

Chapter 6

LibGuides Administration: Roadmap to Engaging Content

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Introduction

Libraries purchase LibGuides software in the effort to provide all users with easy access to engaging library content. Active administration of the software is a vital component in realizing this goal. In the summer of 2014, Miami University Libraries migrated from LGv1 to LGv2. A small group had traditionally overseen the administrative aspects of the LibGuides software that included managing accounts and troubleshooting. The migration to LGv2 created a unique opportunity for the group to re-evaluate their administration and take a more active role in implementing a broader vision of the use of LibGuides in order to meet the needs of faculty, staff, and students.

Background

Miami University is a public university located in Oxford, OH, and is a primarily undergraduate institution, with an FTE of approximately 16,500 students. The Miami University Libraries are comprised of six individual libraries--the main library, the music library, the art and architecture library, the science library, and two regional campus libraries. These Libraries employ a total of 99 staff (49 librarians and 50 staff) and support bachelor's degrees in more than 120 areas of study, 60 master's degrees, and 12 doctoral degrees. The Libraries have utilized subject guides for several decades, in order to support a number of subject areas, with the most

recent iterations in electronic format on Springshare's LibGuides platform. Although Springshare offers a suite of complementary software products, the Miami University Libraries currently only utilize LibGuides. At the time of the Libraries' migration from LGv1 to LGv2, the Libraries were maintaining 187 guides in support of the programs mentioned above. At the time this chapter was written, the Libraries were maintaining 269 LibGuides. Of the total staff employed by the Libraries, 54 have accounts in LibGuides.

Active Administration

Like many other academic university libraries, Miami University Libraries has maintained research and subject guides online for faculty and students for many years. While Sanburn indicates that students do not use subject guides with regularity (2004, 124), there is still a need for both subject and individualized course guides. In an era where online learning is becoming the norm, subject and course guides are finding new life and purpose.

The necessity to be active (and proactive) in centrally administering a library's subject and research guides (on any platform) is evident in the scholarship on subject guides. The literature contains numerous articles on all aspects of subject guides, from those created in print formats to later iterations created electronically and/or online. A study by Dahl demonstrates that the first electronic guides created (sometimes called electronic pathfinders) may have ignored recommendations regarding consistency, resulting in user confusion and lower usage of guides. Dahl's study also found that the ease of creating electronic pathfinders led authors to provide an overwhelming number of links to resources instead of providing a focused research portal (2001, 236). This tendency to create overly complex subject guides can be mitigated in part by an

administrative group or committee that is active in creating and maintaining standards and best practices.

With the advent of software like LibGuides, it has become easier for library staff to create subject guides and to standardize messaging and communications with patrons (Brooks-Tatum 2012, 16-18). An evaluation of a LibGuides pilot at the University College Dublin Library determined that “having a common core and “look and feel” for each guide, increased the ease of navigation for students across different guides, whilst also helping to reinforce branding”(Dalton and Pan 2014, 519). The LibGuides platform is ideal for supporting standards in layout, requires little knowledge of HTML to implement and maintain, and has the added benefit of enabling guide owners to re-use existing content, allowing for both collaboration *and* consistency. LibGuides’ intuitive interface and flexibility allows libraries to easily implement a common core and “look and feel” across guides, which favorably benefit users.

Miami University Libraries developed an administrative group to oversee the implementation process of LibGuides in 2009. Post-implementation, this small group continued to oversee a few administrative aspects of the LibGuides software including managing user accounts and troubleshooting. The Libraries’ migration to LGv2 in 2014 created a unique opportunity for the group to re-evaluate their administrative role and take an active lead in creating a unified vision of library LibGuides. Prior to the migration, the group conducted a literature review, an environmental scan of the use, look, and function of guides created at other universities, and performed usability testing with existing LGv1 guides. This research led to the creation of standards, best practices, and trainings in an effort to provide resources to meet the needs of the user community in an accessible, consistent, and professional way. This active

committee has had a significant impact on the way the library interacts with users through LibGuides.

