

Edlibweb: A Study in Cooperative Web Site Development

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ABSTRACT

This paper will investigate the issues involved in planning for cooperative collection development for a Virtual Library of Education and K-12 Curriculum Resources. It will explore the similarities and differences of collection development in print and Internet environments; describe other efforts at cooperative Web Site development; and detail the steps taken to date in the development of a Virtual Library of Education and K-12 Curriculum Resources.

Introduction

Traditionally collection development has been an activity which, of necessity, was conducted by individual library staff in individual libraries to meet the needs of a library's client group. Collection development decisions have been further dependent upon budget, space and the availability of staff to acquire, catalog and provide access to materials.

This independence in collection development, while understandable, if not necessary; in the print environment, has for the most part been followed in the Internet environment as each library creates a subject specific page with links to Internet resources. However, the constraints in collection development in print materials do not uniformly apply to the electronic world. Given these changes in the environment and the already full workloads that most of us have, I decided to explore the potential for the development of a cooperative Web Site which would provide a Virtual Electronic Library of Internet resources related to teacher education and K-12 Curriculum Resources.

This exploration required that I consider the differences and similarities of collection development in print and Internet environments, explore other efforts at cooperative Web Site development, identify a potential group of collaborators for a cooperative Web Site, consider issues in Web Site design and management and determine whether cooperative Web Site development is a worthwhile method for providing access to Internet resources.

Considerations in Collection Development

Collection development includes many components, chief among them are

becoming knowledgeable about an existing collection or creating one; becoming familiar with the community....; assessing the needs of the school's curriculum as well as the needs of the users; establishing collection development policies and procedures....; creating the basis for selection (including policies and procedures to guide selection decisions); identifying criteria for evaluating materials; planning for and implementing the selection process; participating in resource sharing through networking and coordinated collection development; establishing acquisitions policies and procedures, setting up the maintenance program and evaluating the collection. (1)

In 1976 the ALA's Resources and Technical Services Division prepared "Guidelines for the formulation of collection development policies". These guidelines reflect many of the assumptions of traditional collection development. They state "A written collection development policy statement is for any library a desirable tool, which (a) enables selectors to work with greater consistency towards defined goals, thus shaping stronger collections and *using limited funds more wisely*; (b) informs users, administrators, trustees and others as to the scope and nature of existing collections, and the plans for continuing development of resources; (c) *provides information which will assist in the budgetary allocation process*". (2)

Constraints in collection development of physical materials were noted by Breivik and Gee in 1989. Among the constraints were "limited funds: cost and space limitations are both strained by an increasing number of journals, the problems of housing a wide variety of formats..., and the need to provide specialized equipment." (3)

As noted above the components and constraints of collection development of Internet resources do not parallel all components and constraints that are identified for traditional collection development. Even when the components are parallel the nature of the Internet results in differences in their application.

In creating a collection of Internet resources the existing collection about which we must become knowledgeable is the Internet itself. As we learn this collection we recognize that, except for a few select sites such as the Internet Scout Project, the Wolfgram Memorial Library of Widener University and Search Insider, there are few of the review and selection tools which we use as we select physical resources for our collections.

FIGURE 1: Web Sites that Provide Reviews of Internet Resources

Web Site Resource Review	URL
"Teaching Critical Evaluation Skills for World Wide Web Resources" Wolfgram Memorial Library, Widener University	http://www.science.widener.edu/~withers/webeval.htm (http://www.science.widener.edu/~withers/webeval.htm)
Net Scout Project, University of Wisconsin-Madison	http://www.cs.wisc.edu/scout (http://www.cs.wisc.edu/scout)
Search Insider, LEO: Librarians and educators online	http://www.leonline.com/searchinsider/ (http://www.leonline.com/searchinsider/)

In creating a collection of Internet resources it is still important that we assess the needs of our school's curriculum as well as the needs of our users. However, our cyber space users are not constrained by time or physical space and so our user population is greater than the students, staff and faculty of our local institution.

Collection development policies and procedures still need to be established in the Internet environment. However, as noted above, there are few resources and tools to guide us in this task. Models of policy and practice are also limited to a few pioneers. Some basic principles for policy development remain the same. The policy should serve as a tool for the consistent development of the collection and communicate the scope of the collection to our users.

