

Using Web Resources

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【摘要 Abstract】

網際網路蘊藏著極豐富大量的資訊，深得工商行業、學術教育、和政府機構的廣泛應用，一般大眾更是熱中於在網際網路上查詢所需資訊，網際網路雖是有力的資訊工具，有時卻不易使用。本文討論設定圖書館網頁，以提供有關網站並加以連接，使之易於操作、查詢、和使用。設定網頁時，首先以使用對象為標的，依據網站製造者、內容、設計與編排、和學習環境，選擇有用的網站。網頁需要經常檢視和更新，以保持其正確性和現在性，方始成為有用網頁。

As the Internet contains vast amount of information, its use has become more widespread in business, educational institutions, and government agencies. People are enthusiastic in trying to search for resources on the Internet. However, the Internet, though a powerful tool, is by no means easy to use for many people. This article discusses creating a library home page to make Internet resources more accessible and manageable to users. First, librarians should select useful Web sites for a target audience by examining their authorship, content, design and layout, and learning environment. Then, a library home page listing this Web reference collection should be made. Constant monitoring and updating the site is necessary to keep the site current and useful.

關鍵詞 Keyword

網際網路 網頁 網站 資訊 網上資源

Internet; Home page; Web site; Information; On-line resources



1. Introduction

Since the Web became a very popular Internet tool in the past few years, users have been enthusiastic in using the Internet to search for information. The Internet is becoming a more and more important resource for general users in their information search as well as a valuable reference tool for library professionals in serving their patrons. Librarians have included useful Web sites as part of their library resources. They bookmark sites for ready-reference questions and bookmark for hard-to-find information. Needless to say, a collection of Web sites is indispensable resource in today's library.

Nevertheless, the Internet is not easy for many people to use. At the present time, the Internet is very much like a big warehouse with no order or organization. As a result, users encounter problems and frustration from time to time while searching for information. It is not unusual for some individuals to spend fruitless hours with little satisfactory results. To children and young people, the Web can pose even greater problems. However, one great service that librarians may render to their patrons is providing some organization into Internet resources for ease of use after they have collected useful web sites. A collection of Web sites, which has been sorted out and organized

into categories, will benefit users greatly. Not only will it facilitate users in utilizing Internet resources, but also it will save a tremendous amount of time and energy in gaining needed information. The built-in organization adds a great deal of value to the Internet resource and makes it more accessible and manageable. If Internet resources can be compared to a raw stone, then organization or categorization of Web sites will be like carving the stone into a shining and precious jewel.

In the course of giving reference services daily, librarians may have already collected numerous Web sites for frequently asked questions or obscure information. The collection of those bookmarks will eventually become too cumbersome to handle as vast sites continuously increase on the Net. Thus, making a library home page for a Web reference collection including a list of Web sites for patrons to utilize is very practical and viable. This library home page will be a dynamic way to make Internet resources more manageable and accessible. It can guide users, particularly students through the maze of information resources on the Internet. For high school or middle school students, a homework center page on a school web site featuring useful Web sites to help students with their homework will be like expanding school library media center hours into 24 hours a day and 7 days a week. This home



page will become an important instructional tool in a sense; moreover, it can serve as a means to communicate with students, parents, and the community.

2. Content of Library Home Page

When librarians or media specialists plan to create a library home page, what should be included? First, basic information about the library or media center, such as school or library address, phone number, library staff, and hours, services as well as webmaster's e-mail address should be posted. Second, goals or the purpose of the home page should be stated clearly. What is the purpose or goal of constructing a home page and what will be achieved with that page? The criteria for selecting Web sites from the Net and the scope of selection must be communicated clearly. The main body of the home page should be a collection of Web sites, which is intended as a curriculum resource guide.

Web sites must be arranged alphabetically by titles, as they are shown on the Web, and not arbitrary titles. It is important that Web sites must be annotated with their URL's listed so as to give users some general idea about the content and special features of the sites, if any. A library home page containing only a list of sites with no annotations does not increase accessibility to users, nor does it convey much information about the site. Also,

it is necessary to create links to relevant or related web sites. The selection policy of library resources, including electronic ones should also be part of the library home page.

3. Evaluation of Web Sites

Before constructing a library home page, librarians need to take time to navigate the Internet, locate potential Web sites, evaluate them, and then select appropriate ones to be included in the Web reference collection for their targeted audience. Unlike the traditional publishing world where books, newspapers, and journal articles are published after going through vigorous professional review, in cyberspace any one can publish without a pre-screening process. Thus, there is much disparity in the quality of publications found in Web sites, and publishing standards are thus compromised. While many Web sites provide useful information, others may give misinformation, dated, or biased information. Therefore, it is essential for librarians to glean the numerous Web sites that will be valuable for users. For librarians or school library media specialists who serve young people, screening of Web sites is especially crucial because many young people tend to believe what they read on the Internet. Another factor also needs to be taken into consideration is that the site selected for the Web collection should be geared toward the targeted



audience. Upon selecting Web sites, emphasis should not be placed on the "best" Web sites from the Internet, but on the most appropriate ones for a particular group of patrons. The selection policy and criteria are not different from the general library selection policy, which governs all print and other non-print materials. A wise media specialist will select Web sites that support the school curriculum with consideration for his/her students' and faculty's special needs and interests. Evaluating and selecting proper Web sites is the most important task before starting the construction of a library home page.

