OhioLINK

A Concise History

by William J. Studer

OHIO LIBRARY AND INFORMATION NETWORK
A BRIEF HISTORY
WITH INDICATIONS OF SIGNIFICANCE AND STATUS

As we celebrate the 10th anniversary of OhioLINK's phenomenally successful and award-winning programs, we actually mark the 16th year in terms of visioning and planning. And harkening way back to antecedents of cooperation, we peel off 35 years to the creation in 1967 of OCLC, the Ohio College Library Center, whose founder, Fred Kilgour, is the first recipient of the Voinovich award. The now-named Online Computer Library Center arguably represents the greatest advance in library progress in the 20th century; but its humbler origins (also assisted with public funds via the Ohio Board of Regents, or OBR) were similarly designed to do for Ohio what OhioLINK is doing today. It's just that OCLC cataloging products and services became so much in national demand so quickly that Ohio had to do the right thing and share OCLC with the nation and world.

I believe I can safely claim that OhioLINK is the only academic library consortium whose genesis was a space problem.

The projected three-biennial capital budget proposals which OBR received in the mid-1980's included ca. $121 million in expanded library buildings due mainly to burgeoning print collections. This was viewed with trepidation because a little historical research revealed that it had been 15-20 years since the last round of library construction; and, knowing collections roughly double in that time frame, here was the first ominous evidence of this repetitive cycle. The General Assembly's response was to direct OBR to conduct a study of cost-effective alternatives to cyclical, and unaffordable, traditional library construction for storage of library materials, which in turn led to the appointment of the Library Study Committee (LSC) in July 1986 by then Chancellor William Coulter. The Chair was Vice-Chancellor Elaine Hairston. But the charge went well beyond the narrowly focused storage issue, asking the committee to examine academic libraries in the broadest possible context with an eye to transforming them from individual repositories into a collective resource for the emerging electronic information age.

Joining Dr. Hairston on the committee were 16 others, including OBR staff, and a diverse group of university, business, and technology leaders, as well as I and my colleague Don Tolliver from Kent State as library administrators.

Now committees have been the butt of endless humor about inefficiency, inefficacy, etc., which these two quotes illustrate:

TO GET SOMETHING DONE A COMMITTEE SHOULD CONSIST OF NO MORE THAN THREE PERSONS, TWO OF THEM ABSENT.

MITCHELL'S LAW OF COMMITTEES: A SIMPLE PROBLEM CAN BE MADE INSOLUBLE IF ENOUGH MEETINGS ARE HELD TO DISCUSS IT.

But I can tell you that nothing could be more contrary to OhioLINK committees, beginning with the Library Study Committee whose members undertook their task with great enthusiasm, creativity, and true synergy. Virtually the same can be said of the legion OhioLINK committees, local and central. With good leadership, committees at all levels were and are the lifeblood of the organization, the wellspring of development and progress. The fact that so many have served and still do serve, is what made OhioLINK the relatively easy buy-in it was and the success that it is. Member institutions definitely feel a sense of ownership and the power to influence outcomes.

LSC was also an efficient committee, taking only nine months to complete its study and deliberations; and its report, titled <u>Progress</u>

Through Collaboration, Storage and Technology, was issued in September '87, with three key recommendations: (1) Creation of a Book Depository System for dense, off-site storage of library materials; (2) Mandate that the State of Ohio implement, as expeditiously as possible, a statewide electronic catalog system, with direct user access and a delivery mechanism; and (3) Appointment of a Steering Committee (consisting of librarians, faculty, administrators, and computer experts) to define the elements of such a system.

It is appropriate at this point to offer plaudits for Elaine Hairston's leadership of the LSC. She kept us firmly, but amiably, focused and on track; and she had a real knack for involving all members and eliciting the best contributions from each. Elaine subsequently served as OBR Chancellor from 1990-1997, and remained a steadfast supporter and advocate.

Identifying a dense storage model may well have been the easiest task, albeit there were site visits to see three extant variations: (1) the University of California System; (2) the University of Illinois; and (3) Harvard University. For cost and simplicity, the Harvard model was chosen, and five were built regionally, based on shared usage. The Southeast Depository (Athens) is sized and configured a bit differently because they adapted to an existing building.

With capacities of approximately 1.5 million volumes, these are peculiar warehouses, with a footprint of 9,000 sq. ft., in which books are stored by size in boxes, rather than in classification order, on industrial shelving 30 feet high, 180 feet long, and 36 inches deep, and kept in very cool temperatures. Materials are retrieved daily so that no user has to wait long.

These facilities will contain ca. 5 million books and journals at the end of 2002. Collective construction costs for initial facilities were $10-12 million, whereas to equate the same capacity in conventional library construction would have cost at least $75 million.

