 and 2014, only 19 address the issue of accessibility at all, and there is no clear indication that things have improved over time. Among these 19 books, Jacobs (2007) stands out in that it includes a whole chapter on "The Electronic Resources (ER) Librarian & Patrons with Disabilities" (Riley, 2007). The remaining 18 books do not address accessibility consistently or in sufficient depth, or include mistakes indicating the authors' unfamiliarity with the subject. A few examples shall suffice here to illustrate this point:

The book by Curtis (2004) is laudable in that it contains a three-page section on "Serving users with Disabilities, covering equipment, accessibility standards, and product compliance." However, Curtis disappoints when she includes a sample of an "E-Journal Collection Policy for Paid Subscription" which lists only aspects of accessibility that have nothing to do with the absence of barriers for people with disabilities (e.g., accessible by IP recognition, accessible to walk-in library users, easy to print and download). In Wikoff's (2012) book, this inconsistency goes the other way. While the author includes "ADA-friendly" among the selection criteria in his sample policy, she does not explain its inclusion in either of the two pertinent chapters: "Acquiring Electronic Resources" (Chapter 2) and "Evaluating E-Resources" (Chapter 6).

Evans and Saponaro (2012) acknowledge a potential conflict between DRM and accessibility, but without explaining it. Elsewhere in their book, when discussing the needs of users with disabilities, the authors seem to lack an understanding of the concept of barrier-free, universal design; their suggestion for fund allocation planning implies that access issues involving digital materials and library websites are to be solved through human assistance. Awareness concerning the importance of universal design, which would foster independence and render human assistance unnecessary, is also lacking in Gregory's (2011) work. Her two-page discussion of ADA-related issues focuses exclusively on alternative formats, such as large print and video, various hardware and software, and the services offered by the National Library for the Blind and Physically Handicapped. Johnson (2013) mistakenly considers Section 508 to be part of the American with Disabilities Act (p. 30).

In light of the inadequacy observed in the literature, it comes as no surprise that, with a few exceptions, the needs of people with disabilities tend not to get considered at academic libraries when the procurement of specific online resources (e-books and online databases) is discussed. At least this is the picture drawn from survey data collected from the libraries at Public

Liberal Arts Colleges (COPLAC) institutions (Schmetzke, unpublished data, 2013). Of the 24 libraries included, on campuses with an enrolment between 1,600 and 6,500 full-time students, only one library, Sonoma State University, had a collection development policy that addressed accessibility among its selection criteria. At some libraries accessibility had been considered at least once during the selection process despite the lack of an adequate policy guiding them to do so. However, the number—seven—was relatively small. A survey of the libraries on comprehensive campuses within the UW system—10 of 11 participating—showed a more positive picture: Four of the 10 libraries had a collection policy with an accessibility component. Three of the six remaining libraries reported that accessibility was considered at least once when having selected e-resources.

To summarize this section: while the survey data cannot be generalized, they suggest that accessibility tends to be overlooked during the selection of e-resources at small-to-medium libraries—even though there are some pockets, where accessibility is clearly on the radar screen, such as at Sonoma State University, which is part of the California State University to be discussed in more detail in the next section, and within the University of Wisconsin system. This situation exists despite the policy guidance issued in recent years by a number of different professional library organizations. The dissatisfactory manner in which accessibility for people with disability tends to get addressed in the collection development/ management literature is probably a contributing factor. Books on collection development, often used as textbooks to guide practicing librarians and to train the next generation of librarians, do not cover the issue adequately, if they address it at all.

Accessibility Efforts at California State University

The California State University (CSU) is comprised of 23 unique campuses located throughout the state of California. Student enrollment of all campuses is approximately 450,000 students and amongst this population, there are over 13,500

verified students with disabilities enrolled as well (*Services*, 2014).

It is the policy of the CSU to make information technology resources and services accessible to all students, faculty, staff, and the general public regardless of disability (Reed, 2004). Eliminating access barriers in electronic and information technology (EIT) benefits all people, not only persons with a disability. For example, providing captioned videos can help students with differing learning styles or English as a second language (ESL) learners (Collins, 2013; Morales, 2013). Furthermore, the cost to provide accommodations for students, faculty, staff, or the general public often can be reduced or even eliminated by considering accessibility at the time of purchase.

