

Library Web Sites at Historically Black Colleges and Universities

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This article presents the findings of a study that sought to determine how useful library Web sites of historically black colleges and universities (HBCUs) are as tools for disseminating information and providing services to users. The study compared the library Web sites of public-supported HBCUs with Web sites of other public-supported institutions in the Southeast. It was found that most HBCU libraries used their Web sites mainly to provide information about the library and its collections. The article offers some recommendations on what HBCU libraries can do to improve their Web sites to better serve their users.



The importance of the Internet and the World Wide Web in libraries can no longer be questioned. A few years ago, libraries provided information mainly from books, printed indexes, and journals. Library services were available by physically going to the library or, for a limited number of services, by using the telephone. Today, the medium through which information is disseminated has changed (and continues to change) from the printed to the electronic via electronic books and journals, CD-ROM indexes and abstracts, full-text databases, and other online resources. With the advent of the Web, the availability and accessibility of information in these electronic formats in libraries and other types of organizations has been made even easier because of the Web's graphic and interactive capabilities. These capabilities allow users to search databases; view full-text articles, including pictures and tables; sign "guest books"; send electronic mail; and register for different types of services

and events. As a result, "organizations of all types are recognizing the importance of the Web as a tool, not only for gaining access to information, but also as a means of disseminating information about their activities, products, or services."¹

As expected, every type of organization has made an effort to establish a Web page or Web site through which the virtual global community can access information about that organization and its resources and services.² Not to be left behind, many libraries have created Web sites to serve their patrons and the general information community. But how useful are these Web sites beyond providing information about the library and its collections? As Laurel A. Clyde put it, "many libraries are establishing home pages on the World Wide Web, some simply to be 'on the Internet.'"³

The purpose of this project was to determine how useful historically black college and university (HBCU) libraries' Web sites are as tools for disseminating information and providing services to

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users. The project began as a result of the author's efforts to improve the usefulness of the South Carolina State University Library's Web site. This was done by analyzing other libraries' Web sites to determine what kind of information they provided, how the information was organized, how accessible the information was, and what kind of services they provided.

Literature Review

Because the Web itself is still developing and Web sites are in a constant state of development, the current literature on what makes a Web site useful is still scanty. Even though many guidelines and recommendations on what makes a good or useful Web site now abound, especially on the Web, no concrete standards have been set yet. However, the most important determinant of an effective Web site is that it should have a clear mission and a clear sense of its users and their needs.⁴

In his article on the mission and function of library Web sites, Mark Stover focused on the mission and function of library Web Sites as they relate to the mission of the organization and the function or role of the librarian. According to Stover, the mission of the organization impacts the content of any Web site. In academic libraries, for example, the mission of the Web site will be based on the three-fold mission of the academy: research, teaching, and public service. He concluded that the role of the library's Web site, like the traditional role of librarians, should be one of selecting, organizing, providing access to, and preserving information resources.⁵

In another article, Stover and Steven D. Zink compared the design of forty higher education library home pages to measure how well the libraries have incorporated emerging guidelines for Web page design and organization. The authors concluded that many of the home pages were badly designed and neglected fundamental principles of information organization. In addition, Stover and Zink provided a useful appendix on points to

consider when constructing a home page. These points include the need to plan; the layout and organization of the Web site; how to use links and graphics; what to include in the content; and ways to ensure the credibility of, and accountability for, the information on the Web page.⁶

In their article on library services via the Web, Daniel Xiao, Pixey A. Mosley, and Alan Cornish discuss how the Web has been used at the Texas A & M University Libraries to serve students and faculty more effectively.⁷ The authors describe five concepts—the Web page as a public relations tool, an instructional tool, a search platform, a communication tool, and a museum/virtual library—that have been incorporated into the libraries' Web site. In addition, they discuss other applications under future consideration, including use of the Web for electronic reserve and for instructional resources such as interactive tutorials and demonstration searches.

Clyde also has provided some useful insights on the uses of the library's home page.⁸ She discussed the purposes for which a library might create a home page and the information that such a home page might provide. Based on a survey of home pages of public libraries and school libraries in thirteen countries, her research focused on how libraries used the home page to provide information. She also outlined some essential features that make a page useful, including the title of the page (such as the keywords likely to be used by people searching for the page), well-selected graphics, an overview of the library and its services, appropriate links to other Internet resources, a link to the online catalog, and a means by which visitors to the page can contact the library staff.

Methodology

Because this project was started at South Carolina State University, a public-supported HBCU, the study was limited to HBCU library Web sites in the southeastern region with comparable characteristics in terms of mission, resources and ser-

vices, primary users, and major source of funding. An examination of library Web sites at non-HBCU schools also was deemed necessary to compare the performance of HBCU sites with the overall performance of the Web sites of similar academic libraries.

