
Tennessee Libraries

Volume 58 Number 1

2008

Providing and Managing Access to Subject Resources

by

Mary Ellen Pozzebon
Electronic Resources Librarian

Jiannan Wang
Science Librarian

Kristen West
Instruction Librarian

Middle Tennessee State University

Program Abstract: Libraries are purchasing more and more resources in electronic form, and there is greater need to provide context-specific and course-specific access. We will demonstrate Middle Tennessee State University's use of LibData, a library oriented web application that enables efficient and flexible management of access to electronic content.

Introduction

As libraries purchase more electronic resources, librarians are experiencing a greater need to provide context-specific access to these resources. This paper describes our experience at Middle Tennessee State University (MTSU) in implementing LibData, a Web-based, database-driven authoring tool for subject guides ([University of Minnesota Libraries, 2005](#)). Using LibData allowed us to manage access to our electronic resources more efficiently and effectively than in the past. We were also able to reorganize access to electronic resources in a way more usable by our audience. The article also provides suggestions for organizing electronic subject guides regardless of the authoring environment used.

Problems and Perspective

Librarians have been creating pathfinders as subject-based guides for users for many years. The pathfinders outlined and described various types of resources in a specific subject area. Usually the resources were "arranged in what was determined to be a search sequence order typical for the subject" ([Hemmig, 2005](#)). As library Web sites were developed and evolved in the 1990s, librarians quickly saw an opportunity to not only put those pathfinders online, but to include links to and descriptions of their growing electronic collections. One simple format for an online subject guide is a list of available resources, as shown in Figure 1. Such an arrangement, however, provides little help for the user unsure of which resource to use in a given situation. A more useful arrangement distinguishes resources by subject (see Figure 2).

	<p><i>Safari® Tech Books Online</i> features over 4,600 titles covering the technologies most essential to users in graphic design, certification, enterprise computing, Java, Linux/Unix, Web development, Windows, XML, and more. Users can search hundreds of books simultaneously online, saving time and quickly finding the information they need. On campus use only.</p>
	<p><i>Oxford Reference Online Premium</i> includes more than 170 dictionary, language reference, and subject reference titles in all major fields from the Oxford University Press, including the <i>Oxford Dictionary of Quotations</i> and the <i>Oxford Companion</i> series. The database can be searched using simple and advanced search techniques and is entirely cross-referenced. The Web site also contains a large number of useful links to sites on a wide variety of subjects.</p>
	<p><i>WilsonWeb Omnifile Full Text Select</i> is a periodical database that provides full-text articles, with their accompanying citations and abstracts, on topics in the arts, applied and pure sciences, social sciences, education, humanities, legal, and business fields. Coverage begins in 1994, and all of the more than 2,500 titles indexed are presented in full-text format.</p>
	<p><i>ReferenceUSA</i> contains over 14 million businesses, listed by business name, business type, Yellow Page heading, key contacts, etc. The index may be searched geographically, by occupational subject, by company name, or by a wide variety of other criteria.</p>
	<p><i>LexisNexis Academic</i> includes general news items, legal decisions, company and financial information, medical and health research information, and general reference databases. The general reference databases provide basic biographies, state and country profiles, polls & survey results, quotations, and the World Almanac. On campus use only.</p>

Figure 1. Online guide to available electronic resources, with no arrangement by subject.

Arts and Humanities
<p>Indexes and Databases available electronically</p> <p>Academic Search Complete has citations and full text articles from peer-reviewed sciences, humanities, music, education, computer sciences, engineering, language and literature, medical sciences, ethnic studies, etc.</p> <p>ACLS Humanities E-Book (formerly History E-Book) from ACLS provides electronic resources that remain vital to both scholars and advanced students, are frequently cited in the literature, but are not widely available."</p> <p>Adherents.com "is a growing collection of over 41,000 adherent statistics and religious references -- references to published membership/adherent statistics and congregation statistics for religions, churches, denominations, religious bodies, faith groups, tribes, cultures, movements, and concerns, etc."</p> <p>allmusic lets you search by genre, country, instrument, mood, theme, and more.</p> <p>America: History and Life "is a complete bibliographic reference to the history of the United States of America from prehistory to the present."</p> <p>American Film Scripts Online contains hundreds of scripts by hundreds of writers and provides detailed information on the scenes, characters and people related to the scripts. When complete, the collection will include more than 1,000 scripts and over 100,000 scenes of life as portrayed in American film.</p> <p>American Memory from the Library of Congress "provides free and open access to a vast collection of words, sound recordings, still and moving images, prints, maps, and sheet music that preserve the American experience."</p>

Figure 2. Online guide to available electronic resources, categorized by subject.

At MTSU, the online subject guides were created and evolved as a response to the growing number and significance of electronic resources as well as the reference librarians' reliance on the library Web site as a reference tool. The subject guides were listed in alphabetical order on a page titled Research Gateway. Forty-eight subject guides covered nearly all of the academic disciplines offered by the university and also covered special topics or resources such as Current Issues and Dissertations.