While on these site visits, the delegations also examined carefully their electronic catalog systems, but here the examples were found considerably wanting compared with OhioLINK's avant-garde aspirations; and thus the need for a Steering Committee to define an advanced system. Appointed in early 1988, it was chaired by Vice-Chancellor Garrison Walters.

William Coulter complimented LSC on its report, saying that as a result of creative insight and carefully crafted recommendations, what appeared to be a dilemma can now be viewed as a genuine, exciting opportunity to strengthen higher education.

In my own view, the report, by its very content, made another

vital point in underscoring that the quality of academic libraries is integral to institutional excellence.

The Steering Committee took to its task purposefully and expeditiously, i.e., the serious planning that would define the elements of OhioLINK and culminate in a RFP and selection of a vendor to deliver the software and technical architecture to turn OhioLINK from ideas and concepts into operational reality. To assist the Committee in its efforts, Dr. Greg Byerly was released from Kent State and appointed full-time as pro-tem Director of Library Systems, while J. Carroll Notestine of Ohio State was asked to serve as consultative Director of Computer Systems. Three sub-committees were also appointed to provide essential directional input representing the systems managers' view, the users' view, and the librarians' view.

Another critical form of planning input came from three conferences held in September '88, May '89, and January '90. With attendance representative of all areas of interest, their purpose was to discuss issues and refine ideas relative to OhioLINK's technical, operational, and policy parameters.

The first of these was perhaps the most important in that it involved a panel presentation of seven out-of-state experts representing the best thinking on such issues as services to users, technology and associated architecture, governance and finance, and

organizational structure. Countless other small and large group discussions also occurred throughout the state; and their observations and advice percolated upward.

Both as a result, and to form the basis of further deliberations, the Steering Committee published a Planning Paper in November '88 which articulated a rationale and assumptional blueprint for the OhioLINK system. The Regents also issued a more promotional piece in December '89. Titled Connecting People, Libraries & Information for Ohio's Future, it delineated what OhioLINK could and would become.

We all know that committee reports and their ilk have short shelf lives, but these three major documents from '87, '88, and '89 maintain striking relevance in their premises, philosophy, and vision. Each brings OhioLINK into sharper programmatic focus, and they remain legitimate guideposts and touchstones even today.

All this frenetic activity was of course directed at the central conclusion of selecting the desired system for OhioLINK; and to that end, a copiously detailed Request for Proposal (RFP) was released in August '89.

Eight respondents were selected for further review, and widely attended vendor presentations were conducted in February 1990, thus providing the Steering Committee a 1,000 points of

enlightened recommendations on vendor choice. Site visits to the final four were made in May 1990 to assess each system at a working installation; and with all this input, the Steering Committee selected Innovative Interfaces, Inc. in June 1990--with really good concurrence.

I must add here that Greg Byerly was the glue that held these very complicated and time intensive processes together, beginning with the planning paper of November '88, through contract completion; and Susan Logan of Ohio State was an unsung participant in much of his essential work. We also owe a great debt to Vice-Chancellor Garry Walters whose leadership, dedication, and enthusiasm kept the Steering Committee creatively and productively engaged.

It is important to understand that, in submitting the winning proposal, III viewed OhioLINK not only a favored client with a special relationship, but also an entrepreneurial partner in development of this yet-to-be unique model with stand-alone local systems linked to a powerful central site.

OhioLINK now needed a more formal organizational structure to negotiate a contract with III and to begin planning for implementation. Len Simutis (Steering Committee member and Dean of the Graduate School at Miami) generously agreed to assume the

role of Interim Executive Director in September 1990. The OhioLINK provostial Governing Board met in October to assume formal responsibility for OhioLINK, and the Steering Committee was disbanded. Several implementation committees were appointed at this time to provide essential input, with the goal of having six sites installed in short order. Again, it was felt that more interim regular assistance was required to maintain progress. Marcia Deddens of Cincinnati was designated part-time Assistant Director for Site Development, and Carol Diedrichs of Ohio State was named part-time Assistant Director for Policy Development. In November 1992, the OhioLINK central catalog was activated with six merged local catalogs of the original 18 library participants.

In spring 1992, the search for a permanent Executive Director was reactivated, and Tom Sanville of OCLC was selected and took office July 1. Tom of course is still with us; and, believe me, while he always demurs, he must be accorded major credit for the unequaled success that is OhioLINK ten years later. We simply could not have a better exec. We also want to extend great thanks to Len Simutis for taking time out from his professional career to lead OhioLINK through its early period.