Using the Carnegie Foundation for Advancement of Teaching's *A Classification of Institutions of Higher Education*, institutions were identified in the Southeast that were either Master's (Comprehensive) Colleges and Universities I or Master's (Comprehensive) Colleges and Universities II.⁹⁻¹¹ HBCUs were then identified using *Black American Colleges & Universities: Profiles of Two-Year, Four-Year, and Professional Schools*.¹²

Overall, 66 percent of all the sites examined provided access to the library's catalog.

Seventy-four schools were selected, fifty-six non-HBCUs and eighteen HBCUs. Two major search engines, *Infoseek* and *Yahoo!*, and Christina DeMello's *College and University Home Pages—Alphabetical Listing* were then used to search the Web for the home pages and universal resource locators (URLs) of all selected schools and their libraries.¹³ The home pages of five HBCUs and four non-HBCU schools or their libraries could not be located. Therefore, sixty-five schools remained on the survey list, thirteen HBCUs and fifty-two non-HBCUs.

A list of the selected schools with the URLs to the school's home page and the library's home page was created. With the listing of all selected schools and their libraries readily available, between August 18 and September 1, 1998, the Web sites of the selected libraries were examined to determine their usefulness as tools for disseminating information and providing services to users. All sixty-five Web sites were examined within this time frame to avoid changes that might occur if the study were conducted over a long period of time.

Therefore, any changes made to these sites after September 1, 1998, are not included in this study.

Based on the current literature and several guidelines available on the Web (such as <http://www.usd.edu/engl/proamateur.html>) on what determines a good Web site, and by comparing various library Web sites to see what features made them effective, the following questions were posed at each site:

1. Is the library's home page accessible from the parent institution's home page or Web site?
2. Is the library's online catalog accessible via the library's Web site?
3. Does the library's Web site provide access to the library's journal/periodicals holdings list?
4. Does the library's Web site provide access to the library's list of printed indexes and/or CD-ROM databases?
5. Does the library's Web site provide access to the library's online or Web-based databases?
6. Can users request reference assistance through the library's Web site?
7. Can users request interlibrary loan (ILL) materials through the library's Web site?
8. Does the library's Web site provide links to other sites that may be relevant to the users' needs?
9. Does the library's Web site provide links to other libraries in the area?
10. Does the library's home page and/or other Web pages at the site show the date of the last update?
11. Does the library's Web site provide a feedback mechanism?
12. Is the library's Web site used for interactive purposes (e.g., tutorials or quizzes, patron information, electronic journals, etc.) other than the ones mentioned above?

Results

In all the areas examined, the results show that HBCU libraries are still lagging behind in terms of the resources and services they provide via their Web sites. On average, 72 percent of the non-HBCU li-

TABLE 1
Selected Features of HBCU and Non-HBCU Library Web Sites

Features	HBCU Sites (n = 13)		Non-HBCU Sites (n = 52)	
	No. of Sites	Percentage	No. of Sites	Percentage
Library's home page accessible from parent institution's home page	11	85	52	100
Online catalog accessible through the library's Web site	7	54	36	69
Site provides access to the library's journal/periodicals holdings list	3	23	26	50
Site provides access to the library's list of printed indexes and/or CD-ROM databases	5	38	37	71
Site provides access to the library's online or Web-based databases	7	54	47	90
Reference assistance available through the library's Web site	3	23	24	46
Request ILL materials through the library's Web site	4	31	31	60
Site provides links to other sites that may be relevant to users' needs	7	54	48	92
Site provides links to other libraries in the area	10	77	43	83
Site shows date of last update	6	46	41	79
Site provides a feedback mechanism	7	54	45	87
Site is used for any other interactive purposes	3	23	21	40

brary Web sites and 47 percent of the HBCU sites examined were used to disseminate information and provide services. Table 1 provides a summary of these results.

Access from the Parent Institution's Home Page

Of the sixty-five library Web sites examined, two (both HBCUs) could not be accessed from the parent institution's home page. These sites were found using the *Infoseek* search engine. It is important to note that although a majority of the libraries' sites were linked directly to the parent institution's home page, some library home pages (at least fifteen) were found only after browsing the parent institution's Web site. A direct link to the parent institutions' home page rather than a link through another academic department could make these library sites more visible and easier to locate.

Access to Library Resources

One of the most important resources in a library is its catalog. Many libraries are now turning to Web-based catalogs that are easy to search and can be accessed through the library's Web site. Overall, 66 percent of all the sites examined provided access to the library's catalog. However, although 69 percent of non-HBCU Web sites had links to accessible catalogs, only 54 percent of the HBCU Web sites had an accessible catalog. It also is important to note here that although 23 percent of the sites whose catalogs could not be accessed provided a link to a Telnet-based catalog, only one was an HBCU.