Several factors need to be considered in evaluating Web sites. Librarians have long evaluated books, AV materials, computer software, and CD-ROM's for collection development. Evaluation of Web sites should be no different from assessing other type of media and the basic principles of selection still apply. Authorship, content, design, and learning environment are the major criteria that librarians, teachers, and professors generally use to examine the quality of Web sites (Berger, 1998; Minkel & Feldman, 1999; Robin, Keeler & Miller, 1997).

3.1 Authorship

As in reviewing books, the first criterion for evaluating Web sites is authorship--who

constructs the site or who owns the site. Why is the site on the Internet? The objective or purpose of the site should be stated clearly on the page. Basic information about the site should be given on the home page. The address of a Web site often can shed light for users regarding the type of organization where the site originates. Today, there are six major domains of Internet sites in the United States: .edu for educational institutions, .org for non-profit organizations, .gov for government agencies, .mil for military, .net for network services, and .com for commercial institutions. If a site is affiliated with a university or government organization, it is most likely more reliable than an individual's site. An organization has more talents and resources than an individual to construct and maintain a Web site. If an individual creates a site, check his/her educational experience, job title, and work experience. Contact information such as e-mail address of an author, developer, or webmaster should also be included for users to ask questions or give feedback.

3.2 Content

The content of Web sites is the single most important factor in determining whether a site is worth taking the time to take a look. First, the content must be appropriate for the targeted audience. If a library home page is



for middle school students, choosing proper sites for this age group is crucial. The reading level, interest level, and sophistication of resources must fit their mental, emotional, and psychological development. Sites must also be able to support and enhance teaching and learning of school curriculum. The accuracy and reliability of information found on Web sites cannot be over emphasized. Is the information presented biased or is it propagating the author or developer's point of view? When dealing with controversial issues, do the sites provide opinions or facts? As many young people have yet to develop discerning and discriminatory skills when reading material posted on the Internet, selecting reliable Web sites for them is crucial.

Keeping a Web site up-to-date is absolutely a must. Is there any indication on the page to show when the site was last updated? Young people generally are not discriminating enough to check the timeliness of information as long as they can obtain search results. Another important question is whether the content of the site is unique and not available elsewhere. Can information on a Web site be used to supplement information provided by other resources such as books, magazines, or other non-print resources? Furthermore, a good web site should contain references with bibliographical information and sources of information.

3.3 Design and Layout

A Web site should be well organized and easy to navigate. Users should find it easy to read and navigate around its pages. The design and layout need to be consistent throughout the site. Pages should look uncluttered with proper headings and subheading inserted to help users find information and know their location in a document. In addition, there should be a navigational path directing users to return to the top level of the site or main sections of the site. It is important that information presented on a Web site is not buried under layers and layers of levels, causing users to lose interest in exploration. Furthermore, the icons must represent what they are intended to represent. A site should also load with reasonable speed.

Another design and layout issue is whether the hyperlinks on a Web site actually work. Because of frequently changing nature of Web sites, links to other Web sites may be dead or broken after a period of time. The site may be closed or moved. A good Web site is constantly updated to ensure all linked sites work.

Graphics, color, or animation can increase students' interest and enhance their learning, but they should be used only to supplement or complement the text. These special features of the Web should be used only to aid in the



understanding a concept or guide the navigation paths, and should never become so prominent on the page as to overshadow the message being presented. Too many colors, icons, graphics, and animation are very distracting and confusing, in particular to children and young people. They may totally get lost in cyberspace, landing in sites, far away from their intended sites.

It is also helpful to provide users with help. A feature for frequently asked questions is invaluable, especially for first time visitors. This feature signifies that the developer or manager of a site takes the work seriously and wants visitors to have positive navigation experience.

3.4 Learning Environment

The Web has several unique capabilities that are very appealing to users. It can provide all types of information--text, graphics, sound, animations, videos--anything that can be digitized. Information is presented in a nonlinear fashion, giving users the flexibility for random access. It offers an easy point-and-click navigation, enabling users to connect to multiple Web sites worldwide with more related information. Perhaps, best of all, the Web is interactive, and users can enter text, select options, and run programs. When evaluating Web sites, librarians must ascertain whether a site has been designed to utilize

these unique capabilities so that users can take these technological advantages to enhance their learning or teaching. An evaluator can ask the following questions:

Does the site offer interactive opportunities and invite student input?

Does the Web site offer access to information otherwise not available from other resources in the media center?

Does the site offer access to current and up-to-date information?

Does the site encourage students to collaborate or communicate with other students or expert?

3.5 Creating a Web Reference Collection

After evaluating Web sites, librarians and media specialists may begin work on a Web reference collection. There are several steps involved in designing and constructing a Web reference collection. The first step is preparation work, and then comes construction of the site. Regular update and maintenance follows. Continuously locating new sites is also necessary. Once the site is up and running, it is essential to publicize it so that students, faculty, parents will be aware of its existence and utilize it.

