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If You Build it, Will They Come? Building the Collaborative Infrastructure and the OhioLINK CollaboraTeS Toolbox

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If You Build it, Will They Come? Building the Collaborative

Infrastructure and the OhioLINK CollaboraTeS Toolbox

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Abstract

This research examines how libraries are collaborating, why libraries collaborate, and seeks the environmental conditions that foster successful cross-institutional collaborations. The Ohio Library and Information Network (OhioLINK) Consortium's CollaboraTeS Project is examined, to inventory expertise and needs within the OhioLINK community and the members' willingness to share, barter or contract their expertise with other OhioLINK institutions. This is followed by an examination of a sample of North American collaborative projects to identify environmental conditions that foster collaborations in North American libraries. A brief survey within the OhioLINK environment was then conducted that validated anecdotal evidence that the

CollaboraTeS Toolbox has not been used as much as was intended. The OhioLINK environment was then assessed using the environmental factors discussed in the second phase of the research, and it was evident that only two of the factors were present within the OhioLINK environment that were identified as fostering collaboration. More research is suggested into inventories of expertise and into identifying and building the environmental conditions that foster cross-institutional library collaborations.

Introduction

Cooperation may be defined as systems or people working or acting together for common benefit. Libraries have cooperated in various ways for many years. Libraries buy things together. They share things with each other. They even teach each other more efficient methods; something that is unheard of in more competitive environments. Sound economic reasons exist that foster library cooperation, making cooperation so automatic a mindset for libraries that it has been characterized as being part of the “professional DNA.”¹

Cooperation and collaboration are related processes, with distinctive differences. Merriam Webster defines cooperation as common efforts achieved via the association of persons for common benefit. Collaboration is defined by Merriam Webster as working cooperatively with others, or with agencies to which one is not immediately connected.² Ball defines cooperation as a basic level of working together, but goes on to define collaboration as requiring a conscious and shared approach to planning and implementation.³ Collaboration can be thought of as a

natural progression from cooperation, and a desirable one given the potential for cost containment and efficiencies through collaboration. Winjum and Wu recognized the benefits of collaboration as eliminating redundancies, reducing costs and learning new skills.⁴

Collaborative opportunities therefore require cooperative relationships as well as collaborative planning and implementation. Examples include workflows that cross institutional boundaries; hiring staff with specific skills needed within technical services for multiple libraries; sharing acquisitions sub-systems between two or more institutions to achieve greater efficiencies; and creating formal agreements to do work for each other as circumstances require. Neal goes a step further, promoting what he calls radical collaboration, which he defined as including cross-institutional mass-production, centers of excellence, new infrastructures and new initiatives.⁵

Yet collaborative work is not always easy to manage. Collaboration is often something that libraries find less comfortable, even within their own consortia, often because it is more complex to accomplish and requires less institutional freedom. Regular workflows that cross institutional boundaries tend to be rare. According to Badertscher, libraries will cooperate to buy things together, but they tend to want to write their own checks.⁶

This research examines how libraries are collaborating, why libraries collaborate, and seeks the environmental conditions that foster successful cross-institutional collaborations. Knowledge of the latter in particular could foster collaboration within library environments. The nature of the Ohio Library and Information Network (OhioLINK) library consortium's willingness to build a collaborative environment is examined, as are a sample of other North American collaborative

projects. Conditions are thereby identified that foster collaborations, which are then looked-for within the OhioLINK environment. Ultimately the researchers gained an understanding of why libraries collaborate, the ways they are collaborating, and the conditions that foster successful cross-institutional collaborations.

OhioLINK is a consortium of eighty-eight Ohio college and university libraries and the State Library of Ohio that was founded in 1987 to provide research information for students, faculty and researchers throughout Ohio. OhioLINK libraries have a long history of cooperating to purchase electronic content. Although they collaborate well at the consortium level to catalog OhioLINK resources, they do not have much experience doing technical services work for each other in any formal way. They only have a little experience contracting to do work for each other. There has as of yet been little opportunity to gain experience applying management techniques to cross-institutional project management, especially compared to the time spent managing internal workflows.

