

YALE UNIVERSITY LIBRARY

REPORT TO THE DIGITAL LIBRARY FEDERATION FALL, 2003

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I. Collections, Services, Systems

A. COLLECTIONS

American Context of China's Christian Colleges and Schools Project

This project is investigating the interaction between various China Christian educational institutions and American liberal arts colleges between 1900 and 1950. It is funded by the Luce Foundation and based at Wesleyan University. The Yale Divinity Library is hosting and helping to develop a web site for the project that makes primary sources materials on the topic more accessible to researchers. http://www.library.yale.edu/div/colleges

China Christian Colleges and Universities Image Database

The China Christian Colleges and Universities Image Database provides detailed descriptions of 10,000 photographs and films held in the archives of the United Board for Christian Higher Education in Asia and the Lingnan University Board of Trustees, and includes a growing number of digital images of photographs in the archives. These images provide valuable information about education and mission work in China during the late 19th and first half of the 20th century. Development of this database is supported by grants from the UBCHEA and the Lingnan Foundation. http://research.yale.edu:8084/ydlchina/index.jsp

Economic Growth Center Digital Library Supporting Economic Development Research: A Collaborative Project to Create Access to Statistical Sources Not Born Digital

This project, funded by the Andrew W. Mellon Foundation, will digitize and make accessible to the global research community a selection of Mexican state statistical abstracts from the Yale University

Library's Economic Growth Center Library Collection. The Economic Growth Center Library Collection at Yale University, one of the most comprehensive of its kind in the United States, focuses on materials relating to statistics, economics and planning in over 100 developing countries. It provides an historical perspective to current research in globalization, urban studies and development policies. The Mexican state statistical abstracts provide annual data at the state and municipal level and cover a variety of social and economic indicators including education level, employment, agricultural and industrial production and service sector activity. This digital collection will span the years 1994-2001 for all 31 Mexican states. In the first phase of the project, digital equivalents of the original statistical series will be produced in Adobe Portable Document Format (PDF) and as archival TIFF images. The PDF documents will be available on the Web for browsing by date, geography, and series. The project team will next produce metadata for the statistical tables in the series. The metadata will be created in XML according to the Data Documentation Initiative (DDI) specification for numeric data. When the detailed table-level metadata records are complete, users will be able to browse lists of tables by theme, classification structure, and geographic unit, and to search for and display specific individual tables. Using OCR (optical character recognition) software to render the numeric values from the digitized tables, the team will compile the tables into an online statistical database. Various methods will be evaluated for the automated "scraping" of numeric tables and linking numeric values with descriptive metadata. The goal is that users will be able to view and download extracts of selected values and metadata from the statistical series for use in statistical analysis packages. http://ssrs.yale.edu/egcdl/

Electronic Records Archives (ERA) Project

This project, which includes representatives from Manuscripts and Archives and Yale's Academic Media & Technology, was begun in September 2002 with a broad mission to establish a repository for the long-term preservation of Yale University's electronic records. A permanent Electronic Records Archivist position was created and given responsibility to ensure effective acquisition, preservation, management, future migration, access to and security of electronic records acquired by Manuscripts and Archives, the unit within Yale University Libraries responsible for university records. The group's activities in the last year have included assessing Yale's current electronic records landscape; investigating and evaluating existing digital preservation projects; formulating policies and procedures; developing an XML schema to document records migration events (DSMI-Data Systems Migration Information); beginning the implementation of an active records management application; and planning for a long-term preservation repository system. In addition to the permanent Electronic Records Archivist position, Yale has provided significant project funding to support the research and implementation of the program.

Inventory of Digital Projects at Yale

This inventory, sponsored by the Office of the Provost, represents Yale's first attempt to assess the full range and scope of digital projects, completed or underway, at the University. The inventory will include projects created for research or educational (rather than administrative) purposes, with the goal of making information about these projects available to the entire University community. It is hoped that the information made available through the inventory will stimulate new projects, increase the use of Yale's existing digital resources, and create new avenues for collaboration or cooperation. The University Librarian serves on the steering committee and the Library is a major participant in this project.