This would be a good time to interject that, in spite of an incredible spirit of cooperation and relatively easy buy-in to the

OhioLINK model, it would not have happened so resistance-free without the financial incentive provided through the OBR. We must remember that among 18 original participants there were nine disparate, incompatible systems in place. Some of these systems were well regarded locally and yet had to be abandoned in favor of the III system. Regents funds paid for the initial installations. The central site staff and infrastructure also had to be financed, as did the enormous task of integrating central catalog records and the conversion of several hundred thousand records not yet in electronic format. The influence that the Regents provided through funding subsidies cannot be overstated. The cost of installation for the original 18 sites and the central site was ca. $20 million, and subsidy continued as two-year publics were added. Private colleges have also been provided ongoing support as incentive to join the system. OhioLINK owes OBR an incalculable debt of gratitude for unwavering program support and advocacy over its entire history.

OhioLINK's broad goal is to increase research effectiveness and, thereby, the productivity of teaching and learning for both faculty and students, whose collective number is reaching 600,000 among 83 member institutions. OhioLINK's special strengths in accomplishing this are to expand and enhance the accessibility of information and its ease of use.

OhioLINK greatly benefits higher education: by maximizing the availability and utility of library collections and scores of electronic information resources; by dramatically improving direct access for all, no matter what institutional affiliation; and by effecting prompt delivery in the most cost-effective way. OhioLINK, therefore, better prepares students for the kind of workforce today's economy demands and for lifelong learning in a fast-paced information age.

Guiding these goals and benefits are program philosophies which have served well and stood the test of time. Chief among these are:

*Minimized mediation in favor of direct user-empowered access.

*Abundant rather than rationed information resources.

*Immediate and integrated access, rather than delayed, segregated access.

*Joint, leveraged spending to provide more information for less cost.

*Progressive cooperation rather than parochial orientation.

As reported in OhioLINK publications, the scope and growth and success of OhioLINK's programs are clearly evident; but let me briefly reinforce the impact of four core programs as exemplars of

OhioLINK's importance in fulfilling Ohio's higher education mission.

The OhioLINK Central Catalog has grown to 8.1 million master records, representing unique titles. Amazingly, 56 percent are held by only one library; and cumatviely 70 percent are owned by only two. All users have equal access to this vast collection and may borrow any available title directly through patron-initiated loans, which arrive by van in typically two to four days. Begun in 1994, latest figures indicate an annual borrowing rate of 600,000, more than a ten-fold increase over traditional ILL's between Ohio libraries less than a decade ago. It is interesting to reveal that one of the greatest fears expressed by OSU was that its much larger collection would be raided by smaller members; but, just the reverse has eventuated, with OSU being a net borrower. What better evidence that ALL members benefit!

OhioLINK provides a broad array of just over 100 general and subject-oriented databases, most with associated full electronic text; and searches among these resources have risen with steady rapidity to ca. 13.7 million/year, yielding not only referrals but also several million textual downloads, such as magazine, newspaper, and encyclopedia articles, poems and plays, government documents, etc. A great many of the databases serve undergraduate needs particularly

well.

The Electronic Journal Center (EJC) contains over 4,500 scholarly journals, and perhaps is OhioLINK's most celebrated asset. With a start-up in mid-1998, with only 1,400 or so titles, through September 2002, there have been six million articles downloaded; and annualized downloads are running at just under 2.6 million-- exhibiting a current growth rate of an unbelievable 35 percent. As an illustration of average enrichment, for each EJC journal a university held in print, it now has access to four additional titles, where in fact majority use occurs. For smaller libraries, the EJC titles are substantially all new.

At just over three years old, the Digital Media Center (DMC) has added the critical dimensionality of difficult-to-share visual resources. It already includes over 80,000 art, architecture, and archeology images, increasing at 20,000/year; 40,000 historic maps; 300 Landsat 7 satellite images; 800 foreign language and physics experiment videos; a multiplying cadre of local historic photo and various archival collections; and, likely very soon, some 500 digitized films for the humanities and sciences, which will be of particular utility to two-year colleges. The diversity is evident; the growth curve is steep; and the boundaries are fluid.

What all these figures, indicators, and references really mean

is very simple: OhioLINK resources are now essential in successfully filling the information needs for both students and faculty across a spectrum of disciplines--with ease of use, timeliness, and to a degree unimagined a decade ago.

Noting how much difference a decade makes, one observer recently pointed out that most of Ohio's students of 2002 take current library programs and services for granted. But, only back in 1992 faculty and student research was conducted very differently. Students made do with print books and journal articles available locally, using mainly printed indices as locators; graduate students and faculty whose needs were not met locally either had to travel or exclusively resort to cumbersome Interlibrary Loan (ILL) with its two/three week delivery time (and a high failure rate). Even undergraduate students with ILL privileges rarely had the time to wait for results. OhioLINK-related faculty and students now have the best direct access to information resources of those at any other university or college, bar none.

John Berry, editor of Library Journal, came to Ohio in 1997 and had this to say about OhioLINK in a June 15 '97 editorial: "I saw the future in Ohio. It was only a glimpse ... Still, if you want to watch academic ... libraries hard at work creating the library of the future, be sure to take a close look at Ohio." ... "Rather than wait for the future

to be imposed ..., Ohio's librarians have boldly ventured out to create that future."