In 2006, the CSU Accessible Technology Initiative (ATI) was established to target the elimination of accessibility barriers with a focus in three areas: web-based resources, instructional materials, and the procurement of all resources to support teaching and learning. The CSU ATI implementation guidance articulates key strategies, which include establishing strong administrative/executive support, ensuring continuous quality improvement, prioritizing projects/activities, identifying specific goals/success indicators, documenting each campus's progress, and driving vendor improvements to product accessibility support (Smith, 2013).

The ATI implementation activities take place on individual campuses and throughout the CSU system. In order to support the CSU system, the ATI office has established the CSU Accessible Technology Network (ATN) which leverages campus experts across the system who work together to provide accessibility services and consultation.

Selection of systemwide ATI implementation activities are driven by impact of the activity on the campus population and weak areas shared by several campuses as identified in the CSU ATI Annual Reporting process. One area that was originally identified as high impact and a challenge for campuses was the procurement of accessible

EIT products. As a result, the CSU Accessible Procurement Process was developed as a collaborative effort among stakeholders from six CSU campuses and the Chancellor's Office as part of a systemwide effort to integrate accessibility requirements into a standardized accessible procurement process that could be adopted or adapted by each of the 23 CSU campuses.

Key success factors for establishing an accessible procurement process begins with gaining and sustaining campus executive-level support and hiring or appointing an ATI Coordinator or ATI Project Manager. The accessible procurement process includes four major process steps to integrate accessibility into the existing procurement process, the establishment of eight campus roles with associated responsibilities, and standardized forms for information collection and documentation of the process verifying that key accessible considerations are addressed during the procurement process (Professional, 2009).

Applying the CSU Accessible Procurement Process to the acquisition of accessible library materials would alert the vendors of the needs to serve students with disabilities with their products. A typical procurement process could be the following:

A librarian assumes the role of the purchase requester. The purchase requester selects the most accessible library acquisition that meets their functional requirements. This is documented by the purchase requester completing the EIT Pre-purchase form which lists the technical and functional requirements, intended users of the product, and also includes the results of any market research done to compare suitable products. The purchase requester is also responsible for obtaining any product accessibility documentation (e.g. Voluntary Product Accessibility Template (VPAT), test results that verify the claims on the VPAT, and Accessibility Statement). The completed Pre-purchase form and the accessibility documentation are then submitted to the campus ATI Coordinator for review.

The ATI Coordinator then initiates the EIT Review form which collects information to help the coordinator to determine product impact on students based on information in the Pre-purchase form and then determines the type of product review (e.g. VPAT review, Vendor Demonstration of accessibility features, Automated Testing, Manual Testing, or Code Review).

It has been the experience of the CSU that the review usually uncovers accessibility issues that are not addressed in the VPAT. Based on the results of the review, the ATI Coordinator will request an updated VPAT and an Accessibility Roadmap from the vendor. The purpose of the Accessibility Roadmap is to have the vendor prepare a remediation plan that addresses the accessibility issues with a timeline for repair. The updated VPAT and Accessibility Roadmap are used by the ATI Coordinator, Purchase Requester, and Disability Services to create an Equally Effective Alternate Access Plan (EEAAP) to seamlessly serve students who may be adversely affected by product accessibility barriers.

Frequently, the vendor requests a meeting to discuss updating the VPAT and preparing the Accessibility Roadmap. The CSU/vendor meetings have been very successful in educating vendors about the impact of accessibility barriers on students, the importance of a timely product remediation schedule, and the importance of accurate accessibility documentation for the preparation of the EEAAP.

The CSU Accessible Procurement Process can be successfully applied to select the most accessible product that meets the needs of all users. On occasion a product cannot be purchased until significant accessibility barriers are removed by the vendor. In many instances commitments by the vendor to remove barriers and the preparation of a campus EEAAP are sufficient to allow the purchase to be made. Product accessibility improvements made as result of this process are benefiting all campus users.

The CSU Accessible Technology Network is currently using this process to review the CSU systemwide library core collection contract renewals. The goal of the CSU ATN library acquisitions review is to raise the level of

accessibility of library resources across several large vendors.