3.6 Preparation

The first task in starting a library home page is learning HTML (hypertext markup



language) and understanding how it works. Adobe PageMill, Microsoft Front Page, and Claris Work Home Page are all good HTML editor programs, which allow users to build a Web site with little HTML programming knowledge. However, it must be pointed out that these programs often can not do everything one wants. Hence, some basic knowledge of HTML will be necessary to construct a well-designed site.

Next, the developer of the site should make a list of the topics to be covered on the site. He/she may enlist the school faculty's help in giving suggestions on the areas that will be covered in their instruction or the areas that need strengthening in print and non-print collections. Other media specialists and teachers can also assist by giving a list of typical homework questions that are likely to be covered in the region.

Before getting starting a site, other Web reference collections and similar Web directories for a similar audience provide is the best way to obtain a general idea about content, look and navigation. The points to be considered in the preparatory stage include the following:

- How many topics should the sites cover?
- How many sites are listed for a typical topic?
- How are the sites formatted on the page?
- How easy is it to navigate between topics

and subtopics in a directory?

A developer of a Web reference site may borrow links from other sites that are useful. The developer should evaluate potential sites, select the sites that will meet use need, and then compile a list. However, to use web sites and their annotations, it is necessary to ask for prior permission. Furthermore, they may want to collect the URL's of local and regional interest.

3.7 Construction

When constructing a site for a Web reference collection, all pages in the directory should look and function in similar way, and pages should be clear. Generally, 85% to 90% of screen space should be used with some margins for each page. Use of graphics and animation should be kept to a minimum. Loud colors or background colors that make text difficult to read should be avoided.

Building a clear table of contents will make navigation easy and help users know where they are in a document. Everything on the site should not be multiple clicks away from everything else. A site will be difficult to move around if pages are nestled more than three levels deeper than the table of contents.

It is also important to arrange sites and sections in an alphabetical order by site title as found on the Web. Librarians are known to alphabetize and annotate many types of media.



Since a Web reference collection is just another medium, it too requires alphabetizing and annotating. Annotations briefly describing sites will definitely prove invaluable to users. If a site can do what other media cannot, note the special capabilities in annotations. URL's should be given as it indicates the type of organization that develops the site. Finally, accurate spelling and grammar give users a good impression and increase interest for further exploration.

3.8 Finding New Sites

After building a site for a web reference collection, continuous update and maintenance are essential. New sites appear frequently on the Internet, thus, the author, developer, or manager of a reference site needs to check regularly features, such as "What's new," "What's cool," in Yahoo (www.yahoo.com) or "What's useful links of Web sites" on the Internet. Also, he/she can look at "What's new pages" in library publications for new sites. Seeking input from users is another way to keep up with new sites. A form can be employed for users' input as well.

3.9 Publicizing the Web Reference Collection

The purpose of building a Web reference collection is to give users better library service and to facilitate their access to Internet resources. The ultimate goal for such a site is

to be utilized regularly as part of the library in information searching. Thus, librarians and media specialists, developers, or managers of the site should publicize the new site, stating its purpose, services, scope, capabilities, and advantages. The school community, including parents, personnel in the school system, and public librarians, should be aware of these Internet resources. If the school owns a Web site, the Web reference collection should obviously have a link on the school's home page.

4. Conclusion

Today, as information technology advances at an amazing speed. Web sites on the Internet will continue to increase in number. Resources on the Net will become even more numerous and confusing for users, particularly for children and young adults. As librarians and media specialists strive to provide better services in this technological environment, a valuable service for their patrons is to select, evaluate, and organize useful Web sites, and then to create a Web reference collection in a library home page. This collection will save users a tremendous amount of time and energy spent in aimless searching, and guide them in the right direction in information seeking. The first step for librarians to create such a collection is to navigate the Internet and evaluate valuable Web sites by using the following criteria:



authorship, content, design and layout, and learning environment. The next step is to create a library home page listing these web sites. Finally, after the site is up and running, continuous maintenance is essential to keep information current and assure all links in working condition. Internet resources will

become more and more a part of our life. Librarians and media specialists need to constantly keep abreast of technological developments in the information field and assist users in gaining easy access to resources on the Internet.

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References

- Berger, P. (1998). Internet for active learners: Curriculum-based strategies for K.12. Chicago: American Library Association.
- Minkel, W., & Feldman, R. H. (1999). Delivering Web reference services to young people. Chicago: American Library Association.
- Robin, B., Keeler, E., & Miller, R. (1997). Educator's guide to the web. New York: Henry Holt and Company.
- Selection criteria*. Available:
<http://www.ala.org/parentspage/greatsites/criteria.html> [1999, Sept. 30].
- Simpson, C., & McElmeel, S. L. (1997). Internet for schools. Worthington, OH: Linworth Publishing, Inc.
- Toub, S. (1997). Adding value to Internet collections. Library Hi Tech, 15(3/4), 148-154.