The OhioLINK Database Management and Standards Committee (DMSC) exists to maintain quality standards for the central catalog, and to create policies and procedures for consortial metadata. In 2008 the technical services librarians on DMSC recognized the potential for contributions from cross-institutional collaborations and initiated the CollaboraTeS Toolbox.⁷ DMSC thereby created the tools they thought would be needed to foster cross-institutional collaborations between individual OhioLINK institutions. The thinking was that OhioLINK libraries would collaborate more actively if provided with materials that helped them to collaborate. How could libraries collaborate with each other if they did not know who had the

skills they needed? If information was provided via the CollaboraTeS website on writing memoranda of understanding would more memoranda of understanding written? If you build it, will they come?

To attain these goals, the researchers formed a working group and were charged by DMSC with creating an inventory of technical services expertise within OhioLINK libraries. DMSC envisioned a web resource that could be used to identify collaborative partners, together with other tools to help manage collaborations (sample memoranda of understanding, tips to set up workflows, etc.). The researchers surveyed OhioLINK libraries and provided the results on the CollaboraTeS page on the OhioLINK website in November 2009. OhioLINK institutions were then encouraged to seek and arrange collaborations as needed.

But OhioLINK libraries did not make the use of the CollaboraTeS Toolbox that was anticipated. Therefore the research that started as an analysis of the inventory created by the survey evolved further into an inquiry into the conditions that foster successful collaborations between institutions, ultimately resulting in a three-phase research project. In the first phase, the 2009 OhioLINK survey results were analyzed by the researchers to determine OhioLINK libraries' willingness and need for collaboration. In the second phase the researchers investigated other collaborative projects in North America to determine environmental factors that fostered success. In the third phase, anecdotal evidence that the CollaboraTeS Toolbox was not being used as actively as anticipated led the researchers to survey OhioLINK libraries to gauge usage levels. Once this survey verified that usage was lower than anticipated, the researchers looked within OhioLINK's community for the factors that fostered collaborative projects elsewhere.

This paper is structured following the three phases of research. The research questions for all three phases are presented first, followed by a review of current literature. The discussion of each phase of the research includes contextual information, a description of the methodology and results. This is then followed by the researcher's conclusions and recommendations regarding building collaborative infrastructures between libraries.

Research Questions

For phase one of this research the authors created an inventory of expertise and needs within the OhioLINK community that documented the members willingness to share, barter or contract their expertise with other OhioLINK institutions. It is often not about what libraries have, but rather what libraries are willing to admit they have, and what they are willing to share, barter or sell on contract. The researchers analyzed the results to discover:

1. Does expertise predominantly reside in large OhioLINK libraries, or is it present in smaller institutions as well?
2. Are libraries in large OhioLINK institutions more willing to help other libraries than are libraries in smaller institutions?
3. Do more OhioLINK libraries need assistance than have expertise?
4. Do OhioLINK libraries collectively have expertise in all areas (no gaps)?

5. Do OhioLINK libraries in national cataloging programs (Program for Cooperative Cataloging (PCC), Enhance) have more resources to share than other OhioLINK libraries?

In contrast, phase two of this research had only one research question: what are the environmental conditions that foster successful collaborations? The authors used a qualitative methodology to identify and analyze collaborative projects in North America to determine environmental conditions that foster or impede successful collaborations. Collaborating institutions were discovered through a mix of research, email and telephone calls. Telephone interviews were also conducted to obtain a project description, objectives and success.

The third phase of the research project surveyed usage of the CollaboraTeS Toolbox to confirm anecdotal evidence that collaborations between OhioLINK libraries were lower than anticipated. The OhioLINK 2011 survey findings did indicate that the CollaboraTeS Toolbox has not been utilized as intended. The researchers asked: are the environmental conditions identified in the other North America collaborative projects a factor in the lack of use of CollaboraTeS?

The next section of this research paper contextualizes these questions through a review of the literature

Literature Review

All the Elements of a Perfect Storm

At the turn to the 21st century, St. Lifer asserted that the impending retirements of baby boom professionals would greatly impact the supply and demand for librarians. St. Lifer thought this was due in part to a large hiring boom that occurred thirty to thirty-five years previously.⁸ In 2002 the 8Rs Research Team also predicted a shortage in Canadian libraries.⁹ ALA called for the profession to focus on recruitment in the face of impending shortages.¹⁰ Association of Research Library (ARL) surveys in 1984 and 1998 had revealed that catalogers in ARL libraries were even older than librarians at large.¹¹ Impending retirements in cataloging were predicted to further shrink the pool of professional catalogers.¹² Writing in 2005 Leysen and Boydston found that one-third of all ARL catalogers represented in their study could retire in the next decade.¹³

