

## **Website Design for Student Usability: Implementing LibGuides at the Bryant & Stratton College Cleveland Campus Library**

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**Abstract:** This paper will discuss the complete restructuring of the Bryant & Stratton College Cleveland Virtual Library, utilizing the LibGuides platform to build a flexible website from which users may access a variety of academic research materials, including research databases, eBooks, and journals. The paper will first examine selected professional literature to establish best practices developed by librarians at academic libraries having implemented the LibGuides platform, and then discuss how LibGuides was utilized at the Cleveland campus to design an information architecture supporting multiple academic subject areas to provide a selection of high quality research materials in electronic format. The paper will also address the creation of appropriate metadata (including Library of Congress Subject Headings, abstracts, and tables of contents) to aid users in locating desired materials. The paper will then discuss the multiple ways in which students are trained to successfully use the new Virtual Library, including in-person reference interviews, in-class bibliographic instruction sessions, targeted emails, and short instructional videos. The paper will conclude with a discussion of a pilot project to develop research guides at the course and assignment levels and ongoing work with individual faculty to provide access to selections of virtual library resources tailored for individual class assignments.

### **Introduction**

The current challenge addressed by academic library websites is to provide electronic academic content, which is generally available only through proprietary databases, to student patrons, who Ouellette (2011) describes as tending to prefer information that is “freely available on the Web and found with Internet search engines” (p. 437). This group is further characterized by Stephen Bell as having great difficulty navigating large collections of resources and therefore at risk of avoiding library websites completely (as cited in McMullin and Hutton, 2010, p. 797).

Additionally, McMullin and Hutton (2010) observe that “traditional [library] subject guides often do not appeal to millennial students who are used to and prefer highly personalized and contextualized information, and who do not understand the arrangement of information into the traditional academic disciplines.” They further note that library

information organized at the more granular course level seems to be more in line with current student information seeking preferences (p. 791).

This paper will address the redesign of the Bryant & Stratton College Cleveland campus Virtual Library, which uses the LibGuides platform to provide users with access to library-quality research materials customized at the subject, course, and assignment levels via an interface accessible from either standard library computers or mobile devices.

### **Review of Selected Literature**

Becker (2014) reports on the process of overhauling aging and resource-heavy library websites, noting that when using the LibGuides platform, such sites can be “repurposed to become something of greater value without undergoing a complete redesign” (p. 19). She discusses design considerations that should be addressed prior to beginning actual work on pages (including the roles of multiple content contributors), as well as specific related tasks, such as designing a style sheet for the site and page templates (pp. 20-21). She also discusses the importance of usability testing at the conclusion of the design process (p. 22).

Foster et al (2010) note that a working group of five librarians assigned to teach colleagues how to use LibGuides at the San Francisco State University library ultimately become surrogate authors of much of the guides’ content (p. 603). The authors also observe that usage statistics for the 2008-09 academic year suggest that guide use was directly influenced by a librarian’s in-person instruction (p. 603) and that teaching faculty believe that the availability of the guides have improved student performance on assignments (p. 604).

Ghaphery and White (2012) note that in their examination of 99 American university ARL libraries, 67 were using the LibGuides platform and 5 were in the process of migrating from another system, and that 75 of these included course-specific guides (p. 22). They also observe that much of the creation and maintenance of guide content takes place either in public services or library-wide rather than in systems departments (pp. 23-24), and that 16 of the libraries surveyed were using LibGuides or another guide system as their library website (p. 25). Additionally, they report that 23 of the libraries using LibGuides or another system report policies for controlled vocabulary/tagging (p. 26), and that 37 of those libraries use the LibGuides usage stats as their only means of evaluation (p. 27).

