

Redefining the academic library for the twenty-first century: Citizenship in the bibliographic polis

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Abstract

At the end of the 20th century, US academic libraries are struggling with three fundamental problems - inadequate library funding, demand for a wider range of library materials and lack of power in dealing with publishers. OhioLINK is allowing Ohio academic libraries to deal with each of these problems as we prepare to enter the 21st century but the solutions require a basic shift in how we provide traditional services and ultimately a re-visioning of how we view academic libraries. Both solutions and the emerging vision of the academic library are described.

My assignment today is to talk about how the American academic library is changing, changing not in small or incremental ways but in some very basic and important ways, using the development of OhioLINK to illustrate that ongoing change. My plan is to briefly reacquaint you with what OhioLINK is; illustrate how it is helping us solve fundamental library problems in the U.S. dealing with funding, costs and power; and how OhioLINK is ultimately transforming our views of the academic library. By fundamentally changing how academic libraries go about their tasks, we are establishing as well a new basis for, a new way of thinking about, academic libraries. It is a transformation which keeps traditional library goals and values but which goes about accomplishing them in a vastly different way.

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Ohio review

As you may recall from Don Tolliver's presentation last year, Ohio is one of the larger (population-wise) industrial states located in the U.S. heartland. To a world audience of librarians it is probably better known as the state which began, and still provides a home for, OCLC, first known as Ohio College Library Center and now by the more cosmopolitan name of Online Computer Library Center. Although OhioLINK has no organizational or historical relationship to OCLC, the fact that it originated in the same state is more than coincidence I feel. For a conservative, traditional state, Ohio has an intriguing history of visionary projects. Incidentally, to help you understand just how conservative Ohio is, I remind you of Mark Twain's comment about Cincinnati, Ohio. If the end of the world ever comes, I want to be in Cincinnati. Everything there always happens 15 years later than it does anywhere else. And yet this very strong conservatism has an odd visionary counterpoint and not just in the library world. I remind you for instance, that the Wright brothers who developed the first heavier than air aircraft lived in Ohio ~ indeed, just a few miles up the road from Cincinnati.

In simplified form, the OhioLINK consortium consists of all the academic libraries in the state of Ohio linked electronically by a common software (Innovative Interfaces, Inc.) and hardware (DEC) system. The first OhioLINK library (University of Cincinnati) was brought online in 1992 and there are presently 57 library members with another 18 libraries scheduled to come online in January, 1999. Both governance and automation are federal in structure. This means that each library maintains its own collection and machinery but participates in a common catalog of all holdings as well as a common composite database of 66 research tools and full text collections. In terms of governance, all decisions are made by two councils of OhioLINK libraries — a library directors - council and a Provosts/Vice Presidents - council ~ and implemented centrally by OhioLINK staff. OhioLINK provides library resources for over 500,000 students, faculty and staff in Ohio and is capable of supporting more than 4,500 simultaneous users either through dial in connections or at some 104 library locations throughout the state.

The main point here, however, is not the size of the system or even the use of automation. It is how OhioLINK has transformed our abilities to deal with library problems and in the process begun to change the nature

of individual OhioLINK libraries. In the US academic libraries are dealing with a number of related problems --particularly inadequate funding and increased user need/demand. While most North American libraries continue to see their budget increase annually, the increases are almost universally less than the rise in inflation. If you swim upstream at two miles an hour but the river is flowing downstream at three miles an hour, you move backward rather than forward. Making the problem even worse is the increasing sophistication and knowledge of our patrons. Indexing and abstracting reference tools, union catalogs, the Internet and a host of other bibliographic tools have vastly enlarged our patrons' knowledge of possible information sources. And not surprisingly they want access to those sources of information. There's an American folk saying: "How are you going to keep them down on the farm, after they've seen Paris". Finally, we all struggle with the problem of annual serials inflation. Why does the price of journals increase so much more each year than almost anything else, we ask the publishers. And although they disguise it in more ways than President Clinton talking about Monica Lewinsky, the answer really is: "Because we can and you can't do anything about it".

Inadequate library funding, increased need for library materials, and lack of power in dealing with publishers were our problems. In each case OhioLINK has proved to be the solution by allowing us to think about traditional library services in a fundamentally different way. Let me explain with two OhioLINK examples.