But the economic recession in recent years has also affected libraries. “While libraries are seeing huge increases in usage, the job market for librarians is being hit hard,” according to Davis.¹⁴ At a 2010 meeting of the Creative Ideas in Technical Services Discussion Group Meeting at the American Library Association (ALA) Midwinter conference agreement was reached that acquisitions budget cuts were being overshadowed by cuts in personnel budgets and by hiring freezes.¹⁵ Our profession faces a future where many people are poised to retire, and when they leave, their jobs may or may not be refilled. Jobs are also scarce because librarians are retiring later due to the downturn in the economy and its impact on their own financial portfolios.¹⁶

Federal stabilization funding has helped shield higher education somewhat, but according to Bullington & Lee, this source of support will likely end after 2011.¹⁷ Academic libraries also face cuts to operating budgets due to the economic downturn. According to Lugg, “Libraries will need to collaborate more than ever to save money and to deliver services more efficiently with

less staff.”¹⁸ Lugg goes on to say that, “in a strange way, the current economic situation may be helpful, as it forces some changes in thinking.”¹⁹

According to the 2008 Council on Library and Information Resources report, half of today’s librarians will retire in the next decade.²⁰ By 2009 Smith reported that all of her ARL survey respondents referred to the diminishing of their staff, with one respondent indicating a local reduction in staff of fifty percent.²¹ This has led to time spent refining workflows and eliminating unnecessary steps. Smith also reported an increased dependence on paraprofessional staff, and a consequent further change in the professional’s role, noting that “Professionals have had to keep up with technological changes and then become teachers and trainers for their staff members.”²²

However, when the Library of Congress asked R2 Consulting to undertake a study of the North American MARC records marketplace they determined that there was adequate cataloging capacity in North America to meet the collective need. The question appears to be more about maximizing current potential and distributing capacity differently. They found, for example: that libraries continue to edit copy-cataloging records; that libraries continue to grow backlogs; that LC subsidizes portions of the bibliographic marketplace; and that cooperative cataloging programs have not yet realized their potential.²³

These economic and demographic pressures coexist with changes in the way that bibliographic records are created and distributed as well as by broad-based thinking about how to reengineer the library catalog. In *On the Record*, the Library of Congress’ Working Group called for an

increase in efficiency in bibliographic production by, “maximizing the use of data produced through the entire supply chain for information resources.”²⁴

In 2005 the University of California (UC) Libraries issued the final report of their Bibliographic Services Task Force, which called for a single catalog interface supported by a single centralized data store.²⁵ To accomplish this, they recommended viewing, “UC cataloging as a single enterprise, eliminating duplication and local variability in practice, agreeing on a single set of policies, sharing expertise, and maximizing efficiency.”²⁶ They also began to encourage the creation and enrichment of metadata by vendors, thereby changing, “the processing workflow from *acquire-catalog-put on shelf* to *acquire--put on shelf with existing metadata--begin ongoing metadata enhancement process through iterative automated query of metadata sources.*”²⁷

In 2006 Karen Calhoun’s report on the nature of the catalog explained that while the large-scale aggregation of bibliographic data represented many advantages, barriers existed to reaching that goal. Calhoun questioned the need for the replication of local catalog data in thousands of local catalogs saying that, “the approach of aggregating catalog data regionally or nationally is increasingly attractive to some.” She asked, “Libraries are starting to collaborate on collection development; why continue to have single library catalogs?”²⁸ She went on to say that faculty and staff were not ready for the change, that reliable and easy interoperability was not available and that, “Precedents for large scale collaboration among research libraries are few.”²⁹ However, by 2010 Martha Hruska pointed out that print-based workflows do not work well for collections of digital materials that are increasingly purchased on a consortial basis.³⁰

The Council on Library and Information Resources (CLIR) 2008 report on the future of research libraries, *No Brief Candle*, called for the redefinition of the research library as a multi-institutional entity. According to CLIR the current model of the stand-alone service provider to the university is obsolescent, and that academic libraries should, "...form coalitions that minimize costs for collection development, and consider sharing staff on a consortial, federated basis."³¹