Criteria for the selection of resources are also important in the Internet environment. A variety of models of evaluation criteria or methodology have been developed. However, these criteria include some components which have not been critical to our selection of print resources. These components have been framed in the VOICES methodology as Integrity and Structure (4) and by the Library Instruction Round Table as Access and Design. (5) In both models these components of evaluation exist because of the integrated nature of the structure and content of the Internet. In moving beyond selection based strongly on content-for, in the print world a common structure has evolved-we need to consider how "fully integrated are the design, content, technical and vision components"? (6) The structure of the Internet resources is also critical in selection. Access issues related to compatibility of the site with a variety of browsers and equipment as well as the stability of the site must also be considered.

Since World War II the selection process for traditional library collections has moved from the college faculty to library selectors. This change was due, in large part, to the information explosion and to the inability of faculty members in increasingly more specialized areas to provide the breadth of coverage needed to reflect the entire range of the college or university curriculum and research programs. Despite this change departmental reading rooms have continued to develop on some campuses. The individual Web pages being created by many academic programs are spawning departmental reading rooms in cyberspace. These new 'cyberrooms' do not have the constraints of limited access for no longer is the key held only by the departmental secretary but the same constraints in collection depth and diversity may still exist. The presence of these cyberrooms and other equally accessible but unstructured or limited collections need to guide the librarian in planning for and implementing selection processes for Internet resources and in establishing acquisitions policies and procedures.

I believe that participation in resource sharing through coordinated collection development is critical to the development of a library of Internet resources. In many fields we do not face the constraints of limited funds for materials but the constraints on staff time are still present. Coordinated collection development for a more widely defined audience should allow us to use our time to complement, not duplicate, one another's work.

The maintenance program for a collection of Internet resources also differs from that of a print collection. The changes in URL and content of Internet resources can create a self weeding collection. Changes in the structure and software used to create a resource create new editions of materials that may no longer meet our criteria for accessibility.

The confusion among naive users as to the content and structure of the Internet is strongly related to their evaluation of our collection. Richard K. Gardner has stated that "The selection of materials for a collection is one of the essential parts of a librarian's job and also one of the most creative and interesting. The quality of the resulting collection is undoubtedly one of the criteria on which a librarian is often judged." (7) Karen

Schneider notes in her column in the September 1996 *American Libraries*, "what makes traditional collection development so important is what we don't buy; whereas with the Internet, you are not selecting individual tools but facilitating access". (8) In creating subject pages of Internet resources we are further facilitating access to the Internet by selecting those resources which we feel will best meet the short and long range information needs of our clientele in an electronic environment. Through the process of our selection we are not only establishing criteria for a judgement of our work but also for a judgement of the Internet due to the relevance of our selections to the clients who use our Web Site as an entry point to the World Wide Web.

Examples of Cooperative Web Site Development

Three examples are the Internet Public Library, the Liberal Arts Internet Catalog and Health Web. These three projects differ in their cooperative nature and in their success.

The mission statement for the Internet Public Library succinctly states one of the primary reasons for librarians to take a leadership role in the organization of Internet Resources: "The Internet is a mess." Their mission statement goes on to acknowledge the traditional role of librarians in "finding good stuff, organizing it, and making it easier for people to find and use." Another role for their site is to "work with others, especially other libraries and librarians, on projects which will help us all learn more about what does and does not work in this environment". (9) Even though the Internet Public Library plans to maintain the nucleus of their library staff at the School of Information and Library Studies at the University of Michigan, they "actively seek the participation and collaboration of individuals and organizations around the world". (10) This commitment to finding what works in the Internet environment as well as collaborating with others echo some of the necessary components of a cooperatively developed Web site.

The Liberal Arts Internet Catalog was a project initiated by the Minnesota Oberlin institutions. This project has not been updated since March of 1995 but shows evidence of thoughtful development of collection development criteria as well as considerations for consistency in design. (11)

Health Web, a project of the CIC health sciences librarians, was featured as an Internet "Hot Site" in the December 12, 1996 issue of *USA Today*. Health Web began in 1993 as a "cooperatively developed set of discipline specific Web pages that present evaluated and annotated health science Internet resources." (12) Initiated by Pat Redman at the University of Michigan, Health Web provides access to forty two pages out of seventy areas of excellence. (13) The structure for the development of Health Web included working groups for Planning, Design, Communications and Technical Considerations.

