IV. 1998-2007: Principal Developments and Changes

Re-Organization

In the last decade the Library has restructured its organization in response to budget constraints and changes in our workloads and service needs. Collection Services transformed its organization due to the increase in new systems and digital resources. Cataloging and Metadata Services, Preservation Services, and the Digital Library Technologies Group organized together into Information Management, in order to reflect the interdependence of providing access to and preservation of digital resources. Acquisition Services joined the newly formed Information Resources (comprised of the subject bibliographers and the Director of Digital Resources) in order to reflect the increased support and information needed by bibliographers to provide the best digital resources and to engage with the changing scholarly communications environment.

While experiencing budget reductions in 2002, the Library’s administration was also faced with expanded space and service needs to support the opening of Baker-Berry. As a result, the administration eliminated services in two facilities and streamlined operations in a third: the Cook Mathematics Library was closed and its collections were incorporated into Baker-Berry; Sanborn English Library was placed under the management of the English Department (although its unique materials were transferred into Baker-Berry); and the Sherman Art Library—now physically connected to Baker-Berry—shifted circulation, reserves, and stacks management to the central facility’s staff, expanding the art journals reading area and improving user space within the Art Library’s main reading room.

Expanding Use of Technology

During the past ten years, the Library has overseen major changes in every aspect of its programs. These changes include the application of technology throughout the organization and the provision of online resources and services that are heavily relied upon by users. Throughout the Library, staff in the technical processing units find that their work requires regular upgrades in technology and the learning of new skills to keep up with an ever-changing digital environment.

The Library’s use of technology has also allowed us to reorganize workflows and streamline services. The Library has actively sought ways to use technology to simplify processes, in order to free up staff time to allow us to focus on new demands. In 2001, the ILLiad software was adopted for the interlibrary loan program and six document delivery offices were consolidated into two: one at the Biomedical Libraries, and one in Baker-Berry Library. A delivery van that services requests from the offsite storage library also delivers materials received through ILL to the user’s home library on campus. Document delivery services were expanded to offer faculty and staff a requesting service for locally owned items. Articles are scanned and delivered to the desktop, and books are held at the circulation desk of their choice for pick up. BorrowDirect, a highly popular service, allows patrons themselves to request monographs directly from the holdings of our partner libraries. A virtual private network (VPN), established by Computing Services in 2003, allows users to have secure and simple remote access to Library resources.

The Library introduced a digital reserves service in 2004, including streaming audio and video managed by the Jones Media Center, which is linked into the Library’s systems and into the college-wide Blackboard course management system. The service has been very popular, although the resulting increase in the copyright fees paid to the Copyright Clearance Center has had a budgetary impact on the information resources program.
Richer Bibliographic Access

The Library catalog moved from an in-house system to a commercially developed suite of tools, and has expanded beyond descriptions of items physically owned by the Library to an on-line resource providing access to digital and print material often held beyond the campus. As the catalog changed, so did the work of the cataloging staff, providing authority control for Library resources, batch processing of thousands of digital resources, expanding discovery tools for digital projects, and introducing new standards to provide better access to the rich resources in Special Collections.

Larger, More Digital, Collections

The growth in the importance and scale of major new digital collections places pressure on the information resources budget. The Library has been aggressive in this area relative to our peers (Table 6 – in Appendix VI) which speaks both to our history with the early adoption of technology through locally mounted databases, and to the faculty’s acceptance of the digital version for their work. Membership in important organizations like the NorthEast Regional Library Consortium have made subscriptions to major digital packages more affordable to us, but the net result has been a shift in the information resources budget over time toward a greater investment in serial publications. Dartmouth now spends 75% of its materials budget on serials. The end effect is an erosion of the monographic budgets, which has been partially offset through access to BorrowDirect and other resource sharing partnerships. The Library is actively engaged with SPARC and other organizations to build alternative and less costly digital publishing models, but any budgetary relief from new models will not be felt for some years.

Academic departments in the humanities and social sciences are focused on the undergraduate, yet Dartmouth competes for and recruits high quality faculty dedicated to research and publishing in their areas of specialty. The need to support these specialized research areas can mean expensive investments in resources used by a small number of individuals. In the print world, the Library can more easily rely upon partner institutions to support faculty research needs through interlibrary loan. Digital collections cannot be shared in this manner.

New Digital Partnerships and Resources

As the collections changed, different partners emerged. The Digital Library Technologies Group no longer mounts vendor-supplied data locally but collaborates with faculty to host unique scholarly materials and create opportunities to make scholarly output accessible. They work to develop Web-based tools and other technologies to help Library staff and they partner with vendors such as Innovative Interfaces Inc. (III) to evaluate user service enhancements to our online discovery systems.