Cloud computing fits this new technical services model nicely. Prather-Rodgers reported that, "The use of cloud applications reduces costs for software and staff time."³² The 2010 Horizon Report lists the increasing availability of cloud-based technologies as one of its key trends. While privacy and control are still issues according to the Horizon Report, cost savings are an important driver.³³ By August 2010, OCLC announced that its much anticipated Web-Scale Management services were being released to early adopters, thereby moving cloud-based acquisitions and circulation components from the pilot phase to production.³⁴ OCLC promised these new services would relieve libraries of the burden of supporting an array of technologies, would provide a unified presence on the web, and would maximize efficiencies for libraries by pooling data and streamlining workflows.³⁵

Is this a perfect storm? Neal wrote that given the major changes in the economy, technology, in the patterns of library use, and in the expectations of library users, it is time to take a fresh look at our programs of shared collecting and access.³⁶

What Works?

Within the literature, there is a good amount of information available on collaborations between libraries. What follows is a discussion on conditions that impede or foster collaborative librarianship.

How well, or how poorly, a cross-institutional collaboration fares will depend in part on how well change is managed. Mitchell lists the following factors that impact organizational change to build cross-institutional collaborations: how well the organization manages change and risk; the importance of strong leadership leading the change; broad buy-in by staff and constituents; the contributions of outside assistance, perhaps through consultants or other professional colleagues; careful, comprehensive planning; excellent communications; group decision making; original thinking; and time and timing—managing the group’s time, and initiating at the best time.³⁷ This is basic project management, but it can improve the success of collaborations.

Hayes and Sullivan recommended using an independent consultant when re-designing workflow.³⁸ Not all technical services staff seek change and staff push-back can occur.³⁹ Lugg, Tucker and Sugnet wrote that, “It is the trust-building and ownership agreements and memoranda of understanding – getting over the mental and political hurdles – that are more problematic.”⁴⁰ They go on to say that, “human nature is the biggest challenge. Sharing can be difficult and uncomfortable. It involves a loss of control – and to some degree a dilution of one’s institutional identity.”⁴¹

Lugg goes on to state that some technical services work lends itself more easily to collaboration. Shared work on electronic resources is attractive because the experts can be located anywhere, because of the sheer volume of work, because libraries do not already have good solutions, and because the resources are often leased rather than owned, there is less resistance to sharing.⁴² Print resources represent opportunities to aggregate workloads as volume declines in order to retain efficiencies.⁴³ Libraries are beginning to explore sharing technical services functions in the areas of foreign language skills for cataloging, or other specialized skills, such as music or media cataloging.⁴⁴ Foreign language cataloging, in particular, appears to represent low-hanging fruit for collaboration.⁴⁵

Several authors have recognized that the complexities of the consortial environment may prove challenging to collaborations. For example, libraries that want to share cataloging skills within their consortium must consider the implications of any OCLC commitments.⁴⁶ Winjum and Wu recognized that belonging to a consortium may compromise local interests and divert staff time, which represent costs to the institution.⁴⁷ Jin and Maurer wrote that, “the overlapping layers of consortial agreements that connect libraries form almost a web that can be constricting.”⁴⁸ According to Lugg, decision-making becomes more complicated and travel to more meetings is required. “Sharing well is hard work.”⁴⁹

Thus within this literature review the authors have provided the context for their research. The next section of the paper describes all three phases of the research. Contextual information, methodology, and results are provided for each phase.

Phase One. The 2009 Survey

The Context: Reinventing OhioLINK 2006-2009

In 2006 after twenty years of service, OhioLINK reassessed its service model in light of economic, technological and global issues. Early in this process several priority service areas were identified by OhioLINK libraries, including that OhioLINK libraries look across operations to seek increased effectiveness and efficiencies by using group actions, grants and partnerships with other institutions.⁵⁰ The public institutions within OhioLINK comprise the University Systems of Ohio (USO). In 2007 Tom Sanville, OhioLINK's former Executive Director, outlined a vision for OhioLINK that enabled the USO to be a global leader in research. Part of this vision called for increasing cost-effectiveness by collaboratively and collectively managing the growing physical and electronic collections.⁵¹ In 2009 this initiative was re-named OhioLINK 2.0 and, twenty task forces were formed by OhioLINK and given charges to explore every aspect of OhioLINK library services. In the technical services area, DMSC participated in seven of the task forces.