The original subject guide pages were separate pages created with HTML coding. Each discrete page had to be individually updated when a common resource was added, modified, or discontinued. For instance, if the library subscribed to a resource useful in multiple disciplines, the librarian in charge of adding the resources individually modified each subject guide. If the link to that database later changed, each page would again be modified. As the library added more electronic resources, managing the subject guide pages became increasingly time-consuming.

As the subject guides became more central to our reference services we wanted to include key reference works, Web sites, bibliographies, print indexes, other catalogs, and free scholarly databases. However, the staff time required to maintain the subject guides hindered their continued enhancement. Web management concerns dictated that only a limited number of librarians could edit pages, and this became a barrier to collaboration. We realized that we needed a database-driven Web application to help us manage and improve our subject guides.

Our first step toward implementing a new subject guide structure was a needs assessment. We reviewed the library literature about subject guides and analyzed the online subject guides at several other universities for inspiration. Our guiding principle was to provide clues and shortcuts to users for obtaining needed information. We wanted our subject categories to be pertinent for our audience, so we looked closely at the list of degrees offered at MTSU and developed an initial list of subject guides that corresponded to those degrees (see Figure 3).

Research Guides by Subject

Academic Disciplines

Accounting	Education
Aerospace	Electronic Media Communication
African American Studies	Engineering & Industrial Studies
AgriBusiness & AgriScience	English Language & Literature
Anthropology	Family Studies
Art	Foreign Languages and Literatures
Biology	Geography and Geology
Business Communication & Entrepreneurship	Health and Human Performance
Business, Management, & Marketing	
Chemistry	

Figure 3. Some of MTSU's subject guide categories.

We also sought to further refine our strategy for patron access by providing context-specific subjects for academic concentrations such as Public History and Dance History. The Public History subject guide includes general history sources but also highlights several historic preservation sources that are applicable to that program's focus (see Figure 4). Dance History is a class taught in the Speech and Theatre department. As shown in Figure 5, the Dance History course page augments the Speech and Theatre subject guide with biographical sources and image databases relevant for researchers in that course. Guides such as Biographical Sources and Country Studies are meant for a particular research need. The Government Documents and Statistics guides provide access to resources of a particular type. In our needs assessment, we realized it was important to think creatively about the arrangement and taxonomy of resources.

Primary Source Materials

Digital Collections

[Built in America: Historic American Buildings Survey/Historic American Engineering Record, 1933-Present](#)

[Digital Sanborn Maps 1867-1970](#)
Maps of over 100 Tennessee towns and cities. [Database details.](#)

[Historic Architecture and Landscapes of Georgia](#)
1500 images of representative architectural sites and landscapes
state

Figure 4. MTSU's Public History subject guide highlights historic preservation sources vital to that program.

Information Resources and Services for:

DANC 4800: Dance History

Course Personnel
 Instructor: Marsha Tardy
 Librarian: Kristen West, kwest@mtsu.edu 615-904-

Table of Contents:

- [Encyclopedias and Reference Works](#)
- [Articles](#)
- [Biography](#)
- [Images](#)
- [Search Tips](#)
- [Resources in Walker Library](#)

Figure 5. MTSU's Dance History course page includes assignment-specific resources not available on the parent Speech and Theatre subject guide.

Many librarians have found it useful to continue providing access to resources according to resource type, as they did with print pathfinders. We felt that our resource type headings should be concise and descriptive and should make sense to users, not only to librarians. During the development and implementation of our subject guides we continually refined the hierarchical listing of resource types. For instance, the headings under the Primary Source Materials master resource type went through several iterations before we finally settled on: Archival Directories, Digital Collections, Historical Newspapers, and Local Collections. Not surprisingly, the Articles master resource type underwent the most review. Because LibData sorts headings alphabetically, we creatively titled the Articles headings: Best Sources for this Subject, Find Articles in Other Databases, Journals, Magazines, and Newspapers, Multiple Database Search, and Print Indexes (see Figure 6). We are now using 43 resource type headings in our subject guides. Resource type schema, however, will change over time in order to best reflect current resources and their subject context.

Master Information Type	Information Type
Articles	Best Sources for this Subject Find Articles in Other Databases Journals, Magazines, Newspapers Print Indexes
Business Research	Company and Industry Data Marketing Research
Primary Source Materials	Archival Directories Digital Collections Historical Documents Historical Newspapers Local Repositories

Figure 6. Some of the resource type headings used in MTSU's subject guides.

Advantages of LibData

LibData is an open-source Web application developed by the University of Minnesota's Digital Library Development Lab ([University of Minnesota Libraries, 2005](#)). It is available for download at <http://sourceforge.net/projects/libdata>. In our previous arrangement of static HTML pages, where each page had to be individually edited for changes, it was easy to overlook an occurrence of a resource that needed editing. This led to inconsistencies between subject guides. For example, at one time, the resource Expanded Academic Index appeared in several subject pages. On the History subject guide, the resource appeared as Expanded Academic Index, but the same resource was named Expanded Academic ASAP on the Criminal Justice subject guide. It was difficult for the library Web team to keep up with all the changes necessary to keep the subject guides consistent. LibData has allowed us to efficiently manage access to our databases. Because LibData is a database-driven application, one user can edit a resource name, URL, or description and immediately update all occurrences of the resource in multiple subject guides. When the InfoTrac OneFile database name changed to General OneFile, we were able to quickly change the name on the 17 subject guides where the resource appeared.

