PLANNING PROCESS AND CONSIDERATIONS FOR A STATEWIDE ACADEMIC LIBRARIES INFORMATION SYSTEM IN OHIO

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Abstract

Academic libraries in Ohio have led in cooperative library automation, with the establishment of OCLC in 1967 as one example. Beyond OCLC, which provides online shared cataloging, interlibrary loan and the world's largest bibliographic database, many have developed or acquired local systems to meet the needs of individual libraries. A 1986 study by the state Board of Regents recommended development of an Ohio Libraries Information System (OLIS) which would permit students and faculty at any public university to have full access to the resources at any public university in the state. Beyond bibliographic access, the system emphasizes information delivery. This paper describes the planning process and considerations of the system which will go to REP in June 1989.

1. Ohio: The Birth Place of OCLC

Cooperation for automation and resource sharing among academic libraries, especially the state-supported university libraries, has been firmly established in Ohio since the 1960s. The most important accomplishment was the establishment of OCLC

in 1967. Originally, OCLC was the abbreviation for Ohio College Library Center, an entity founded by a group of academic libraries whose institutions were members of the Ohio College Association. Under the leadership of the Inter-university Library Council (IULC), an informal organization of the library directors of state-supported universities, initial funding was obtained from the Ohio Board of Regents, the planning and coordinating agency for all state-supported institutions of higher education. OCLC's success in creating a central bibliographic database of MARC (MAchine-Readable Cataloging) records to facilitate online, shared cataloging by participating libraries induced many other libraries to join. Within fifteen years, OCLC had become a multi-type library network. The membership had grown from 48 in 1967 to 2,934 in 1982, covering every state of the Union (Maciuszko, 1984:17 & 219). The expanding membership caused OCLC to change its name and governance. Today, OCLC stands for the Online Computer Library Center. As of June 30, 1988, OCLC had 9,400 participating libraries of all types and sizes in 50 states and 23 other countries with 17,748,222 bibliographic records, making it the world's largest bibliographic database. In 1987-88 alone, 21.9 million books and other materials were cataloged into the database, and 3.78 million transactions for interlibrary loans were handled (OCLC, 1988).

By the late 1970s and early 1980s, with the advances in mini-computer technologies, many libraries found it desirable to develop or acquire local library systems for other library functions not provided by OCLC. In 1988, there were 50 library systems vendors in the market (Walton & Bridge, 1988), most claiming to include a variety of integrated library functions. Additionally, many of these systems are capable of networking among a group of libraries on a local or regional basis. Even with local systems, most libraries still participate in OCLC for shared cataloging and interlibrary loans. In Ohio, for example, of the thirteen state-

supported universities and two medical colleges, all of which are members of OCLC, one has a locally developed system and eight others have acquired local system (Table I).   Nearly all are capable of providing an online public access catalog (OPAC), acquisitions, fund accounting, circulation, and serials control.

Table I   Automated Local Library Systems
in Ohio Public Universities

University/Medical College	Local System
University of Akron	Virginia Tech Library System
Ohio University	Virginia Tech Library System
Youngstown State University	Virginia Tech Library System
Bowling Green State Univ.	OCLC LS/2000
University of Cincinnati	Washington Library Network
Ohio State University	LCS (Locally developed)
Wright State University	Data Research Associates
Cleveland State University	NOTIS
Kent State University	NOTIS
University of Miami	No system
Central State University	No system
Shawnee state University	No system
University of Toledo	No system
Medical College of Ohio	No system
Northeast Ohio Univ. College of Medicine	No system

To facilitate resource sharing, the thirteen university libraries have a reciprocal borrowing agreement allowing faculty and students at these universities to use each other's libraries. Inter-library loan and photocopy requests among IULC libraries receive priority attention and are free of charges. Those libraries with a local system allow the other libraries remote dial-up access. Through OCLC these libraries all have access to the bibliographic records of the others; however, such records do not indicate the

number of copies in a given library nor circulation status. Information on serial holdings is often incomplete or absent. Further, OCLC's massive database does not yet allow for subject, keyword, or boolean searching. Most local systems provide these capabilities.