Exploding the Book Collection By Transforming Interlibrary Loan into Circulation

Before OhioLINK, the University of Cincinnati had a book collection of just over 2 million volumes - respectable, but hardly earth shaking by North American standards. With OhioLINK we now have a book collection of over 27 million volumes. This represents the single largest collection in the United States outside of the Library of Congress. While some of my colleagues might quibble with me about what constitutes a "single collection", let me propose this definition: It is a collection which is directly available on a circulation basis rather than an Interlibrary Loan basis, regardless of how dispersed the collection is, i.e. regardless of how many collections locations exist or owning institutions are involved.

Using a union catalog to enhance the effectiveness of Interlibrary Loan, for instance, is merely an improvement; making collections available on a circulation basis represents a radically new reality. I believe there are five important tests which allow us to determine whether we are talking about a circulation system or an ILL system — tests which I can illustrate by describing how patrons use the OhioLINK collection. The tests for a circulation system are as follows: patron initiated; known item, known location; convenient/easy to use; fast and reliable; and inexpensive, i.e. affordable on a mass volume basis.

Let's start with "patron initiated". In the OhioLINK system, if a patron is unable to find an item in their local collection a single keystroke allows them to replicate the search on the entire OhioLINK database. If the item is located in another OhioLINK library, the patron may initiate the request for the item without any review or mediation by staff other than that which a standard circulation function requires, i.e. a student to get the book and check it out. When the patron initiates an interinstitutional request, a pull slip is generated in the holding library and a student assistant retrieves the item, does a preliminary checkout and puts it in a delivery bag for the appropriate library. When the patron picks up the item, the checkout transaction is finalized. The return of the item works exactly in reverse. The process, in short, is completely patron initiated.

Because the requests operate completely within the OhioLINK system, all requests are for known item, known location items. It is not necessary to establish the bibliographic identity or library home of the item. Again, quite different from traditional Interlibrary Loan where such determinations, usually requiring professional staff, are both time consuming and expensive. The third test is convenience/ease of use. When an OhioLINK patron finds an item at a library other than his own, one of the options presented him at the bottom of the screen is whether he would like to request the item. If so, the patron simply selects this option, enters the name of his home library and is prompted to enter three information elements: patron name, patron ID, and name of the library to which the item should be sent (a list of eligible libraries is available if desired or necessary). A patron may request such an item 24 hours/day, 7 days/week, i.e. at times when the library or ILL office is not open. Furthermore, there are no ILL forms to fill out and submit.

The fourth test is speed and reliability. Our design goal was to provide the materials within 2 days and with close to the same reliability as a

patron going into the local stacks could expect. All OhioLINK libraries have agreed to process requested items within 24 hours, i.e. they will retrieve each requested item, do the preliminary checkout and put it in a shipping bag for pickup within 24 hours of receiving the request. The actual movement of the shipping bags between libraries is undertaken by a commercial delivery service. Our contract with them specifies that they will deliver all bags within 24 hours of pickup. By and large, the actual operation is surprisingly close to our design hopes. Repeated internal studies over a 2 year period have shown that 41 to 44% of the requested materials are delivered within 2 days and 71 to 75% are delivered within three days, Ultimately 88% get delivered. The main problem we have with this remaining 12%, and which accounts for more than half of the 12%, is that the item cannot be found on the shelves. It has been mis-shelved, lost or stolen and the holdings record is simply inaccurate. In any case, we are in the process of making software changes which will allow us to easily pass such problem requests on quickly to other OhioLINK libraries. Once this software is in place we expect a standard fill rate of 95% or better.