The Library has partnered with vendors to develop products to solve local needs. Current projects include development of the Journal Usage Reports [JUR] product with Thomson ISI Web of Knowledge. Other projects include development of ISI Inside, and the reserves interface to Blackboard with Innovative Interfaces Inc.

The Library made a dramatic shift to acquire digital resources and struggled to adjust to the new skills required to acquire and make the resources accessible. In a time of budget reductions the Library discovered that processing digital materials takes as much as three times longer than traditional print resources and that the workflow is one of constant problem-solving. Library staff has had to navigate through this ever-changing landscape. Staff positions have been upgraded to reflect the increasingly complex nature of the work, and every position opening is treated as an opportunity to reconsider current needs.

The Baker-Berry Project brought the processing units together into a contiguous space to enhance workflows and spur collaboration on digital resources. Workstations provided the connectivity needed to process digital resources and work with Web tools.
Developing Digital Infrastructure

The Library still needs to develop the infrastructure required to support the digitization and management of local collections, in order to identify unique materials in our own collections and to exploit them for teaching and research at Dartmouth and beyond. We are developing a workflow to manage locally created digital images, have adopted CONTENTdm as a delivery platform, and have begun to identify potential digital projects of value to the curriculum. The Jones Media Center gives us rich resources in the area of video and audio production. We need to be sure to nurture this asset, and to continue to partner with Academic Computing and others to ensure that the campus infrastructure for streaming media keeps up with our users’ developing needs.

A recent initiative to digitize the Samson Occom papers in Rauner Library is a good example of a partnership with a faculty member to identify an important digitization project that can support teaching and research, both locally and internationally. Digitization efforts such as this join with “born-digital” journals that are already hosted by the Library for Dartmouth faculty as part of an emerging digital publishing program.

Furthermore, there is a compelling need for Dartmouth College to develop an institutional strategy and infrastructure to accommodate the transition from a paper-based to a primarily digital-based environment for academic and administrative records. It is critical that Dartmouth’s core digital information, and the information of its faculty, is safeguarded and available into the future. Following the work and recommendations of a Duke University-Dartmouth College planning collaboration, supported by The Andrew W. Mellon Foundation, the Provost established the Dartmouth Digital Information Steering Committee in spring 2007 (Appendix X) to provide leadership for these issues. The Library must remain intimately involved with this infrastructure and policy planning.

Increased digital production and repository capabilities would also allow us to publish Dartmouth dissertations and theses on the open Web. These ambitions combined with the College’s plans to build an institutional repository make this a good moment to develop a portal that showcases Dartmouth scholars and their work. The Dean of the Faculty is already requiring that some of this information be collected annually from faculty, and the Library has been discussing author’s rights issues with the faculty to encourage them to retain the ability to place their scholarly output in an institutional repository. A Dartmouth Author’s Amendment has been developed by the Library and is available. The Library is well-placed to take the lead on an online database of Dartmouth scholarship.

Innovative Reference and Research Services

The Library has continued to focus on outreach, seeking ways to increase the visibility of the Library within the user communities we serve. Librarians hold office hours within academic departments and staff service desks outside the Library. They work closely with their academic departments to support the programs through collection development and education, and they attend departmental events such as conferences, seminars, and recruitment presentations. The subject liaisons also offer specialized support to students engaged in research projects. One effect of these initiatives has been a decrease in the number of professional librarian hours at the Library service desks, as schedules have shifted to allow librarians to be present during departmental hours. Early morning and evening desk hours are covered more frequently by Library paraprofessional-staff and student employees, and in some cases, have been reduced.

Rapid Document Delivery Services

Document delivery activity has continued to climb, even with the growth of digital resources. The explosion of access to databases, Google Scholar, and other online information resources has encouraged an increase in user requests for materials that Dartmouth does not own. Patron initiated interlibrary loan services, and links from databases to local request forms have helped to enable this increase.

The addition of the BorrowDirect service (2002) had an immediate effect on resource sharing activities. The speed of this service has made it popular with both faculty and students. Dartmouth is a net lender in this partnership,
lending on average approximately 2.25 volumes for each volume that we borrow. The cost of each transaction is substantially below a standard interlibrary loan transaction cost, and the significance of our membership cannot be overestimated. The Library staff provides fast turnaround and fulfills a high number of requests. In fact, Dartmouth lends more volumes per year than any of the other partner libraries (Appendix IV).

Efficiencies created through investments in new software have enabled the Library to manage growth. Staff resources have been reallocated to support the increase in both the borrowing and lending sides of these operations, The Baker-Berry office has been relocated to create improved workflows, and the public face to these highly valued services now occurs at the circulation desk.