Medical Historical Library Exhibits

The Medical Historical Library has six exhibits on the history of the medical school, hospital, and the schools of nursing and public health, and New Haven's Hospitals. In addition, 1600 prints and drawings

from the Clements C. Fry collection have been digitized on CD for use within the Medical Historical Library for researchers, in conjunction with a printed catalog, to get a more detailed view of the material and for copies of the material.

http://www.med.yale.edu/library/historical/exhibits_main.html

B. SERVICES

Electronic Library Initiatives http://www.library.yale.edu/eli

American Studies Digital Imaging Project:

The Library has been awarded a \$250,000 grant to facilitate the design of teaching and study tools and the building of collections of digitized images to support American Studies. Through close collaboration among staff from the Library, Graduate School and Academic Media & Technologies, the project also aims to assess the impact of using these new digital materials and information technologies on teaching and learning, as well as on library service support. The project began in April 2002. Since then, six Working Groups have been created to explore issues related to Management Software, Software Integration, Collection Building and Organization, Copyright Guidelines, Instruction and Assessment. An individual Faculty Support Team composed of staff from across campus provides course-specific assistance to each participating faculty member. These Faculty Support Teams work closely with the faculty member and exist for the duration of the supported course. Three courses were supported in the spring of 2003 including courses in History, English and African American Studies. This fall five courses will be supported in the areas of African American Studies, Architecture, Political Sciences and the Formation of Modern American Culture. At least 14 courses will be supported over the duration of the grant project.

Shoah Foundation Archives Collaborative Project

Yale University Library is participating in a Mellon Foundation grant-funded pilot project with the Survivors of the Shoah Visual History Foundation, Rice University and the University of Southern California. The program is intended to make the Shoah Foundation's digital video archive of Holocaust testimonies available on campus via the Internet. Using the Visual History Archive (VHA), a web based tool, students, faculty and other researchers can access and search the metadata available for the foundation's cataloged testimonies. The testimonies are stored in a digital format and can be requested over a fiber-optic network for viewing on selected workstations in the Yale University Library. http://www.library.yale.edu/mssa/vha/

Yale University Library's Course Support in Insight

Development of online image collections in the Insight software from Luna Imaging is progressing. The Visual Resources Collection now stands at 26,000+ digital images and the Insight Collection of the Beinecke Rare Book and Manuscript Library contains over 12,000 images. Library readers using Insight also have access to collections created outside of Yale including the AMICO Collection and the David Rumsey Map Collection. The Library has also provided extensive instructional support for both students and faculty in using the Insight software. Faculty using Insight in their teaching includes those from the Arts, History, African American Studies, English and Political Science. The Library is looking forward to introducing the many sophisticated features of Insight version 4.0 to the Yale community this fall and to the incorporation of several additional Yale collections into the system over the next year.

Yale University Library's Course Support and Digital Library development using the Digital Library application developed in the Beinecke Rare Book and Manuscript Library

Development of on-line image collections using technology originally developed by the Beinecke Rare Book and Manuscript Library for its digital projects is progressing. Staffs in the Beinecke Library and Yale University Library Web & Workstation Services are working on collection building efforts and also working collaboratively on product enhancements. Enhancements include cross-collection searching, a group and presentation module and support for audio and video assets. Collections using the product include the collections of the Beinecke Rare Book and Manuscript Library (over 16,000 images), the print collection of the Lewis Walpole Library (9,000 images) and collections developed in support of the Library's ELI project including an African-American Studies Digital Library (500 images) and the Cities, Suburbs and the Culture of Sprawl Digital Library (200 images). Collections in development include digital collections for the Music Library and the Arts of the Book Collection.

Borrow Direct Upgrade

Borrow Direct began as a service of the CoPY Project, based on a 1995 proposal from the University Librarians of Columbia, the University of Pennsylvania, and Yale. After a pilot project that extended from late 1999 through fall 2001, expansion was the next step and the three founding institutions welcomed four additional research libraries -- Dartmouth College and Brown, Cornell, and Princeton Universities -- as new Borrow Direct participants, with all members providing full service by October 2002. The expanded service has more than doubled the size of the collections available for use by Yale faculty, students and staff. Readers search all seven catalogs simultaneously and directly request books not owned by Yale or owned by Yale but not available for use. The volume of borrowing for Yale readers and lending to readers at other Borrow Direct institutions has skyrocketed, from 3040 borrowed and 3183 lent during the entire pilot project to 1136 borrowed and 1149 lent during a single month near the end of last term. Since its inception, the service has delivered more than 89,000 items to patrons of all participants. Still, we have consistently met the goals of the service, delivering items in less than four business days and reducing the average cost per transaction to less than \$10. Survey data and impromptu feedback from our readers illustrate their strong and enthusiastic support for Borrow Direct. http://www.library.yale.edu/ill/borrowdirect.html

