



MIT LIBRARIES'

NEWS

A Report to the Faculty

Strategic Planning

In December, 1988, the Libraries issued a report entitled "The MIT Libraries at the Beginning of the 21st Century—A Strategic Plan." This document was the culmination of an effort that took place over an 18-month period and involved many members of the staff and many days of research, discussion, and writing. Some of the major elements of the plan are described below.

The Vision

There are four major components of the future view of the MIT Libraries:

The Library as a Place

MIT's libraries will continue to be a place for self-education and discovery. They will continue to contain a substantial body of printed information. The Libraries will also serve as a source of information about new technologies and as an access point to information available elsewhere. As subject collections close to their user communities, existing libraries will retain the advantage of proximity while, through technology, providing links to the outside world. New electronic library modules will be created in non-library sites to provide access to collections and services and to communicate with library staff. All collections will be represented in an online catalogue including specialized materials such as archives, manuscripts, machine-readable data files and computer software.

From the Director of Libraries

This column inaugurates a new publication of the Massachusetts Institute of Technology Libraries that is aimed at informing the faculty of the Institute, and others, of recent developments, current and future plans, and events of general interest in and about the MIT Libraries. Major articles in this issue deal with strategic planning, the crisis in serial prices, and online information services. In future issues we will cover, among other topics, preservation, databases on the campus network, the addition to the Rotch Library of Architecture and Planning, and copyright. We welcome comments on this new publication including suggestions for topics. Correspondence may be addressed to the Director of Libraries, 14S-216, MIT, Cambridge, Massachusetts 02139.



The Workstation as a Window on the Library

The Libraries will be accessible day and night through terminals connected through a campus network. Patrons will have available to them a package of information services, the MIT Libraries' catalogue, and information in the larger world. Browsing will be possible in regional, national, and international databases. MIT faculty and students will be able to download information to local workstations or request delivery of hard-copy documents.

The Librarian as Information Guide

Librarians will continue to develop their subject knowledge and information management skills and will aid in designing databases, creating retrieval systems, and organizing services to meet the MIT users' needs. Faculty and researchers will be able to subscribe to services that provide them with relevant information in their field in either digital or paper form. Librarians will play an important role as intermediaries between the information consumer and the many potential information vendors.

The Libraries as an Organization

Within the Libraries, internal operations will be automated and all staff will use computers in carrying out their responsibilities. Staff will work in teams based on subject-targeted services and collections and on central support functions. Teams will design and use expert systems for a variety of procedures and services. Measures of the quality of access to materials will replace the number of volumes as a measure of library excellence. Intellectual rewards for MIT librarians will be defined in terms of success rate in matching users with relevant information.

Current Initiatives

A number of actions have already been taken and a number of decisions made that will have a major effect on the implementation of the strategic plan over the next two years and beyond:



Science Library periodical shelves and reader
Photograph: Ginny Such

The serials cancellation project described elsewhere in this issue resulted in solvency for current serials subscriptions as well as additional funds for monographs and for new serial titles.

A decision will be made within the next two months on the expansion of the online information system that will provide additional capacity making it possible to mount an online acquisitions system, increase the number of terminals, and provide direct access from the campus network.

Acquisition of CD-ROM databases has been increasing and, by the end of the current academic year, all of the following will be available: *Academic Index*, *LotusOneSource: CD-Corporate*, *Science Citation Index*, *National Technical Information Service*, *Public Affairs Information Service*, *Art Index*, and *Supermap*.

The Libraries have begun offering a literature search service for undergraduates writing senior theses. Up to \$50.00 free searching time is provided to each student.

Ground will be broken in April for the addition to Rotch Library.

Project Athena clusters will be installed in the Barker and Hayden library buildings.

The first electronic library module will be established in the Wiesner Building serving the Media Laboratory.

Major New Initiatives

The Strategic Plan includes a long list of activities, projects and studies to be undertaken over the next five years. Many of the projects will be supported by the reallocation of existing resources, by foundation and government grants, or by a combination of the two. Two major efforts have been identified as having the highest priority for the immediate future—retrospective conversion and databases on the campus network. The Libraries have been allocated funds from the Sustaining Fellows Program to fund in part the first of these. A combination of library funds plus equipment and programming provided by Information Systems will cover the second.