Librarians who are making collection purchasing decisions can apply parts of this process even if their campus does not have a formal accessible technology effort. During the purchasing process librarians can ask questions about accessibility, require a VPAT, ask for a demonstration of the product that includes how the product works with assistive technology, and work with the purchasing department to include accessibility requirements in contracts. These actions will send a strong message to vendors that accessibility is required and serving all students is part of the campus mission.

A Publisher's Perspective on Accessibility

Not all e-resource vendors address accessibility equally. This section describes, within a historical framework, the accessibility features and services provided by one of the leading companies in this area, Cengage Learning.

Cengage Learning is a leading provider of innovative teaching, learning and research solutions for the academic, professional and library markets worldwide. Its products and services are designed to foster academic excellence and professional development, increase student engagement, improve learning outcomes and deliver authoritative information to people whenever and wherever they need it. Through its unique position within both the library and academic markets, Cengage Learning provides integrated learning solutions that bridge the library to the classroom. In addition to Gale, Cengage Learning brands include Brooks/Cole, Course Technology, Delmar, Heinle, South-Western, Wadsworth, among others.

Prior to the accessible e-book revolution, when the company received a request from a customer on behalf of a student with a print disability, it provided the textbook source file upon request, at no cost. As with most information technology, the format that customers asked for changed over time. In the late 90s, ASCII files were the most requested format. They were copied onto compact discs and dropped in the mail. The

customer would typically receive the CD in about 14 days. By 2003, the demand for ASCII format had dropped, while Word became the most requested format with a notable increase in the number of requests for students with print disabilities. In 2008, PDF saw a sharp uptick as the most requested textbook source file, and today PDF format is still the overwhelming majority. Overall, the demand for accessible electronic versions at the institutional level had increased tremendously. Striving to meet its customers' needs, Cengage Learning adapted its workflows to these changes. Today, the company provides for efficient web-based support via an online form for customer requests. Many of the source files can be easily downloaded almost immediately.

While this helped bridge the gap for accessible textbook accommodations for the print disabled, Cengage Learning also needed to keep in mind the evolving accessible digital landscape and plan for the convergence of the print world with the digital world. The industry's shift towards digital instructional material coincided with the rapid evolution of the World Wide Web. Starting in 1991, the need for guidelines to make Web content accessible to everyone soon became clear. The Web Content Accessibility Guidelines (WCAG) published by the W3C and Section 508 issued by the U.S. government were important milestones in this process. Initially seeking compliance with Section 508, Cengage Learning today strives to conform to the more stringent WCAG 2.0 Level AA guidelines.

Once again, hearing the customer's voice the company responded to their needs with the production of their first digital e-book. We now have more than 99% of our print textbooks available in an accessible digital format on CengageBrain.com.

Cengage's standards for creating e-books include proper heading structures to-permit users who are print impaired to use their screen readers to navigate a page of content just like their sighted peers. In this way they can skim major sections of text without necessarily needing to read each paragraph within.

Cengage Learning ensures that links to other areas of content consist of meaningful, descriptive link text so screen reader users know where the link will take them, rather than hearing the infamous "click here." For images that are critical to the learning experience, text describing the purpose of the image is provided so the print disabled as well as those users with certain cognitive impairments have the same learning experience as users who are sighted—unless the description of the image is already in the surrounding text. The company has policies in place to require close captions and transcripts for audio and video content.

Striving to serve a wider range of users, Cengage Learning considers not only the needs of readers with print disabilities in its design of e-books. For example, products are designed so that the needs of users who have mobility impairments and cannot use a mouse are met. They, too, can successfully navigate the company's digital products using standard keyboard keys. Focus feedback lets them know where they are on a page. For users who have low vision, Cengage Learning provides sufficient foreground and background color contrast so the text can be easily read.

While Cengage Learning strives to make digital e-book solutions that would work for anyone, anywhere, the company is faced with ever-changing technology. Taking a closer look at a few major components of the changing technological landscape helps set the stage for some of the challenges the company faces when designing accessible material. Developing accessible content that works seamlessly on all operating systems poses a major challenge. Similarly, different browsers on the market today have varying levels of accessibility. Assistive Technology has varying support for accessibility. For example, some screen readers, like certain versions of JAWS, can speak Basic Math content, while other screen readers, such as NVDA, cannot speak complex

math content. Likewise, some mobile devices have more support for accessibility than others.