Many libraries also use their Web sites to provide information on the resources within their libraries, such as lists of journals/periodicals holdings, printed indexes, and other CD-ROM databases. This study revealed that very few HBCU sites provided this information. For instance, whereas 50 percent of non-HBCU sites provided access to the library's holdings list, only 23 percent of the HBCU sites

provided this list. At the same time, only 38 percent of the HBCU library Web sites examined provided a link to a list of printed indexes and/or CD-ROM databases compared to 71 percent of non-HBCU sites.

Access to Web-based Databases and Other Web Resources

Most of the HBCU library Web sites examined did not provide access to Web-based databases or links to other resources relevant to their users. Overall, 83 percent of the library Web sites examined had a link to one or several Web-based databases. But a further examination of these sites revealed that although 90 percent of non-HBCU libraries provided access to Web-based databases, only 54 percent of HBCUs provided such access. Likewise, 92 percent of non-HBCU sites had links to other sites, whereas only 54 percent of the HBCU sites provided such links.

Reference Assistance, Interlibrary Loan, and Other Services

The library Web sites also were examined to determine whether users could request reference assistance or initiate ILL requests through the library's Web site, or if the sites were used to provide any other services. Compared to other applications, the results showed that not many libraries use their Web sites to provide these services. Overall, 42 percent of the library Web sites examined provided reference assistance, whereas 54 percent allowed users to initiate ILL requests through the library's Web site. However, only 23 percent of the HBCU Web sites provided reference assistance compared to 46 percent of non-HBCU sites, and only 31 percent of HBCU sites were used to provide ILL services compared to 60 percent of the non-HBCU sites that were used to provide this service. Apart from reference and ILL, some sites also provided forms to request bibliographic instruction or to suggest new titles for library purchase and others provided online tutorials.

Currency and Accountability

Two important features of a good Web site are currency of the information provided and accountability for the site. Thus, it is expected that a good Web site will show the date it was last updated and provide a feedback mechanism that users can use to communicate with the site's author(s). This study found that many HBCU sites did not provide this information. For instance, 79 percent of the non-HBCU sites showed when the site was last updated compared to only 46 percent of the HBCU sites. Likewise, only 54 percent of the HBCU sites provided a feedback mechanism compared to 87 percent of the non-HBCU sites.

Discussion and Recommendations

This study revealed that although most HBCU libraries have Web sites, many of the sites are used mainly to provide information about the library, that is, its collections and services, hours of operation, and staff directory. Even though this type of information is essential, it may not satisfy the needs of a Web surfer looking for information. In the language of Web page evaluators, it may not warrant a return visit.

A Web site that cannot be found is as good as one that does not exist.

The library Web site is an invaluable tool in providing access to remote databases, the online catalog, and other Internet resources.¹⁴ However, most HBCU libraries do not have the variety of resources, such as Web-based databases, electronic books and journals, and Web-interfaced catalogs, that can be organized and searched through a library Web site. Most of these resources are expensive and cannot be supported by the small budgets that HBCU libraries have. For instance, it is important to note that all but one of the HBCU sites that had a Web-interfaced catalog were part of a consortium composed of several libraries. Many HBCU libraries that are not part of a consortium may find it too expensive

to finance a Web-interfaced catalog or other Web-based databases.

Nevertheless, HBCU libraries that do not have a Web-interfaced catalog or subscribe to Web-based databases or other resources can still find ways to make their Web sites more useful to their users. For example, HBCU libraries that do not have a Web-interfaced catalog can ensure that their Telnet catalog is accessible from remote sites and can link it to their Web sites. Many libraries successfully provide access to a Telnet-based catalog through their Web sites.¹⁵

At the same time, HBCU sites could provide links to databases such as ERIC and PubMed or Grateful Med, which are available free of charge on the Web, together with links to other Web sites relevant to the needs of their users. However, such links should be chosen carefully and up-dated frequently to ensure they are still operational. It also is important to note that other Web pages at the library's Web site should be updated, as needed, and the date of such updates displayed to inform visitors of the currency of the information. Infrequent updates greatly reduce the value of a Web site because they leave the user wondering about the usefulness of a site that remains static in a rapidly changing and dynamic environment.¹⁶ Apart from linking to other sites, HBCU libraries could expand the resources available to their users by linking to local libraries and then making the catalogs of those libraries and other resources available to their users.

Moreover, HBCU libraries can post on their Web sites resources such as lists of indexes and CD-ROM databases (even if these cannot be searched through the Web site) and journals/periodicals holdings. This would allow users to verify availability and library holdings without having to call or go to the library. Also, many HBCU libraries are repositories of unique collections pertaining to the African-American experience. These collections can be digitized and made available to users through the library's Web site. In this way, these collections will be more useful

to a wider audience and thus enhance the usefulness of the library's Web site.