GIS Services

The Yale Library has created a GIS (Geographic Information Systems) service in the last 2 years that encompasses the acquisition of patron-requested geo-spatial data and software/scripts, provides reference, processes geo-spatial data, helps patrons output geo-spatial data to several formats. Geospatial data that range from items such as satellite photos to census data are collected to support research based on patron requests. The GIS Specialist also provides patrons with a searching service to find geospatial data as well as GIS software and scripts to extend their analysis capabilities. Currently, Yale holds a site license for ESRI's ArcGIS/ArcInfo software. Reference interviews are held to determine the data, software, training, and output needs of the patron. Geo-spatial data that has been collected for the patron is organized, processed and burned to a CD (along with metadata) for the patron to use with GIS software at many of the computer labs on campus. Software instruction is provided to patrons through the campus-based courseware, "classes.edu", short one-on-one sessions, tutorials, and through the ESRI Online Virtual Campus. The GIS Service at the Map Collection has an HP800 PS 42" large format color printer for patrons who wish to output GIS cartographic layouts or for patrons who wish to obtain color reproductions of maps in the collection. The GIS Service also has a large format ColorTrac 54" sheet-fed color scanner to convert paper maps to digital format and a MrSid encoder to compress the images down to a size that is easier to work with. Finally, the GIS Service has recently implemented both ArcIMS and ArcSDE server software and began to develop services that involve interactive on-line maps and database applications. http://www.yale.edu/gis

StatCat: Social Science Statistical Data Finder

StatCat replaces the Yale Social Science Data Archive catalog. StatCat is a mySQL database with a PHP front end. It provides more precise search results and more advanced searches than the old catalog. It includes records for numeric datasets in the Yale Social Science Data Archive, as well as datasets in the Yale University Library and on the Internet. Over the coming months and years it will include records for more datasets held on CD, through subscription databases, and available free on the Web. StatCat is a joint project of the Social Science Statistical Laboratory (Statlab) and the Social Science Libraries and Information Services, based on a subset of DDI, the Data Documentation Initiative, which is the metadata standard adopted by the international statistical data community (and which Ann Green, Statlab Director, participated in developing). Future enhancements to StatCat include the ability to link directly to datasets online, including documentation and software setups. http://ssrs.yale.edu/statcat

Virtual Reference Pilot Project

In October 2002, a virtual reference service began as a pilot project, using 24x7's Interact software. Ask!live is staffed by 22 volunteer professionals from across the library system and is available 32 hours a week, including two evenings until 11:00pm. Some comments on the service, gathered from an immediate post-use survey, include "I love love love this new service" to "I am a senior, and I'm wondering if I can still use the service as an alumnus" to "This resource makes me feel like I've found a needle in the haystack!!". Most users are undergraduates (44%), and most (40%) initiate their questions from off-campus. Ninety-three percent (93%) of survey respondents report they are Very or Somewhat Satisfied with their experience. The pilot's success has shown that this form of reference service can be successfully shared by service providers across campus who offer reference assistance to all Yale constituencies from one electronic service point.

C. SYSTEMS

Endeavor's Voyager replaced NOTIS Library Management System in July 2002

In July 2002, the Yale University Library introduced Endeavor's Voyager integrated library management system into full production service following a two-year planning, selection, data migration, implementation and training process. The new system provided the Yale libraries with immediate improvements in services to readers: library account management and self-service requests, including renewal of borrowed material, information on fees and fines, placing recalls for items checked out, and intra-library delivery among most Yale libraries; display of non-Roman characters for Chinese, Japanese and Korean records; presentation of much more detail in lists of titles found; and a wide variety of options for search limiting and refinement, to name a few. The system operates on a complex of eight SunFire V880 and 280R servers distributed across two machine rooms located in different buildings. In the fall of 2002, prior to final shutdown of the NOTIS mainframe, we focused attention on the development of archive databases for historical acquisitions and circulation data and on the creation of mechanisms for the delivery of critical reports to staff. In the first half of 2003 major projects have included embedded order data loads for acquisitions, e-resource data loads (e.g. Serials Solutions titles), a collection analysis tool that will enable selection of material for the off-site Library Shelving Facility, and the August installation of release 2001.2, which includes a set of important enhancements specified in the Yale contract with Endeavor. In the coming year we look forward to expanded support for non-Roman scripts through Voyager's implementation of Unicode, and integration of the OPAC with diverse electronic resources through federated searching (MetaLib or ENCompass) and reference linking (SFX). http://orbis.library.yale.edu

