DIGITAL LIBRARY FEDERATION

THE UNIVERSITY OF TENNESSEE LIBRARIES

REPORT TO THE DIGITAL LIBRARY FEDERATION
FALL, 2003

Table of Contents

I. Collections, services, and systems

A. Collections

General

Leveraging a combination of state and endowed funds, the Libraries continued building the collection of commercial electronic full text resources, adding over 50 new titles, with particular emphasis on journal aggregations. The Libraries opened a new Media Center in Fall 2002 that incorporated media resources with a multimedia production laboratory, The Studio.

Tennessee Newspaper Project Survey (TNP)

The database was converted from a SiteSearch format, to a MySQL database with a PHP interface. http://www.lib.utk.edu:90/tnp/catalog.

Albert "Dutch" Roth Photograph Collection

The Albert "Dutch" Roth collection contains some of the finest images taken of the Great Smoky Mountains region in the early to mid-twentieth century. Mr. Roth is recognized as one of the most prolific early photographers of the Great Smoky Mountains' Greenbrier and Mount Le Conte sections. The photographs provide a significant level of insight into the pioneer way of life as well as the early stages in the creation of the Great Smoky Mountain National Park. The collection consists of 1200 digital images that can be assessed via DLXS image and bib classes. OAI records are available for harvesting.
http://diglib.lib.utk.edu/cgi/i/image/image-idx?c=rth;page=index;g=gsmc

The Flora of Tennessee

The flora digitization project is an initiative to add plant images to the herbarium's existing distribution maps of the vascular plants of Tennessee. The project began with a grant from The University of Tennessee Digital Library Center (DLC). To date, the DLC has provided ca. 1500 digital images that are now available for viewing. In addition, the DLC created and will be archiving digital master images for

the future needs of the Herbarium, as the technology evolves.
http://tenn.bio.utk.edu/vascular/vascular.html

Type Specimens in the Tennessee Fungal Herbarium

UT Scientists have been gathering, studying, and describing a collection of over 60,000 specimens in the UT Fungal Herbarium. This collection is especially strong in specimens from the Great Smoky Mountains National Park. About 900 "type" specimens used to establish new species were selected and have been digitized by the Digital Library Center.
http://tenn.bio.utk.edu/fungus/fungus.html

Tennessee Documentary History, 1796-1850

The collection contains documents and images relating to the history of antebellum Tennessee. With financial support from the Institute of Museum and Library Services, over the course of two years the University of Tennessee Libraries has built a free on-line website with a searchable database. The primary audience for TDH is K-12 teachers of Tennessee history, who can download primary materials for classroom instruction; however, the content is suitable for academic scholars and general researchers as well. The documents were marked up using TEI-Lite and indexing and access was built using a customized version of DLXS textclass. OAI records are available for harvesting.
http://diglib.lib.utk.edu/cgi/t/text/text-idx?c=tdh;cc=tdh;tpl=home.tpl

Electronic Theses/Dissertations

The ETD Program at The University of Tennessee is a joint library, graduate office, and information technology office initiative. The program began in 1998 and to date; nearly 300 ETDs have been contributed by participating students. UT ETDs are cataloged in OCLCs WorldCat and then added to the library's OPAC. In addition, the records are made available using DLXS bib class and the NDLTD Union Catalog. OAI records are available for harvesting.
http://diglib.lib.utk.edu/cgi/b/bib/bib-idx?c=etd-bib;cc=etd-bib;page=index

B. Services

The Studio

The Media Center Studio provides a media production laboratory where students, faculty, and Studio staff consult and work to create media-enhanced teaching and learning products. The Studio offers instruction and consultation services for the use of the software and hardware provided to create and use digital media. The Studio also provides equipment, such as digital cameras, that may be checked out by university students, faculty, and staff. Library users may also access electronic text resources and digital image collections in this facility.
http://www.lib.utk.edu/mediacenter/studio/index.html

Streamed Visual Library Tours

Through its web pages, the Reference Department now offers streaming video Internet tours of Hodges Library, with accompanying web pages and an optional quiz. Graduate assistants serve as tour guides, and the videos feature a number of library staff. The tour has been well received by freshman composition instructors and students, and it is also available to the public.
 http://www.lib.utk.edu/instruction/visualtours.html