Another way that an HBCU library can enhance its Web site's usefulness is to use it as a bulletin board. Some libraries have a "What's New" page on which they can post news about the school or the library, announce new print and electronic additions to the collection, and recognize the professional accomplishments of staff members.¹⁷

In addition, many libraries use their Web sites as a teaching tool to support library instruction programs. HBCU libraries could incorporate tutorials or quizzes for freshman orientation or library skills classes and thus encourage independent learning.¹⁸ Libraries also could provide forms that would enable instructors or library users to request library instruction sessions online.

Few HBCU sites provided reference or ILL services through their Web sites. Many libraries are making use of the Web's interactive capacity to establish services between library users and library staff.¹⁹ HBCU libraries need to recognize the advantages of making these services available electronically, such as eliminating the need to be physically present to get service, and must prepare themselves for the imminent paperless society.

Finally, a useful Web site should be easy to access and locate. A Web site that cannot be found is as good as one that does not exist. For academic libraries, Web site accessibility and visibility is greatly enhanced by linking it to the university or college's home page. Placing a link to the library's home page in a prominent position on the university's home page is highly recommended.²⁰ Such a link is important because it makes it easier for users to identify the library with the parent institution and also enhances the context of the library's Web site.

Conclusion

To maintain their role as information providers in a rapidly changing electronic environment and to provide high-quality service, HBCU libraries have to develop dynamic Web sites that can meet the needs of their users in both the academic and global communities.

However, there is need for dedicated support from the parent institution. HBCUs need to increase their library budgets or obtain funding from external sources so that their libraries can purchase the technical resources necessary for Web page authoring and maintenance and can subscribe to Web-based resources such as databases, electronic journals, and books. Specific methods that HBCU libraries can use to get funding are beyond the scope of this article and could be the subject of a more detailed study.

In addition, HBCU libraries must hire staff with the technical expertise to work with Web technologies or train their staff to obtain such expertise. Many libraries rely on librarians with some Web-authoring skills to create and maintain the library Web site. But such librarians may not be sufficiently skilled and usually have too many other duties to devote the necessary time to Web page maintenance.

This study focused on library Web sites of public-supported colleges and universities in the Southeast; a similar study conducted on all types of HBCUs nationwide may be necessary to determine any differences in their performance. Nevertheless, HBCUs must recognize the importance of the library's Web site not just as a tool for disseminating information and providing services, but also as a public relations tool through which the institution sells itself to current and potential students and faculty, as well as to the rest of the world.

Notes

1. Mark Stover and Steven D. Zink, "World Wide Web Home Page Design: Pattern and Anomalies of Higher Education Library Home Pages," *Reference Services Review* 24 (fall 1996): 7-20.

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2. The term "Web site" is used in this article to refer to several Web pages found at the same site.
3. Laurel A. Clyde, "The Library as Information Provider: The Home Page," *Electronic Library* 14, no.6 (Dec. 1996): 549-58.
4. *Ibid.*, 556.
5. Mark Stover, "Library Web Sites: Mission and Function in the Networked Organization," *Computers in Libraries* 17 (Nov./Dec. 1997): 55-57.
6. Stover and Zink, "World Wide Web Home Page Design," 7-20.
7. Daniel Xiao, Pixey A. Mosley, and Alan Cornish, "Library Services through the World Wide Web," *Public-Access Computer Systems Review* 8, no. 4, (1997). Available at: <<http://info.lib.uh.edu/pr/v8/n4/xiao8n4.html>>.
8. Clyde, "The Library as Information Provider," 549-58.
9. The Carnegie Foundation for the Advancement of Teaching, "A Classification of Institutions in Higher Education." Available at: <<http://www.carnegiefoundation.org/cihe>>.
10. Master's (Comprehensive) Colleges and Universities I offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award forty or more master's degrees annually in three or more disciplines.
11. Master's (Comprehensive) Colleges and Universities II offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award twenty or more master's degrees annually in three or more disciplines.
12. Levirn Hill, ed., *Black American Colleges & Universities: Profiles of Two-Year, Four-Year, and Professional Schools* (Detroit: Gale Research, 1994): 760-61.
13. See <<http://www.mit.edu:8001/people/cdemello/univ.html>>.
14. Xiao, Mosley, and Cornish, "Library Services through the World Wide Web," 3.
15. See <<http://www.state.sc.us/scsl/lion.html>>.
16. Stover and Zink, "World Wide Web Home Page Design," 12.
17. Bruce Connolly and Gail M. Golderman, "Schaffer Library Home Page: Structured Access to Library and Internet Resources," *Library Hi Tech* 15 (1997): 90-100.
18. See <<http://www.library.cornell.edu/okuref/tutorialsguides.html>>.
19. Xiao, Mosley, and Cornish, "Library Services through the World Wide Web," 4.
20. *Ibid.*, 6.