SFX Linking

The library implemented OpenUrl linking using the Ex Libris SFX software in January 2002. In addition to fairly standard links between abstracting and indexing sources and full text targets, the library has also written several custom target scripts, including one for document delivery requests and another to search our local database of online journals. Use of SFX links has been climbing without a major publicity effort, and use has increased more than 100%

[http://info.med.yale.edu/library/refstats/Page.htm] in the past year. http://www.library.yale.edu/sfx/index.html

Windows Active Directory

The Yale University Library Web & Workstation Services Group has automated software distribution, including OS security updates and Voyager configuration files, and secured public-use workstations using Microsoft's Windows 2000 Active Directory. All Library staff and public workstations are all currently running Windows 2000 and log into the W2K Active Directory to authenticate. Group policies are used to automate software distribution and to then log the successful deployment. Tasks that previously required manual installation at the workstation (for example the installation of a W2K security patch) can be accomplished automatically overnight. Given the almost 1,000 workstations in the Library, this is a significant gain in productivity.

Electronic Library Module: Databases and E-Books

Yale continues development on a centralized database for access to electronic resources. Journals lists [http://www.library.yale.edu/journals/] have been created dynamically from this database since Fall, 2000, with individual librarians able to target journals in this central database for appearance on subject and/or departmental pages. The second stage of this project, that of presenting dynamically on the web a list of electronic databases, has been completed and live since Fall, 2001 [http://www.library.yale.edu/databases/].

Readers can perform keyword searches of Titles and Abstracts of Database Descriptions and individual librarians can target databases for appearance on subject and/or departmental pages. The dynamically produced web page listing many of our online books [http://www.library.yale.edu/ebooks] went live in late Spring 2002, and has already dramatically increased the use of many of our online books. The next phase of the project will incorporate management data for staff use and an integrated Reference Resources composite view of materials pulled from the ejournals, databases, and e-books areas. Additional databases are used for maintaining and dynamically creating pages for Newspapers on Microform, the Library Staff Directory and various Library surveys.

Finding Aids Database Upgrade

The Yale University Library Finding Aids database is now based on XML. The primary enhancement of the new Database is that search results can be accessed from any Web browser with Java. Previously, SGML viewers were required. The new Database also allows for more complex displays of hierarchical information as well as dynamically linked tables of content for easier browsing. There are currently 2130 finding aids available in the database.

http://webtext.library.yale.edu/

II. Projects and Programs

Encoded Archival Context

Together with an international group of archivists, Manuscripts and Archives is working to further the development of Encoded Archival Context (EAC), an ongoing initiative within the archival community to design and implement a prototype standard based on Extensible Markup Language (XML) for encoding and exchanging descriptions of record creators, and the context in which records were created. EAC is intended to extend and complement EAD, and will support the descriptive needs of the archival community, specifically in the creation, maintenance, and publication of creator description. The primary audience for this prototype standard is the international archival community. http://www.library.yale.edu/eac.

Encoded Archival Description

Manuscripts and Archives is currently working on a prototype EAD authoring system based on Open Office [http://www.openoffice.org], an open source office productivity suite maintained largely by Sun Microsystems. Preliminary testing has proven the stability and ease of use of OpenOffice as a basis for authoring EAD files. It is anticipated that the system will also work with files created by the commercial office productivity suite StarOffice 6.0, also a Sun product.

III. Specific Digital Library Challenges

The overarching goals of an Integrated Yale University Library are to:

- Enable digital activities to permeate core functions through a managed organizational structure that values communication and openness to improvement.
- Unite proliferating independent digital initiatives through adherence to core principles created and adopted by the community.
- Ensure full and enduring access to the entire range of library resources regardless of format through seamless interfaces and a systematic preservation program.
- Encourage entrepreneurial initiatives that can evolve into sustainable core services through exploration and development of reliable practices.

This report covers the period July 2001-August 2003.