

CREATING A GOOD LIBRARY WEB SITE

A well-designed Web site is one of the best ways for a library to communicate to students and faculty. It serves as a gateway to library resources such as the online catalog, databases, other Web sites, and information about the library. The content and purpose of the Web site will vary, depending on the type of library and the mission of the site. Many books, journal articles, and Web sites offer detailed instruction on Web site design; however, this article will focus on our experience and will provide a step-by-step guide to the process we followed.

Southern Adventist University's McKee Library developed a simple Web site in 1996. As time passed, content was added, frames were used, and the page became more complex. By 2000, it was becoming cumbersome to navigate and was no longer flexible enough for all the additions the librarians needed to make. Following an excellent presentation at a conference in March 2000, which advocated design by a committee, our library director appointed a Web site committee. Thus began the process of developing a totally new site, which was completed in February 2001. In August 2003, we incorporated a database-driven design.

Step 1: Establish a Committee

The Web site committee should have a broad representation with varied skills and knowledge in design and content. Our initial committee of five members has since grown to seven, which includes two students who actually do the designing and programming. The committee members each bring different skills, specialized expertise, and a variety of perspectives to the task.

BY MARGE SEIFERT AND PATRICIA BEAMAN

Step 2: Do Research

All committee members need to do research to determine content to include, the steps to take, and the components of a well-designed Web site. Research can take various forms, including workshops, books, articles, usability studies, and reviewing Web sites for individual likes or dislikes.

The content and purpose of the Web site will vary, depending on the type of library and the mission of the site.

It is important to study others' successes to determine what will work well for your library.

Step 3: Determine the Audience

The committee needs to make some decisions early in the process. First of all, who is the audience? Is it the students, faculty, alumni, or administration? This audience will dictate content, design, and organization. We decided that our primary audience was the students, faculty, and distance-education students of Southern Adventist University, with a secondary audience of administration and community.

Step 4: Compose a Mission Statement

Another important component, which affects the look and content of the site, is the mission statement. What do you want the Web site to accomplish? Will it inform, sell, or provide services? The type of library affects the kinds of information that will be included on the site. McKee Library's Web site mission "is to instill lifelong learning skills and to be a main conduit for information, services, and training to adequately support the instructional and research programs of the university."

Step 5: Decide on Design Principles

As committee members conduct research, they will discover the importance of following design principles, which they can share with the actual designers, to ensure that the site is easy to use. From noted Web designers like Nielsen and Shneiderman, we gleaned the following principles.

The main page, or first screen, is the most important. This page should provide all the pertinent information without scrolling and should load quickly to retain the attention of the audience. Quick loading will also help users with a slow connection and make the page more manageable. The first page should also have a first-rate design, so it will interest your customers. It should not be too cluttered and should show customers where to go to find content on subsequent pages. Web pages should be logically arranged and easy to use.

Content chunking is how you categorize information. The main page should feature no more than nine links or seven buttons, to allow for ease of navigation.

As we began to design the main page, each committee member made lists of content subjects they felt were important to post on the Web site. These elements included the official



Observing a student as he or she uses the school Web site makes it possible to quickly detect navigation problems.

The Web site committee should have a broad representation with varied skills and knowledge in design and content.

name of the library, its complete street and mailing address, telephone number, hours, a description of the library and its collection, a list of personnel, the online catalog, online databases, and library policies. After assembling the list, the committee members put the information on small cards and divided them up into different categories. By placing the cards for each Web page in a separate pile, the members could quickly reorganize them and discuss the results. Our current main page has three main divisions—*Research Central* (all research can be done from this page), *Services*, and *About Us*. All content is listed under one of these chunks.

Navigation

The navigation should move from *simple to complex using chronological or alphabetical order*, whichever works best for your site and customers. Also important is the three-click rule. You will lose patrons if they have to click more than three times to find desired content.

The Web site should load quickly. Remember that some of your customers will have old computers with slow connections, while others will have broadband width and high-speed connections. Make it easy for everyone to use the site.

Customers should always be aware that they are using your library Web page. They do not need to know the origin of all the items they access, but they should be able to move from one component to another *seamlessly*.

Don't clutter your Web site with too many icons. White space and a clean menu enhance readability. Each page should be consistent, easy to use, and should not include so much information as to seem overwhelming. *Simplicity* is the key.

Readability

Text readability is very important. Maintain a contrast between the text and the background. A busy background will create confusion. Make the font size and style readable even for

those with impaired vision. It's helpful to have an option that identifies graphics, since some people may choose to turn off the images. In this way, they will still be able to read the text connected with the images and can choose to turn on the graphics if they wish.

Use a *consistent* layout throughout the site. Incorporate either a logo or some identifying graphic, placed in the same position on each page, to tie the pages together. Be sure to identify each page, and use the same headers, footers, margins, and alignment throughout. Footers should include the address and telephone number of the library.