Retrospective Conversion

The goal of this project is to add to the Barton (online catalogue) database bibliographic records for materials held by the Libraries covering the period 1964-1974. The addition of approximately 200,000 records for books, serials, theses, and other materials will complement the more than 350,000 current records covering materials acquired from 1974 to date. Ultimately, records for older (pre-1964) items, currently classified in the Dewey Decimal system and generally stored in the Retrospective Collection, will be added. The first increment, 1964-74, will result in the elimination of ten card catalogues.

Databases on the Campus Network

Within the next six months, it is expected that the Libraries' online catalogue will be available on the campus network. It is currently available through dial access. Plans have been developed for the addition of a database of current periodical titles along the lines of *Current Contents*. The file would contain tables of contents of current journals and would be searchable by journal title, author, and subject. The system would be programmed to highlight MIT holdings and would also include a document ordering module. *Current Contents* presently includes about 6,500 journals, a vast majority of which are in the MIT Libraries and/or in member libraries of the Boston Library Consortium.

Copies of "The MIT Libraries at the Beginning of the 21st Century" are available upon request from the Office of the Director of the MIT Libraries.

Jay K. Lucker, Director of Libraries

MIT Libraries' News: A Report to the Faculty, an official publication of the MIT Libraries is published three times a year. Edited by Carol A. Zoppel. Designed by MIT Design Services. Correspondence should be addressed to: The Director of Libraries, 14S-216, MIT, Cambridge, Massachusetts 02139.

Serial Prices

During the past several years, U.S. research libraries have had increasing difficulty in paying the soaring subscription prices for journals, particularly foreign science and technology titles. As prices rose, library administrators became suspicious that erosion of the dollar was not the single cause of what has become a financial crisis for many libraries.

Analyses of renewal invoices revealed that many price increases exceeded both inflation and dollar devaluation factors. In FY87, the average increase for foreign serials (mainly science and technology subjects) in the MIT Libraries' subscription list was about 30%, far beyond the serials budget projections for the year. Similar effects were being felt in research libraries across the U.S.: Stanford's expenditures were up \$600,000; at Harvard the cost overrun was \$480,000; and a \$630,000 shortfall was experienced at University of Michigan.

Listed below are several titles which demonstrate the problem. (These titles have not been cancelled by MIT Libraries.)

	1985	1988
<i>Applied Physics (A&B)</i>	\$ 469	\$ 985
<i>Beilstein Handbook of Organic Chemistry</i>	\$6,820	\$22,053
<i>Biochimica et Biophysica Acta</i>	\$1,751	\$ 4,530
<i>European Journal of Pharmacology</i>	\$1,076	\$ 1,750

The vulnerability of science and technology collections has long been three-fold. First, serials, not books, are the primary publishing format in these disciplines. Second, science and technology serials are more expensive than publications in other fields. Even a modest percent of increase translates into a considerable dollar increase. Third, because most of these titles are produced in Europe, the value and stability of the dollar is always a factor. The new, unexpected, factor is that a small group of European publishers, Elsevier, Pergamon, Gordon & Breach, and Springer-Verlag, have pushed prices to alarming levels. The publishers defend the prices as justifiable due to increased publishing output per title, but librarians find the arguments unconvincing. Whatever the reasons, very few libraries can afford enormous annual increases.

The causes and effects in this situation are many and complex. The number of serial titles being published has grown tremendously, the costs per title keep rising, and the dollar is unstable. Universities lack the bottomless resources their libraries require to both maintain current titles and add new ones. In order to cope, libraries across the country have been avoiding purchasing new serials, cancelling existing subscriptions, and sacrificing book funds to shore up the serials budgets.

These actions and reactions bring on a further cycle of disruption to the flow of scholarly communication. Finding they have fewer subscribers supporting the costs of journals, publishers are forced to raise prices. The shrinking book budgets are causing some academic book publishers to curtail book lists and reduce print runs.