And lastly, these OhioLINK transactions are cheap enough that we can handle them in mass volume. This is an absolutely critical point. It is not possible to develop sharing on a mass level if it is expensive. Recent North American ILL studies have shown that the combined costs of an ILL transaction for both the lending and requesting library runs around \$30.00 an item. OhioLINK out-of-pocket costs per item run around 40 cents per round trip (this is just the delivery cost our commercial delivery service charges us). If student labor costs are added in, the cost is still probably not more than one dollar per item. These bare bone costs are important if we are to make OhioLINK Interinstitutional borrowing a mass enterprise — which we are well on the way to accomplishing. Presently OhioLINK libraries are generating 92,000 such transactions per month, At a standard University such as the University of Cincinnati, we presently handle just under 3,000 such requests per week (half are borrowing requests and half are lending). Last year over 20% of our total circulation in Cincinnati involved OhioLINK libraries. Statewide, OhioLINK has already increased Interinstitutional borrowing among OhioLINK libraries by 20 times. A glance at the bottom of the displayed chart "Monthly Transactions Costs" illustrates why reducing transaction costs is so critical to high volume interlending. It controls what would otherwise be increased "ILL" costs of \$145,000/month.

In short, we have so changed borrowing among OhioLINK libraries, that it is no longer appropriate to call it Interlibrary Loan. It is, for all practical purposes, simply circulation. While there are some increased costs for such large scale sharing, it is still by far the cheapest, most effective way to add new volumes to the collection. At Cincinnati, for example, this means that in addition to the 30-50,000 print volumes we purchase locally each year, we have as well in the last five years added approximately 3.5 million virtual volumes each year as well to our local collection. New books added to any OhioLINK library's collection are for all practical purposes exactly the same as having them added to your own local collection. It's magic. Although each individual library has less money to spend on monographs than in former years, together we are adding huge numbers of new volumes to each library's collection.

The implications of such a system obviously go beyond ILL, however. There are clearly some significant implications here for collection development, for example. Such intense sharing of collections is presently based on collections which were originally meant to be stand-alone. If we could begin to coordinate collection development among OhioLINK libraries in order to reduce unnecessary duplication, after all 60% of the OhioLINK titles are held in more than one library, we could use the money thus saved to expand the overall coverage of the OhioLINK collections. We have begun to try to solve this problem.

Turning the tables on publishers — consortial purchase of serials

A second major opportunity which the OhioLINK system gives us is in dealing with the journal problem — issues of cost, publisher power, interinstitutional sharing and the need for increased access. If, as outlined above, we have dealt with the sharing of monographs not by incrementally improving the traditional system but by fundamentally changing its whole nature, i.e. transforming ILL into circulation, so also we have taken a radically different approach in dealing with journals. Our basic problem, probably not unlike yours since it is widespread, is that OhioLINK libraries were paying more money for journals but getting increasingly fewer subscriptions. While it appears to be an international problem, we know that it is at least a North American problem as

the Association of Research Libraries statistics show, [see screen] When we did an in-state study of a particular, large international publisher we found the same pattern -- each year OhioLINK libraries were paying more [see screen] but able to buy fewer titles. The traditional solutions, interlibrary loan among libraries from print copies (even when augmented by modern electronics) were not a great deal of help once you got beyond relatively few transactions. Even with Ariel II and ongoing improvements in scanning hardware, it proved to be a costly and time consuming enterprise to retrieve from the stacks, scan and send out copies of journal articles. Add to that publishers concerns about copyright infringement in the electronic world and the generally unsettled legal situation regarding use and distribution of journal articles electronically and you have an almost impossible situation — particularly for mass sharing of journal articles.

The problem here is first getting out of the death cycle where libraries pay more and get less and second, to find a way to share journals electronically which bypasses both the labor intensive problems of working with print as well as the legal problems of mass sharing. So, the OhioLINK approach has been to fundamentally bypass print and individual journal purchase altogether. Or put another way, our approach is to consortially, i.e. jointly, purchase system-wide rights to the fulltext electronic versions of the articles. In other words, rather than buy the journals individually in each library and then negotiate sharing agreements among ourselves (the traditional model), we simply buy system-wide access to begin with. Another way to look at it is that we have moved from individual subscriptions to journal titles to a consortial, in our case state-wide, subscription. There are many advantages with this approach, not least of which is that while in the print world there is often a problem of who gets to keep the single copy of a jointly purchased item, while in the electronic world everyone in effect gets to keep a copy of the jointly purchased item.

