# Click Here! (And Other Ways to Sabotage Accessibility)

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#### Introduction

Over the past decade, an increased demand for online tutorials and course-embedded library services has challenged the traditional roles of reference and instruction librarians accustomed to serving students face-to-face. In lieu of print guides, subject librarians find themselves creating virtual subject guides in Lib-Guides and other content management systems. The ease of creating online content using WYSIWYG visual editors has created an expectation that everyone can—and must—create web based content.

However, training has not necessarily kept up with these expectations. While recent MLS graduates may have taken courses that introduced them to accessibility issues with online content, many experienced "non-techie" librarians may not have comparable guidance and are left to forge for themselves. As a result, they may not know how to take advantage of the built in accessibility elements their visual editor offers, much less understand how to go into the source code and manually correct other common issues. Moreover, they may not even be aware that they are creating inaccessible content.

There are abundant resources on web accessibility: comprehensive websites, practical scholarly articles, and entire books are devoted to providing webmasters with standards and guidance. Then why are accessibility issues frequently being bypassed by guide creators? Certainly, no librarian creates an online research guide with the intention of excluding those who may have limited ranges of hearing, sight,

or mobility. While the primary purpose of this paper is to introduce "non-techie" librarians to some common accessibility issues and how they can fix these problems in their own content, it is the authors' hope that it will ultimately inspire others to become advocates for implementing accessibility training at their own institutions.

# Why Does It Matter?

While there is sufficient literature on creating accessible library websites and many articles that cover the benefits of utilizing LibGuides or other content management systems to create online research guides, there is a gap in literature regarding accessibility training and resources for librarians creating their own electronic guides. Although it is true that the same best practices can—and should—be translated from websites to online guides, it does not seem to be a priority in the current environment. Instead, the focus is on how quickly technologically inexperienced librarians can utilize new software applications to begin creating web content.

In a 2012 study of web-based research guides, Ghaphery and White found that Springshare's LibGuides were the platform of choice in 67 of 99 American ARL libraries reviewed.<sup>1</sup> According to Springshare's website, approximately 250,000 guides have been created by 53,500 librarians.<sup>2</sup> That is a lot of librarians. What is the reason for its popularity? According to Gonzalez and Westbrock, New Mexico State University found "the ease of creation and incorporation of

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Web 2.0 elements...as one of LibGuides' main benefits", particularly since "most of the people that would be using the product were not experienced with Web design software or HTML." Verbit and Kline also appreciated the "short learning curve, so pages can be edited easily by librarians with little web experience." Glassman and Sorensen found one of the advantages to LibGuides was that "librarians do not need to be experts at Web Design to make a coherent, professional guide."

Although it is true that even the most technology-timid librarian can be quickly shown how to create and edit a LibGuide, this cannot be mistaken for training a librarian how to publish a guide that meets accessibility standards. In fact, when Ghaphery and White surveyed both technical and public services librarians and collected responses from 188 libraries, only 39% indicated that *any* kind of training was provided for guide creators.<sup>6</sup>

This is entirely contrary to what the literature on creating accessible library websites esteems. Riley-Huff issues a no-nonsense rebuke to anyone that would argue against needing to know HTML in order to create accessible Web content, stating "you cannot possibly build quality, accessible websites in design mode, regardless of what a product evangelist tells you." While it may not be feasible to expect every librarian creating online research guides to become an expert at coding, her article provides a succinct overview of standards and best practices, while also pointing the reader to additional resources.

As disheartening as it may be to learn that WYSI-WYG visual editors may be sabotaging your online research guides, Riley-Huff is not alone in advocating for learning at least the basics of coding. In Future Proof Web Design, Dawson recommends avoiding the visual editor altogether and sticking to hand-coding in order to "avoid a nasty mess." In Bickner's article "Why Web Standards Matter", the author suggests that libraries view sticking to Web standards similar to the way cataloging is performed in the library—not for that library's own system, but because the standards are necessary in order to reap both the short and long-term benefits.9 It is hard to imagine any library administrator encouraging subject librarians to create cataloging records with minimal training, and yet visual editors have lulled the library community into believing it's "just that easy" to create quality Web content.