While the library literature has been covering this crisis since 1986, articles also have begun to appear in scientific journals such as *Physics Today*, *Science*, *American Mineralogist*, *Optics News*, *American Scientist*, *Acta Crystallographica*, and *Bulletin Of The American Physical Society*. Concern is widespread as evidenced by the discussions held at the Society of Scholarly Publishing (SSP) Annual Conference in June 1988 and the SSP Seminar on the Future of the Scholarly Journal in October 1988.

At MIT, with assistance from the Institute, the Libraries absorbed several years of price escalation which culminated with an 18% overall subscription price increase in FY87. Library administrators recognized the impossibility of meeting similar increases another year. Equally worrying was the inability to purchase new serials needed to support research at MIT.

With the advice of the Faculty Committee on the Library System, Jay Lucker, Director of Libraries, instructed the staff to review the serials collection to identify candidates for cancellation. Specific goals of the project were budgetary control, reallocation of money to purchase important new serials, and maintenance of the existing level of funding for purchasing books.

The project involved several review strategies. The highest priced titles were examined first, as were those with the highest percent increase compared with the previous year. Surveys of lower priced titles followed, including the few remaining duplicate titles. Indexes and abstracts on narrow topics were examined to see if access to the same information could be gained through other print sources or online databases. The holdings of other Boston area libraries were taken into consideration. Extensive discussion of potential cancellations with faculty members revealed titles no longer important to MIT research.

The result of the review project was the cancellation of 5% of MIT's titles representing 10% of the total serials budget. This accomplished the original three goals—control of the serials budget, reallocation of money to buy new titles, and protection of book funds. Additionally, intensive examination of collections and consultation with faculty enabled librarians to insure that the serials collection meets current needs in curriculum and research. By preserving undergraduate serial titles and related book funds, the Libraries maintained the commitment to support Institute initiatives in the undergraduate program.

As part of the continuing management of the collection, the Libraries will monitor prices, usage, inter-library loan requests, and online database searching results. Significant levels of activity for any title may result in reinstatement of that subscription. The Libraries are committed to meeting all information needs of the MIT community by ownership of materials or through access to off site collections and databases.

Jennifer S. Banks, Preservation and Collections Librarian and
Marilyn G. McSweeney, Head, Acquisitions Department

Electronic Access to MIT Libraries

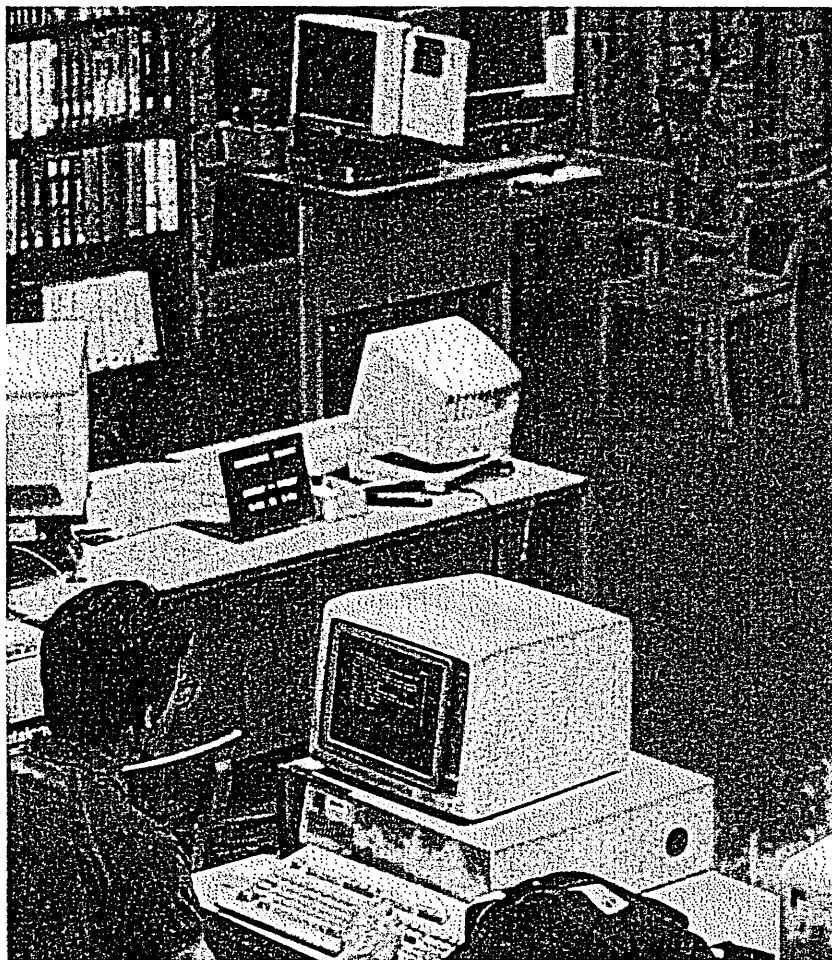
Since the March 1 announcement of DIAL BARTON, i.e., dial access to the MIT Libraries' online catalogue, an average of 7,000 dial-in queries of the catalogue are being recorded daily from users around the campus.