We have already concluded two of these deals, one for all the titles published by Academic Press (175 titles) and one for most of the titles published by Elsevier (about 1, 150 titles). We are in the process of concluding a similar deal with Springer and have a number of smaller deals with Society and University publishers in the works. From the first two deals alone, you will note on the screen a significant increase in the number of subscriptions available to individual OhioLINK libraries ~ over 62,000

new titles if the new titles available in each library are added together. It occurs to me that Ohio may have added more new net subscriptions in the past 12 months than literally the whole rest of the world put together.

Our deals follow a common pattern. The libraries get unlimited electronic access to the articles from some agreed upon starting date. Such use includes all reasonable academic, not-for-profit use. Faculty and students may access and download articles for their personal or instructional use to whatever degree necessary. In addition to access to all of the journals in electronic format, each library may maintain, without additional cost, the ongoing print subscriptions to titles currently owned. This has turned out to be important. Until everyone sees exactly how well the electronic access works and all the bugs are eliminated from the electronic version of the articles (and Elsevier has some serious problems), continued access to print subscriptions represents an important and reassuring aspect to our user population. Ultimately our expectation is that maintaining multiple print copies throughout the state will prove unnecessary (and an unnecessary expense) and that these will be reduced to one or two print copies for archival purposes. The agreement also specifies that even should the contract be discontinued in the future, continued access to the electronic articles covered by the contract period will be maintained in perpetuity.

As should be clear by now, cost is always a big issue for us. The cost of these agreements for each library is the sum of their present subscription costs plus 10%. Since even the biggest universities in Ohio were not subscribing to more than just over half of the titles for the two publishers, this agreement represents a doubling or greater of available titles for every one of the OhioLINK libraries for very little additional outlay. Viewing the Elsevier deal alone from a slightly different perspective, OhioLINK is making available for an annual cost of \$6.3 million what would otherwise have cost Ohio academic libraries \$46 million to purchase.

Also critically important is a cap on journal price inflation during the contract period to mid-single digit increases each year. Compared to regular double digit increases of the past, this too represents a substantial savings over the period of the contract. For example, the Engineering Library at Cincinnati will save over \$50,000 this year alone on reduced inflationary costs. You may be interested in an overall sense of the dol-

lar amount of these contracts. It helps explain why publishers are so willing to work hard to cut a deal. The Academic Press deal runs a total of around \$3.4 million over the three year period of the contract while the Elsevier contract runs around \$21 million for the three years of their contract. The lesson here is that it is not that hard to become a 600 pound gorilla (or perhaps here, a bibliographic Hercules); when libraries come together, the numbers get big very quickly.

Probably most importantly, however, this is clearly an arrangement which is good for both sides. The libraries have vastly increased not only their range of access, but the ease of access as well. The publishers have not only put their revenue stream onto a sustainable basis, but they have managed to increase that stream. In short, everybody wins.

Most interesting, however, is what happens to Interlibrary Lending. If all the libraries in effect own the journals and have direct access to their articles, there is no need to share those articles via ILL. Just as we have substituted circulation for ILL for books, so we have substituted joint ownership for ILL for journal articles. We get all of the advantages of a perfectly functioning ILL system without doing any of the work.

There is even a more radical possibility for doing away with ILL. Two years ago at the Consortium of Consortia meeting in Chicago (more about this Consortium in a minute), Chadwyck-Healey's national sales manager proposed that if the group assembled there could raise the \$400,000 annual subscription costs of one of their databases, they would simply make it available for all of North America, that is, for every North American library user it would simply appear as a free database. Although this proposal, for a variety of reasons, didn't ultimately work out, it was one of the most intriguing and advanced ideas for rethinking ILL that I have ever heard. Such an arrangement represents a kind of ultimate achievement in the library community's ability to make information freely available to the largest number of people. The good news is that this year, a very similar deal was made by a major part of the North American academic library community with Lexis/Nexis for the Academic Universe product — an electronic reference tool which includes some 5,700 titles covering general news, case law and company information. In what is close to a national arrangement, 53% of the US colleges and universities, more than 600 institutions involving some 23 consortia and 3.7 million full time students, have signed a single contract. Since the

unit price of the product decreased as more individuals were involved, the final price for each participating institution was extraordinarily low indeed.

