A World Wide Web site, developed by University of Nebraska-Lincoln Information Services staff and funded by a NEB*SAT (Nebraska's multiple channel satellite and optical fiber educational telecommunications network) grant, provides a clearinghouse of distance education, Internet, and Web page development information that is useful to librarians and educators across the state. This paper discusses: goals and objectives of the grant; grant implementation and workflow, including resource selection criteria, resource categories for the clearinghouse home page, and record format; responsibilities of staff members; cataloging the workflow; placing records on the webserver; the UNL library environment; the evaluation process; and maintenance issues. (AEF)
Abstract
This new web site, developed by UNL staff and funded by a NEB*SAT grant, provides a clearinghouse of distance education, Internet, and web page development information that will be useful to librarians and educators from across the state. The paper will include a description of the project, the responsibilities of staff involved, and how we expect the project to benefit Nebraskans. After the oral presentation, an online demonstration will be given. The web site address is http://www.unl.edu:80/websat/

Introduction
In September 1995, the University of Nebraska-Lincoln Information Services submitted a proposal to NEB*SAT for a distance learning mini-grant. The mini-grant initiative was part of legislative funding to provide distance education training programs for teachers at K-12 and postsecondary levels. The proposal was entitled "Proposal to Create and Maintain a Clearinghouse on Internet User Education Materials in Support of Distance Education." NEB*SAT is Nebraska's multiple channel satellite and optical fiber educational telecommunications network.

The Internet has become widely recognized as a valuable tool in support of distance education programs, for K-12 as well as in post-secondary education. Educators at all levels are seeking training on the use of the Internet. A wide variety of electronic user education training materials have recently been developed and are available through the Internet. However, educators and students often find it time-consuming to identify and locate electronic training resources.
With the recent merger of the University Libraries, computing units, and Telecommunications, the Information Services (IS) organization has combined staff expertise in current and emerging technologies with extensive knowledge of the rich Internet resources and an emphasis on user education. To share this rich knowledge of electronic resources, Information Services staff sought grant funding to create and maintain a home page on the World Wide Web for electronic training resources, in order to make access to the resources easier for educators and students. Also, the inclusion of the resources in the UN-L Libraries Innovative Research Information System (IRIS) catalog would make them available to all Nebraskans. The grant was awarded in January 1996 in the amount of $6,790.

Goals and objectives of the grant were as follows

1. To identify exemplary training materials related to the Internet and electronic information resources in support of distance education.

2. To organize the training materials in a system, or collection, that will be useful to the user.

3. To create a home page on the World Wide Web to bring those materials together.

4. To publicize the clearinghouse as a state-wide resource.
Grant team members from Information Services were Dr. Pamela Holley-Wilcox, Director of Information Technology Support; Associate Professor Kate Adams, Distance Education Coordinator, University Libraries; Assistant Professor Sara Martin, Assistant Systems Librarian, University Libraries; and Andy Conklin, Computer Software Technician, Information Services. Dr. Holley-Wilcox served as Principal Investigator. The grant was prepared by Dr. Joan Giesecke, then Associate Dean for Collections and Services at the University Libraries, and now Dean of Libraries.

*Grant timeline overview, beginning in January 1996*

The initial month involved completion of the implementation plan, hiring of the staff person, developing the home page design, and development and operationalization of criteria for selection of materials.

During the second month, the team began the review of resources using selection criteria. The clearinghouse staff person also initiated the process of obtaining permission to link or add copyrighted resources.

During months three through six, the Distance Education Coordinator and Assistant Systems Librarian searched for and reviewed resources using the established criteria. The staff person began to add links for materials selected for the site.

In the sixth month, the team developed an evaluation instrument for selected users to complete, in order to gain input on design and assess usefulness of the electronic collection. Toward the end of the grant period, the team incorporated changes based on the evaluation. The final report was prepared, and the team developed a plan for ongoing support for the clearinghouse.
Grant implementation and workflow

At the team's initial meeting in January, we developed criteria for choosing quality resources. The team organized the selected resources by developing a list of categories which would be placed on the Clearinghouse web page. In addition, a defined format was agreed upon for each resource record. This format provides for usability as a print document as well as for ease of reading online. With a quick printout, the librarian and/or user has the title, annotation, and URL for each resource. Listed below are the selection criteria, established resource categories, and individual record format.