An active administrative presence to oversee LibGuides can be the work of a single individual, a pair, or a committee, depending on university library resources. If resources allow, establishing a committee creates efficiencies and allows a beneficial division of labor. When establishing a committee, it is essential to select a diverse membership to seed the committee with the variety of knowledge needed to administer an entire library's guides. Knowledge of web design and accessibility, library technology, library instruction practices (both in-person and online), and library resources are integral pieces in creating a self-sufficient group.

In their chapter on administering LibGuides in the LITA Guide *Using LibGuides to Enhance Library Services*, Kumar and Farney suggest five potential scenarios to use for setting up an administrative structure:

- single lead
- task specific
- large team
- divided leadership
- buddy system

A "single lead" scenario may be ideal for institutions with fewer staff, where one librarian serves as the LibGuides administrator to oversee basic format and layout while giving librarian guide owners and editors more control over content. The "task specific" scenario divides technical administrative duties among a group of people, allowing each person to focus on a task. The "large-team solution" may work best at larger institutions, as it is comprised of two administrative teams, where one team oversees administrative duties and the other team

oversees content. Like the “large-team solution”, the “divided leadership” scenario creates multiple administrative teams where the division of duties is by subject area (e.g. social sciences, humanities, sciences). The fifth suggested scenario, “buddy system”, has the potential to work at an institution of any size, as it pairs an administrator with a guide owner (2013, 44-47). At Miami University Libraries, the administrative group used a combination of three of these scenarios--“single lead”, “task specific”, and “buddy system”. The group is comprised of five members--the User Experience Librarian, an Academic Resident Librarian, two Liaison Librarians, and one Technical Services Librarian. The User Experience Librarian brings web design and accessibility skills to the table, along with the knowledge of technologies already in use in the library. The Academic Resident and Liaison Librarians bring knowledge of instruction practices (both in person and online) used across the University’s community of users. The Technical Services Librarian brings knowledge of the library’s print and online resources (both the resources themselves and the infrastructure that makes them discoverable) to the group. All five group members were given administrator privileges in LibGuides, were owners of numerous LibGuides themselves, and were intimately familiar with LibGuides functionality and features. This allowed the group to lead by example, by following standards, providing re-usable content, and encouraging collaboration in their own guides. Group members were able to address migration challenges in their own familiar guides first, which allowed them to provide expert guidance when colleagues experienced similar challenges. After standards and best practices were created, administrative group members implemented them in their own guides first, which demonstrated the benefits of the standards and paved the way for asking colleagues to follow the same guidelines.

Responsibilities of the individuals in the group can be assigned to some degree based on corresponding responsibilities in the job description of each individual. For example, at Miami University Libraries, the Technical Services Librarian was assigned the role of primary liaison to Springshare customer service (a version of the “single lead” scenario). This aligned with similar job responsibilities in managing vendor relationships for library materials, and also prevented duplicative and redundant communication and troubleshooting between group members and Springshare customer service. It was also extremely helpful during the migration process from LGv1 to LGv2, a process in which Springshare assigns a primary contact to manage the migration process. A second example was to assign the Liaison Librarian in the group (who is also responsible for overseeing the Library’s role in the University’s growing e-learning program) to focus on the creation, maintenance, and accessibility of video content on LibGuides, an expertise that the Librarian utilizes in his daily job (a version of the “task-specific scenario”). At different times throughout migration and implementation, all group members paired themselves with guide owners in order to ease migration and training anxieties (a version of the “buddy system”).