A Focus on Professional Development

Dartmouth’s location necessitates traveling to professional meetings, which results in challenges of finances, time, and convenience. To address these issues the Library has created a Staff Development Committee charged with developing local programs for Library employees. The Committee has identified specialized training needs for both professional and para-professional staff, and seeks support from Dartmouth’s Office of Human Resources for training in supervisory skills and productivity tools. New methods of providing education and staff development, such as Webcasts and online training opportunities, are effective complements to in-person training.

The Library also seeks to bring meetings and conferences closer to campus. The Biomedical Libraries organize an annual October Conference, focused on current topics in education and outreach for libraries, which draws participants from around New England. The Access Services group has organized a northern regional meeting that alternates with other New England locations. Despite these efforts, staff members still find it challenging to integrate new knowledge and processes into their daily work.

Collaborations on Campus

The integration of the Library into the fabric of the institution has become a core theme for the library in recent years. DCAL, the new Dartmouth Center for the Advancement of Learning (2004), and the new Writing Program (2004) occupy space within Baker-Berry Library, and this has created important academic partnerships for the Library. The development of the Research, Writing, and Information Technology Center (2003), a new student peer-tutoring program, is an exciting collaboration between the Writing Program, Academic Computing, and the Library. This center provides student support for writing, technology, and research skills, and is located in the heart of the Berry main service floor.

The Library has also increased collaboration with other campus programs. The Hood Museum of Art and the Hopkins Center for the Arts have co-sponsored programming to celebrate major new Library acquisitions. The Library seeks to showcase student work in the arts by sponsoring student performances in the “Random Acts of Art” series and displaying student artwork through the NovArt program. The Matthews-Fuller Library hosts opening receptions for artists exhibiting at the Medical Center. Library exhibits are coordinated to support important institutes and events on campus, and are sometimes developed by students as a part of their curriculum. The current celebration of the Polar Year by the Arctic Institute is an excellent example of this, with contributions from the Library’s collections to the exhibit “Into Thin Ice” at the Hood Museum, and an exhibit planned for the Baker Library exhibit cases this fall. A major two-part installation by avant-garde Chinese artist Wenda Gu, commissioned by the Hood Museum, has been located in Baker-Berry Library from June to October of this year. Part of his ongoing global united nations hair monuments project, the green house and united colors comprise a massive sculpture created from hair collected in 2006 from thousands of Dartmouth College students, faculty, and staff and Upper Connecticut River Valley community members. The words ‘advertises’ and ‘educations’ in the massive hair screen proved compelling and challenging to viewers. Wenda Gu’s hair sculptures grow from his dream that through his art he might unite humanity and encourage international understanding. An exhibition of the artist’s recent works on paper is presented concurrently in the Hood’s galleries. The Biomedical Libraries are an integrated part of the curriculum planning and participate as faculty at the Dartmouth Summer Institute in Evidence-Based Psychiatry (2006 and 2007). The prior Associate Director, John James, was the key advisor for the establishment of a library for the
new American University of Kuwait, an educational institution formed in partnership with Dartmouth College. And the Dartmouth Library maintains a small but active Friends group who meet periodically.

The Library provides technology support where it can to assist other areas. Examples include: creating a public interface to the Hood Museum catalog and integrating it into Search360 (our federated searching tool), leveraging our locally developed workshop registration system for DCAL and the Writing Program, fostering conversations concerning the slide library in the Department of Art History and the Hood around use of ArtSTOR for managing image collections, and partnering with the Dean of Faculty’s office to develop an automated system for reporting and sharing information about faculty publications. The Biomedical Libraries oversee the development of the Medical School’s Web site. The Digital Library Technologies Group works with Computing Services to support the development of PKI and Shibboleth authentication tools, and ensures Dartmouth’s compliance with Communications Assistance for Law Enforcement Act (CALEA) regulations for private networks.

**External Collaborations**

Librarians, faculty, and college administrators are critically concerned about our long-term access to e-journals. A recent report by the Council on Library and Information Resources (CLIR) describes the current state of digital archiving and recommends institutions support a third-party archive for e-journals. The Library has embraced these recommendations and supports the preservation of digital publications by being a founding member of Portico (a digital archiving service sponsored by the Andrew W. Mellon Foundation and the Library of Congress), and participating in the LOCKSS (Lots Of Copies Keep Stuff Safe) program of distributed Internet archives. The Library was also a member of the ARL Scholar’s Portal experiment (2002-2005), which provided staff the opportunity to grapple with the complexities of federated searching technologies. Lessons learned from that project led the Library to launch Search360, Dartmouth’s federated search service that allows users to search multiple article indexes, encyclopedias, image collections, catalogs, and other databases simultaneously.