The Planning Group focused on moving the project forward and on maintaining communication between CIC and the working group chairs. The Design Group developed uniform graphics, considered access for levels of Web browsers and created a distinction between full and mini page development. The Content Group developed collection development guidelines. These guidelines include an introduction to Health Web, a statement of purpose, identifies the areas of excellence, provides a scope note, details the evaluation process as well as the criteria for selecting local and remote resources; and addressed issues of uniform content/style; maintenance and procedure. (14) The Communications Group was responsible for public relations as well as for intragroup communication through listservs and Web conferencing. The Technical Group set up the Health Web server and provided training in FTP transfer.

Lessons learned in the development of Health Web include:

- Don't wait for funding.
- Develop a complete image from the start.
- Develop a template to avoid proliferation of styles.

- Collection development guidelines should be open to revision.
- Intragroup communication needs to be searchable and active.
- A search engine is critical for success.
- Simplicity in technical issues is important. (15)

Building the Cooperative Education Web Site

The Wisconsin Idea that "the boundaries of the University are the boundaries of the state", was my guiding principle in determining a potential group of collaborators for a cooperative education Web Site. Wisconsin is home to thirty three teacher education programs, including the top ranked School of Education in the country. (16)

The libraries for thirteen of these thirty three programs had already begun development of their own collections of Internet resources. In addition the State Department of Public Instruction Web Site listed over 350 individual sites divided in subject or curriculum areas. (17) This site had been recognized as one of the top 40 education Web sites. (18) Despite this recognition or perhaps because of the work which the quality of the site represented, representatives from the Department of Public Instruction asked to be included in the development of a cooperative Web site for education.

On November 11, 1996 twenty two librarians from eighteen teacher training institutions and representatives from the Department of Public Instruction met to discuss the development of a cooperative Wisconsin Web site to provide access to PK-12 and teacher education resources on the Internet. Following a presentation on the development of Health Web by Heidi Marleau of the U.W. Madison Health Science Libraries, the meeting participants discussed considerations in developing a cooperative Web site.

The purpose of such a site would be to provide comprehensive subject access to information about Internet resources for PK-12 Wisconsin educators. Identified values of cooperation would be to allow each participant to identify, evaluate and annotate Internet Resources in selected areas rather than each individual librarian or agency attempting to do this task for all areas of PK-12 education. A five member steering committee was appointed and assigned the task of initial development of the site.

Among the initial development tasks for the Steering Committee were:

- Review and refine the mission statement and goals for the site.
- Determine an appropriate name for the site.
- Propose a home server for the site.
- Establish a communication structure.
- Design the home page structure.
- Identify the potential audience.
- Identify collection development and evaluation criteria.
- Identify the appropriate subject and grade level access points.
- Develop a process for implementing a search engine for the site.

The Steering Committee was charged to complete its work by February 14. Unfortunately this schedule has not been strictly adhered to. Progress has been made on the mission statement and goals for the site, on selecting a name for the site, on locating a home server for the site, in establishing a communication

structure, identifying the potential audience, and developing a process for implementing a search engine for the site. All of these proposals will be presented to participants in the cooperative Web project at a meeting on April 17, 1997.

The proposed mission statement is based on the discussion at the November 11 meeting. It is:

To develop a World Wide Web site that serves as a Web-based tool to provide ease of access to high quality information and teaching resources for PK-12 teachers and to provide a forum for the development of exemplary support materials for the professional development of PK-12 teachers.

Project goals are:

- To demonstrate the value of cooperative Web development by combining the expertise and resources of Wisconsin teacher education and professional development institutions.
- To provide a mechanism for professional development and outreach to the PK-12 community by Wisconsin teacher education and professional development institutions.
- To provide an exemplary model of a Web Site through the development of an easily accessible resource for locating resources with strong relevance to the PK-12 community.

In selecting a name for the site we wanted to select a name that would clearly identify the source of the site and its subject area. In trying to combine Wisconsin and Education in the same succinct Web Site name some amusing proposals were made:

- WEIRD: Wisconsin Education Integrated Resource Directory
- WICKED: Wisconsin Cooperative Kit for Education

The name WisEdWeb was chosen because it combined the elements of source and content.

