



Dartmouth College

Report to the Digital Library Federation Spring, 2004

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The Digital Library at Dartmouth launched in March 2003. Included in this newsletter are original and newly added features of the DLD. <http://diglib.dartmouth.edu/>

I. Collections, services, and systems

A. Collections

Collections may include digitized surrogates based on local holdings; finding aids, online catalogues, and indexes (including indexes of third-party networked information resources); electronic text or journal collections; pre-print and e-print collections; etc.

eResources.

The Digital Library at Dartmouth features a new discovery tool called "eResources." eResources is a database of all web-based digital resources in the Dartmouth College Library collection. The database, which uses Oracle database technology, is generated nightly by a transfer of data from the Dartmouth College Library Catalog.

eResources presents citations to users through Search and Browse functions. The Browse function presents digital resources in folders arranged by topic and by type. Library bibliographers define topical folders by identifying ranges of LC classification numbers for each folder and sub-folder. Classification numbers present in catalog records for digital resources are used to sort the resources into the appropriate folders. When necessary, classification numbers are added to catalog records to facilitate folder arrangements. Type (or format) folders are created by

using data available in the MARC record. Over 62,000 records are currently included in the database.

<http://diglib.dartmouth.edu/eResources/home.php>

EAD/XML Finding Aids.

Finding Aids for approximately 275 manuscript collections in Rauner Special Collections Library are available in the Digital Library at Dartmouth. The finding aids were converted to XML using the Encoded Archival Description (EAD Version 1.0 1998) standard by Apex Data Services. They are displayed using an XSLT style sheet that is a modification of a sample XSLT style sheet (EAD Cookbook Style 2 Version 0.9 2000 July 22) made available by Michael Fox. The finding aids describe a portion of the manuscripts in Rauner Special Collections Library, with a focus on manuscript collections that exceed one box in extent. A title listing of the finding aids is included in the eResources area in the Digital Library at Dartmouth in the folder "Manuscript Finding Aids." <http://diglib.dartmouth.edu/library/ead/html/index.shtml>

A link to the associated finding aid has been added to the Dartmouth College Library Catalog record for each manuscript title. The next phase of the project will include the development of indexing and retrieval tools for the finding aids. A working group will determine policies and procedures for locally-created EAD documents.

B. Services

Services may include user-profiling services, online reference services, services supporting interlibrary loan or the use of electronic reserves. Details below.

Borrow Direct.

In September 2002 Dartmouth College joined original members Columbia, the University of Pennsylvania, and Yale, and Brown, Cornell and Princeton as participants in Borrow Direct. Borrow Direct employs Dynix URSA software to allow library users to search for books by author, title, or ISBN in the combined "virtual catalog" of the seven institutions. If the item is not owned or is currently unavailable at the requestor's library the transaction is communicated directly to a holding library without staff mediation. Borrow Direct manages the transaction from submission through completion.

The project objectives are to lower the cost of interlibrary loan activity to below \$10.00 per transaction; to provide library users with direct access to off-campus material that is as convenient as material held locally; and to deliver materials in a rapid, predictable time frame - 4 business days from point of request to notification for pickup. The project continues to meet

these objectives as the membership has expanded from 3 to 7 institutions and the number of transactions steadily increases.

<http://diglib.dartmouth.edu/libserv/borrowdirect.shtml>

Viewlets – Animated Video Tours of the Digital Library.

A Dartmouth Reference Librarian, with the assistance of students, created two animated online tours to aid users become familiar with the overall features of the Digital Library and of the specific eResources tool. The two tours, *Introducing the Digital Library* (1 minute 40 seconds) and *Browsing for eResources* (4 minutes) were created using ViewletBuilder software and are listed in the Digital Library on a “Take a Video Tour” web page. Information for viewers on setting monitor resolution and downloading Flash are also provided on the page. For several weeks after the launch of the Digital Library the videos played on a large screen in a high-traffic area near the reference/circulation/computing service desks in Baker-Berry Library.

<http://diglib.dartmouth.edu/libserv/videosdiglib.shtml>

Digital Library News and Marketing.

The Digital Library News feature allows all library staff to submit a news item about library services, exhibits, events, recently purchased databases, or special notices. This program permits designated editors to review the item, assign it to a news section, specify activation and expiration dates, specify permanent display or rotation of items on the Digital Library home page and allows for automated posting to college-wide news services. Home page display changes automatically based on parameters, and multiple URLs are available for either chronological or news section display.