As a group, the Miami University Libraries’ administrative group performed three essential functions before, during, and after the migration to LGv2. The group’s initial priorities were migration-related tasks, such as transferring accounts, troubleshooting page migration issues, learning new features and functions, and training colleagues on the changes brought about by migration. Once migration was complete, the group’s priority shifted to performing usability testing and comparing that usability testing with results from previous studies completed with LGv1. This allowed the group to determine if students’ needs had changed significantly between 2009 and 2014, and to make site-wide decisions based on those needs. In the post-migration,

post-usability period, the group consciously elected to take a much more active role in evaluating and overseeing LibGuides than they had after the 2009 implementation. Migrated guides exhibited a wide variety of formats, features, styles, and aesthetics, many were branded inconsistently with University and Library branding, and many contained outdated references and broken links. Taking an active role meant creating and enforcing standards and best practices in LibGuides' site-wide customization options, standards that created consistency across subject guides and between subject guides and the Libraries' other online presences. For guide owners with an overwhelming number of guides to be updated, administrative group members absorbed the work of the standard content changes, such as re-formatting page layouts, making text consistent in font style, size, and color, and updating broken links. This eased the challenges of migration and paved the way in helping our colleagues to accept the perceived imposition of standards and best practices.

Standards

Best practices and standards are a necessity for any site wide product implementation. A product like LibGuides affords many people editing rights to both content and layout, presenting administrative challenges such as determining how restrictive policies should be, electing how to enforce those standards, and developing a strategy for revisiting and updating standards as needed. The impending transition to LGv2 served as a natural opportunity for Miami University's administrative group to assess and update our own set of standards and best practices.

Importance of Standards

Academic libraries offer a breadth of resources and information that is sometimes overwhelming to users seeking information on a specific topic or within a particular discipline. Subject guides play an important role in helping librarians highlight useful resources and reinforce information literacy skills to a specific target audience. However, there are common pitfalls that detract from developing and maintaining guides that are user-friendly and practical for the intended audience. As we create and maintain guides, it is important to keep our audience and their needs at the forefront. This includes following basic web design principles and periodically employing usability testing to update standards.

In 2009 when LibGuides was first implemented at Miami University, it replaced a fairly static alternative. The dynamic format of LibGuides was a breath of fresh air. It allowed those librarians with even the most minimal of web-authoring skills to create content, and they were encouraged to explore the varied functionalities of the platform. At the point of adoption, Springshare was just two years old, and LibGuides was growing quickly but little about best practices had been presented in any scholarly setting.

Miami University Libraries' initial best practices were too basic and vague. A subject guide template was developed to ease creation by librarians and present a common look and feel. One of the early misconceptions was that subject guides would largely serve as standalone pages. Guide homepages were welcoming but offered no functional use and added yet another click between the user and the content they sought. (See Figure X.1)

<Insert Figure X.1 here; Caption: LGv1 before usability testing>

Casually observing both what users were seeking on the guides and how they were trying to find it led us to conduct a formal usability study in 2011. Initial findings indicated that students expected a common experience across all guides and found even slight differences jarring. This observation along with analysis of results led us to make the following changes:

- Standardize all nomenclature across all guides to simplified terms instead of library jargon (e.g. ‘find articles’ instead of ‘databases and indices’).
- Require specific tabs on all subject guides including: Find Articles, Books, and Citing.
- Eliminate any embedded search boxes.
- Require a centered “Quick Start” guide at the top of each subject guide homepage that reiterated tabs. We found users failed to notice that each guide had tabbed content so were often confused when met with a welcome box and little to no resources. (see Figure X.2)

<Insert Figure X.2 here; Caption: LGv1 after usability testing>

One of the primary goals was to create a common user experience across all guides. Guide owners were informed about usability testing and asked to implement changes prior to the start of the 2012 spring term. While some guides were updated, others were not, and little was done to enforce conformity.

By 2014, the total number of guides had increased by more than 60% with little commonality among them. With Springshare gearing up to roll out LGv2, the administrative group decided to take another in-depth look at all Miami guides. Usability testing and a literature review were conducted, and best practices from other institutions were analyzed to inform

updating local standards. Some common themes emerged including consistency, simplicity, accessibility, and maintenance.

Consistency

One important aspect of developing subject guides is presenting a consistent experience for the user to ease navigation and use. Developing standards that brand your LibGuides to match institutional and library aesthetics indicate to the user that the guides are part of that bigger effort (Gonzalez and Westbrook 2010, 642). Strutin found that students' goals are "speed and simplicity" and that "familiarity and consistency seemed to be key" when selecting what research tools to employ (2008, para. 24). Consistency in layout and style is not only best practice in web design (Jasek 2004, 4), but also aids users in navigating to what is needed quickly and efficiently. If students have to learn how information on subject guides is organized each time a different guide is accessed, they will opt for other resources that are easier to use.

