Dream the Impossible Dream: A Case Study of U.S. Federal Website Accessibility Standards Compliance at Seton Hall University Libraries.pdf

Elizabeth Leonard
Dream the Impossible Dream: A Case Study of U.S. Federal Website Accessibility Standards Compliance at Seton Hall University Libraries

Elizabeth Leonard


To link to this article: https://doi.org/10.1080/10572317.2018.1422908

Published online: 17 Jan 2018.

Submit your article to this journal

Article views: 38

View Crossmark data
Dream the Impossible Dream: A Case Study of U.S. Federal Website Accessibility Standards Compliance at Seton Hall University Libraries

Elizabeth Leonard
Seton Hall University Libraries, South Orange, New Jersey, USA

ABSTRACT
This case study examines the process of meeting Web Accessibility compliance in a United States academic library for a medium sized University. This process was prompted by the Office of Civil Rights in the Department of Education, and resulted in the execution of a Voluntary Resolution Agreement (VRA). In addition to the process the author describes what a VRA is and the common component parts therein.

Introduction
Collecting and disseminating knowledge to all has been at the forefront of most libraries’ missions. Indeed, one could argue that libraries were created to collect information so that all in the community had access to it. In 1731, Benjamin Franklin created the first circulating library specifically to provide greater access to information, thereby helping to improve the circumstances of its users (Green, 2014). Almost two centuries later, public and academic libraries across the United States and the world continue to provide access to its patrons. As the world becomes ever more dependent on an online presence, libraries have struggled to maintain a level of full access for persons with disabilities, even though they comprise a not insubstantial portion of the population; the 2016 American Community Survey estimates that 12.8% of the general civilian population has some type of disability (factfinder.census.gov). Students with disabilities face more barriers to equal opportunity in education than they did 20 years ago (Lazar, Goldstein, & Taylor, 2015).

Although “there is no federal provision requiring accessibility for all Websites,” (Yoon, Dols, Hulscher, & Newberry, 2016) in the United States, higher educational institutions have been required to make accessible public facing materials for students through Section 508 of the Rehabilitation Act of 1973. It is unknown how many institutions meet this standard, although research suggests that few do. Comeaux and Schmetzke, (2013) found basic coding errors in forty percent of surveyed library Websites. Unknown to many organizations, the Federal Government updated the standard in January 2017 to WCAG 2.0 AA (U.S. Government Printing Office, 2017), and the Office of Civil Rights in the Department of Education is seeking to enforce this more stringent standard. In September 2017, Seton Hall University (SHU) entered into a Voluntary Resolution Agreement with the U.S. Department of Education, Office for Civil Rights to meet this updated standard. The purpose of this article is to provide an overview of the process and a practical explanation of Seton Hall University Libraries’ approach...
to remediation of their online presence, including Website and institutional repository and LibGuides.

**Literature review**

While there are recent publications on developing accessibility for an academic library Website, there are few that discuss resolution agreements; the notable exception is Walker and Keenan, (2015). Articles on accessibility and libraries have been published for many years; the challenge of reviewing this literature is that older materials often reflect out-of-date standards or approaches. Nor is it the intention of this article to perform a metareview of articles on accessibility in libraries. Web accessibility is a global issue; for an overview of the laws governing web accessibility outside of the United States, the World Wide Web Consortium (W3C), an international community working to (W3C, 2017), has an excellent section on global web accessibility laws and policies. For those interested in an excellent review of the U.S. literature prior to 2015, especially as it corresponds to Section 508 compliance, see Yi (2015). Some more recent articles on the accessibility are particularly noteworthy. K. Ostergaard’s (2015) articles on accessibility for acquisitions and Delancy and Ostergaard (2016) for electronic resources librarians are good summaries of initial steps each of these roles can make towards compliant accessibility. As libraries address their accessibility issues, they ought to also consider usability and obtain feedback from their patrons. Dominguez, Hammill, and Iuliano Brillat (2015) have provided an overview of usability practices, from Think-aloud protocol to focus groups, and web analytics. For a suggested approach to creating sustainability in accessibility, see Pionke (2016). West (2016), has some simple suggestions to creating accessible content. Reilly Huff (2012) created an excellent primer on web accessibility. Mune and Agee (2016) discovered that no vendor’s e-book platform is fully accessible.