Gonzalez and Westbrook (2010) observe that the use of LibGuides provides a practical way to reinvent library research guides as Web 2.0 tools which can then be linked into course management systems (p. 642). They also discuss the creation and use of a page template, which will allow librarians to work on similar-looking guides at the same time (p. 644). They also note their finding that course and assignment-specific guides are much more popular with students than general subject guides (p. 648), and note that such guides can be created directly from a syllabus or assignment description, allowing students to “spend more time becoming familiar with appropriate resources and less time overwhelmed by the vast array of resources available on any given topic” (p. 649).

McMullin and Hutton (2010) observe that traditional library subject guides generally do not appeal to millennial students who prefer highly contextualized information, but that creating guides at the course level seems more in line with how these students approach library research (p. 791). They also note that guides must be promoted in several ways in order to be effective, and that user statistics imply that if students are shown where a guide is and how to use it in a library instruction session, they will likely return to it (p. 793). They also observe that the best way to make library guides available to distance learners is to embed them directly into course management systems (p. 795)

Ouellette (2011) observes that undergraduate students consistently search for information in the easiest way possible to complete assignments, and prefer using information that is found on the free web using Internet search tools over traditional library materials. Additionally, students will generally only use the library when they are specifically instructed to do so (p. 337). She also observes that when library subject guides are used, students use them most often to access article databases. She notes that students who receive information literacy instruction are both more likely to use library subject guides and find them helpful (p. 440). Further, she observes that when students do use library subject guides, they prefer easy to use designs that are free of clutter (p. 444).

Pittsley and Memmott (2012) review several issues related to user navigation of library web sites. They find that users often look straight at content and tend to ignore navigation, and that users may experience “banner blindness,” contributing to the neglect of navigational tabs (p. 54). They also note that user expectations of where to look for navigational elements may change over time (p. 55). They conclude that, while effective navigation is difficult, it can be improved by considering user expectations, common conventions, best practices, and the possibility that intuitive ideas for design may not perform as expected (p. 56)

Verbit and Kline (2011) present a case study of how the York College of Pennsylvania Schmidt Library selected and implemented LibGuides, starting with a brief history of the library’s website and discussing factors that lead to the selection of the LibGuides platform, initial setup and training, the design process, management of resource links, statistics, images and videos, and catalog integration. They conclude that LibGuides has helped them construct a library website that is both student- and librarian-friendly.

### **Planning for Implementation**

The timeline for implementation of the LibGuides platform at the Bryant & Stratton College libraries was set by the system library director to span an entire semester in order to allow campus librarians across the four-state system to fully redevelop library websites while being sensitive to the needs of their individual campus communities. A LibGuides implementation working group was formed, composed of the library director and selected librarians from multiple Ohio and New York campuses, who designed the visual theme to be shared by the library pages and created a number of resources to be shared across the

system, including an A to Z listing of library databases, a shared virtual reference collection, and a password-protected library intranet.

Working group members were also instructed by the director to register for a variety of training webinars offered by LibGuides developer Springshare, so they would be prepared to assist campus librarians with any local implementation issues once the redesign process started at the campus level. Once the redesign was underway across the campus system, this group worked throughout the process to assist local librarians by phone and email, and by conducting in-person LibGuides design workshops at the regional level.

### Information Architecture

The information architecture for the Bryant & Stratton College Cleveland campus Virtual Library was constructed using the LibGuides tab interface. The home tab for the site was provided by the library director, who served as the lead LibGuides administrator for the College, and the LibGuides working group.

Additional tabs were added locally for virtual reference, an electronic APA lab, an electronic faculty resources collection, an electronic government resources collection, a tab for the campus Learning Resources Center (managed by the LRC coordinator), and tabs holding electronic collections composed of subject-specific library databases, electronic academic and non-academic journals, and eBooks for all academic subject areas taught on the Cleveland campus.

The concept for this architecture was to present a recognizable visual metaphor displaying headings for all site content at a glance and facilitate ease of searching.