While users could find a common experience across *some* guides, overall, consistency was lacking in any meaningful way. Testing determined that while users are initially drawn to images, they quickly shift their gaze to the middle of the page. Standardizing content of the guide homepage allowed the administrative group, in essence, to predict and prioritize what users experience. Therefore, the homepage of each subject guide adopted the same layout and basic content. All guides moved from a 25/50/25 three-column format to a 25/75 two-column format. Additionally, font style, font color, and box colors were standardized to create a consistent look throughout. Profile boxes were shifted to the left side of the page and the larger column offered two key features: a Quick Links box that replicated tabbed content and a Best Bets box that contained the most commonly used resources for the particular subject area. The administrative

group found that most users were commonly seeking subject-specific databases, so the group opted to bring that content forward and showcase them on the homepage. Users who required more options or alternatives could find a more exhaustive list on appropriate secondary tabs. (see Figure X.3)

<Insert Figure X.3 here; Citation: LGv2 homepage>

The group also opted to require professional photos for all guide owners. The initial practice of allowing owners to use any headshot resulted in images of varied quality and backgrounds. Requiring professional photos of a 225x275 size was a small change but played a big role in developing consistency. It also made librarians and staff more identifiable to users.

Simplicity

Along with consistency, simplicity is pivotal both in designing and populating guides. LibGuides ushered in easy web design for libraries, offering each owner the ability to customize every aspect of their guide. While this offers flexibility to guide owners, too much customization can counter the consistency of the collective guides, creating a cluttered or chaotic aesthetic and failing to meet basic web design standards. Subject guides should serve as an extension of a library's website and therefore reflect the same aesthetic with "few colors and minimal graphics" (Jasek 2014, 7). A case study at York University library by Dupois, Ryan, and Steeves in 2004 found that organization and simplicity were key factors in guide creation (272). A simple organizational scheme using common language allows users to easily find the information they seek.

The quantity of content, too, should be strategically simple and selective. Vileno notes that even though librarians create tools with the intent of aiding a specific audience, frequently that population's input or feedback about their needs is never sought (2007, 448). Too often, librarians design guides to address *any* need a user might have, but the more tabs and pages of information there are within a single guide, the more opportunities users have of being confused (Dahl 2001, 236). According to Kapoun, tools like LibGuides should not be exhaustive, but rather serve as an introduction to resources (1995, 96).

It became clear during testing that Miami users struggled to prioritize content on a text-heavy page and found many guides to be "cluttered." A conscious effort was made to re-work the guides with the user in mind. Best practices included:

- Standardize the homepage content and create a Best Bets box.
- Prioritize resources, listing them strategically instead of alphabetically.
- Be selective, focusing on the needs of most users, not all users.
- Direct more advanced questions to course guides or a librarian.

Accessibility

Accessible content has been part of web development best practices for a long time but is not universally employed. Spindler found that many libraries struggle to meet accessibility standards on their websites (2002, 152). In 2011-2012, the U.S. Department of Education reported that more than 11% of students enrolled in higher education had at least one disability, and those numbers are on an upward trend, making compliance with accessibility standards critical. Our goal is to ensure compliance with Section 508 of the Rehabilitation Act of 1973, which covers information and technical assistance of the Americans with Disabilities Act

(United States Department of Justice, Civil Rights Division). The LibGuides software complies with Section 508 through the creation of alternate public pages intended for screen readers, as well as hidden “skip to” links, seen only by those using adaptive technology. In order to create a standard experience for all users, it is recommended that all images have alt-tags, all videos be captioned and have text equivalents, and all “click here” linked text be replaced with descriptive text for the URL.

