Standard 7 • Library and Other Information Resources

The institution demonstrates sufficient and appropriate information resources and services and instructional and information technology, and utilizes them to support the fulfillment of its mission.

Overview

Middlebury offers a library and technology environment that provides for access to a rich array of resources, attends to the physical structures needed for teaching and research, and provides the infrastructure required for efficient administration and planning. In the last ten years, the College has built a new state-of-the-art library building, created a merged library/IT organization, replaced a home-grown administrative system with a vendor-supported enterprise resource program (ERP), and sought to support and collaborate with the Monterey Institute in supporting their library and technology needs.

Organization & Staffing

Description

Middlebury College’s information and technology needs are served primarily by Library and Information Services (LIS), formed in 2001 through the merger of the College libraries and Information Technology Services departments. LIS supports the undergraduate campus in Middlebury, Vermont; the Bread Loaf School of English; and the Language Schools. It also provides limited support for the C.V. Starr-Middlebury Schools Abroad. The Monterey Institute has separate but collaborative IT and academic technology departments, reporting to a single administrator on the Institute’s president’s staff and working closely with the library, which is located organizationally under the provost. There is also a separate media services department that reports to the president’s office. The Monterey Institute provides the primary library and academic technology support for its graduate programs through the William Tell Coleman Library, the Teaching & Learning Collaborative, and the Digital Media Commons. LIS provides increasingly critical hosting and support for the Monterey Institute’s enterprise and web applications and network services, working closely with the Monterey Institute IT staff members who manage the local network and systems at the Monterey Institute.

Appraisal

The organizational structure of LIS has been modified regularly to accommodate changing staffing levels and the changing needs of our patrons, and to respond to the results of internal assessment processes. Currently approximately 33 FTE perform library work within LIS, which translates to slightly under 75 students per staff member. Although this is well in line with our peer institutions, as reported in the most recent Oberlin Group survey (17th lowest FTE/staff, out of 73 institutions reporting data), total staff positions in LIS have decreased approximately 20% over the past 18 months – from 104 to 80 – due to early retirements and voluntary separations. These departures included many long-term staff with high levels of expertise and institutional memory. As a result of staffing reductions, LIS has had to cease providing some services and restructure workflows.
At the Monterey Institute, five librarians and 1.5 FTE of additional staff provide library services for a student body of over 700. The Teaching and Learning Collaborative and the Digital Media Commons at the Monterey Institute were developed over the last four years to address unmet needs for faculty and student support in the uses of technology, and to coordinate and support the use of digital media in communications, recruitment, and other outreach functions. This structure has worked well as a bridge connecting distributed pockets of expertise throughout the Institute. Through regular conversation and planning efforts, the work of LIS and the separate technology and library organizations at the Monterey Institute is well coordinated.

Planning

Description
Two years ago the leadership of LIS engaged in a significant strategic planning effort. The results of this effort were the articulation of a mission and values statement for the organization; an outline of primary responsibilities for each area within LIS; and clear strategic priorities designed to guide areas, workgroups, and individual staff members in their annual planning and goal-setting processes. The strategy focuses on five major areas: carbon reduction, emerging technologies, space planning, administrative efficiency, and training and education. Both this larger strategic planning process and annual planning processes are guided by input from members of the senior College administration, advisory groups consisting of faculty (the Faculty LIS Advisory Committee, or FLAC) and students (the Student LIS Advisory Committee, or SLAC), five divisional advisory groups (Social Sciences, Sciences, Languages, Arts, and Humanities), as well as LIS staff. These planning efforts have also involved collaboration with the Monterey Institute’s IT and library staff. Monterey’s IT has developed their own technology strategic plan, based on the LIS strategic plan.

Appraisal
Although there are multiple channels for communicating about information technology needs within Middlebury, and good coordination between the College and the Monterey Institute, planning for new programs and enterprises does not consistently factor consideration of technology needs into the early stages of planning. Ensuring the need for information technology infrastructure, hardware, software and support are included in planning at the outset will allow LIS to improve its own planning and resource allocation, and improve the College’s ability to move from idea to implementation more smoothly.

Projections
- LIS will engage various offices of the College to learn about upcoming initiatives that may require LIS support. This process will also engage the Monterey Institute so that planning efforts at both locations can be coordinated.