This number will undoubtedly grow as use expands and we expect that, in time, catalogue access from outside the Libraries will match the number of queries from public workstations in the Libraries. Already it is the fourth most actively used catalogue "location" following the Science, Barker and Dewey Libraries.

Dial access to the catalogue of holdings of the MIT Libraries is only one of a series of electronic library services that are planned for the MIT community over the next few years. Under a Council of Library Resources grant, the Libraries are currently developing a prototype front end for a package of online library services which would be available on the campus network and include access to Barton and to the tables of contents of journals, (see article on strategic planning in this issue), as well as information about library hours and services, online guides to the literature of topics of current interest at MIT, information about citation formats for different disciplines, and the ability to leave questions for subject specialists and requests for service at any time of the day or night.

CD-ROM Applications

Management students are flocking into the Dewey Library (social sciences and management, E53-100) to look up information about the current status of corporations for their classes and for their job interviews. They are using *LotusOneSource*, a CD-ROM product recently acquired by the Dewey Library. Dewey Library head Ed Davy says that *LotusOneSource* is in continual use. Students are queueing up to get access and are downloading information to take away for use on their own workstations. Davy credits the availability of *LotusOneSource* with causing a recent 30% jump in user activity in the Dewey Library.



Student using the Barton Online Catalogue in the Science Library Photograph: Ginny Such

In the Humanities Library (14S-200), undergraduates writing term papers can, in minutes, get a printout of journal articles on their topics of choice by searching *Academic Index*. *Academic Index* is a database on CD-ROM which indexes the last five years of over 375 journals commonly used in undergraduate programs. *Academic Index* is an easy-to-use starting point for undergraduates working on term papers for the HASS subjects.

Soon to come in the Science Library (14S-100) will be CD-ROM-based access to *Science Citation Index*. This critical research tool is hard to use in its paper form. MIT librarians are always looking for ways to teach students how to use this tool and have decided that providing CD-ROM access, which will allow users to experiment with *Science Citation Index* in its electronic form, is particularly appropriate for the MIT community. Another science/engineering resource, *NTIS*, will soon be available in the Barker Engineering Library (10-500) and will provide CD-ROM-based access to technical reports, including MIT technical reports.

Perhaps the most innovative CD-ROM product planned for the MIT Libraries is *Supermap*, a product that will appear shortly in the Rotch Library (7-238). It supplies interactive analysis and enhanced mapping display of U.S. census data. U.S. demographical information down to the block group can be easily mapped or downloaded to work with other software such as Lotus 1-2-3.

Other CD-ROM indices planned for the Libraries are *Public Affairs Information Service* and *Art Index* to be housed respectively in the Dewey and Rotch Libraries. The Humanities Library has also acquired CD-ROM versions of *Grolier's Encyclopedia*, the *Oxford English Dictionary*, the *Constitution Papers*, and the *Bible* which includes a number of translations and reference works related to the *Bible*.