So what is the Consortium of Consortia, or rather, because they have just changed their name, the International Consortium of Library Consortia (ICOLC)? Three years ago OhioLINK decided that they had a responsibility to provide not just leadership to Ohio libraries but nationally as well. Consequently in 1996 they invited collection development heads from all U.S., primarily academic, consortia to a common meeting with a small number of publishers to talk about consortial models of pricing! As it turned out, some 80% of all North American academic collection buying power turned up to talk with the invited publishers. It was an eye-opening and not always comfortable experience for the publishers to be faced with a relatively united group of librarians who controlled such a large part of their market. Publishers are accustomed to dealing with libraries one at a time which gives them considerable advantage in setting prices. Having to face all the libraries together shifts much of the advantage back to the librarians.

What is perhaps most impressive about the ICOLC is that it is not only purely voluntary in terms of coming together to talk with publishers, it is also purely voluntary in terms of negotiating with publishers. Everyone is completely free to do as they wish. But the advantages of common action, as soon as people can see it clearly, are so compelling and so obvious that it is not that difficult to arrange. Much of the success is simply providing a forum or bibliographic agora that allows people to come together to discover their common concerns. This is even beginning to dawn on the publishers who are beginning to see meeting with the ICOLC not just as a sales opportunity (or a punishment session), but as an opportunity as well to begin to understand their market better and to experiment with new and innovative pricing strategies. As with serials it is increasingly turning into a win-win opportunity for both librarians and publishers.

The ICOLC, as the new name suggests, is now international and if there are Greek consortia who would be interested in joining, I would encourage it. Much of their communication is done over the net and even summaries of their publisher meetings are provided over the net. There are no fees, no bureaucracy — just librarians who have decided that voluntary co-operation can work to everyone's advantage.

Seeing With New Eyes

As I indicated at the outset, more than the way we are doing business has changed for OhioLINK libraries. As we have transformed the means by which we make books and journals available to our patrons in the OhioLINK context, we have also begun to transform our vision of the library. Moving away from the traditional concept of the library as basically a stand-alone institution limited primarily to a local collector which only co-operates with other libraries really only on the fringes of its operations, to a developing view of the local library as an integrated part of a larger entity. In other words, we are increasingly seeing the role and definition of the local library coming no longer exclusively from its local environment or parent institution, but increasingly from its role and position in a consortium.

Does this mean that the individual, local library is becoming submerged in a large consortial ocean, losing its individuality and local role? This is not so far what is happening to OhioLINK libraries with our strong use of a "federal" model both in way the automation is structured and the way the governance is handled. Powers and responsibilities are divided between the local and central sites so that it can be truly said that the strength of OhioLINK depends as much on strong local libraries as central coordination and joint action. Indeed, the main purpose of central coordination and joint action is to allow the local libraries to provide greater resources in more cost effective ways to local patrons.

Curiously enough, though no surprise to a perceptive historian of Western culture, this idea of an individual institution finding its fullest manifestation of its particular nature not in glorious solitude, but within a larger community, is not a new one. It has, as this audience will particularly realize, a close analogy to one of the most basic concepts to arise in Western culture ~ one developed by classical Greek civilization. This is the understanding that the fullest expression of the individual does not take place on a desert island or in the absolute freedom of complete solitude, but rather within a community. That the individual and the polis are inextricably intertwined and while this often causes tension and difficulties (the Antigone comes immediately to mind) each is necessary to the other. True freedom and fulfillment for the individual comes not in complete independence, but within an appropriate community. That this is as true of individual libraries as of individual people, is the core of my message today.

Perhaps because I have recently been in Northern Europe it seems to me that the appropriate metaphor for OhioLINK, the clearest image I would like to leave with you, is a rose window, like those found in great cathedrals of our common Western culture. In such a stained glass window, each individual piece is distinct with its own clear identity. But that individual piece has been arranged in a harmonious and creative way with other such pieces of differing shapes and colors to make a combined whole of surpassing beauty. It is a whole which no individual piece could hope to achieve on its own but to which each individual piece is necessary. And as a rose window transforms the light passing through it, so OhioLINK is transforming our vision of the academic library.

Thank you for your time and kind attention.