Financial Support and Sufficiency of Resources

Description
Middlebury College and the Monterey Institute maintain library resources to support their respective academic programs, but the scope and wealth of those resources differ between the
camps due to differing needs and resource levels in their institutional histories. Middlebury College allocates approximately $2 million annually for library resources. Over the past several years, LIS has deliberately chosen to allocate the majority of these funds to online digital resources, allowing the entire Middlebury community to access to over 48,000 full-text online journals, over 350,000 electronic monographs (e.g. eBooks), and approximately 400 online databases. We provide access to these resources in a number of ways, including via an A-Z list of journals, through the library catalog (MIDCAT), and through subject-specific guides prepared by college librarians. The library’s print collection counts almost 730,000 monographs (including printed music, etc.) and almost 45,000 audio and visual recordings. In addition, an active Inter-Library Loan department utilizes partnerships with the NExpress consortium, the Center for Research Libraries, and individual lending libraries to supplement the local physical collection at the College by processing nearly 35,000 requests in the last year alone (split almost evenly between borrowing and lending requests). In addition to funding allocated to library materials, the College spends on average $120,000/year to provide academic software in support of the curriculum.

The Monterey Institute library has a collection of just over 100,000 printed monographs, over 2,400 media materials, and access to 855 full-text online journals and 2,349 eBooks. Budgets are divided between the library and information technology services, as these remain separate departments. The library budget in FY11 totaled $943,113; of that total, about $340,000 is allocated to library resources.

**Appraisal**

Budgets for library materials have decreased in terms of real dollars at both the College and at the Monterey Institute in recent years, despite increases of roughly 8.5% annually for journals over the past ten years. At the College, the total fell from $2,271,075 in FY 2008 to $2,155,200 in FY 2011; at Monterey, that budget decreased from $400,000 to $340,000 in the same period. At the College, this reduction has forced the library to reduce discretionary spending on print monographs (including audio and visual resources) substantially in order to maintain subscriptions to core journals and databases. Some of this reduction has been offset by participation in regional and national consortia, specifically NExpress, a borrowing consortium of seven New England region colleges and universities and the Center for Research Libraries (CRL). In general, this speaks to a shift in the Library’s focus from “just in case” purchasing to “just in time” access, as well as a concerted effort to focus on digital resources that can be accessed by Middlebury users at any of our campuses. The library has also undertaken modest efforts at building local digital collections that will support the curriculum, the most robust of which are several collections based on the holdings of the Special Collections and Archives as well as a selection of videotaped lectures held on the Middlebury College campus over the years.

As part of our on-going collection development efforts at both Middlebury and the Monterey Institute, we regularly assess our database and journal subscriptions to ensure that our collection dollars are spent most effectively to support the teaching and research needs of our community. Additionally, Middlebury maximizes opportunities for sharing electronic resources and software between our campuses where there are overlapping needs and where licensing arrangements allow. LIS also monitors software usage statistics and adjusts licenses based on usage.
**Projection**
- The dean of library and information services will monitor the materials budget to ascertain whether it is sufficient to support the scholarship and teaching of the entire College. In addition, LIS will continue to experiment with the new models described above in order to see whether access to materials through alternative programs is sufficient and cost-effective.

**Instructional Technology**

**Description**
Middlebury uses a wide array of instructional technologies through a variety of platforms and means within its undergraduate and graduate programs. Innovations include the use of clickers, iPods, and Second Life, and learning management systems. LIS has developed its own course management system, Segue, for the College, and implemented or developed other tools for online curricular collaboration, including Mediawiki for wikis, WordPress for blogs, MiddMedia for sharing media content, and Middfiles for sharing other digital content, First Class (aka, “BreadNet”) for collaboration among Bread Loaf School of English participants, and a limited implementation of Moodle for support of online testing needs for the Language Schools. The Monterey Institute uses Moodle as its primary LMS, and WordPress for its blogging community. Support for faculty to integrate these technologies into their teaching comes through a variety of channels, depending on the program. The undergraduate College and the Language Schools are served by liaisons. Bread Loaf faculty have an on-site staff person to provide support. Regular workshops are hosted, as are faculty-led discussions on how technology is used in their work. Support at the Monterey Institute comes largely from the Teaching Learning Collaborative.

**Appraisal**
The effectiveness of these various tools was recently assessed as part of an investigation into a suitable replacement for Segue. The Curricular Technologies team is currently leading this charge, and they have recommended LIS continue to offer different “best of breed” platforms for different types of activity (e.g., WordPress for blogging, MediaWiki for wikis), while assessing the merits of various learning management systems to replace the core functionality offered by Segue. Based on this work, we are creating a “course hub,” which offers a centralized place where students can access the various tools being used in each course. In our recently completed MISO Survey, we discovered a growing interest in a range of technologies, including on-line quizzes, digital images, digital video & audio, and classroom electronic polling devices. In addition, our Training and Education team is seeking to identify training needs to support effective use of technologies across campus, including instructional technology needs.