2. A New Initiative

In 1986, facing massive requests for new and enlarged library facilities on state-supported campuses, the state legislature mandated that Ohio Board of Regents assess the need for space by the university libraries and possible alternatives. The Board created a seventeen-member Library Study Committee, chaired by Dr. Elaine Hairston, Vice Chancellor for Academic and Special Programs of the Board of Regents, consisting of a university president, a provost, two vice presidents, two deans, two library directors, a professor, an OCLC researcher, a publisher, and four additional Board of Regents senior staff officers. The Committee decided early in its deliberations that its charge would require assessment of "the role of the academic library . . . in its broadest contemporary sense" and that it "should consider such opportunities for improving the quality of libraries as might appear in the context of its considerations." (Ohio Board of Regents, 1987: vii)

In its published report of the year-long study (Ohio Board of Regents, 1987), the Committee felt that:

This wider perspective is necessary because the academic library of today has a threefold purpose, serving not only as a storehouse of information, but also as a gateway to information held elsewhere, and as a center for instruction about information. (p. vii)

Accordingly, the Committee's recommendations centered on

three broad areas:

1) Collaboration, which encompasses a range of issues such as colla-
    borative acquisitions, shared access, and shared storage;
2) technology, including high density means of publication such as the
    existing microform and the emerging compact disk;
3) alternative storage, including the various methods of maintaining
    rarely used materials in a warehouse environment. (p. vii)

The principal recommendation for collaboration was to implement "as expeditiously as possible a statewide electronic catalog system" — the project, initially the Ohio Library Access System (OLAS) was later named the Ohio Library Information System (OLIS). Collateral recommendations included retrospective conversion of remaining paper catalog records to MARC format, the development and implementation of a statewide delivery system for library materials, and a plan for a cooperative preservation program.

3. Ohio Library Information System: The Rationale

Soon after the release of the Committee Report, the Ohio Board of Regents acted to begin planning for a statewide electronic library system. They commissioned a feasibility study (RMG Consultants, 1988) and an evaluation of centralized vs. distributed approaches to the statewide system (Hurley, 1988), established a steering committee and three task forces (one each for systems managers, librarians, and users), held a working conference featuring reports of experts on multi-campus systems from seven different states, drafted a planning paper and held regional hearings, and prepared a "Request for Information" (RFI) document. A chronology of events from the formation of the Library Study Committee to the issuance of the RFI is recorded in Table II.

Table II   Chronology of Events

Fall 1986	Library Study Committee formed by Ohio Board of Regents
Sept. 1987	Library Study Committee report, *Progress Through Collaboration, Storage, and Technology*, issued
Fall 1987	Ohio Board of Regents commissions a feasibility study of statewide system from RMG Associates
Winter 1987	Steering Committee appointed
March 1988	Task Forces for systems managers, librarians, and users established
Apr.-Aug. 1988	Task Forces meet, work toward planning document and RFI
July 1988	Board of Regents receives capital budget appropriation of $2.5 million for planning
Summer 1988	Board of Regents commissions an evaluation of centralized vs distributed approach to statewide system
Sept. 1988	Co-directors for planning hired
Sept. 20, 1988	Draft of planning paper circulated
Sept. 27-28, 1988	Working Conference I in Columbus
Nov. 2, 1988	Planning Paper circulated
Dec. 5-9, 1988	Regional hearings on the Planning Paper
Dec. 16, 1988	RFI draft circulated
Feb. 3, 1989	RFI sent to vendors

Table III presents the Projected Timetable of Future Actions.