From the Digital Library home page, click on the "More News" link at the bottom to see a listing of all news.

<http://diglib.dartmouth.edu/>

Digital News Center.

In the fall of 2002, the Library News Center site launched the Digital News Center feature. Both subscription and free news resources are available in the Digital News Center and new services are continually added. Other features include E-mail News Alerts which contains a selection of free headline and breaking news alert services. An E-books section contains a listing of books relating to the history of news and journalism. An RSS feature (Really Simple Syndication or Rich Site Summary) presents an introduction to RSS, links to aggregator programs, and a list of resources to assist library users in finding automatic feeds

related to news or other areas of interest. Information on blogs (weblogs) rounds out the Digital News Center by listing recognized news blogs and describing how blogs are valuable sources in keeping up with current news.

http://www.dartmouth.edu/~libacq/News_Center/ncdigital.shtml

C. Systems

Systems may include reports by members on their development, implementation or experience of various applications and software whether developed locally, acquired from a third party. Reports might focus on integrated library systems, application specific software or software components, applications developed by members for specific functions. Details below.

LOCKSS.

Dartmouth is a participating library in the Mellon-sponsored LOCKSS (Lots Of Copies Keep Stuff Safe) Program. Since February 2003 we have worked with Stanford to test the distribution, installation and ongoing operation of the LOCKSS archiving software on locally-supplied hardware. We expect to contribute as publishers as well, providing our locally published journals to the LOCKSS cache.

<http://lockss.stanford.edu/>

PKI.

The Dartmouth PKI Lab is working to combine practical deployment of public key technology in academic applications with research into the obstacles inhibiting its use and adoption. The team consists of staff from Computing Services as well as faculty and students from the Computer Science department. The Lab was founded in 2000 with a grant from AT&T and Internet2. The Lab is in the second year of a project sponsored by the Mellon Foundation to foster the application of PKI technology in higher education. The Computing Services team is working to simplify the use of current X.509 PKI technology and to develop usable applications of it that address current security concerns. The team created a Certificate Authority system for Dartmouth College and is developing a number of applications including client authentication for web services using PKI certificates, secure e-mail, electronic signatures, and authenticated network connections. The Library has begun to incorporate certificates as an authentication method for licensed library resources. In this initial stage it will be a fall-back option for patrons who cannot use the current campus authentication system, Kerberos. As support for certificates becomes more stable in web browsers we expect PKI to be the first choice for authentication on the Dartmouth campus.

Shibboleth.

Shibboleth, a project of Internet2/MACE, is developing architectures, policy structures, practical technologies, and an open source implementation to support inter-institutional sharing of web resources subject to access controls. As a participant in the pilot, Dartmouth will serve as an Origin Site, attempting to make connections to licensed resources. Library participation in the project to date has been minimal, but is anticipated to increase as more Target Sites (vendors) come on board.

II. Projects and programs

A. Projects

Projects in progress 2003-2004:

Dartmouth/ISI Engineering and Applied Sciences Portal.

The Dartmouth/ISI Engineering and Applied Sciences Portal project is a joint effort between the Dartmouth College Library and Thomson ISI. The Portal launched at Dartmouth in October, 2003. It provides Dartmouth's engineering and applied sciences communities with a single interface to research information from diverse providers, including INSPEC, CSA, ISI, ACM, IEEE, Knovel.com, Compendex via Engineering Village 2, and selected Usenet newsgroups in science and engineering. In development for approximately 18 months, the goal behind the Portal is to support a federated search service across a group of databases in science and engineering. Integral to the Portal's design, feedback from focus groups of Dartmouth faculty and graduate students helped to shape the product.

Scholars Portal.

The Scholars Portal Project is a collaborative project including seven ARL Libraries and software vendor Fretwell Downing, Inc. to build an integrated, web-based tool that will enable students, faculty, and researchers to discover and navigate high quality scholarly information resources. To date the project has concentrated on tools for discovery and delivery of information resources, including the software and metadata needed for federated searching and open linking. Together with the six other ARL partner libraries, Dartmouth is collaborating to identify and configure scholarly resources and provide the metadata which will facilitate federated searching and direct linking to full-text resources. At present several hundred resources are available to project participants for inclusion in local implementations. Dartmouth's goal is to launch the Scholars Portal in fall 2004 with a broad focus on the undergraduate

program. Collections comprised of scholarly resources in the areas of general reference, humanities, general sciences and environmental studies will be offered organized for effective cross-searching and the delivery of full-text material.