Meantime, the Group Technical Services Task Force (one of the original twenty OhioLINK task forces) was charged with exploring aggregating or centralizing technical services activities. Expected benefits included: cost savings through staffing efficiencies and discounts, greater standardization among member activities, reduced duplication, and improved expertise for libraries that have few staff resources for technical services. Specific action ideas suggested in

the charge included: grouping acquisitions ordering; centralizing cataloging and/or processing; establishing new models for authority control; grouping serials check-in, finding ways to catalog unique local collections of interest to the consortia; evaluating centralized activities; examining the relationship with OCLC and other vendors in light of proposed changes; suggesting cost sharing proposals, specifications, and sample workflow routines; determining whether to issue requests for proposals (RFP) for services and issue RFPs as necessary and desired, and making a schedule for participants and projects' implementation dates.⁵²

To execute these ideas, willing participants and demonstration projects were needed. In response to an invitation from Tom Sanville, thirty three individuals from seventeen OhioLINK institutions experimented with collaborative projects that provided cataloging for other institutions (music scores, Chinese, Japanese or Korean (CJK), Arabic, special collections and original), provided a YBP GOBI workflow consultation, and provided guidance with electronic record loading and authority control.

OhioLINK libraries that participated in this process produced five formal recommendations.

1. Use technology to enable new models of collaboration that coordinate expertise virtually for greater efficiency without requiring physical relocation of expertise away from local sites. For example, virtual statewide or regional hubs could be formed to handle certain functions, formats, languages, or subject areas (a hub being defined as a concentration of expertise and capacity). There could be hybrid models for some types of work as well, with certain physical sites coordinating virtually with experts around the state.

2. The composition of the hubs must be flexible to accommodate changes that affect the availability of expertise and capacity at OhioLINK sites.
3. To realize the greatest benefit from such new collaborative arrangements, an individual or group (e.g., DMSC) should be given responsibility for facilitating their establishment and for coordinating and supporting them on an ongoing basis.
4. Use the data from the DMSC survey of catalog expertise to identify needed hubs related to cataloging and potential participants.
5. Create and share documentation of the various methods used by GTS2 pilot participants for one site to accomplish cataloging for another site (e.g., for setting OCLC holdings, transferring catalog source information and completed records, receiving compensation, etc.)

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The CollaboraTeS Toolbox grew out of this four year process of as an on-going DMSC project. Its mission “Is to work to foster collaboration among OhioLINK technical services departments by providing a set of supportive tools, and by working state-wide to help OhioLINK libraries create collaborative technical services opportunities.”⁵⁴

2009 Survey Methodology

In October 2008 the authors were tasked by DMSC with creating a survey to be administered to OhioLINK institutions to inventory technical services expertise and to gauge institutional willingness to share, barter or contract that expertise with other libraries. DMSC also wanted to know the nature of the expertise that was needed by specific institutions. The survey instrument

was designed by the authors by March 2009, and mounted on Kent State University Libraries' content management system using an on-line form that stored responses in a database. Results were later exported by the authors to a spreadsheet. A copy of the survey instrument is available on the web.⁵⁵ The survey was tested by librarians from three OhioLINK libraries and judged ready to be released to OhioLINK libraries in May 2009.

Each OhioLINK Director was asked to identify a contact person with knowledge of local technical services resources and the authority to deploy them. Ninety of these institutional CollaboraTeS contacts at OhioLINK institutions received the survey. There were forty-one responses to the survey (45.56 percent response rate). However, four of the responding institutions opted out of the directory. Ultimately thirty-seven (41.1 percent) of OhioLINK institutions opted to participate in the CollaboraTeS Toolbox.

Responders were asked about their expertise in foreign languages, formats, cataloging schema, metadata standards, technologies, OCLC products and services and participation in PCC programs. The researchers also asked the respondents to define the broad nature of the reciprocation (have, share or barter, or do on contract). Responders were assured that they could use the Toolbox regardless of whether or not they could reciprocate. Preliminary survey results were presented to DMSC by the authors in August 2009 and by November 2009 the CollaboraTeS data were posted on the website and announcements and advertisements by the authors of its availability were being broadcast to OhioLINK libraries.

Because some of the research questions focused on institutional size in relation to the data, a gauge for institutional size was needed. Student full time equivalent (FTE) was chosen by the authors as that gauge. The four categories were defined as small, medium, large and giant. Table 1 describes the four categories of schools and provides frequencies for all responding institutions.