Table III Projected Timetable of Major Actions

Apr. 15, 1989	Vendor responses to RFI due
May 2-3, 1989	Working Conference II in Kent
June 15, 1989	RFP sent to vendors
July-Aug., 1989	Vendor demonstrations
Sept. 4, 1989	RFP responses due
Sept. 15, 1989	Capital budget request for 1990-92
Sept. 22, 1989	Acting director and initial staff hired
Dec. 1. 1989	Vendor/system selected
July 1 1990	Capital budget for 1990-92 available

| Aug. 1, 1990 | Operating budget for 1991-93 |
| July 1, 1991 | Operating budget for 1991-93 available |

First Phase of Implementation Begins

The planning Paper, issued on November 2, 1989 (OLAS Steering Committee, 1988), was divided into the following sections:

- Goal statement
- Need for an Ohio Library Information System
- Assumptions
- Governance issues
- Tentative project timetable

Because the currently installed six different local systems at the nine IULC libraries are not compatible, direct communication among them is impractical. OLIS will connect local systems at the thirteen state universities, plus the two medical colleges. OLIS is conceived as a multi-dimensional information system which will integrate traditional catalog and circulation functions for a state-wide system with a document delivery service to make the information resources readily available for users from each participating university and beyond.

The Ohio Board of Regents has emphasized the importance of the system by incorporating OLIS into its Selective Excellence initiatives — nationally acclaimed challenge grants to encourage outstanding programs specially funded by the State of Ohio. Although OLIS will directly benefit the faculty, researchers and students of the state-supported universities initially, the system will be available to all citizens in Ohio and later may be expanded to include other institutions of higher learning and other types of libraries.

The Planning Paper (OLAS Steering Committee, 1988:4-5) identifies the following reasons for creation of OLIS:

- Access to the diverse resources of IULC libraries.
- Enhance interlibrary loan and inter-institutional borrowing.
- Cooperative collection development and management.
- Access to centrally maintained databases and other information resources.
- Research for further improvement of information access.

4. Basic Assumptions for System Design

The heart of the Planning Paper treats basic assumptions (pp. 5-16) which outline the bases for system design and specifications. For categories of assumptions are identified:

- General assumptions,
- Access and use assumptions,
- Functional assumptions, including:
  - Catalog creation and maintenance,
  - Document delivery and circulation,
  - Acquisitions and serials,
  - Collection development and maintenance,
  - Online public access catalog, and
- System assumptions.

The following summarize important assumptions:

1. A decentralized (or distributed) model with individual local systems linked to a central system is preferred. Diagram I shows one such model which links each local system to a central system via a Linked System Protocol (LSP) or internal protocols.
2. The system will be designed with one standard command structure for all users. It is an end-user driven system.
3. The local online catalog will serve as the first database for bibliographic searches before searching the centrally maintained database.
4. Access to circulation information in the online catalog is considered an essential element of the system. Although all
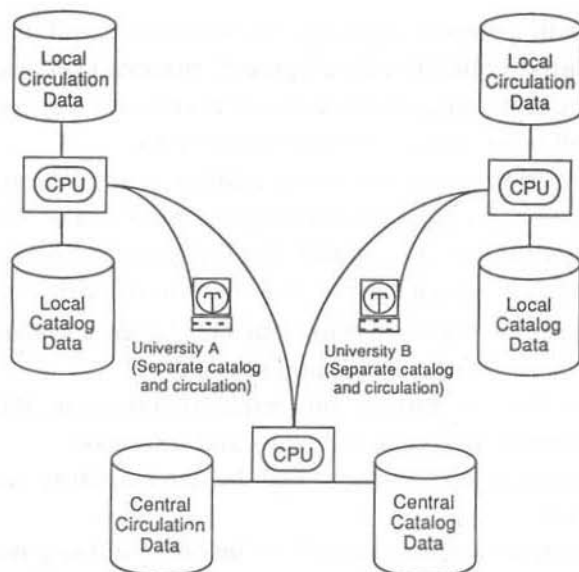
Central System Linked via LSP or Internal Protocols
to Local Catalog and Circulation

Diagram I. Preferred System Configuration

Ohioans will have access to the system, users affiliated with participating institutions will be able to directly initiate requests for document delivery from any of the libraries.

