# Today's Challenge: Integrating Information Systems

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With the rapid advances made in electronic information processing we are experiencing a greater proliferation of stored information than ever before. It is, therefore, becoming increasingly important to manage information and make it easily available to users. Meadow proposes that "we could acquire the habit of recording nearly everything, because recording devices will be connected to memories so cheap that it will be easier to record any given transaction or observation than to decide whether or how to record it." He predicts that future information systems will develop in two areas: intelligence and integration. "Thus, the value of an information system will be judged by what it adds to the world's arsenal of tools and information, not by its ability to provide a unique service to a user group and, in the process block out other systems from their use."[1] He continues to state the future for libraries will be as information counseling organizations with the physical retention of works remaining with publishers who can transmit them to users on demand. Book collections will be for the museums and librarians will be in the front lines providing, counseling, and integrating users and information.

The objective of this article is to inform the nonmedical academic library community about the current work resulting from the report entitled "Academic Information in the Academic Health Sciences Center: Roles for the Library in Information Management,"[2] hereafter referred to as the Matheson Report,[3] and to call academic librarians into action for planning integrated information systems within their communities.

It is quite easy today for librarians to overlook publications discussing the research and development activities in medical libraries. However, one publication which should not be overlooked, which is a landmark publication in the medical library community and has implications for all types of libraries, is The Matheson Report.

This report, sponsored by the National Library of Medicine and the Association of American Medical Colleges, was to provide a general blueprint for integrated information management systems. It describes a library that is an active partner in the management of information—a library involved with strategic planning in a changing environment. Matheson points out that information support systems in academic health science centers (to which I add most academic institutions) "are fragmented mixtures of single-function, manual and computer based files that can neither communicate nor exchange information effectively."[4] The Matheson Report provides a guide for planning and developing systems and/or networks for the management of information in a rapidly changing technological environment.

Because the Matheson Report has attracted the attention of university administrators and librarians across the country, I would refer you to the Symposium Section of the October 1983 issue of the *Bulletin of the Medical Library Association*[5] for a more thorough discussion of the Matheson Report. In this symposium nine authors from diverse backgrounds in librarianship address the challenges the report proposes for librarians. Gloria Werner in her article "Implications for University Libraries," succinctly demonstrates the universality of the report to libraries beyond the health science center and how the health sciences library can serve as a model for other libraries. Jo Ann Bell in "Health Science Personnel and the Academic Information System: User Requirements" describes the use of the marketing concept, i.e. "analyzing the problems from the users' perspective and encouraging their participation in the design of new services." Bell states that without user involvement the goals of the Matheson Report cannot be realized. Robert Hayes addresses the related manpower considerations in preparing health science librarians to meet the challenge and William G. Cooper describes the National Library of Medicine's priorities with regard to implementing the report's recommendations.

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[1]Charles T. Meadow, "Information Science and Scientists in 2001," *Journal of Information Science* 1 (1979):218–19.

[2]Nina Matheson & John A.D. Cooper, "Academic Information in the Academic Health Sciences Center: Roles for the Library in Information Management," *Journal of Medical Education* 57:10, Part 2 (October 1982).

[3]Nina Matheson is currently the President of the Medical Library Association and holds the position of consultant in the Planning Office at the National Library of Medicine.

[4]Matheson and Cooper, p.1.

[5]Rachael K. Goldstein, ed., "Symposium on Academic Information in the Academic Health Sciences Center: Roles for the Library in Information Management," *Bulletin of the Medical Library Association* 71 (October 1983):403–434.

Following the publication of the Matheson Report, health science librarians eagerly awaited to see what would happen next. In March 1983 a Request for Proposal, entitled "Integrated Academic Information Management Systems (IAIMS) Strategic Planning—Phase 1" was announced. The closing date was June 10, 1983. "The purpose of the IAIMS is to bring the operational and academic information files into a useful conjunction. The flow of information, in support of research, patient care, education, and administration, as a consequence, will include information from the published recorded knowledge base."[6] Medical center administrators, library directors, and faculties across the country eagerly began to draft documents for their strategic planning to develop such a system. Many institutions failed to apply merely because of the shortness of time to meet the deadline. Numerous institutions applied and four institutions received grants to begin planning for an integrated academic information management system. The four institutions to receive awards were: Columbia University, Georgetown University Medical Center, University of Maryland at Baltimore, and the University of Utah. The approach to be used by each institution is different based on the administrative structures, backgrounds, and experience of its participants. Although only four awards were made, many institutions are using the report as a developmental framework for integrating information systems within their health science centers.