LibData is based on the PHP language. It creates a data repository that enables page authors to create Web content using a Web-based authoring console. Using PHP programming code, commands in the authoring console deliver page authors' input into a MySQL database, and separate PHP code enables the information to be rendered to the public interface. This structure is also useful for posting temporary notices about resources or resource groups. When a recent vendor power outage interrupted access to all EBSCO products, we were quickly able to edit the LibData vendor record to post a service interruption notice.

Another advantage of LibData is that it allows subject guide authors to customize resource descriptions. The creator of a resource record writes a default description. Subject page authors can later choose to use the default description or customize it to provide context-specific information. For example, Education Full Text appears on eight MTSU subject guides and seven course pages. The Education subject guide author used the default resource description for Education Full Text. The author of the Health and Human Performance subject guide, however, modified the default description to emphasize the resource's health and physical education content. This feature enables subject guide authors to create guides that follow a standard blueprint but that also include customized information about a resource.

Subject guide authors can also modify a resource type when appropriate. For example, LexisNexis Academic appears on the Engineering Subject Guide under the resource type Journals, Magazines, and Newspapers (see Figure 7). This categorization is meant to highlight the resource's utility as source for engineering trade publication content. In contrast, LexisNexis Academic is categorized on the Legal Research subject guide under the resource type Articles-Best Sources for this Subject (see Figure 8). In both subject guides, a link to the database description page offers users the opportunity to read more about the resource.

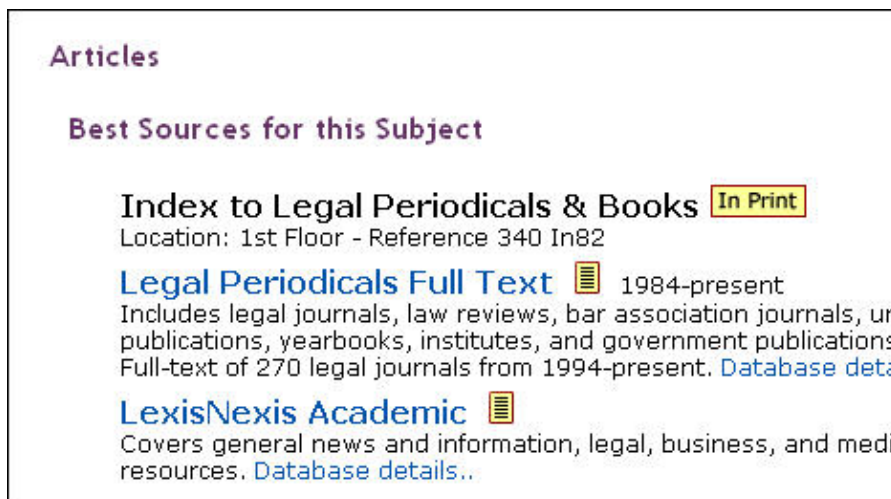


Journals, Magazines, Newspapers

Journals in Engineering 
Full-text engineering journals the library owns or has access to.


LexisNexis Academic 
Covers general news and information, legal, business, and medical resources. [Database details..](#)


Figure 7. Custom resource type: LexisNexis Academic is categorized as a Journals, Magazines, and Newspapers resource on the MTSU Engineering subject guide.



Articles

Best Sources for this Subject

Index to Legal Periodicals & Books 
Location: 1st Floor - Reference 340 In82

Legal Periodicals Full Text  1984-present
Includes legal journals, law reviews, bar association journals, and publications, yearbooks, institutes, and government publications
Full-text of 270 legal journals from 1994-present. [Database details..](#)


LexisNexis Academic 
Covers general news and information, legal, business, and medical resources. [Database details..](#)

Figure 8. Custom resource type: LexisNexis Academic is categorized as an Article resource on the MTSU Legal Research subject guide.

In closing, LibData has enabled us to manage our subject guides efficiently while providing an extensive research environment for our users and reference librarians. However, LibData is not the only available open-source or database driven option. Corrado and Frederick highlight several other open-source options in their Code4Lib Journal article (2008). Additionally, some libraries are making creative use of social bookmarking, blogs, wikis, and course management systems for a similar purpose. A newer fee-based product called LibGuides is a hosted subscription product that is fairly inexpensive: <http://www.springshare.com/>. Even if you are limited in the technology that is available to you, it is possible to assess and improve your patron's access to electronic resources.

References

Corrado, E. M., & Frederick, K. A. (2008, March 24). Free and open source options for creating database-driven subject guide. Code4Lib Journal, (2). Retrieved April 1, 2008, from <http://journal.code4lib.org/articles/47>

Hemmig, W. (2005). Online pathfinders: Toward an experience-centered model. *Reference Services Review*, 33(1), 66-87.

University of Minnesota Libraries. (2005, December 1). LibData project site. Retrieved April 1, 2008, from <http://libdata.sourceforge.net/>