Table 1. Responding Institutions by FTE Group			
Categories	FTE	Number of Schools that Responded	Percentage of all Schools that Responded
Small Schools	Below 5,000	23	58.5%
Medium Schools	5,000 – 19,999	10	24.4%
Large Schools	20,000 – 39,999	5	6%
Giant Schools	40,000+	1	2.4%

Of the eight-nine OhioLINK libraries, only forty-one responded to the survey. The respondent sample characteristics differ from the population. For example, there are more small libraries in the population than the sample, and more large libraries in the sample than in the population. (The proportion of medium sized libraries is about the same in both the population and the sample.) Because of this, the researchers were unable to generalize the results back to the population of all OhioLINK libraries and are thus limited to describing our results in terms of the libraries that responded.

The results are impacted by a lack of uniform granularity in the format of the survey, and by the broad universe of expertise that could be needed. The researchers struggled when designing the survey regarding whether or not to provide specific examples, or to depend upon the respondents

to create the content, and this proved problematic. The design of the survey may have affected results in two ways. First, respondents were more likely to select from what they saw in the survey than to enter original responses. Secondly, the specificity of the examples provided in the survey was inconsistent resulting in more or less detail in the responses.

2009 Survey Results & Analysis

Survey results are available on the web⁵⁶ for each of the six areas of expertise in the survey: languages, formats and schemas, subjects, technologies, OCLC products and services, and PCC participation. Specific responses to questions about types of expertise are listed in the left columns. The number of institutions that indicated that they had or needed each specific expertise is provided in the next two columns in the tables. Institutions that indicated they had or needed each expertise are listed in the right column. Institutions that indicated that they had expertise also could indicate whether they were willing to share or barter that expertise, or to do work on contract. There is a wealth of information here for OhioLINK planning purposes in terms of both haves and needs. The languages, formats, schema, subjects, technologies, products and services listed here could also be used by other institutions as the basis of their own inventory. As such these results are an important tool for future research.

The 2009 survey sought to answer five research questions. Following are the findings.

1. Does specialized expertise predominantly reside in large OhioLINK libraries, or is it present in smaller institutions as well? While the larger libraries consistently demonstrate more

expertise across all the types of expertise, it is not true that medium and small libraries do not have expertise to offer. For example, thirty percent of the libraries reporting language experience were medium-sized libraries and thirty percent were small libraries. Of the libraries that reported expertise with formats and schema, fifty percent were small libraries, and forty-five percent of the libraries reporting subject expertise were small libraries. Across all types of expertise in the survey small and medium libraries report having expertise.

2. Are libraries in large OhioLINK institutions more willing to help other libraries than are libraries in smaller institutions? The authors do not see a pattern of large libraries being more willing than medium or smaller ones to help others. Across all the survey categories of expertise small and medium libraries indicated a willingness to barter, share, or contract their expertise, although the rate of agreeing to do so differs across the categories. For example, most of the small libraries with language expertise indicated they would barter or share, but a smaller number were willing to do so for formats and schemas, subjects, or technologies.
3. Do more OhioLINK libraries need assistance than have expertise? Across all the survey categories, more libraries indicate having expertise than needing expertise. For example, while thirty-four institutions indicated having format and schema expertise, only fourteen indicated needing this expertise. Language expertise was the only area in which the needs and available expertise were more balanced: nineteen libraries have and fifteen need language expertise.

4. Do OhioLINK libraries collectively have expertise in all areas (no gaps)? It is difficult to assess if OhioLINK libraries have expertise in all areas. As mentioned previously, survey results were impacted by the granularity of the responses, due in part to the format of the survey. OhioLINK libraries reported a wealth of broadly-based expertise in technical services. For example, libraries indicated having expertise in the formats and schemas listed on the survey as well as twenty other additional areas. However, while expertise in thirty-three languages was reported by OhioLINK libraries, expertise in additional languages not listed might be available or needed. Evidence of gaps in expertise appeared in two areas: Indic and Thai language expertise and subject expertise with Manga/Comic book literature. These were identified as needs, and were not identified as expertise that OhioLINK libraries have. OhioLINK libraries were more likely to identify expertise than they were to identify needs. This is one of the strongest findings, and it is true across the board. It is difficult to assess gaps given these conditions.