The Library has recent experience seeking partnerships with external vendors and publishers with the digitization of the *American State Papers* and the *United States Congressional Serial Set* through Readex, an agreement with ISI to develop an engineering portal, and with Innovative Interfaces on various components of the integrated library system. The Library is currently in discussions with the publisher of the Database of Recorded American Music to include important electronic music recordings from Dartmouth into this product. Further back, in the 1970s, we partnered separately with Library Resources, Inc. and with University Microfilms to microfilm collections including Saint Gaudens, Winston Churchill, White Mountains materials, and Eleazar Wheelock.

**Membership Organizations and Consortia**

In early 2001, the Library withdrew from the Research Libraries Group (RLG), relying on bibliographic and interlibrary loan services from OCLC. The Library continues its long-standing membership with the Association of Research Libraries (ARL). Strategic new memberships that enable the Library to provide access to a greater array of resources and participate in the ongoing development of digital library technologies include: the Digital Library Federation, Portico, LOCKSS, the Scholarly Publishing and Academic Resources Coalition (SPARC), the Council on Library and Information Resources (CLIR), and the Coalition for Networked Information (CNI). Collections Program staff are also involved with partnerships and consortia among libraries, publishers and vendors to provide greater access to resources than would be possible for one academic research library alone. Chief among these are membership in the Center for Research Libraries, participation in the Federal Depository Library Program, the Borrow Direct program, and NELINET. Additionally, memberships in the NorthEast Research Libraries (NERL) and Westchester Academic Library Directors Organization (WALDO) enable the purchase and lease of information at discounted pricing.
**Education and Outreach**

The Education and Outreach Program (E&O) is led by librarians and staff from libraries across the system, and it has made considerable progress in the five years since this program was formed. The program has developed an information literacy program, supported librarians in developing their teaching skills through in-house conferences and Educator Forums, and brought librarians from the libraries together to investigate the teaching, learning and liaison roles of librarianship. Important partnerships include DCAL, which has supported the program by promoting faculty-librarian partnerships in the classroom and in designing research assignments, and the Writing Program, which has enabled the Library to integrate research skills into the first year curriculum. E&O has developed the Library presence in the Blackboard course management system, fostered collaboration with other teaching and learning support centers (such as the Academic Skills Center, Curricular Computing, Residential Life, the Athletics Department, and the First Year Office), and has raised the awareness of the teaching support librarians can provide.

The education program continues to be a core focus for the campus libraries. The following are examples of recent initiatives: Feldberg has integrated itself into the Tuck first year program, working with teams of students during the Tuck Forum experience to provide individualized support. The Biomedical Libraries provide a Library Advisor program, partnering librarians with incoming Medical School students, Institute for Health Policy and Clinical Practice students, and medical residents, to support them during their careers at Dartmouth. The Biomedical Libraries continue to provide for-credit educational programming through a series of Grand Rounds, which take place at the Medical Center.

Rauner Library has recently expanded its role in curricular support and is now a major component of courses taught throughout the College. A hallmark of Special Collections at Dartmouth has been its long-standing commitment to creating an atmosphere conducive to student use of the collections. Welcoming staff, an open reading room, and access tools invite students to explore what makes Special Collections so “special.” For example, students make regular use of the pre-1600 manuscripts for course work, a collection that includes a small but very rich trove of books of hours, a 15th-century prose Brut Chronicle and a strong collection of early musical manuscripts.

**Marketing**

Within the past two years this endeavor has raised the visibility of the Library through numerous feature articles in campus publications, placement of Library news on the College home page, and a vigorous marketing effort to support the release of new products and services.

January 2007 saw the Library’s first E-Resources Fair, a daylong event to showcase a wide variety of digital databases and services. The event was a resounding success, with eleven information resource companies participating, ranging from databases in art and music to engineering and science. The Library also provided a “Find It @ the Library” station to show how to locate these digital resources. It was an educational event for all involved, with students learning about resources outside of their major area of study, publisher representatives hearing from the students directly about their resources, and Library staff from all areas of the library interacting with students, faculty and the resource providers. Based upon the success of this program, the Library will periodically offer a variety of information fairs.

Since fall 2005 the Library has been providing an annual welcome program for first year students. A letter sent during the summer invites students to participate in “The Great Indoors” in early October. The event occurs in the Baker Library Main Hall and includes food, tables sharing information about the various libraries and services, and prizes for students completing self-guided tours. It is an excellent opportunity for staff from across the libraries to work together on a joint event, and the location attracts many students who are enthusiastic to learn about core services and hidden treasures, such as the Book Arts Workshop and the popular media collection in Jones. Welcome programs are offered to graduate and professional school students by the Feldberg, Kresge, and Biomedical Libraries staffs, and a special effort
is made to reach out to incoming international students, who may face unique challenges in understanding how to navigate the American library system.