The absence of a concern about accessibility can be further found within Springshare's own "Best Of" pages, particularly in the "Best Practices" area. Of the sites listed, only the University of Central Florida's "Tips & Tricks" LibGuide specifically reminds authors to add alt-tags to images; the guide also includes captioned videos. <sup>10</sup> Unfortunately, many of the other "Best Of" guides are ripe with the accessibility issues that will be later covered. If librarians are being left without proper training and only the examples provided, then the problems will just perpetuate.

LibGuides and other content management systems create incredible opportunities for libraries to keep their content relevant to audience needs and can be quickly updated when change inevitably happens. They help bridge the gap between technology skills and subject specialists, thereby enabling all reference librarians to publish content online, instead of relying on someone else who possesses technology skills. Without having to rely upon an intermediary, broken links can be fixed as soon as they are identified and pages can be edited as needed-all crucial improvements to the previous technology hierarchy. Conversely, the limited learning curve for software like LibGuides should actually allow librarians more time to learn the fundamentals of HTML and accessibility, rather than skip past them in a rush to publish.

At the least, librarians authoring online research guides should be given some of the same guidance and accountability that is expected from the webmasters of library websites. In addition to providing accessible content to students with disabilities, it is widely accepted that adhering to accessibility standards improves overall usability for all site visitors.

# Are You Sabotaging Accessibility? A Picture is Worth a Thousand Words... At Least Use a Few

By far, the most common accessibility issue is pictures that are embedded in Web pages that do not contain an "alt" tag. While many "how to" guides instruct librarians how to save and then upload an image into an online guide, they frequently neglect to emphasize that every image absolutely must have descriptive text to accompany it. Software that assists visually impaired users will read the "alt" text so that the student is able to understand what is being portrayed. If the picture is important enough to include for your sighted students, then be sure to assign it some value for all students.

Pretend you are describing the picture to someone in about ten words—what would you say? Then say it in the "alt" tag. As an added bonus, the "alt" tag will display your descriptive text in situations where the image is not displayed, perhaps because of browser settings, image size, or the user's security settings. If you are using the visual editor, you will find a field that usually says "description" or "alt"—this is where you type your descriptive text. When you are finished uploading the image, you can double-check that you added the description properly by going into the source code—which may be labeled as html—and ensuring that there is an "alt" tag included. For example, a properly coded image may look like <img src="mcdonald." jpg" width="150" height="150" alt="Krista McDonald eating a french fry in front of the Statue of Liberty." />

#### Screenshots are Pictures, Too...

No doubt about it, librarians love their screenshots, and for good reason. A screenshot of a library database with neat callouts explaining what students should do step-by-step is a great visual aid and more visually appealing than paragraphs of descriptive text. However, it is imperative that whatever task is being illustrated also includes basic steps and guidance in a text equivalent for the same reasons it is important to add "alt" text to images. One option is to include a brief bulleted list describing the image in conjunction with the screencast; this ensures that both visually impaired visitors and those who do not have the image displaying properly are able to acquire the necessary information.

# Click Here! At Your Own Risk.

Imagine telling a blind man to jump, without telling him if he was standing on flat pavement or a cliff. Link anchors, the hyperlinked text that the user clicks on, need to be descriptive enough that the user knows where he or she will end up once they navigate to the suggested resource. Alternatively, the text surrounding the link anchor can be used to describe the end destination. For example, avoid statements like: "Click here to find newspaper articles." Instead, edit the link and surrounding text to be more descriptive, like: "To find newspaper articles, go to the library's external database, *Newspaper Source*."