While the Matheson Report is primarily aimed at health science libraries, its importance to all academic libraries should not be overlooked. We must look beyond our in-house catalogs and circulation systems with a view to the entire academic structure of information processing. We must not only be familiar with today's technology, but incorporate it into the delivery of library services. The use of inexpensive electronic mail systems and computer conferencing through such vendors as BRS and Dialcom are now available. Yet few libraries have incorporated these facilities into extending services to their remote users. The literature shows that such facilities are being used predominantly by special libraries such as Bell Laboratories. A few libraries have been successful in using electronic mail for the transmission of interlibrary loan requests. One example is the Pacific Northwest Bibliographic Center, now known as the Resource Sharing Program at the University of Washington.[7]

Currently the Assistant Directors for Departmental Library Services at the University of Illinois, Urbana-Champaign, are exploring the use of electronic survey techniques to identify the needs of "invisible users" (individuals who access information and library resources electronically rather than through conventional means). The underlying theme of this research project is to develop more relevant library services in the changing world of information. Following the analysis of the electronic survey, a computer conferencing project will become operational. Although this research project is in its infancy (it was initiated in September 1983), we believe the results will demonstrate the needs of the invisible users and provide data to determine if their needs differ from traditional users of libraries or vary among disciplines. This project is supported by a grant from the Association of Research Libraries. Such studies should aid academic libraries in program development and service delivery.

Little has been written to date on the use of computer conferencing, electronic mail, or electronic bulletin boards in the delivery of library services to end users. Recent experiences demonstrate that the time has come for immediate action on the part of librarians for the planning described in the Matheson Report. For example, the Agronomy Faculty at the University of Illinois is in the process of developing a computer network based primarily on the needs of the individuals within a particular build-


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[6]*Integrated Academic Information Management System (IAIMS) Strategic Planning—Phase 1.* Department of Health & Human Services, National Institutes of Health, National Library of Medicine. RFP NLM-83-104/JPS, March 10, 1983. HEW-556.

[7]Connie M. Schardt, "Electronic Mail Service: Applications in the Pacific Northwest Region," *Bulletin of the Medical Library Association*, 71 (October 1983):437–38.

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ing. It was only because of a few enlightened individuals within that group that the Agriculture Library received copies of the minutes of their planning sessions and began to participate in the planning process. It is obvious that similar discussions are occuring elsewhere, and it behooves all librarians to become at least active participants, if not leaders, in discussions of computer networks and integrated management information systems. While the burden of such systems cannot lie fully on librarians but should be shared, as Matheson points out, by industry, academe, the private and public sectors, the conceptual leadership should come from librarians and information scientists. ■■

## BI EXHIBIT

Your library's instructional materials may be shared at ALA Annual Conference in Dallas. If you act before June 1, the ALA Library Instruction Round Table will display them at its exhibit booth on June 23–26. The Membership/Public Relations Committee welcomes all formats of materials—slide/tapes, videocassettes, instructional brochures, pathfinders, workbooks, study guides, program announcements, orientation programs, aims and objectives, course curricula, evaluation instruments—from academic and research libraries.

Audiovisual materials may be retrieved at the close of the exhibits on June 26. No other materials can be returned. Please send contributions to: Emily Bergman, California School of Professional Psychology, 2235 Beverly Blvd., Los Angeles, CA 90057; (213) 483-7034, ext.54. ■■

## TEST COLLECTIONS

The ACRL Education and Behavioral Sciences Section's Ad Hoc Subcommittee on Test Collections is preparing guidelines for the management of test collections in academic institutions. The guidelines will be based on the results of surveys sent out by Iowa State University, the University of Missouri-St. Louis, and the University of Illinois, as well as queries sent out by members of the Subcommittee. The Subcommittee is seeking any collection development statements for existing test collections to include as samples in their final report.

If your library has not been contacted in one of the above surveys and would like to forward information about test collections, please direct sample collection development statements or inquiries to: Nancy O'Brien, Education and Social Science Library, University of Illinois Library, 1408 W. Gregory Drive, Urbana, IL 61801; (217) 333-2305. ■■

## RBMS PRECONFERENCE

The Twenty-Fifth ACRL Rare Books and Manuscripts Preconference, "Collecting the Twentieth Century," will be held June 19–22, 1984, at the Sheraton Crest Inn, Austin, Texas.

The conference will focus on problems and issues raised by current trends in collecting 20th-century materials in literature, politics, business, science, and the arts. The collecting of manuscripts and archival materials will receive special emphasis.

The main program, which will cover such issues as selection, access and copyright, preservation, and constituencies, will have six speakers: Donald Gallup, Beinecke Rare Book and Manuscript Library, Yale University, on the Ezra Pound Papers at Yale; Gerald Ham, State Historical Society of Wisconsin, on Collection Management and the Historical Record of the Future; Michael Holroyd, biographer of Lytton Strachey, on A Writer's View of Collecting the 20th Century; Carlton Lake, Humanities Research Center, University of Texas, on A Case History of 20th-century collecting; Richard Landon, Thomas Fisher Rare Book Library, University of Toronto, on the Administration of 20th-Century Research Collections; and Arthur Norberg, Charles Babbage Institute for the History of Information Processing, on Historical Themes and the Availability of Resources in the History of Science and Technology.

In addition there will be a half day devoted to workshops on techniques of conservation of 20th-century research materials in various formats.