**Assessment**

The Library participated in the ARL Assessment program in 2005 (*Appendix IX*) to review the effectiveness of our assessment activities. Following this review, an Assessment Committee was established to develop the expertise and Library-wide oversight needed to create an integrated assessment program. In this work we liaise closely, and benefit from the expertise of, the College’s Office of Institutional Research. Our aim is to make our decision-making processes much more driven by data on use and effectiveness of service, in order to make the best use of our human and financial resources.

**Records Management**

The addition of Records Management to the Library’s program scope in 2000 is of strategic importance to the organization. The department assists administrative units across the campus in managing the records of the College. The program moved into an impressive new facility in 2006. The campus transition to digital recordkeeping has begun, most notably this year with the Admissions Office moving to a paperless process. This transition highlights the need for the College to develop a campus-wide institutional digital information strategy. The Library and Duke University Libraries received an Andrew W. Mellon Foundation grant this past year to begin this work. Following their report, the Office of the Provost established a campus-wide committee to craft a strategic plan for digital information management.

**Support for New Research**

Dartmouth continues to develop new areas of curriculum and research including Arabic, Hebrew, Cognitive Neuroscience, Bioengineering, Genetics, and Public Health. A number of new research centers have been formed, including the Center for Nanomaterials Research, the Institute for Security Technology Studies (dedicated to pursuing research and education for cyber security and trust), The Neukom Institute for Computational Science, and the Institute for Information Infrastructure Protection (a nationwide consortium of leading cyber security research and development organizations including universities, federally funding labs and non-profit organizations). In recent years Dartmouth has also opened a new Center for Environmental Health Sciences, the Institute of Arctic Studies, and a new interdisciplinary graduate environmental science program: Earth, Ecosystem, and Ecological Sciences (EEES) Fellows. Each of these adds richness to the campus. While the Library can support some of these new initiatives by expanding upon existing collections, some of these disciplines are new to the institution and the Library is challenged to expand its services and collections.

The College has been steadily increasing the number of faculty in the Arts and Sciences. An identified goal for the current Capital Campaign is to increase faculty by an additional 10%. The professional schools are also growing. The Tuck School of Business has increased the student body from 180 to 240, with modest growth in the faculty size and an increased focus on research. The Thayer School of Engineering has developed a Master of Engineering Management program and increased the number of PhD candidates. The Dartmouth Medical School (DMS) has 2,200 faculty and researchers, 316 MD students and 274 graduate students, and an operating budget of $215 million. DMS’s healthcare improvement arm, the nationally prominent Institute for Health Policy and Clinical Practice, is growing significantly, and has recently begun awarding the Masters in Public Health. The Dartmouth-Hitchcock Medical Center (DHMC) comprises the Dartmouth Medical School, the Dartmouth-Hitchcock Clinic, the Mary Hitchcock Memorial Hospital, and the VA Medical Center in White River Junction, VT. It has 6,500 employees, 1.9 million patient visits a year, and an operating budget of $1.5 billion (inclusive of DMS and exclusive of the VA). The DHMC facility doubled in size a few years ago and continues to expand. A new patient care tower will be built, and freestanding surgical centers are being considered. The Medical Center is also recasting some services (cardiology, neuroscience, and others) as multidisciplinary centers. DHMC is focused on “translational research”—rapidly applying biomedical research to improving the care of patients and populations. DMS and DHMC share a focus on healthcare improvement. The Norris Cotton Cancer Center is one of the top cancer centers in the nation.
Interdisciplinary Programs

All areas across the campus are growing in their interdisciplinary focus. Relationships have been formed between business/engineering, medicine/business, business/science, biology/medicine, biology/engineering, and so on. Across the institution there is an increased focus on competition for federal grants and contracts. The curriculum reflects an increasing internationalism, and there is a growing percentage of international students in the professional schools. Many undergraduates participate in the Foreign Studies Program at Dartmouth. Boundaries in the humanities and social sciences are disappearing as faculty research interests develop and as faculty interact with colleagues across departments and divisions. The Dean of the Faculty recently observed that as these boundaries blur, the faculty view the Library collections as the pillars of support for the core of the disciplines. They are expecting the Library to maintain and develop these core areas as well as addressing support for new areas of focus and research. All of these developments place greater pressures on the Library to support the curricular and research programs.