Maintenance

Beyond developing standards for guide creation and layout, standards were also developed for maintenance of guides. Regular maintenance requires ongoing time and energy but is integral to the value and usability of guides. The administrative group is encouraged to set standards including: a biannual schedule for owners to review and update guides, evaluate usage statistics, and remove or reorganize content and links that are not getting used in order to ensure a healthy and relevant resource. Our administrative group sends reminders and offers workshops on strategic maintenance in addition to periodically checking guides to ensure standards are met. The group further supports guide owners and trains new employees who are inheriting and developing guides by maintaining a guide that details standards, how-tos, and expectations.

In addition to creating a professional and reliable aesthetic, it is important to maintain the currency of information and functionality of resources in each guide. Springshare offers some useful built-in tools such as a link checker, link-level statistics, and a centralized assets feature that aid greatly in maintenance. The link checker tool simplifies the process of ensuring external links on guides are functional, though it is worth noting that it fails to detect web pages that have moved. Link-level statistics provide owners a snapshot of what resources are being utilized and

with what frequency in order to assess their value to users. The assets feature allows administrators to maintain a master list of resources, which, if utilized by guide owners, allows the update of links across all of the library's LibGuides.

Training & Development

A high rate of compliance with standards by guide owners likely reduces the need for frequent maintenance by the administrative group. The introduction of training and development opportunities is one way to ensure that LibGuides owners comply with standards and create engaging content. For guides to be most effective, they must be refreshed with new ideas and content on a regular basis. Dalton and Pan noted that “regular outreach and evaluation activities should be undertaken to ensure that the content of LibGuides keeps pace with changing student needs and preferences, and that offerings remain relevant”(2014, 519). Finding time in the schedules of busy librarians to create and maintain vibrant content can be a challenge. A LibGuides administrative group can lead the way by providing training, new ideas, and support.

In the process of migrating to LGv2, Miami's administrative group met with the LibGuides owners to provide insight into the upcoming migration and to share the results of the recent usability testing that compared an LGv1 guide with a beta LGv2 guide. From the outset of the planning process, the administrative group recognized the importance of communicating information and a migration timeline. In the first meeting with owners, usability testing results were shared, including directly quoted remarks from participants. This evidence gave credibility to the suggested changes for the layout of guides after the migration. Implementing new standards would require owners to plan significant time and effort to reformat the layout and content of their guides. By outlining the rationale for new standards, the timeline for the process,

and how the group would provide support, the administrative group gained the trust and cooperation of guide owners.

Training

Training sessions were planned shortly after the migration. Multiple time slots were offered in an effort to accommodate the availability of all owners. Administrators reviewed the most significant changes from LGv1 to LGv2 and presented a step-by-step walk through of the changes needed to comply with the new standards. Through this process, it became clear that LibGuides would be an appropriate format for sharing this information. An internal guide entitled LibGuides Standards & How-tos (<http://libguides.lib.miamioh.edu/MULGStandards>) was created in order to provide a single point of information that serves current and future owners. All presentation materials as well as tips and answers to commonly asked questions were added to the guide.

LibGuides owners have varying levels of skill and comfort in using the software based on their technical abilities and previous experience with the tool. During the migration process, an administrative group can offer open sessions where owners can drop in to ask specific questions and get help. This time can be used by owners and the administrative group to proactively update guides or work collaboratively. These sessions can continue to be offered semi-annually to educate owners of changes and encourage adherence to standards.

The migration process allowed work on the LGv2 guides while the LGv1 guides were still available to the public. The timeline required owners to complete changes during the summer of 2014 in order to go live with LGv2 prior to the start of the fall 2014 semester. As a proactive measure, members of the administrative group were assigned to support those

individuals who owned numerous guides, had less comfort in using LibGuides, or had other competing responsibilities. Offering personal support and guidance was positively received and helped to reinforce the team effort of the process. In some cases, guide owners allowed others to make basic changes to guide format so they could focus on reviewing content.