Shirley K. Baker, Associate Director for Public Services

New Librarian Staff

Ruth K. Seidman was appointed Head Librarian of the Engineering and Science Libraries effective May 16, 1988. Seidman was the Director of the Research Library at the U.S. Air Force Geophysics Laboratory, Hanscom Air Force Base for six years prior to coming to MIT. The AFGL Library provides support to a large research and development community and contains strong collections in physics, chemistry, materials science, mathematics, geophysics, computer science, and electronics.

Before 1982, Ruth Seidman served as Librarian for the U.S. Environmental Protection Agency in Boston.



Ruth Seidman, Head Librarian of the Engineering and Science Libraries
Photograph: Albert's Photo Studio

She holds the A.B. degree in political science from Brown University, a master's degree in soviet studies from Harvard University, and an MLS from Case Western Reserve University.

As the first incumbent in the position of Head of Engineering and Science Libraries at MIT, Seidman has brought a wealth of management and technical experience with her and has made great strides in bringing about the combined administration of the two libraries.

Shirley K. Baker, Associate Director for Public Services

MIT Libraries Accepted as Contributor to National Bibliography

In July of 1988, the MIT Libraries were accepted as a full member of CONSER, (Cooperative Online Serials Program). As a member of the program, the Libraries will contribute machine readable records describing the serials it acquires to a national bibliography of serial titles.

David Van Hoy, Principal Serials Cataloguer, received training in procedures for creating standard records at the Library of Congress in October and has since then trained other serials cataloguers at MIT. Helen Ploss, Associate Head, Catalogue Department, will serve on the CONSER Operations Committee, and Carol Fleishauer, Associate Director for Technical Services, will serve on the Policy Committee.

The program is coordinated by the Library of Congress and OCLC, (Online Computer Library Center, Inc.), and the bibliography is available on the OCLC database. Other goals of the CONSER Program are the support and promulgation of standards for the bibliographic control of serials and the exercise of leadership in the fields of serials management and education.

Carol J. Fleishauer, Associate Director for Collection Management and Technical Services

Reciprocal Faculty Borrowing Program

MIT faculty members are eligible for borrowing privileges at a number of North American research libraries through the Reciprocal Faculty Borrowing Program. The program, sponsored by OCLC, Online Computer Library Center, Inc., and available to members of the Association of Research Libraries, is designed to promote and facilitate scholarly research and communication among faculty of university research libraries. The MIT Libraries have been one of the 62 participating libraries since the program's inception in March 1987.

In order to take advantage of the program faculty must come to the Office of the Director of Libraries, 14S-216 (3-5651) to apply for a Research Library/OCLC Identification Card which will be valid for one year after its date of issuance. A list of participating libraries is also available from this office. Upon arriving at the lending library the faculty member will be required to show both his/her Research Library/OCLC and MIT identification cards and may be issued an additional card by the lending library. Borrowing privileges are determined by the lending library.

Carol A. Zoppel, Assistant to the Director of Libraries

Free Searching for Senior Theses

The MIT Libraries are engaging in an experiment designed to test the usefulness of computerized literature searches for seniors writing theses. Computerized literature searching is a time-saving but expensive process. The Libraries have to date offered the service only to those able to pay for the costs incurred. This has meant that the service has not generally been available to undergraduates who might benefit from it.

As an experiment, the Libraries are offering seniors writing theses up to \$50 worth of free computerized literature searching. We are handling seniors on a first-come, first-served basis until the funds we have allotted for this experiment (\$10,000) are exhausted.

Senior thesis writers who will benefit from a search are being referred to librarians by faculty advisors (who have been contacted by reference librarians and briefed about the service). The students are given a search consultation appointment with a librarian, and the student, depending on the topic and the availability of relevant databases, leaves the consultation with a list of citations on the topic and strategies for further investigation.

We are asking each student involved to complete a short evaluation questionnaire so that we may judge whether to maintain or expand computerized literature searching for targeted groups of undergraduates.

Shirley K. Baker, Associate Director for Public Services

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