This article reports the findings of a study that sought to find out how useful library World Wide Web sites of Historically Black Colleges and Universities (HBCUs) were 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 southeastern United States. It was found that most HBCU libraries used their Web sites mainly to provide information about the library and its collections. The article provides some recommendations on what HBCU libraries can do to improve their Web sites to better serve their users. A table compares selected features of HBCU and non-HBCU library Web sites.

(Author/MES)
The Usefulness of Library Web Sites at Historically Black Colleges and Universities as Tools for Disseminating Information and Providing Services to Users

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Abstract

This article reports the findings of a study that sought to find out how useful library Web sites of Historically Black Colleges and Universities (HBCUs) were 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 provides some recommendations on what HBCU libraries can do to improve their Web sites to better serve their users.
The Usefulness of Library Web Sites at Historically Black Colleges and Universities as Tools for Disseminating Information and Providing Services to 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 through the use of electronic books and journals, CD-ROM indexes and abstracts, full-text databases, and other online resources. With the advent of the World Wide Web (or the Web as it is popularly known), 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 World Wide 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 site2 through which the virtual global community can access information about that organization, its resources and services. 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 Clyde puts 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 Colleges and Universities (HBCUs) libraries' Web sites were as tools for disseminating information and providing services to 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**

Since the Web itself is still developing, and Web sites are in a constant state of development, 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.

In his article on the mission and function of library Web sites, Mark Stover focuses 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 concludes 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.

In another article, Stover and Stephen D. Zink compared the design of forty higher
education library home pages to measure how well these libraries have incorporated emerging guidelines for Web page design and organization. They concluded that many of the home pages were badly designed, and neglected fundamental principles of information organization. They also provided a useful appendix on points to consider when constructing a home page. These 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.²

Daniel Xiao, Pixey A. Mosley, and Alan Cornish, in their article on library services through the World Wide Web discuss how the Web has been used at the Texas A & M University Libraries to serve their students and faculty more effectively. They describe five concepts that have been incorporated into the Libraries’ Web site. These include, the Web page as a public relations tool, as an instruction tool, a search platform, a communication tool, and a museum/virtual library. They also discuss other applications under future consideration, which include using the Web for Electronic Reserve and instructional resources such as interactive tutorials and demonstration searches.³

Laurel A. Clyde also provides some useful insights on the uses of the library’s home page. She discusses the purposes for which a library might create a home page, and the information that a library might provide through its home page. Based on a survey of home pages of public libraries and school libraries in 13 countries, her research focused on how libraries used the home page to provide information. She also outlines some essential features that make a page useful. These include the title of the page (which includes 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

Since this project was started at South Carolina State University, a public supported HBCU in the Southeast, the study was limited to HBCUs library Web sites in this region with comparable characteristics in terms of mission, resources and services, primary users, and major source of funding. An examination of library Web sites at non-HBCU schools was also deemed necessary in order 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, A Classification of Institutions of Higher Education (Available at: http://www.carnegiefoundation.org/cihe)9 institutions in the Southeast that were defined either as Master's (Comprehensive) Colleges and Universities I9, or Master's (Comprehensive) Colleges and Universities II9 were identified. Historically Black Colleges and Universities were then identified using Levin Hill, ed., Black American Colleges & Universities: Profiles of Two-Year, Four-Year, and Professional Schools (Detroit: Gale Research, 1994).12

A total of seventy-four schools were selected. Fifty-six of these were non-HBCUs, and eighteen HBCUs. Two major search engines, Infoseek and Yahoo!, and Christina De Mello's College and University Home Pages – Alphabetical Listing12, were then used to search the Web for the home pages and Universal Resource Locators (URLs) of all selected schools and their libraries. 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-HBCU schools.

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 to 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 the sixty-five Web sites were examined within this time frame to avoid changes that may occur if the study was 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 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 through 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 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 up-
11. Does the library’s Web site provide a feedback mechanism?

12. Is the library’s Web site used for any other 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 through their Web sites. On average, 72% of the non-HBCU library Web sites, and 47% 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

Out of the 65 library Web sites examined, 2 sites, both HBCUs, could not be accessed from the parent institution’s home page. These sites were found using the Infoseek search engine. It is also 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 15) 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 the library’s 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% of all the sites examined provided access to the library’s catalog. However, while 69% of non-HBCU Web sites had links to accessible catalogs, only 54% of the
### TABLE 1
Selected Features of HBCU and Non HBCU Library Web Sites