Virtual Reference Services

With use of Question Point software, the Reference department is on its second generation of virtual reference services. The first began in August 2001, when the Reference department debuted its live reference service. Using Live Person software, we gradually increased our hours over the year and during Spring semester set up a central service point for monitoring phone, e-mail, and chat reference service. In June 2003, The Reference Department began participating in a consortial subscription to Question Point.
http://www.lib.utk.edu/help/
http://www.questionpoint.org/

Open Archives Initiative (OAI)

The Library established an OAI data provider service in early 2002. This service was initially developed using a Php/MySQL solution that also included a web-based form for data entry of Dublin Core. In 2003, OAI data provider service was assumed by DLXS as the new release provides built-in, OAI data provider/broker functionality. This service currently makes available 2336 records, providing public access to all digital library objects.
http://diglib2.lib.utk.edu/cgi/b/bib/bib-idx?page=collpick;g=UTBib

C. Systems

Migrated to Ex Libris Integrated Library System

The library is currently nearing the end of a 6-month migration schedule to deploy Ex Libris' Aleph library system. The new system will replace epixtech's Horizon system.

MetaLib Development

The Metalib software suite was purchased from Ex Libris. Metalib will serve as UTK Libraries' scholarly portal, and also includes SFX, which uses the OpenURL standard to create dynamic links between information resources and services. The SFX portion of Metalib went live in Fall 2002.

Digital Library Software System Update

Performed DLXS system update to release 10 in the Spring 2003. DLXS is the primary system used for access and delivery of locally created digital collections.

Development (pre-production) Server

A development server was also purchased in Spring 2003 to provide an update/upgrade environment for the DLXS system. The primary purpose for establishing the development server was to minimize system down-time on the production server due to system updates. All system updates are now performed on the development server first allowing time to fine-tune and tweak the software before transferring the updates to the production environment.

Archival Storage Server

In Spring 2003, the Digital Library Center acquired a new server with 2-terabytes of storage capacity to provide archival storage of digital masters. This storage server is being used to store master metadata files, uncompressed binary, and the documentation associated with digital projects.

Tape Backup System Upgrade

A new magnetic tape backup system was purchased in 2002 to service the fast-growing amount of digital content. The new system provides storage capacity measured in Terabytes.

Digital Library Metrics

A system was developed in Summer 2003 to capture and track digital collection use. This metric-tracking tool compiles the number of queries and the number of users for each collection, each class, and the entire library, providing daily, weekly and monthly totals.

Digital Library Programmer (1 FTE)

With the addition of a professional programmer in December 2002, the digital library now has three full-time staff (Digital Initiatives Librarian and Metadata Librarian) who are devoted primarily to digital library development.

II. Projects and programs

A. Projects

Blount County Public Library (BCPL) Collaborative.

The Digital Library Center is serving in a consulting role to assist BCPL in the development of a digital library project that will provide a collection of historic images. The project is developing as a pilot for the Tennessee Electronic Library Preserve and Share Project. Currently, BCPL is working to secure the rights to freely distribute the images and also have begun a formal selection process that will eventually include K-12 educators.

History of Women at the University of Tennessee

This is a joint project with the Women's Studies Program. Approximately 2,000 items related to the Women's Study Program, the UT Commission for Women, and prominent women associated with UT have been selected for digitization and will be added to the UT Digital Library. Historical materials about the first women to attend UT and photographs of UT women students, staff and faculty will be gathered from the University Archives and other repositories. The selection process was recently completed and scanning work is underway.

David Van Vactor Collection

David Van Vactor was the conductor of the Knoxville Symphony Orchestra for 25 years and the founder of the UT School of Music. This is a joint project with the Music Library and will make available sound recordings from the Music Department and the Knoxville Symphony produced from 1942 through 1979 and parts of the original music manuscripts, opening a window for the public and scholars alike on Knoxville's cultural history.

WPA/TVA Photographs

In preparation for a Tennessee Valley Authority (TVA) dam construction in the 1930's, the Works Progress Administration (WPA) provided archaeological workers to systematically photograph and document the many prehistoric sites along the river before flooding from dam construction occurred. The resulting collection consists of approximately 15,000 photos that are permanently curated by the

Frank H. McClung Museum at the University of Tennessee, the William S Webb Museum at the University of Kentucky, and the Alabama Museum of Natural History at the University of Alabama. With funding provided by the Institute of Library and Museum Services (IMLS), this project is currently digitizing 7500 of the photographs, creating standardized metadata, and building an online service for search and retrieval of images from the collection.