Selection Criteria:
Stable site with current information
Breadth of coverage -- including general materials
Author qualifications
Graphics -- that load quickly on most machines
Information can be read easily via Lynx web browser
Well written text
Creative Sites

Resource Categories For Clearinghouse Home Page:
How to Teach the Internet
Online Teaching -- Examples and Articles
Internet Classes, Tutorials, Guides, and Manuals
Internet Use Guidelines
Internet Tools and Helper Applications
Electronic Journals, Listservs, and Other Resources for Internet-based Distance Education

Record Format:
Title -- black bolded
Brief annotation -- the annotation provides value-added content for the user. The Distance Education Coordinator and the Assistant Systems Librarian provided the majority of the annotations with some additional help from the Computer Software Technician.
URL/Internet address -- The Internet address is linked and can be identified by the blue, underlined text. The User can click on the link and go directly to the resource.
Responsibilities of team members

The weekly workflow for creating the Clearinghouse has involved all of the grant members. The Distance Education Coordinator and the Assistant Systems Librarian worked together as a team to identify appropriate Internet resources. Each resource was reviewed, annotated, the URL noted and then the resource was added to an Online Bookmark file in Netscape. At the end of the week, the list of resources was sent via e-mail to the Computer Software Technician who put the sites onto the Clearinghouse web page. This same list was sent to the UNL cataloging department where each resource was cataloged. In addition, the Distance Education Coordinator and the Assistant Systems Librarian worked independently to locate sites and either brought them to their weekly meetings or sent them to each other via e-mail for review. The combined work of identifying and selecting resources averaged 6 hours per week.

In addition, the entire grant team met nearly every week to discuss the Clearinghouse Web page design, and reviewed it for clarity. The focus of the grant was discussed and the resource selection process was reviewed.

Cataloging workflow

An important part of the grant was the inclusion of the Clearinghouse Internet sites in the UNL Web Catalog. There were seven catalogers assigned to the Clearinghouse cataloging project. These Internet sites were incorporated into their weekly work load and each cataloger completed between 2 to 10 Internet sites per week.
After the Distance Education Coordinator and the Assistant Systems Librarian had accumulated a list of sites for the Clearinghouse, the Assistant Systems Librarian sent them to the Internet Cataloging Project Coordinator via e-mail. After receiving the list, the Cataloging Coordinator reviewed the sites to see if any of them were already in the catalog, made the decision as to whether the resource was a monograph or a serial, and noted whether the resource was an FTP site. The Internet sites were then assigned to the catalogers depending on whether it was a monograph or a serial and according their subject area or in the case of an FTP site, to the catalogers specializing in that format.

After the Internet sites were cataloged, they were coded in HTML by the catalogers for inclusion in the web catalog. This cataloging and conversion to HTML process was completed using a Telnet software package called Ewan. This software allowed the catalogers to do multiple telnet sessions from Windows and have Netscape open all at the same time. So the cataloging workflow process was streamlined by the ability to open up e-mail, Netscape, and cut and paste between documents. After the newly cataloged records were complete, they were sent back to the Assistant Systems Librarian via e-mail. It was then the job of the Assistant Systems Librarian to move the records onto the web server.

Placing records on the webserver

Placing the cataloged records onto the server involved sending a batch of them at a time utilizing FTP into an Alpha file.
This Alpha file automatically sorts itself alphabetically. The Assistant Systems Librarian then would look at each record individually and note its subject heading. There is an associated HTML file for each subject heading. The Assistant Systems Librarian would then place a Link in each subject heading file. In this way, a user can look for an Internet site by subject, click on the link, which then accesses the cataloged records in the Alpha file. The user then reads the cataloged record, and if satisfied with the chosen resource, will click on the menu heading which will then connect to the actual Internet site.

Library environment

As we discuss the Clearinghouse grant it is important to note the existing environment of the UNL Libraries. The grant has required many hours of staff time to design, implement, catalog and evaluate the web site. However, the University of Nebraska-Lincoln already had numerous faculty and staff who were familiar with computers, the Internet and the knowledge of how to create, catalog and maintain a web site. None of these tasks were new and no new knowledge needed to be acquired in order to be able to fulfill the parameters of the grant. In addition, hardware and software requirements were already in place and no new purchases were needed for the grant design and implementation. As a result of the existing environment, the Clearinghouse has come into existence with a minimum of disturbance in the daily workings of the library and has been developed quickly and efficiently.
**Evaluation process**

The evaluation process is now coming to closure. Dr. Holley-Wilcox as Principal Investigator developed the instrument for evaluation. Two graduate level classes in Educational Administration offered during the first five week summer session (June 7th, 1996- July 11, 1996) evaluated the home page for design and content. There were approximately 20 students in each class. Sample questions from the evaluations included “When exploring the site, it is easy to get lost among the screens,” “The visual design of the site is distracting,” “The annotations add valuable information.” The evaluation instrument is available upon request.

Evaluation is also encouraged from all web site visitors. If a user wants to add a resource or comment on the home page, that can be done through the Comment or Register a Resource page.

**Maintenance issues**

Maintenance issues for transferring workflow to the University Libraries will be addressed. The expectation is that the home page will be maintained with the addition of a moderate number of new sites.
Closing remarks

The grant team found this to be a worthwhile project. The feedback from the web site has been positive. And it has been a good opportunity for Information Services staff to work together and share their expertise.

You can reach the Clearinghouse web site at the following address:

http://www.unl.edu:80/websat/

You can reach the University of Nebraska-Lincoln web site at the following address:

http://www.unl.edu
Title: Distance Education Clearinghouse Web Site

Authors: Kate Adams & Sara Martin

Corporate Source: Nebraska Library Association

Publication Date: 1996

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Corporate Source: University of Nebraska-Lincoln

Publication Date: 1996

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