The administrative group has continued to offer training since the LGv2 migration in order to address key issues. The first training topic involved how to access usage statistics to evaluate guides. This functionality in LibGuides helps owners to evaluate the number of visitors to a guide, the specific use of tabbed pages and links, and time frame of usage. Training was provided on how to access the statistics including examples of how they could be used. For example, an owner could see if a guide was accessed after a library instruction session or see if a link to a particular resource was being used. Analysis of this data reinforced the need for guides to be concise, with the most important resources prominently placed on a page for improved visibility.

Accessibility was another training topic that involved online information, in person training, and administrative oversight. Pickens and Long noted that while many new librarians may have learned about web accessibility, less technologically experienced colleagues may have little to no training (2013, 107). In order to ensure compliance with accessibility standards, the administrative group trained owners on technical aspects such as adding alt-text to images, creating accessible documents and videos, and using the WAVE web accessibility tool (<http://wave.webaim.org/>). Additionally, links to accessibility resources and tools were included on the LibGuides Standards & How-tos guide.

Development

The growth of online learning expedites the need for integrating library resources into learning management systems (LMS) (Tumleson and Burke 2013, 3). LibGuides are an ideal tool to provide this integration because they are easily embedded into the LMS. The administrative group aided owners in meeting the demand for online instructional resources by creating video content for librarians to re-use in subject guides. This shared content addresses core information literacy skills that are foundational for all subject areas. To ensure a consistent and professional aesthetic, all videos incorporate a standard library introduction and are uploaded to a high-definition Vimeo account owned by the library.

The focus on updating guides has led to the creation of new content to meet the needs of users. The administrative group has created or collaborated on topic guides that provide content across disciplines. For example, the administrative group partnered with other owners of citation guides and worked to create a single, concise and uniform offering of citation resources (<http://libguides.lib.miamioh.edu/citation>) and citation managers (<http://libguides.lib.miamioh.edu/CitationManagers>). LibGuides can also serve to provide a concise pathway to information relevant to specific demographics. The administrative group created a Faculty Resources LibGuide (<http://libguides.lib.miamioh.edu/oxfordfaculty>) in order to provide faculty-specific information in one central location. The guide is promoted during faculty orientations, is easily shared with faculty who request information, and may promote the serendipitous discovery of additional library resources. LibGuides content can also be focused on providing information to library staff. For example, a Library Professional Development Guide (<http://libguides.lib.miamioh.edu/ProfDev>) was created to promote internal and external learning opportunities as well as highlighting the library science collection.

Marketing

A library website re-design coincided with the launch of LGv2, offering the opportunity to create a more prominent link to LibGuides on the new website. This increased visibility provides users with direct access to guides. The administrative group strongly encouraged subject librarians to market their LibGuides to faculty members. Subject and course guides were promoted during new faculty orientation as well as in training sessions for faculty preparing to teach online courses. This opportunity promoted the use of guides in all courses, whether online or in person. Librarians were asked to promote their guides through contact with faculty at the start of the semester through email, newsletters, or in person meetings. The administrative group recognized that faculty members may not know how to integrate subject guides in the LMS, so a how-to video was created that could be attached to promotional email correspondence. Guides are also promoted in library instruction classes and individual research consultations with students. Gonzalez found that guides introduced when a practical context is demonstrated during instruction sessions served as an instrumental marketing technique to student populations (2010, 652).

Conclusion

An administrative team can help to coordinate and oversee significant changes due to a software migration or determine the necessity for global updates. Miami University Library's administrative group used the opportunity to increase the usability of guides by implementing new standards. The administrative group consistently performs the responsibilities of contact with Springshare, orienting new guide owners, providing support and troubleshooting,

maintaining databases links, and training. New efforts are undertaken on a semester or annual basis to address broader issues such as the recent focus on accessibility.

Miami's experience has clearly shown that a model of active administration can improve the overall quality of the LibGuides that are provided to users. With the changes implemented during the migration to LGv2, usage of guides increased, accessibility improved, creation of guides increased, and collaboration improved between guide owners. The keys to our success were to create an administrative team with the right balance of expertise, the creation of standards, providing instruction on changes in a collaborative and inclusive way, training to continue improvements and keep guides updated, and continued oversight and maintenance.