#### Click Here! And Good Luck Getting Back!

Having all of your links named correctly is just the first step; you also have to make sure that they actu-

ally work. Before ever publishing your online guide, double-check that all of your links work. All it takes is leaving off one tiny character to create a broken link. Better yet, if you are using LibGuides, reuse an existing link that draws from a common source. For example, an A-Z list of databases or a guide that points to online reference resources. Get in the habit of reusing links that can be maintained from one location, rather than trying to update across multiple guides when you discover something is broken. Then, get in the habit of rechecking those links at least once a semester.

#### Captioning—Don't Publish Video Tutorials Without It.

Seriously. Don't. There are an abundance of articles and guides explaining how to quickly and easily create and embed video tutorials into your research guides, but very few that emphasize the importance of including quality captions so that hearing impaired visitors will be able to utilize your video tutorial. If the learning curve is a deterrent, than find another way to display the information until you feel confident enough to create captioned screencasts. While there are several tools out there that will enable you to add captioning to videos after you've created them, be sure to critically analyze their quality before considering it "good enough".

For example, YouTube has the option to turn on automated captioning for videos that do not have caption files attached—it simply tries to translate what the speaker is saying into text. And it fails in most cases. Even orators with the clearest enunciation will be humored to see how their spoken word is translated. In most cases, the captioned results provide comic relief instead of research guidance.

It is possible to upload an accurately transcribed caption file to YouTube; one free service worth mentioning is CaptionTube. If video tutorials are already uploaded to YouTube, they can be imported into CaptionTube to create a timed document that will sync with the video when the option is activated in YouTube. However, the default color and font of the displayed captions is not optimal for most screencasts and severely impairs readability. Before relying upon this option, librarians should watch the video in its entirety to ensure that text is readable regardless of the background image.

While there are many tools for screencasting, a user-friendly platform that creates quality captions should be a priority consideration. The authors cur-

rently use Screencast-o-matic because of its affordability and overall usability for adding captions. In addition to providing equal access to off-campus students, the captioned videos have been beneficial as a supplement for face-to-face library instruction with hearing impaired students. The difficulty such a student faces trying to keep up with the librarian via the interpreter, while watching the librarian's actions on the projection screen, while also trying to duplicate the librarian's actions on his or her own computer cannot be overstated. Captioned video that the student can refer back to later reinforces the concepts that may have been difficult to grasp in the one-shot library instruction environment.

Again, sticking to accessibility standards will improve your guide's overall usability. No one wants to create captions for a ten minute long video, and no student wants to watch one that long—it's mutually beneficial. Additionally, captioning enables students without hearing impairments to benefit from the video tutorial in situations where having the sound turned up on their computer is not an option. For example, some libraries that have sound blocked from their public work stations, or when some students may be doing their research in a home environment that is not conducive to additional noise (sleeping children, studying roommates, etc.).

Do you embed the video tutorial into your guide? Any time you embed an object (even a chat widget), you need to provide an alternative access point to ensure that your visitors can make it to the embedded resource, even if the content does not display properly due to browser settings. If embedding a flash object—like a screencast made with the free version of Jing—be sure to provide an html text equivalent. Flash objects pose difficulties with many versions of screen readers, particularly in the way the information is disseminated; linking to a complete description of what the video is portraying will ensure that all students are able to benefit from your tutorial.

### Text: Less Really Is More

The limited space of print handouts and guides required librarians to exercise restraint and carefully select the most important information for inclusion. The same restraint is necessary in a "limitless" Web environment, but the temptation to keep adding more information and resources that students "could" use has proven too difficult for many guide authors to re-

sist. While the typical user will be able to skim the bloated text to find the relevant information, visually impaired users will not be able to skip to the important parts in text-heavy areas. It also poses difficulties for site visitors who rely on keyboard commands instead of a mouse.