**Projection**
- LIS’ curricular technologies team and the Center for Teaching, Learning, and Research will work with faculty using instructional technology to document best practices in this area, and to promote assessment of the efficacy of various approaches to instructional technology.
Training

Description
LIS offers a variety of training programs related to library and technology resources. These include one-on-one reference services, both in person and via chat or e-mail (1,491 questions were received last year); group instructional sessions, usually embedded within individual courses (134 sessions were held in the most recent year); and technology workshops designed to help students, staff, and faculty improve skills with various applications such as Drupal and the Microsoft Office suite. The Digital Media Tutors program also provides instruction in the use of media applications and technologies, as well as full project support for faculty during the summer months. For College employees, LIS also partners with a local technology training organization to offer a variety of online and in-person courses aimed at increasing technology skills.

Library staff at the Monterey Institute also offer one-to-one reference services and a text-a-librarian service, as well as group instructional sessions. The Digital Media Commons program offers training, workshops, and project support for a variety of media tools for students, faculty and staff. The Teaching and Learning Collaborative facilitates faculty learning communities, offers workshops on supported LMS and web-conferencing systems, and individual and small group consultation for faculty interested in incorporating technology into their teaching. Information Technology Services (ITS) offers workshops on operating systems and productivity software and facilitates instruction (some of which is offered by Middlebury staff) on the Banner administrative data system.

Appraisal
The work of planning and assessing these programs was recently assigned to an LIS team. This team is developing a matrix of core skills required by the various constituencies that make up the College, and evaluating the various resources available to help our community acquire and maintain these skills.

Projection
- Based on the analysis of the Training and Education Team, LIS anticipates licensing and/or linking to externally developed training materials that speak to the various learning styles of our constituents, and focusing its training efforts on College-specific topics and systems.

Student Use of Resources as an Integral Part of Education

Description
Although Middlebury College has not yet defined institution-wide information literacy goals, two recent initiatives suggest the need for this effort. One is the faculty-supported requirement that all students complete a senior independent project (currently on hold pending revision of teaching load guidelines). The second is the Spring Student Symposium, a day each spring devoted to celebrating student research and creative work. Both of these developments arose from recommendations in the College’s Strategic Plan, and both require that students be able to “critically analyze and investigate problems using appropriate information resources.” In order to
facilitate the development of these skills, the Faculty LIS Advisory Committee and LIS have embarked on an effort to define appropriate learning outcomes at each stage of a student’s career at Middlebury. These draft learning outcomes encompass both research and technology skills, and envision a progressively rigorous, curriculum-based approach to hone student skills.

Appraisal
Currently information literacy goals are pursued largely through the first-year seminar program. We have begun pilot projects in a few departments that focus on discipline-specific information literacy within the major. Although there are certainly many other courses that integrate information literacy instruction into their syllabi, it is not yet done in a systematic manner.

The Monterey Institute has created a working group to explore information literacy standards for its graduate population. Because standards vary a great deal from program to program, each program’s faculty will need to identify technology-related learning goals that should be embedded in their programs.

Projections
- LIS will work with the appropriate college communities to systematically link department and program learning goals to information literacy goals.
- The Monterey Institute will identify technology-related learning goals for each program.

Access

Description
LIS seeks to make available as many of its resources as possible to the entire population of Middlebury students, including those studying abroad, at the various Bread Loaf locations, at Language School sites in Vermont and California as well as increasingly to those at the Monterey Institute. The increasing number of online digital resources available to all Middlebury students (including those off-campus) is a central strategy to reach this goal. The library has also implemented a pilot project to explore the use of patron-initiated acquisitions of eBooks, which will further broaden the amount of material easily available to students who are not located on the Vermont campus.

Physical access to the Davis Family Library’s collections is usually provided 101.5 hours per week; the library at the Monterey Institute is open 95.5 hours weekly. Branch libraries and Special Collections at Middlebury are open somewhat fewer hours, but still maintain generous night and weekend hours. During the summer, LIS also ships physical materials and technology equipment from Vermont to the Language Schools at the Mills College campus in California and to Bread Loaf’s New Mexico and North Carolina sites. While this is currently necessary, this practice may not be sustainable in the long term. The Library has also partnered with Mills to create an online Middlebury@Mills information gateway, which pulls together resources and policies crucial to providing information and technology resources to students in that program.

Appraisal
The preference for digital formats eases our ability to share resources across our multiple locations. Nonetheless, some library materials are not available digitally, and these materials, as
well as technology equipment, will still need to be shipped to our remote locations for the foreseeable future. This practice will need to be evaluated, given the logical and financial challenge it presents.

**Projections**

- LIS will continue negotiate licenses that maximize access, and to prefer digital formats that make sharing across dispersed geographic locations much easier.