One of the fundamental challenges for Cengage Learning as it continues to move towards better accessibility is to make its content work with all these other components. This environment presents challenges and opportunities. As part of its forward-looking efforts, the company employs upstream accessibility efforts, communication, outreach, and collaboration as important strategies. Cengage Learning continuously seek to identify and evaluate opportunities for improving the accessibility and usability of our all of our digital products.

Cengage Learning integrates accessibility into product development activities. It has an established standard iterative assessment and remediation program to consistently and continuously move the dial towards better accessibility. It conducts ongoing progressive audits performed by disability experts.

A critical driving force for product development at Cengage Learning is the voice of the customer. Comments and suggestions about the accessibility of its products are valued and encouraged via a dedicated accessibility e-mailbox. Real users with disabilities test the products and the company invites users of all abilities to share their suggestions for improving the accessibility of its digital products.

Cengage Learning invites industry accessibility experts to train its staff, and it requires accessibility conformance from its vendors. The company seeks collaborative solutions with others in the industry by remaining active in the accessibility initiatives of the National Federation of the Blind and other accessibility advocacy groups. It continues to build relationships with the accessibility community and those committed to accessibility by telling its accessibility story.

References

American Library Association Council. (2009). *Purchasing of accessible electronic resources resolution* (ALA Council document #52 revised). Retrieved from thttp://www.ala.org/aboutala/governance/council /council_documents/docu_inventory_acmw2009

Association of Research Libraries. (n.d.). *Model licensing: accessibility*. Retrieved from http://www.arl.org/focus-areas/scholarly-communication/marketplace-licensing/2548-model -licensing-accessibility

Association of Research Libraries. (2012). Report of the ARL Joint Task Force on services to patrons with print disabilities. Retrieved from http://www.arl.org/storage/documents/publications/print-disabilities -tfreport02nov12.pdf.

Collins, R., and Collins, R. (2013). Using captions to reduce barriers to Native American student success. *American Indian Culture and Research Journal, 37*(3), pp. 75-86. Retrieved from http://aisc.metapress.com/content/025wr5k68l15021q/?p=41af08e70dd246d3917604db448d1768 &pi=5.

Curtis, D. (2004). E-Journals. *A how-to-do-it manual for building, managing, and supporting electronic journal collections.* New York, NY: Neal-Schuman Publishers.

Evans, G. E., & Saponaro, M. Z. (2012). *Collections development basics* (6th ed.). Santa Barbara, CA: Libraries Unlimited.

Gregory, V. L. (2011). *Collection development and management for 21st century library collections: An introduction*. New York, NY: Neal-Schuman Publishers.

Jacobs, M. (Ed.). (2007). *Electronic resources librarianship and management of digital information: Emerging professional roles*. New York, NY: The Harworth Information Press.

Johnson, P. (2013). *Developing and managing electronic collections: The essentials*. Chicago: American Library Association.

Morales, J. (2013, October 14). Video captions improve comprehension, professor finds. *SF State news.* Retrieved from http://news.sfsu.edu/video-captions-improve-comprehension-professor-finds.

Professional development for accessible technology in the CSU. (2009). *CSU accessible procurement process*. Retrieved from http://teachingcommons.cdl.edu/access/procurement_process/

Reed, C. M. (2004, December 20). *Executive order no. 926*. Retrieved from http://www.calstate.edu /AcadAff/codedmemos/AA-2013-03.html

Riley, C. (2007). The electronic resources (ER) librarian and patrons with disabilities. In M. Jacobs (Ed.), *Electronic resources librarianship and management of digital Information: Emerging professional roles* (pp. 83-98). New York, NY: The Harworth Information Press.

Schmetzke, A. (in preparation). Collection development and barrier-free access to electronic information: A content analysis of 46 pertinent books published between 2000 and 2014.

Services to students with disabilities. (2014). *The California State University*. Retrieved from http://calstate.edu/sas/disabilities.shtml

Smith, E. P. (2013). *Accessible technology initiative memorandum*. Retrieved from
http://www.calstate.edu/AcadAff/codedmemos/AA-2013-03.html

Wikoff, K. (2012). *Electronic resources management in the academic library: A professional guide*. Santa
Barbara, CA: Libraries Unlimited.