5. Do OhioLINK libraries in national cataloging programs have more resources to share than other OhioLINK libraries? Absolutely, yes. This research compared admitted expertise between institutions that participated in national cataloging programs and institutions that did not participate. The researchers compiled the frequencies for each individual area of expertise between participating and non-participating institutions. The percentages of these frequencies were then averaged and compared. Table 2 provides the resulting data, and reveals that across the board OhioLINK institutions that participate in national cataloging programs were more likely to have expertise than were institutions that did not participate in national cataloging programs.

Table 2. OhioLINK Libraries' Average Percentage for Admitted Expertise (Haves)		
Expertise Category	Average Percentage for Libraries Participating in National Cataloging Programs	Average Percentage for Libraries Not Participating in National Cataloging Programs
Subject Expertise	8%	2%
Format and Schema Expertise	36%	16%
Technology Expertise	48%	13%
Language Expertise	12%	2%

One unanticipated research finding is that libraries with expertise were more willing to share or barter than were willing to do work for other libraries on contract. Libraries were asked to indicate whether they would share or barter expertise they admitted having or make it available on a contract basis. Across all categories where libraries were willing to share expertise, more libraries were willing to barter or share than to do the work on contract. For formats, schemas and technologies, most of libraries that admit having expertise were not willing to share expertise. For both subjects and OCLC expertise almost half were unwilling to share. Only for language skills were a larger percent willing to barter and share than were willing to contract.

Why are some things easier to share than others? What are the barriers to collaborative work between libraries? Perhaps libraries have a reluctance to take on other institutions' work if the unit is under the threat of being downsized. Libraries' comfort levels with their own perceived level of expertise may differ when considering doing work for other institutions. False modesty

may play a role here too. Local practices may also be a barrier to potential collaborations. Looking for answers to some of these questions lead to the next phase of the research.

Phase Two. Selected North American Collaborative Projects

This research started as an analysis of the results of the 2009 survey and evolved into an inquiry into the environmental conditions that foster successful collaborations. Phase two of the research used a qualitative methodology to discover and examine collaborative projects in North American libraries with the hope of determining conditions that foster or impede successful collaborations.

Phase Two Methodology

Collaborative projects in North American libraries were discovered during the literature review for this research. In late January 2011, the researchers also queried the AUTOCAT discussion list seeking information about projects that were building or had built cross-institutional structures that fostered collaborations.⁵⁷ Individuals at a total of fifteen institutions and/or consortia were contacted, and interviewed by one of the authors via telephone.

The most significant limitation in phase two was the population. The method of identifying institutions to sample was not exhaustive and the true extent of the actual population of cross-institutional collaborations is not knowable. The qualitative analysis that followed did not feature

a formal set of questions that each institution was asked to respond to. From the institutions sampled, selected institutions are discussed. This weakens the representativeness of the results, but the authors still find the results interesting, and indicative.

Phase Two Results and Analysis

In this section, summative information about a sample of collaborative technical service projects in North America is presented that includes many environmental factors. The results presented here reflect information provided from literature searches and from interviews. Ten of the fifteen projects investigated are discussed here. The projects described all were able to provide evidence to contribute to the analysis for this phase. The projects are grouped in three categories: example successful projects, example potentially successful projects and example less successful projects. Within these groupings, the projects are presented here in chronological order, depending on when they first began their collaborations.

Example Successful Projects

Denison University, Kenyon College

CLIR, with the help of the Andrew W. Mellon Foundation, offered workflow redesign support to six institutions in the early 2000s in the hope that a group of case studies could be published.⁵⁸

In 2003, Denison University and Kenyon College applied for and were awarded a Mellon grant to combine and reshape their technical services operations in order to create efficiencies and increase service.^{59,60} Denison University and Kenyon College are small, residential, liberal arts

colleges, located about forty minutes apart in the southeastern corner of Ohio. They share a catalog with the Five Colleges of Ohio, which is part of the OhioLINK Consortium catalog.

Based on a desire to do more with less, Denison/Kenyon aimed to create new workflows through a combined department that crossed institutional lines.⁶¹ By 2005 “all purchasing, receiving, and cataloging of monographs from the primary book vendor for both institutions took place at Denison. Orders from other vendors and standing orders were processed at Kenyon.”⁶² By combining operations they realized a savings of 2.5 FTE which they redeployed within technical services.⁶³

Denison/Kenyon listed the following as critical factors for their success: administrative leadership; good communication; good proposal; experienced consultant; a shared catalog; and honesty about the motivation for the project.⁶⁴ Denison and Kenyon were, and are, geographically proximate and similar in terms of collections, budgets and staffing. They have a history of cooperation, and share a catalog, if not an acquisitions subsystem. They planned carefully and hired a consultant. They communicated well and worked to establish trust between libraries, and between staff and administration.⁶⁵ The entire grant funding process, with the requisite planning and accountability, let alone the start-up money, undoubtedly helped the project succeed as well. Since the project’s completion, the merged unit has continued to evolve. According to Amy Badertscher, Director of Library Services, Kenyon College, two areas that have proved difficult to merge include building a shared acquisitions subsystem and doing physical processing in common.