Atmosphere Conducive to Study and Research

**Description**

In 2004, Middlebury College inaugurated its new library building, the Davis Family Library. This world-class facility features student carrels, faculty studies, classrooms, computer labs, media lab, the Center for Teaching, Learning and Research, group study rooms, and robust wireless connectivity. It was built to provide a flexible architecture that will allow the building to adapt to the changing needs of the academic community. Since that time, the number of people using the library (as measured by gate count) jumped from about 3,700/week (2004) to a high of approximately 27,600/week (2006). Over the last three years, this figure has consistently been between 14,000-16,000/week. The Monterey Institute has a small but comfortable facility, averaging 2,960 patrons/week during that same period. Clearly, the physical environment of the new Davis Family Library is an attractive one for the Middlebury community. During the weeks preceding and throughout finals, additional temporary help is hired to enable the library to remain open 24 hours a day, 7 days a week, providing students with a safe, quiet environment in which to study.

**Appraisal**

LIS recently formed a Space Team that was charged with doing regular assessments of the physical space of the library, and other technology-enhanced areas, and to make recommendations on ways to improve the use of the library space. The teams’ analysis resulted in a recommendation that no major reconfigurations of service points or study areas are needed. The Team also analyzed the feasibility of integrating the Music Library within the Davis Family Library, and developed a plan to accomplish this during the spring of 2011.

At the Monterey Institute, space is a challenge, both for the library itself and for other technology-enhanced spaces. The Institute has the added challenge of providing specialized labs to support its translation and interpretation programs. All four teaching spaces for the Translation and Interpretation program have received equipment upgrades in the last four years, but in spaces that are smaller than optimal. Overall, the Monterey Institute has opted for flexible, multi-purposes spaces wherever the needs of the curriculum allow, and have moved away from fixed lab installations and toward support for laptop use.

Safeguards against Inappropriate Use

**Description**

Middlebury has a range of policies in place to ensure the appropriate use of resources; these
policies apply to all members of the Middlebury community. The College handbook includes sections on the responsible use of College computing and network services and facilities, including policies on file sharing. A designated copyright compliance agent works with LIS staff to respond to complaints about illegal file sharing. We also use bandwidth management technology to appropriately prioritize the use of file sharing protocols in order to ensure that the network is available for core academic and administrative activities.

Middlebury is also a charter member of the Copyright Clearance Center, paying an annual fee to insure that the rights to place materials on reserves and create course packs of materials from participating publishers are properly secured and cleared for use. (Rights to use material from non-participating publishers are secured individually as needed). Off-campus access to online databases and journals is managed via an EZproxy server requiring users to login with valid institutional credentials. There is also an annual audit of our IT systems by PricewaterhouseCoopers.

**Appraisal**
Through annual reviews of IT policies, on-going adjustment of our education programs, and systematic assessment of our logs, LIS regularly revises institutional and technology policies to adapt to the evolving technology landscape. For example, we recently revised our computing policy to account for the need to manage peer-to-peer file sharing use.

**Use of Information Technology to Plan, Administer, and Evaluate Programs and Services**

**Description**
The College uses Banner as its main administrative system. Implementation began in 2002. In addition, we have developed or licensed various subsidiary systems to augment the functions provided by Banner. Planning and oversight for these systems falls to the Banner LEADS group. A recently formed Banner Web Prioritization Committee prioritizes larger scale projects. Most administrative offices have in-house expertise for using these systems, and for gathering data from these systems. Increasingly our Office of Institutional Research is helping to ensure that data is shared effectively across the institution.

**Appraisal**
A recent survey of administrative offices revealed that while the campus is more or less satisfied with Banner’s ability to support administrative functions, there is room for further improvements. We have developed an administrative systems roadmap to plan for improvements to Banner that will allow for greater administrative efficiency and better access to institutional data for planning and decision making. One major unaddressed issue is the decommissioning of the system which houses the administrative data that was not converted to Banner. In addition, there are two major initiatives under consideration that will address gaps in Banner functionality. The first is the implementation of an imaging/document management system that will shift many offices to a largely paperless environment. The second is consideration of a data warehouse and reporting system.
**Projections**

- LIS will implement an imaging/document management system for use initially by the Admissions office. This system will later be extended to most major offices. Work has already begun on this effort.
- In collaboration with the planning, assessment, and institutional research office, LIS will continue to improve the data reporting environment through the use of Hyperion, and also through a feasibility study of a data warehouse. As part of this project, the legacy data stored in the AS400 will be converted to an Oracle database.

**Institutional Effectiveness**

LIS and its partners at the Monterey Institute are engaged in several ongoing efforts to assess the effectiveness of their activities with respect to information literacy skills, general services, and organizational structure. We use multiple instruments to collect this information, ranging from broad surveys to in-house evaluations. Library materials are periodically reviewed for their continued relevance to the curriculum as evidenced by usage statistics. Planning efforts in LIS have been thorough and effective, and efforts will be undertaken to better communicate and coordinate initiatives across the College with LIS planning.