<table>
<thead>
<tr>
<th>Features</th>
<th>HBCU Sites (n=13)</th>
<th>Non HBCU Sites (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Sites</td>
<td>Percentage</td>
</tr>
<tr>
<td>Library’s home page accessible from parent institution’s home page</td>
<td>11</td>
<td>85</td>
</tr>
<tr>
<td>Online catalog accessible through the library’s Web site</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>Site provides access to the library’s Journal/Periodicals Holdings List</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Site provides access to the library’s list of printed indexes and/or CD-ROM databases</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td>Site provides access to the library’s online or Web based databases</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>Reference assistance available through the library’s Web site</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Request interlibrary loan materials through the library’s Web site</td>
<td>4</td>
<td>31</td>
</tr>
<tr>
<td>Site provides links to other sites that may be relevant to users’ needs</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>Site provides links to other libraries in the area</td>
<td>10</td>
<td>77</td>
</tr>
<tr>
<td>Site shows date of last up-date</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>Site provides a feedback mechanism</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>Site is used for any other interactive purposes</td>
<td>3</td>
<td>23</td>
</tr>
</tbody>
</table>
HBCU Web sites had an accessible catalog. It is also important to note here that while 23% 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 about 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, while 50% of non-HBCU sites provided access to the library’s Holdings List, only 23% of the HBCU sites provided this list. At the same time, only 38% of HBCU’s library Web sites examined provided a link to a list of printed indexes and/or CD-ROM databases, compared to 71% of non-HBCU sites that did.

**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% 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 while 90% of non-HBCU libraries provided access to Web based databases, only 54% of HBCUs provided such access. Likewise, 92% of non-HBCU sites had links to other sites, while only 54% of the HBCU sites provided such links.

**Reference Assistance, Interlibrary Loan, and other Services**

The library Web sites were also examined to find out if users could request reference assistance or initiate Interlibrary Loan 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% of the library Web
Library Web Sites at HBCUs

sites examined provided reference assistance, while 54% allowed users to initiate Interlibrary Loan request through the library's Web site. However, only 23% of the HBCU Web sites provided reference assistance compared to 46% of non-HBCU sites that did, and only 31% of HBCU sites were used to provide Interlibrary Loan services, compared to 60% of the non-HBCU sites that were used to provide this service. Apart from Reference and Interlibrary Loan, some sites also provided forms to request Bibliographic Instruction, or suggest new titles for library purchase, while others provided online tutorials.

Currency and Accountability

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

Discussion and Recommendations

This study revealed that although most HBCU libraries have Web sites, many of these sites are used mainly to provide information about the library, that is, its collections and services, hours of operation, and a 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.

The library Web site has been recognized as an invaluable tool in organizing access to
Library Web Sites at HBCUs

remotely accessible databases, the online catalog, and other Internet resources. 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 comprising 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 which do not have a Web interfaced catalog can ensure that their Telnet catalog is accessible from remote sites, and link it to their Web sites. Many libraries successfully provide access to a Telnet-based catalog through their Web sites.

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, these links should be chosen carefully and up-dated frequently to ensure they are still operational. It is also important to note here that other Web pages at the library should also be up-dated as needed, and the date of such up-dates displayed to inform visitors of the currency of the information they are using. Infrequent up-dates greatly reduce the value of a Web site because they leave the user wondering about the usefulness of a site that remains so static in a such a rapidly changing and dynamic environment.

Apart from linking to other sites, HBCU libraries could expand the resources available to their
users by linking to local libraries, and make the catalogs of these libraries, and other resources readily available to their users.

HBCU libraries can also 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 will 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 enhance the usefulness of the library’s Web site.

HBCU libraries can also enhance their Web site’s usefulness by using it as a bulletin board to make important announcements. Some libraries have a “What’s New” Page that serves a communication tool to post news about the school or the library, to announce new print and electronic additions to the collection, and to recognize the professional accomplishments of staff members.  

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 encourage independent learning. They could also provide forms that would enable instructors or library users to request library instruction sessions online.

Few HBCU sites provided reference or interlibrary loan services through their Web sites. Many libraries are making use of the Web’s interactive capacity as a communication tool to establish services between library users and the library staff. 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 also prepare themselves for the imminent paperless society.

Finally, a useful Web site should be easy to access and to locate. A Web site that cannot be found is as good as one that does not exist. For academic libraries, accessibility and visibility of the library's Web site is greatly enhanced by linking it to the home page of the university or college. Placing a link to the library's home page in a prominent position on the University's Home page is highly recommended. 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 provide high quality service, HBCU libraries have to develop dynamic Web sites that can meet the needs of their users both in the academic and the global community.

However, there is need for dedicated support from the parent institution. HBCUs need to increase their library budgets or get funding from external sources so that these libraries can purchase the technical resources necessary for Web page authoring and maintenance, and 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 paper, and could be the subject of a more detailed study.

HBCU libraries must also hire staff with appropriate technical expertise capable of working with Web technologies, or train their staff to gain such expertise. Many libraries rely on librarians with some Web authoring skills to create and maintain the library Web site. These
librarians may not be very highly skilled, and usually have too many other duties to devote enough time to Web page maintenance.

This study focused on library Web sites of public supported colleges and universities in the Southeast, and a similar study conducted on all types of HBCUs countrywide 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 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


2. The term Web site is used in this article to refer to several Web pages found at the same site.


4. Ibid., 556.


10. Institutions that offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 40 or more master's degrees annually in three or more disciplines.

11. Institutions that offer a full range of baccalaureate programs and are committed to
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16. See <http://www.state.sc.us/scsl/lion.html>


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