After weighing the advantages and disadvantages, we decided on *no frames*. This allows for more space for content and greater flexibility.

On the main or home page, the users should not have to scroll to see all of the content at once. The entire site will function better, and users won't get lost if you keep scrolling to a minimum.

Although libraries must provide service to all regardless of disabilities, accessibility for persons with a disability is not always considered in Web site design. However, it is not hard to develop a site that is accessible and attractive. A number of Web sites give suggestions for enhancing accessibility. Bobby (<http://bobby.watchfire.com/bobby/html/en/index.jsp>) is a free service that will test your site.



Step 6: Designing the Site

Once we had decided on design principles and content, we asked two members of the committee to provide some designs from which to choose. After selecting one, we gave it to a student programmer to develop. We chose a design that allowed us to add new content. When we redesigned the site, we had a student employee who was knowledgeable about Web design prepare ideas for the committee.



By involving a diverse group of advisors, the school Web site committee can more readily solve or prevent problems.

Step 7: Conduct Usability Tests

Usability testing is one way to develop a user-friendly Web site rather than a designer-centered one. Be sure your site is easy to use, rather than one that looks great but is difficult to navigate. Testing can also save money and is good public relations for the library.

You can use different methods to test a site—surveys, use statistics, focus groups, and online suggestions. An inexpensive method is individual user testing. Choose approximately five individuals who are representative of your audience. Have at least two people oversee the testing—one to administer the test and one to write down comments. Give survey subjects questions that require them to navigate the site and to think out loud. The results, when analyzed, show where changes are needed. This testing should be done early in the design process and repeated after changes are made.

We consulted several students and staff members who were unfamiliar with the new design. They gave us several helpful suggestions, which were implemented. One problem we found was with terminology. Some people simply did not know the meaning of certain technical terms. We changed some terms and left others as they were, recognizing the need for library use training. Looking back, we realize we should have done usability testing earlier in the process.




Last Step: Database-Driven Web Site

We discovered belatedly that we should have planned ahead for future updates. This became very time-consuming. Changes had to be given to the student programmer, proofread after being posted on the site, then if necessary, modified again. We



Southern Adventist University Web site committee members discuss the university's Web page design.

concluded that we really needed a database-driven site. Rather than hard-coding information directly into a static HTML page, we would construct a database containing the information. Whenever a resource needed to be added or a page edited, the templates from the database would automatically update the Web pages. So, instead of waiting for programmers to revise the Web site, librarians could do the work themselves. The committee began meeting again to redesign the library Web site. We simplified the page, changed the look, and with the help of two students, created a database-driven site.

The entire process of designing and redesigning the McKee Library Web site has been interesting, though time-consuming. All of the committee members have learned a great deal, and we have been pleased with the final results. Many people have said that the latest version of the Web site is now much easier to use. Although the redesign is now complete, updating the site is a continuous process. We invite you to visit our Web site at <http://library.southern.edu/>. 



Marge Seifert

Marge Seifert has been Public Services Librarian at the McKee Library at Southern Adventist University in Collegedale, Tennessee, for the past five years. Her responsibilities include reference and instruction. Previously, she was a librarian and teacher at Collegedale Academy in Tennessee for 12 years. Ms. Seifert holds an M.A.T. degree from Andrews University in Berrien Springs, Michigan; and a M.S.L.S. (Master of Science in Library Science) from the University



Patricia Beaman

of Tennessee in Knoxville. **Patricia Beaman** has been Periodicals Librarian at Southern Adventist University for the past five years and Chairperson of the university's Library Web Site Committee for four years. She previously served as a Librarian at Middle East College in Beirut, Lebanon.

SELECTED BIBLIOGRAPHY

- Breeding, Marshall, "Essential Elements of a Library Web Site." In *Computers in Libraries* 24:2 (February 2004), pp. 40-42.
- Davis, Francie C. "Successful Web Page Design: Neither Accident Nor Frill." In *15th Annual Computers in Libraries: Proceedings 2000*, compiled by Carol Nixon and Jennifer Burmood (Medford, N.J.: Information Today, 2000), pp. 58-63.
- Nielsen, Jakob. *Designing Web Usability* (Indianapolis: New Riders, 2000).
- Roberts, Gary. "Designing a Database-Driven Web Site, or, the Evolution of the InfoGuana." In *Computers in Libraries* 20:9 (October 2000), pp. 26-32.
- Rosenfeld, Louis, and Peter Morville. *Information Architecture for the World Wide Web* (Cambridge, Mass.: O'Reilly, 2002).
- Shneiderman, Ben. *Designing the User Interface: Strategies for Effective Human-Computer Interaction* (Reading, Mass.: Addison Wesley Longman, 1998).
- Song, Yuwu. *Building Better Web Sites: A How-to-Do-It Manual for Librarians* (New York: Neal-Schuman, 2003).