Bibliography

- Brooks-Tatum, Shanesha RF. "Delaware State University Guides Patrons into More Effective Research with Standardized LibGuides." *Against the Grain* 24, no. 1 (2012): 16-18. <http://proxy.lib.miamioh.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=lih&AN=73903242&site=ehost-live>.
- Dalton, Michelle, and Rosalind Pan. "Snakes or Ladders? Evaluating a LibGuides Pilot at UCD Library." *The Journal of Academic Librarianship* 40, no. 5 (2014): 515-520. doi: 10.1016/j.acalib.2014.05.006.
- Dahl, Candice. "Electronic Pathfinders in Academic Libraries: An Analysis of Their Content and Form." *College & Research Libraries* 62, no. 3 (May 2001): 227-237. doi: 10.5860/crl.62.3.227.
- Dupuis, John, Patti Ryan, and Merle Steeves. "Creating Dynamic Subject Guides." *New Review of Information Networking* 10, no. 2 (2004): 271-277. doi: 10.1080/13614570500082931.
- Gonzalez, Alisa C., and Theresa Westbrook. "Reaching Out with LibGuides: Establishing a Working Set of Best Practices." *Journal of Library Administration* 50, no. 5-6 (2010): 638-656. doi: 10.1080/01930826.2010.488941.
- Jasek, Chris. "How to Design Library Web Sites to Maximize Usability." (2004). <http://digital.csic.es/bitstream/10261/2926/1/howtodesign%5B1%5D.pdf>.

- Kapoun, Jim M. "Re-thinking the Library Pathfinder." *College & Undergraduate Libraries* 2, no. 1 (1995): 93-105. doi: 10.1300/J106v02n01_10.
- Kumar, Beth Larkee and Tabatha Farney. "Administering LibGuides: Planning, Implementation, and Beyond," in *Using LibGuides to Enhance Library Services : A LITA Guide* edited Aaron W. Dobbs, Ryan Sittler, and Douglas Cook, 43-64. Chicago: ALA TECHSOURCE, An imprint of the American Library Association, 2013.
- Pickens, Kathleen, and Jessica Long. "Click Here! (And Other Ways to Sabotage Accessibility)." Paper presented at the annual meeting for the Association of Research & College Libraries, Chicago, Illinois, April 10-13, 2013.
http://www.ala.org/acrl/sites/ala.org/acrl/files/content/conferences/confsandpreconfs/2013/papers/PickensLong_Click.pdf.
- Reeb, Brenda, and Susan Gibbons. "Students, Librarians, and Subject Guides: Improving a Poor Rate of Return." *Portal: Libraries And The Academy* 4, no. 1 (January 1, 2004): 123-130. doi: 10.1353/pla.2004.0020.
- Spindler, Tim. "The Accessibility of Web Pages for Mid-Sized College and University Libraries." *Reference & User Services Quarterly* (2002): 149-154.
<http://www.jstor.org.proxy.lib.miamioh.edu/stable/20863979>.
- Strutin, Michal. "Making Research Guides More Useful and More Well Used." *Issues in Science and Technology Librarianship* 55 (2008): 5. <http://www.istl.org/08-fall/article5.html>.
- Tumbleson, Beth E., and John Burke. *Embedding Librarianship in Learning Management Systems: a How-To-Do-It Manual*. Chicago: Neal-Schuman, an imprint of the American Library Association, 2013.
- United States Department of Education, National Center for Education Statistics. "Fast Facts: Students with Disabilities." *Digest of Education Statistics*,
<https://nces.ed.gov/fastfacts/display.asp?id=60>.
- United States Department of Justice, Civil Rights Division. "Section 508 Surveys and Reports." *ADA.gov*. <http://www.ada.gov/508/>.
- Vileno, Luigina. "From Paper to Electronic, the Evolution of Pathfinders: a Review of the Literature." *Reference Services Review* 35, no. 3 (2007): 434-451. doi: 10.1108/00907320710774300.