Before concluding, I would like to make some abridged points about OhioLINK's efficient and cost effective use of technology.

OhioLINK per se gives Ohio national technology recognition, with its massive shifting and growing central infrastructure which so effectively and efficiently invests in technology only once to accommodate expanding programs for the many. Technology requirements of the various services are integrated so as to employ the flexibility of interchangeability in handling such huge files as the data bases, e-journals, and DMC graphics. Software systems and associated content data now interchangeably use 45 CPU's and consume 5.1 terabytes of disk storage, which is used in coordination with the massive tape silo storage system of the Ohio Supercomputer Center (OSC). Ohio has thus avoided the costly duplication and redundant maintenance so often experienced elsewhere with such a large, dispersed user community; and in doing so, OhioLINK has saved the state many millions of dollars. Other states, and even multi-state consortia, look to Ohio for technical expertise in handling such gargantuan, complex system needs.

OARnet (Ohio Academic Resources Network) is the other essential OhioLINK partner that provides the system-wide

instantaneous access and feedback for electronic resources – Users find even a few seconds of delay very annoying!

It's when you merge use of these three state-of-the-art technology resources--OSC, OARnet and OhioLINK-- that you can offer combined computing and telecommunications power and information services that lead the nation.

CONCLUSIONS

Ohio's academic libraries are no longer in the parochial book business; they are in the dynamic, multiple-source information business, operating individually and collectively as gateways to knowledge in a fast-paced digital age. OhioLINK has greatly facilitated this transformational revolution, which keeps libraries relevant and indispensable to their institutions.

If we provide access to vast stores of information resources, users will come, and the expansion in use, abetted by electronic technology, will be dramatic. What we had in print locally is obviously not even close to what we needed; and previous use behavior was a poor predictor of real wants.

Ample proof of this is exhibited with the explosive growth in the use of combined book collections through patron-initiated, unmediated borrowing; with the incredible number of article downloads from the Electronic Journal Center (EJC); and with the multi-million searches in our bank of databases, which frequently lead directly to electronic full text. Continued expansion of easy-to-use, online resources will clearly lead to ever greater volumes of use. We must then concentrate on broadening and deepening the resource base through the potent economics of group purchase which has proved so far, far superior to individual libraries acting as independent agents.

OhioLINK and library budgets work powerfully together to increase access to more information, well illustrated by two centrally licensed resources: (1) databases which in the current year cost $6 million, with libraries paying $2 million of that total; and (2) EJC with current costs of $19.5 million, of which libraries cover $15,795,000. OhioLINK central subsidy is obviously critical, but interdependency is the essential key, and we don't believe this is well-recognized. We might add here as a non-trivial footnote that, if OhioLINK's 83 member libraries individually licensed these databases and journals, the collective cost would be an astounding $94 million.

OhioLINK has indeed done wondrous things and has certainly made great strides in meeting its goals; but it is not a finished program. Rather, it is a work in progress, still struggling for

comprehensive coverage of information resources to meet all disciplinary needs well. Recent budget setbacks have reversed forward momentum; but what must also be realized is that, when institutional budgets are cut, OhioLINK's library partners suffer proportional cutbacks within their institutions, thus further eroding program funding in a shared-cost model. Libraries represent a very, very small percent of Ohio's overall annual higher education expenditures (cited most currently at $6.93 billion); and OhioLINK's $11 million is infinitesimal (.16 percent, i.e., 16 one hundredths of one percent). But both are programmatically very susceptible to even small reductions. Nearly all of OhioLINK's modest budget is pre-committed to information licensing contracts and associated technical infrastructure costs; and loss of funds inevitably means loss of information resources for our users, as well as placing a greater burden on equally strained library budgets. OhioLINK and its members are budgetarily joined at the hip!

OhioLINK has achieved its success through staunch support of OBR and largesse of the General Assembly, no question. But we cannot sustain the program, let alone advance it, without continued steady financial support. Ingenuity, finesse, and hard-nosed bargaining on license costs can go only so far. OhioLINK desperately hopes for the delayed capital budget request to come through intact,

and its latest operating budget request asks for restoration of lost funds, and very small increments for resource expansion. I hope it will be given exceptional consideration because the dollars are relatively few, and the bang for the buck is truly extraordinary. In fact, I challenge anyone here to identify any state-supported program that can best OhioLINK in terms of quality and quantity of impact per dollar spent.

Mark Twain once said that "too much of a good thing is never enough." I think the same might be said of OhioLINK. Much as it has accomplished, it has not achieved fulfillment; and I really doubt if anyone believes OhioLINK will ever provide us more than we need. It leads the nation, and, yes, it is the envy of the nation in provision and delivery of information products and services. Let's take great care to maintain, and enhance, that stature.

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