Figure 1. Tabbed information architecture

### Selection of Content

Content for the ready reference tab was assembled by the Syracuse North campus librarian, who, as a member of the inter-campus LibGuides working group, had created the tab to be shared at all campuses. The APA Lab was constructed in consultation with librarians and faculty teaching the information literacy class in New York and on the Cleveland campus. Content for the faculty resource collection, the Learning Resource

Room collection, and the library intranet were initially largely drawn from the existing library website, and expanded with the addition of appropriate research databases.

Content for the academic subject collections was drawn from existing collections of research databases, eBooks, and electronic journals, and was developed using the same selection model as print collection development projects. Catalog descriptions for each class were consulted before selection of materials, and then the library's electronic collections were searched and selections made based on those descriptions.

Specific research databases were identified for each subject area, and then placed at the top of each subject collection guide with a specific graphic icon used as a bullet point so that students and faculty would be quickly able to identify database links. Following these links, eBooks, academic journals, and selected websites were added to the collections.

A simple classification system was developed and classification markings were added to each link in order to help students identify the specific material type (database, eBook, journal, or Web resource) of each resource.

### **Metadata**

When constructing individual collections, appropriate metadata was added to item links in order to allow users to make informed selections by leveraging the ability to create catalog-like records at the link level.

All items included the publication title and URL as basic elements for description and access. In addition to these items, descriptive abstracts were added for all databases, Library of Congress Subject Headings and complete tables of contents were added to the records of all eBooks, and descriptive abstracts and issue publication details were added for electronic journals. Abstracts and URLs were added to the records of Web resources. The justification for adding such information was that users would be able to examine resource descriptions in the same way they often consulted such information in the library's catalog when searching the print collection.

### **User Training**

Based on the finding by Foster et al (2010) that guide use was directly tied to a librarian's in person demonstration of how to locate and use it (p. 604), the training of student patrons was addressed in four specific ways to prepare students for successful searching and discovery.

The most immediate form of user training to reach all students at the beginning of their degree programs is through bibliographic instruction sessions conducted in all first semester information literacy classes. Students receive instruction in how to recognize and navigation the Virtual Library's information architecture through use of the tab interface and how to navigate the information structure of databases, eBooks, and

academic journals within the Virtual Library's collections. At the end of the session, students are given an exercise which guides them through the tasks they need to accomplish to successfully find and access information.

The second form of user training is in the form of the standard reference interview when patrons request assistance in the library. During these interviews, students are instructed on how to effectively navigate the Virtual Library, and how to construct an effective search strategy for using individual research databases.

The third form of user training is in the form of targeted emails regularly sent to specific populations of students and faculty and containing information about research materials available in the Virtual Library that pertains to their major subject area.

The fourth form of user training is the production of short instructional videos which demonstrate how to use various elements of the Virtual Library. These videos are played on video screens in student lounge areas across campus.

### **Embedded Librarianship**

At approximately the same time that the new Virtual Library became available to the campus community, the library director instructed campus librarians to pursue with faculty opportunities to develop classroom resources in the form of web-based guides directing students to collections of library materials developed at the course and assignment levels.

At the Cleveland campus, this took the form of a pilot project developed with business and engineering faculty at the assignment level, covering multiple class research projects over two semesters. From assignment descriptions, collections of eBooks and electronic journals were selected and submitted to faculty for final approval. After final selections were made, web-based guides were created for specific assignments with titles, direct links to the resources themselves, and appropriate metadata (abstracts and tables of contents) to aid students in resource selection. Finished guides were then linked into a special area of the campus library home page for easy discovery. Guide URLs were also provided to faculty members for inclusion in syllabi and course management pages.

### **Future Collaboration with Faculty**

Upon the successful completion of the pilot, a discussion was held with the dean of academics, presenting the utility of providing students with the ability to access such collections of library resources via the Virtual Library. Plans are currently under development to meet with individual faculty members to discuss which of their assignment could be used as the basis for the development of such resource guides, and implementation of guides for several classes is planned for the coming semester.

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