National Digital Library for the Legacy of the Manhattan Project

The Manhattan Project, the massive scientific effort to produce the first atomic bomb during World War II, brought the United States into the nuclear age. The Library is collaborating with the Department of Energy's Office of Scientific and Technical Information (OSTI), Oak Ridge National Laboratories (ORNL), and the American Museum of Science and Energy (AMSE) to carry out the section, digitization, and web presentation of 2,000 documents and images from the Manhattan project.

Use-Based Selection for Digital Monographs

The goal of this project is to add full-text links to the catalog for pre-1923 monographs owned by the University of Tennessee Libraries. Titles with at least five circulations in the past five years will be searched in OCLC's WorldCat to identify those already in digital form. Remaining titles will be high priorities for digitization. This will make high use and often-fragile monographs more accessible to students, faculty, staff, and the public. Monographs published prior to 1923 are in the public domain and can be duplicated freely and distributed without the complicated concerns of copyright ownership.

The Tennessee Electronic Library Preserve and Share Tennessee Culture Initiative

The Digital Library Center will host a statewide digital initiative that provides an integrated resource discovery method for digital collections and content from around the state. This statewide project will offer Tennessee cultural heritage resources for the K-12 community and citizens of the state.

Institutional Repository Exploration

The digital library is collaborating with UT SunSite to develop a DSpace test implementation, allowing the campus community to further explore institutional repositories.
http://dspace.sunsite.utk.edu

UT Scholars Archive

This is a first attempt to gather cost data on digitizing a journal, the *Journal of Economic Issues* (JEI). Issues from 2000-2001 are now digitized. We are working on a methodology for gathering use statistics. The larger vision is to digitize half a dozen journals and make them available through open access. This would create the foundation for a scholars' archive and gives the DLC baseline information about the technical processes of digitizing journals.
http://diglib.lib.utk.edu/utj/

B. PROGRAMS

Scholarly Publishing & the Common Good Symposium

On September 25-26, 2002 the Libraries hosted *Scholarly Publishing & the Common Good: Changing Our Culture* , a symposium for the UT academic community. The conference addressed issues related to reasons for declining access to scholarly information; ways faculty choices affect the cost of publications, ways that the digital environment affects the dissemination of scholarly work, and peer-

reviewed alternatives to traditional publishing.
http://www.lib.utk.edu/admin/symposium/

Over 200 UT faculty, graduate students, support staff, local area librarians, and invited speakers participated in the event. Speakers included UT Dean of Libraries Barbara Dewey and Provost Loren Crabtree, University of Kansas Provost David Shulenburger, NC State Scholarly Communications Librarian Peggy Hoon, American Physical Society Editor-in-Chief Martin Blume, CNI Executive Director Clifford Lynch, and UT Professor Carol Tenopir. During symposium breaks, UT faculty, staff, and members of the local information community gave demonstrations of digital access to scholarship. http://www.lib.utk.edu/admin/symposium/demos.htm.

Electronic Forum Series

The E-Forum Series features programs for the university community on the convergence of scholarly communications and emerging technology. Started in 1996 following a UT scholarly publishing conference, *Professors and Publishing in the Electronic Academy*, the E-Forum Series presents both national and local speakers. Among speakers in the last two years were Sarah Thomas (Cornell University) on the ARL Portals project; Peter Boyce (American Astronomical Association) on scholarly association publishing vision; Paula Kaufman (University of Illinois) on changes in scholarly communications; Abby Smith (CLIR) on building research collections in the digital age; Mark Beatty (University of Wisconsin) on electronic books; and Hillary Nunn (University of Michigan) on *Early English Books Online*.

David Seaman Visit

DLF Director David Seaman visited UT December 16, 2002 to get acquainted and discuss future DLF collaboration.

John Price Wilkin Visit

John Price Wilkin, Associate Director for Digital Library Services at the University of Michigan met with the Steering Committee on September 13, 2002 to discuss digital issues.