B. Programs

Digital Publishing Initiative.

Launched in 2001, the Digital Publishing Initiative (DPI) reflects the Library's mission to advance scholarship and research through the comprehensive management of scholarly content. The DPI provides an opportunity for the library to collaborate with members of the academic community to publish original scholarly content in a digital environment or to create digital versions of previously developed content. Projects are considered for inclusion in the Digital Publishing Initiative based on several criteria, including: scholarly content, resources required to achieve the project goals, faculty/student commitment to the publishing model, and opportunity for innovation/exploration into new and challenging areas of digital information management.

<http://diglib.dartmouth.edu/libserv/digpub.shtml>

Linguistic Discovery.

Linguistic Discovery is a refereed online journal published as part of the Library's Digital Publishing Program. The journal was the first project under the aegis of the DPI, a new service launched in 2001. The first issue of Linguistic Discovery was published in January 2002 and new issues appear semi-annually. The journal, which is not aligned with any specific theory or subfield of linguistics, promotes research on lesser studied languages, and has a data focus. A primary goal of the project is to utilize the capabilities of the digital environment to provide scholarly information, including audio and video content, in the field of linguistics research. The journal was developed and published by a team comprised of faculty from the Linguistics Department, librarians, and computing staff.

<http://linguistic-discovery.dartmouth.edu/>

Latino Intersections.

Latino Intersections is a multi-faceted Web site developed through the Library's Digital Publishing Initiative. Inspired by the Latinos 2000 Conference held at Dartmouth College in February 2000, the web site continues the Conference's dialogues and debates, which brought together scholars, students, artists, and activists from all

over the United States. Latino Intersections combines a refereed online journal, a journal of student contributions, research materials, current events, and art/performance content focusing on Latino Studies. Latino Intersections is a crossroads, *una encrucijada*, for the exploration of Latino culture. The site is a collaborative effort between the Department of Spanish & Portuguese and the Dartmouth College Library. The first release of Latino Intersections was published in March 2003.
<http://journals.dartmouth.edu/latinox/>

Regiomontanus Astronomy Manuscript.

The Regiomontanus Astronomy Manuscript Project is a collaborative effort by Richard Kremer of Dartmouth College, Michael Shank of the University of Wisconsin-Madison, the St. Petersburg Archive of the Russian Academy of Sciences, the Dartmouth College Library and Dartmouth Academic Computing. It focuses on a previously unstudied manuscript, "*The Defense of Theon*", written by the leading astronomer of fifteenth-century Europe, Johannes Regiomontanus. The web site associated with the project will make available a digital edition of "*The Defense of Theon*", a Latin text extant in a single holograph manuscript of 302 folios. The manuscript is housed at the Archive of the Russian Academy of Sciences in St. Petersburg.

Phase I of the web project, slated for completion in fall 2004, will make available digital images of the entire manuscript, a diplomatic transcription of heavily revised text, and a final version of the text as deciphered by the editors. Subsequent phases of the web project will add an expanded electronic edition of "*The Defense of Theon*", selected portions of the text being attacked by the "Defense" (George of Trebizond's "Commentary on the *Almagest*"), English translations of selected passages of both texts, and a pedagogical introduction to late medieval astronomy intended by undergraduate audiences. Phase I of the project is being funded, in part, by the National Science Foundation.

III. Specific Digital Library Challenges

Digital Library Organizational Innovations.

In an attempt to meet staffing challenges for Digital Library projects, Dartmouth College Library is experimenting with partial reassignment of library staff with technology skills. In an early implementation, a reference librarian has been temporarily assigned to the Digital Library Technologies Group half-time. Reassignments of this type capitalize on

available expertise, provide a method for library units to contribute to the design and development of the digital library, and allow consistent management of personnel assigned to digital library development tasks.

Other Challenges:

Copyright/Privacy.

Better presentation and management of financial, demographic, and other statistical information data.

The Digital Library as teaching tool.

Implementing large functions and tools in collaboration with other departments on campus.

Link readers.

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

View documents at

<http://diglib.dartmouth.edu/staffweb/diglibmg.shtml>