**Background**

Seton Hall University (SHU) Libraries has had a tradition of meeting the needs of patrons (students, faculty, and staff) with disabilities. The library had an established relationship with the Accessibility Services Department at Seton Hall and the two administrations had worked together as needed to help individual students. While the library had specific individuals identified as unofficial liaisons to the Accessibility Department, any librarian could and would have 1:1 meetings with students to help them with research. When the librarians discovered older articles that were not OCR (Optical character Recognition) compliant, and thus unable to be read by screen readers, they printed out the article and scanned it back in using the OCR tool in the scanner. In the two cases in which the database vendors’ web interfaces did not meet the needs of particular students, SHU Libraries facilitated a discussion between the students and the vendors to aid in the redevelopment of the product. Indeed, both the vendors and the library welcomed the insights provided. In another case, when the Library found that the digital right management (DRM) of e-books presented a problem for screen readers, the Library attempted to reach out to the vendors and to Adobe to get the issue permanently addressed.

The SHU Library also supported students with disabilities within the physical space of the library. The 2014 redesign of the Information Commons was completed with accessibility in mind and several accessible workstations were created. We leveraged existing technologies as well; the University Libraries requested that IT make default the OCR option for scans on our MFD printer/scanners in the Information Commons to enable sight limited students to use the equipment without having to navigate the small onscreen menu. This meant that every scanned page would be accessible to screen reading software. Our “Get it @Circ!” Initiative allowed students to request print materials be pulled from the stacks and held available at the Circulation Desk for students to pick up, thereby precluding any patron from a struggle to reach the top or bottom shelves. We also allowed articles from our print journal to be requested via ILL. When ILLiad received such requests, we pulled the print journal, scanned the article into an OCR enabled format, and emailed it to the requestor. That way no one needed self-identify as having a disability in order to get help with print journals.

Finally, the Library started an Accessibility Committee and the Administration routinely reviewed Voluntary Product Accessibility Templates (VPATs) from our vendors. The VPAT is a template a vendor fills out that describes how the company meets Section 508 standards, which until January 2017 was the government standard for Information and Communication Technology (Thatcher, 2001).
SHU Libraries’ administration believed, as did our vendors, that our Website met the standards outlined by Section 508 of the Rehabilitation Act. We had not received any feedback from our differently abled students indicating that our Website needed changes or alterations to make it friendlier to screen reader or others. We genuinely believed that we were providing an equivalent environment for abled and differently abled students. We were wrong.

The complaint and resolution agreement

In May 2017, Seton Hall University (SHU) received notice that the Office of Civil Rights (OCR), part of the Department of Education, was investigating a complaint from a non-SHU source that SHU’s online presence was not fully accessible. The Library, as well as the main University webmaster and the Athletics department learned that the OCR was judging the sites not by the 508 Standard of the Rehabilitation Act, but by the newer WCAG 2.0 AA standards. This was a standard we did not yet meet. Seton Hall University then signed the Voluntary Resolution Agreement in September of that year.

A Resolution Agreement, or Voluntary Resolution Agreement (VRA), is a legal document that outlines the remediation of an organization’s online presence as well as describes the steps an organization will take to ensure that future content will be accessible. A review of the OCR Website showed that the VRAs generally referenced the following sections: timeline, benchmarks for accessibility, audit, corrective action plan, plan for new content, notice, and training.

Timeline: This is not an official section, but is extremely important nonetheless. The timeline sets out the dates by which each part of the VRA will be completed. None of the VRAs reviewed had exactly the same timeline for when each section outlined below would be implemented or completed, but generally, the whole process took between eighteen months and two years.

Benchmarks for Accessibility: This is the standard by which both parties agree the online presence will be measured. In every agreement, the author reviewed from 2015 on, the standard was WCAG 2.0 AA. Since Web content cannot currently make individual accommodations for the user, the Web Content Accessibility Guide (WCAG) was created as a set of guidelines that, when followed, ensure web-based materials are accessible for all individuals with disabilities. Guidelines are organized into “success criteria” which are “testable statement[s] that will be either true or false when applied to specific Web content” (W3C, 2017). The twelve success criteria are organized into four principles: Perceivable, operable, understandable, and robust. Perceivable means that content must be made accessible to one of the user’s senses. For example, the typical abled user can view web content, but others must have that content delivered via sound. For audio files, transcripts should be provided for those who cannot hear. Operable means that the user must be able to navigate the content, by either mouse, keyboard, or other tool. Understandable principles ensure that the content is accessible either through information or operation. Finally, robust means that different assistive technologies are available to interpret the information. Each of the guidelines is measured at three different levels: A, AA, or AAA, which are successively greater detailed requirements. The generally accepted standard is level AA.