III. Specific Digital Library Challenges

DLC goals include developing a more versatile technical infrastructure to support digital collections, continuing the systematic development of digital content, making the DLC and its mission more visible, and documenting digital library procedures and practices. The DLC Steering Committee held a planning retreat in March 2003. We noted that the strategy for selection of initial projects worked well to involve many in the university community. As the projects got underway, we discovered that some of the project proposers held different expectations from those of the librarians, in terms of how data would be managed, where content would reside, and length of commitment to the project. Hiring a metadata librarian and DLC programmer helped to relieve the workload of librarians and staff who had added digital projects to already full agendas. We lacked technical leadership, a common problem with emerging digital libraries. During the retreat we drafted a mission statement: "The Digital Library Center creates and provides durable access to and preservation of unique and valuable collections." We identified three areas for specific attention: leadership, documentation, and integration.

Leadership

As digital library projects mature at the University of Tennessee, the need for a full-time leader of the

Digital Library Center has become apparent to the Steering Committee. Although integration of functions and projects into existing library units is the long-term goal, the Digital Library Center focus on developmental work requires sustained attention. The Steering Committee is currently working on a position description.

Documentation of policies, procedures, public information
A subcommittee of the Steering Committee used the IMLS *A Framework of Guidance for Building Good Digital Collections*, Lou Pittschman's *Building Sustainable Collections of Free Third-Party Web Resources*, and Abby Smith's *Strategies for Building Digitized Collections* to draft a *Digital Collections Management Policy*. The UT document addresses content, objects, metadata and access. Considerable work is yet to be done in converting the goal-based approach into sustainable policies and procedures that those involved with digitizing local resources can use for standards. We must determine criteria for digital preservation and develop standards as well as processes for selection and production.

Integration of DLC projects into user services

From selection of resources for digitization to provision of access to digital materials, we are challenged to incorporate DLC projects into the awareness of library staff and users. Subject librarians will need criteria for selecting items to digitize. We must determine criteria for digital preservation and develop standards as well as processes for selection and production. We want to move beyond a collection of web links to access from many points, such as the library catalog, commercial databases, web searches, etc. where users begin their research. From a technical standpoint we hope to integrate metadata skills beyond the cataloging department, creating templates on which users can submit their own metadata. We hope to take advantage of sophisticated linking systems that will draw locally digitized materials into search results. Through our projects we are gaining valuable knowledge about relative cost, efficiency, user behavior, and communicating with subject experts about content.

IV. Digital library publications, policies, working papers, and other documents

Publications

Bayne, Pauline and Chris Hodge, "Digital Audio Reserves: A Collaborative Project at the University of Tennessee". *Journal of Interlibrary Loan, Document Delivery & Information Supply*, 11, no.4 (2001): 25-36.

Burgett, James, John Haar, and Linda Phillips, "The Persistence of Print in a Digital World: Three ARL Libraries Confront an Enduring Issue" in *Crossing the Divide; Proceedings of the Tenth National Conference of the Association of College and Research Libraries, 2001, Denver, Colorado*. Chicago: American Library Association, 2001, pp. 75-80.

Crowther , Karmen N. T. and Alan H. Wallace, "Delivering Video-Streamed Library Orientation on the Web," *College & Research Libraries News*, March 2001, pp. 275-279.

Mack, Thura, Maribeth Manoff, Tamara Miller and Anthony D. Smith, "Designing for Experts: How Scholars Approach an Academic Library Web Site," *Information Technology and Libraries,* (Mar 2004).

Smith, Anthony D., "Electronic Theses and Dissertations (ETDs): A Report on the Current Issues and Trends Among Academic Institutions," *UT Library Report,* (Jan 2002), available from http://hdl.handle.net/1785/50 .

Tenopir, Carol, and Eleanor Read, "Patterns of Database Use in Academic Libraries," *College & Research Libraries* 61 (May 2000) : 234-246.

Tenopir; Carol, Gayle Baker; and William Robinson, "Database marketplace 2001: Racing at full speed," *Library Journal;* New York; May 15, 2001.

Tenopir, Carol, and Eleanor J. Read, "Database Use Patterns in Public Libraries," *Reference & User Services Quarterly* 40 (Fall 2000) : 39-52.
Policies

DLC Working Group, "Draft DLC Collections Management Policy," available at: http://diglib.lib.utk.edu/dlc/cdm_draft.htm.

DLC Digital Preservation Working Group, "Digital Preservation Statement," available at: http://diglib.lib.utk.edu/dlc/techdocs/preserve.htm