In addition to cutting down the amount of text included, guide authors should use "lists" to display the material; this enables disabled users to skip ahead to the important information, while also increasing overall usability for students who skim. If using LibGuides, chunk your information into relevant categories and take advantage of how easy it is to add another box; it will be easier for users to skip ahead to a different box (or navigate back to one) and will also improve the overall page design.

Sometimes adding another box is not the solution; in these cases, be sure to use the visual editor's "Headings" to call attention to the chunked material. Although increasing the font-size will make a paragraph title "stand out" to a sighted visitor, a screen reader will not know that this text is really any different from the paragraph text. Unlike enlarged text, headings are a message to the screen reader that a new section has begun; students using screen readers will be able to navigate to the sections that are needed. Additionally, users who rely on keyboard commands will find it easier to navigate to desired content areas. If you are unsure whether you have used headings or simply enlarged your text, go into the source code and look for a <h1>, <h2>, or <h3> tag at the start of your title, and for an equivalent closing tag (</h1>, </h2>, etc) at the end of your title.

#### Artistic License is Overrated—Follow a Template

When Ghaphery and White analyzed 63 libraries utilizing LibGuides, they found that the average number of authors for each site was 32. 11 In the absence of standardized tab navigation, consistent design, and a commonly used vocabulary, students are forced to relearn how to efficiently utilize a guide each time authorship changes. Considering the standard course load of an underclassman, they could be accessing guides from five or six different subject specialists to meet their needs. It is difficult enough for students to learn how to effectively search the resources provided in the guides; learning how to get to them or what they are called should not be an additional barrier.

While some guides will necessarily need to deviate from a standard template by adding additional tabs or including vocabulary specific to that discipline, the basics should be consistent. If all of the other guides are pointing students to a "Find Articles" tab to access subscription databases, then the stubborn guide author who insists on calling that tab "Periodical Indexes" is not serving the guide audience. Once a student becomes familiar with a particular course or subject guide, it should be easy for him or her to effectively translate that knowledge into operating the next guide needed. The urge to deviate from common guidelines may be well-intentioned, but it creates even bigger issues for the disabled guide users who are not as easily able to navigate through all of the contents to discover needed resources.

Likewise, consistency in the types of file and media formats is imperative. Although guide authors may have different individual preferences for the types of screencasting program they use or audio format employed, students should not have to download different software each time they go to a different guide. Judd and Montgomery emphasize the need for decisions to be made and whether guide standards will be monitored in order to ensure the accountability of all guide authors responsible for publishing content.<sup>12</sup> While it can be difficult to agree upon common guidelines, they should not be viewed as an attempt to stifle the creativity or individuality of a guide author. Rather, it should be understood that the primary purpose of the research guides is to serve the student audience, not to serve as an individuality statement or creative outlet for the authoring librarian.

#### Conclusion

The few tips included in this paper are just the tip of the iceberg and offer nothing unique or original for those experienced with usability, accessibility, or web design, for which the information could be considered common knowledge. However, is this information being taught, monitored, or explained to the thousands of librarians creating web content, or has the excitement about how easy it is to publish content online overtaken sensibilities? While it appears that the latter is closer to reality, it is time that librarians who create content in the online environment have the same accountability as any other webmaster, for that is what they are.

What can you do? Become more informed about accessibility issues, and then share that awareness with

the other guide authors at your institution. With a little bit of research, even the novice guide author can ensure that content is accessible. Include accessibility guidelines when training other librarians on how to create or edit guides, then check that guidelines are being followed before publishing. Peer-review is common practice for librarians conducting bibliographic instruction and is considered an opportunity for growth; consider implementing a similar peer-review for created guides. This creates opportunities for discussing accessibility issues and improving overall usability.

LibGuides and content management systems are affording librarians the ability to reach students where they are and to tailor resources to fit research needs. Yes, they are something to be excited about! But in our excitement about how easy it is for every librarian to become a guide author, let us not overlook the importance of training beyond the visual editor. Go beyond the hype; become an advocate at your institution.

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