5. The system will have a wide variety of search capabilities including keyword and Boolean operators.

6. OLIS will not be an interlibrary loan system, but a intrasystem circulation and document delivery network. A statewide circulation policy shall reflect this philosophy.

7. Effective and expeditious document delivery will be provided as an integral part of OLIS.

8. Besides traditional bibliographic information, OLIS will provide direct access to the full text of journal articles or the tables of contents of individual publications.

9. OLIS will provide capacity for collection and use analysis, cooperative collection development, preservation, etc.
10. Updates and transactions to local nodes and the central database will occur simultaneously in real time.
11. The selection of a system is neither a simple procurement process (e.g., acquire an existing system based on responses to REP) nor an entrepreneurial development process (e.g., design a totally new system) but a combination of both: the selection of a vendor(s) to work with Ohio to design a system that will support state-of-the-art capabilities and use.
12. OLIS will move toward full implementation in stages which are governed by local constraints and interests.
13. The development process will be participatory and widely discussed.
14 Participating institutions will be involved in the governance of OLIS.

5. The Road Ahead

At the time of this writing (March 1989), the Request for Information (RFI) document has gone out to some 50 vendors and interested parties. The responses are due on April 15. In the meantime, the Task Forces are working on functional specifications which will be included in the Request For Proposal (REP) document to be issued on June 15. Specialized consultative working conferences on the functional specifications are scheduled for late April and a second general working conference is scheduled on May 2-3 to consider the vendor responses to the RFI and to finalize the RFP.

Although the final shape of OLIS is still unclear, all involved in the process are encouraged by the progress thus far and remain optimistic about the future. Many questions remain, some of which will not be answered until the vendor and system have been

selected and the governance structure and funding clarified.

A major question is not only what will be the system architecture, but whether there is a system that will do all that is expected. There are also concerns about whether the new system and its various components to be selected will indeed perform better than the existing local systems in all major functions. Can transition be accomplished with minimal interruption of services? Will the governance structure be able to balance central management and local control? How will OLIS be financed after the initial capital funding by the State and will there will be some kind of compensation or incentives for libraries which have invested funds in their local systems? Virtually all involved are concerned that OLIS should be viewed not as a means to reduce future library funding but rather as increasing the effectiveness and richness of library resources and services to benefit all library users. Moreover, the beneficiaries should include not only users at the state-supported universities but all other Ohioans who may use them.

Document delivery, cooperative collection development, retrospective conversion, preservation, regional depository facilities for less used research materials, and the application of new technologies are all complements of the new system which, if effected correctly, will raise academic libraries in Ohio to new plateaus of excellence as they enter the 1990s.

The major academic libraries in Ohio are once again undertaking a giant step together after the success of OCLC. The results may be equally as far reaching as the first one.

References

Hurley, Bernard. Centralization vs. Decentralization for Large Library Systems in a Changing Technological Environment: A Position Paper for the Ohio Board of Regents. Berkeley, California: Hurley Consulting Corp, 1988.

Maciuszko, Kathleen L. *OCLC: A Decade of Development, 1967-1977.*   Littleton,
    Colorado: Libraries Unlimited, 1984.

OCLC Annual Report, 1987/88:   Furthering Access to the World's Information. Dub-
    lin, Ohio: OCLC Online Computer Library Center, 1988. p. 4&20.

Ohio Board of Regents.   Library Study Committee. *Academic Libraries in Ohio
    Progress Through Coliaboration, Storage, and Technology.   Report of the Library
    Study Committee.* Columbus, Ohio: Ohio Board of Regents, 1987.

OLAS Steering Committee.   Ohio Library Access System Planning Paper, November 2,
    1988. Columbus, Ohio: Ohio Board of Regents, 1988.

RMG Consultants.   Alternative Approaches to Linking State University Automated
    Library Systems for the Ohio Board of Regents. Chicago, RMG Consultants, 1988.

Walton, Robert A. & Bridge, Frank R. "Automated System Marketplace 1987: Maturity
    and Competition." *Library Journal,* V. 113, No. 6 (April 1, 1988), pp. 33-44.