The RBMS Continuing Education Committee has also planned a variety of seminars intended to encourage response from preconference participants to issues raised by the speakers.

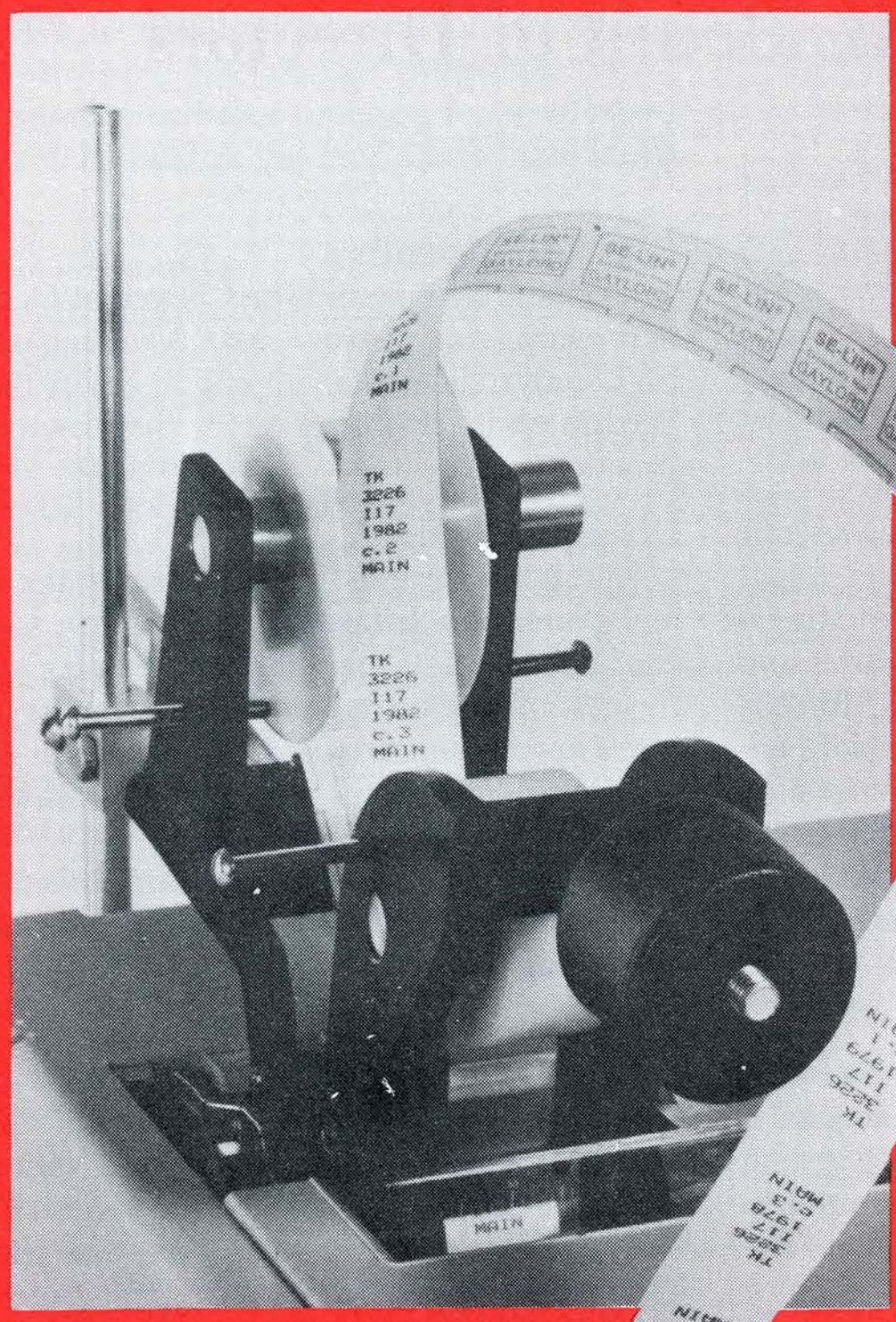
The preconference dinner will take place on June 20 at the Old Pecan Street Cafe in Austin; the cost, $20, is not included in the registration fee. Other meals and receptions during the conference are included.

As a convenience for those going on to ALA Annual Conference in Dallas, a chartered bus will leave Austin at 3:00 p.m. on June 22, arriving at ALA hotels in Dallas after 9:00 p.m. En route the bus will stop in Waco for a tour of the Armstrong Browning Library at Baylor University.

Preconference registration is limited to the first 250 applicants. The registration fee of $85 for ACRL members, $125 for non-members, should be sent in by May 19. Late registrations will be accepted on a space available basis after May 19 at an additional cost of $15 per person.

Accommodations will be at the Sheraton Crest Inn, 111 East First Street at Congress. A housing form will be sent upon receipt of your registration.

Additional information and registration forms for the preconference may be obtained from: RBMS Preconference, ACRL/ALA, 50 E. Huron Street, Chicago, IL 60611. ■■

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