Audit: The institution and the OCR agree that a neutral third party will review the online site(s) and provide a report of the changes that need to be made to bring the site(s) into compliance with the agreed upon standard.

Corrective Action Plan (CAP): The organization must prepare a document that outlines how it will address the issues found in the audit as well as how it will ensure that future content will be tested to maintain accessibility. The CAP sometimes mentions that vendors—in the library’s case, publishers and aggregators of online content—will need to meet these standards as well, and that the organization is responsible for verifying their claims.

Plan for New Content: While this section is sometimes part of the above in the CAP, the OCR does require the institution to submit a report that describes how the new content will meet accessibility standards, and how this plan will be implemented across the institution.

Notice: This section requires that the institution post a notice on the Website(s) that outline: a method to report inaccessible content so it can be remediated, and an accessible link to OCR so that individuals can report formal grievances. This notice must be published on the homepage in a prominent location as well as all subordinate pages.
Training: Finally, the institution must obtain Web accessibility training for all appropriate personnel including anyone responsible for developing, loading, maintaining, or auditing Web content and functionality (Killeen (Office of Civil Rights, 2016, 2016a, n.d), Oak Grove RA).

Initial responses

Once University Libraries realized that our online presence required remediation, we developed a plan to bring the Library’s site and LibGuides into compliance, even while Seton Hall’s counsel negotiated a resolution to the matter. In addition to our Springshare hosted Website and LibGuides, we needed to fix our Institutional Repository and Archives pages. Our first question was how to find the errors. After considering several browser extensions that would help us identify noncompliant code, we settled on the SiteImprove extension in Google Chrome. We found that, of all the products we considered, it allowed us to most easily identify both the type of error and identify the location of the errors in the code. The downside was that, as it was a free extension, it reviewed only a single page at a time. So, even though we were able to identify different levels of errors and their locations, we still needed to review the 1,000+ page site page-by-page. Thankfully, once we had reviewed 25-50 pages, we were able to separate out content into several categories, which were roughly analogous to the way SiteImprove reported the issues.

To review the pages in the most efficient method possible, we created an ad-hoc review team of faculty and staff, who reviewed the list of LibGuides and reported which errors existed and on which subpages of the guide those errors were located. The team worked much like an IT help desk. Our first level of reviewers looked at each page and identified if any errors existed and identified them on a shared Google spreadsheet. They also fixed bold, italic, and alt-tag errors. The second level group fixed more complex errors (e.g., adding descriptions for iframes and alt-tags links). The top tier was only one person, our digital collections developer, who made global changes to the site including CSS editing, site wide color combinations, fixing tabbing issues, and redesigning our search boxes.

Vendors and consortia

We still had errors left to address. About six weeks into the Library’s remediation process, the University purchased a site license to SiteImprove, which allowed us a “bird’s eye view” of noncompliant content. This greatly facilitated our ability to identify issues that we needed to address with vendors who provided our content on University Libraries branded sites, including Springshare, BePress, and ArchivesSpace. Since we already had strong relationships with these vendors, we were able to move into action quickly. We reached out to the identified companies and explained that accessibility compliance had become a priority and that these standards needed to be met. Springshare, which has a long tradition of supporting both accessibility and its customers, immediately began to address the issues and make plans to roll out updates not just for our site, but all LibGuides users. BePress, the platform that hosts our institutional repository via Digital Commons, also met with us and began the remediation process. ArchivesSpace was just releasing its new public interface, and luckily for us, had consulted during the development process with WebAIM (Web Accessibility in Mind), an organization dedicated to helping solve Web accessibility issues. In order to ensure that ArchivesSpace would continue to meet federal accessibility compliance, we also decided that our digital collections developer would join the ArchivesSpace Accessibility Committee. Since our goal was to achieve full accessibility wherever possible, we reviewed our electronic resources licenses. Most had provided VPATs to us in the past, or made them easily available. However, all VPATs are based on Section 508’s web standards which roughly correspond with WCAG 1.0 standards (Fulton, 2011) and we now needed WCAG 2.0 AA compliance. We then determined to include accessibility language in our electronic licenses at our institution and consortia level agreements. Our consortia partners were generally supportive of our request and committed to incorporating this language in future license renewals, renegotiations, and acquisitions. In order to help them more easily add this language, we directed the consortia to good examples of boilerplate language on CRL Website (2015).