Since ease of access to information is one of our goals for the site the selection of a home server that will be familiar to our targeted audience was also important. Since many Wisconsin PK-12 teachers are already familiar with the Department of Public Instruction's Education Resource List our first choice for a server home was with DPI. At the time of writing it appears that this will be the home for WisEdWeb.

The identification of audience was a major component of our discussions at the November 11 meeting. An article in the February 1997 issue of Curriculum Administrator mirrors many of our perspectives during that discussion. This article reports on the findings of a poll of over 500 teachers designed to examine their attitudes towards the Internet. This survey found that even though over 93% of teachers believe using the Internet is a good idea, only 34% are actually using it to assist them in their teaching. (19) The primary audience for WisEdWeb is Preschool through Grade 12 preservice and inservice teachers. This expansion to Preschool teachers was an expansion of emphasis for myself, as at our institution Preschool Teacher Education has been the responsibility of the School of Family Resources and Consumer Sciences.

The development of a potential process for developing a search engine for the site has moved ahead in priority because of the interest of faculty members in the School of Library and Information Studies at the University of Wisconsin-Madison. When the staff at my library heard that the SLIS indexing class was looking for a practicum experience, we proposed that the class investigate the development of a database for WisEdWeb. During the current semester students from this course are piloting this project using

resources which are included in the Internet Education Resources Web Site at the U.W. Madison Instructional Materials Center. Their initial exploration include a comparison of search terms for education concepts used by the Library of Congress, the ERIC database and the Eisenhower National Clearinghouse. By semester's end the students will have created a database of the resources in one to two subject areas and we will test this search process on students from the School of Education.

As we design the home page structure we want to create a page that is reflective of the cooperative nature of the site, that is easily accessible and which is organized in a way that is useful to our target audience. A common element among many of the current Web sites being supported by Wisconsin education and curriculum libraries and by the Department of Public Instruction is the inclusion of annotations for individual sites and that is an element we plan to retain. A major issue in our collection development and evaluation criteria which will need to be resolved is the decision whether to link to meta sites or to specific documents.

Identification of appropriate subject and grade level access points will require the development of a matrix by broad subject categories and grade levels. Once again, grade level ranges used by ERIC, the Eisenhower National Clearinghouse on Science and Mathematics Education and TESS: The Educational Software Selector will serve as the basis of our work. These are resources which are already familiar to our target audience; echoing their terminology whenever possible will assist in the easy accessibility of material on our cooperative Web Site. The development of a single page of reference resources, such as AskERIC, that span the entire spectrum of subjects and grade levels must also be a part of our planning process.

Additional tasks beyond those initially assigned to the Steering Committee need to be identified and defined. Not the least of these tasks is the process of dividing the work for the development of the WisEdWeb. This work can be divided into areas that, in some ways, parallel the working groups of Health Web. The planning and management elements will need to be located at an institution with easy access to the communication structures and indexing staff for the site. The technical responsibilities will be delegated to those responsible for the home server for the site. Responsibility for content development will be delegated based on individual interests and expertise. For example, the University of Wisconsin-Platteville has a very strong program in Middle Level education and the University of Wisconsin-Stout has a very strong program in vocational education.

The development of additional resources as part of our site is also planned. Among these are a directory of Wisconsin curriculum libraries and links to the selected curriculum libraries from other states. Reference resources for which we have recognized a need in our work will also be developed. Example of these are search guides on education topics and resources as well as substantial Web publishing such as the Annotated List of Education Related Journals (http://www.soemadison.wisc.edu/imc/journals/anno_AB.html) (http://www.soemadison.wisc.edu/imc/journals/anno_AB.html). This list is a cooperative project of the U.W. Madison IMC and the Libraries of Kansas State University.

Conclusion

The differences in developing a physical collection, serving a primarily time and space bound client group, and developing a virtual collection serving a client group defined more by subject area and information are important elements in cooperative Web site development. Structural decisions must be integrated with content decisions in order to develop an easily accessible and navigable site.

Working partnerships for cooperative Web development require leadership, a respect for individual contributions and expertise and a willingness to compromise. For those considering the development of a cooperative Web site these words of advice may be helpful: "It's good to get documentation, it's good to get organized, it's best to get moving!" (20)

NOTES

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