Long term accessibility training

Even though we now had a site license to SiteImprove, we were not sure how long we would be able to maintain this. Nor did we think we could rely on the page-by-page review format in order to make sure we continued to meet WCAG 2.0 AA standard. We also recognized that the greater number of faculty and
staff who understood about accessibility on Websites, the easier it would be for us to provide and maintain a fully accessible site. We decided to implement a dual approach to keeping our site accessible. First, we provided training to all faculty, administrators, and staff who had any responsibility for publishing public facing Website materials. Over the course of several sessions, we helped these individuals understand the structure of the webpages they were creating, as well as how to recognize and remediate the types of common errors we frequently identified while fixing all of our public facing webpages. Since we knew that there were errors that the average user could not find or would not know how to address, we decided to leverage Springshare’s CMS LibGuide tool, Publishing Workflow, as a way to ensure that changes to our public facing pages would be reviewed before they were made available online. The Publishing Workflow tool “routes all content through an approval process ensuring that only designated reviewers can publish content” (Freedom …with Control, 2017). Content creators must submit their new or revised guide for approval, and reviewers are notified when items are submitted. Then the reviewing team can check the material for adherence to WCAG 2.0 AA standards, make any necessary changes, and publish. To reduce the workload of one or two people being responsible for this process, we selected the most technology-facile librarians at SHU and trained them on the approval process. Just as in our initial Website audit, these librarians fixed simple issues and escalated more complex ones to the appropriate person in the library (either the Assistant Dean of IT or the library’s developer). We feel confident that this solution will work long-term.

Towards the future

All of the above was completed or in process before the VRA was signed. Now that it has been executed, we will need to comply with the directives and address any additional issues found in the audit. And we will need to stay in compliance going forward. Adhering to the standard is iterative; once we have achieved compliance with WCAG 2.0 AA, the library needs to keep abreast of any future changes in the standards that would affect the site or library services, and implement them.

Our internal training process has been a stop-gap measure. The VRA requires that all individuals who create online content take training sanctioned by the OCR. We will also need to get approval for our publishing workflow. Additionally, one of the requirements of the VRA is to implement focus groups and feedback on all of Seton Hall’s sites. As Yoon, Hulscher, & Dols (2016) and Pionke (2016) both noted, accessibility compliance may be achieved but not be functionally usable by those with disabilities. In fact, a study by Rømen and Svanæs, (2012) found that the majority of usability issues people with disabilities face were not fixable by WCAG standards. In order to truly ensure that online content is fully accessible, the library must get feedback from users with different disabilities who rely on various disability tools.

Conclusion

These last few months have been both difficult and rewarding. It is very challenging to restructure a Website to meet accessibility standards because so many types of needs must be met. However, WCAG 2.0 AA standards are an excellent way to approach and ameliorate many of these issues.

To be sure you make the site accessible, adhering to WCAG is not enough. It is the letter of the law versus the spirit. Be sure to run focus groups and seek input from patrons with disabilities. You can also learn for yourself what it is like. Download a free screen reader and test it; our experiences with ChromeVox gave us great insight into the challenges faced by differently abled patrons. Additionally, train as many individuals as possible to be sensitive to the needs of various types of disabilities. Lewis (2013) notes that the fewer the personnel designated as disability liaisons, the greater the possibility that a person with a disability will not find anyone to provide support when he or she needs it. There is a wealth of materials on accessibility. While member of our library took a free online Canvas course from Ryerson University, many other courses are listed on Mike Gifford’s GitHub page: https://github.com/mgifford/a11y-courses (Gifford, 2017). Finally, seek the guidance of your own institution counsel. It should be emphasized that the author does not have legal training and the descriptions of the parts of the VRA are based on her interpretation and should not be construed as necessarily legally accurate.

As our library has shown, a single library can do a great deal, but not everything. While the majority of our vendors have committed to meeting accessibility standards, and are open to renegotiating licenses to include language on accessibility, there may be no
way to require all of them to move towards the more stringent WCAG 2.0 AA standard. “The burden of accessibility, from a federal legal standpoint, rests entirely on purchasers or licensees of technology.” (Lazar, Goldstein, & Taylor, 2015, p.78). The only way we can force publishers to meet accessibility standards is by spending money elsewhere. Seton Hall University Libraries provides only one voice of a medium sized academic library. We will need more voices added to our request to improve their standards. Hopefully by bringing this issue to a more open forum, we can work together to ensure accessibility is met across the library, from the physical to the virtual.

References


Thatcher, Jim (2001). Section 508 web standards and WCAG priority 1 checkpoints: a side-by-side comparison. The Research Exchange, 6(3; Special Supplement), 1–12.