“In almost every case, what did not work can be attributed to lapses in communication or communication difficulties,” according to Badertscher and Cochrane.⁶⁶ The best ideas for improving workflows come from the staff handling day-to-day operations. “All staff must be encouraged to think critically about the details of the work they are doing.”⁶⁷ Staff must also begin to see their work as including innovation and special projects, according to Badertscher, which in her opinion may take some time to evolve.⁶⁸

University of California Next Generation Technical Services

One of the most ambitious collaborative technical services projects, the UC’s *Next Generation Technical Services*, evolved from a 2005 report from UC Libraries’ Bibliographic Services Task Force. *Rethinking How We Provide Bibliographic Services for the University of California* asserted that UC Libraries were spending effort maintaining fragmented systems, and needed to look to new ways to centralize services and data while maintaining local control and improving the user experience.⁶⁹ The report recommended that UC Libraries view cataloging as a single enterprise, eliminating duplication and local variability in practices and policies.⁷⁰ The UC Next-Generation Technical Services project grew out of this report in 2009 and was charged with redesigning technical services workflows.⁷¹ The appendix to the working group’s charge listed three possible workflow scenarios, all of which reside at the network level. To attain these goals would require harmonization of UC cataloging policies, cooperative approaches to acquisitions practices and new ways of working with vendors.⁷²

Possible barriers to adoption that were listed in the charge appendix included details about their local cataloging habits, policies and best practices, their inventory of staff skills as it matches to newly needed skills, and technological challenges.⁷³ Martha Hruska, the Associate University Librarian, Collection Services, UCSD and Chair of the Next Generation Technical Services Steering Team for UC Libraries, stressed the importance of being transformative rather than transitional.⁷⁴

UC Libraries approached this process in a well-organized and documented way, with Phase 2 Final Reports posted to the web that describe work on improving the financial infrastructure, developing enterprise-level collections management services, and developing new modes for organizing and providing access to special collections, archives and digital formats.⁷⁵

Bradford Lee Eden, then Associate University Librarian for Technical Services & Scholarly Communication, University of California, Santa Barbara, explained that the Governor of California had proposed extensive cuts to the UC budget in 2011. This was occurring at a time then the library system was already running out of space.⁷⁶

Because of this situation, UC fast-tracked their next-generation technical services plans as a way of saving money and reallocating staff to digital initiatives. According to Eden, "University librarians from the bigger schools were getting it pretty quickly that campuses must combine to survive."⁷⁷ Cross-institutional pilot projects were geared up for system-wide shelf-ready, electronic resources cataloging, Japanese language cataloging and music backlog cataloging. They were moving into a future that was more of a hybrid or centralized system, with conscious

decisions being made about at what level (local or system) personnel replacements, if any, should be hired.⁷⁸

Talking to Eden provided a real sense of commitment to Next Generation Technical Services, and an understanding that in order for this to happen, support had to come from both the administration and the staff that did the actual work. Eden said, “we have been talking about this for five years and we have to move now because of economics.”⁷⁹

Five Colleges, Amherst, Massachusetts

A technical services consolidation for the Five Colleges in Massachusetts was announced in the December 2009 issue of *American Libraries*.⁸⁰ That consolidation never took place, but collaborative projects have evolved among the technical services units at Amherst College, Hampshire College, Mount Holyoke College, Smith College and the University of Massachusetts at Amherst. For example, Amherst College provides binding ticket services for Hampshire College and in return receives assistance for setting their ILS Acquisitions/Serials Ex Libris tables. Since the 1990s, two of the libraries reimburse a third for weekly onsite visits by an Asian language cataloger who also does liaison work on their campuses. One library has contracted with another for acquisitions and cataloging services. Bartering for preservation work and AV cataloging is also done.⁸¹

Susan Sheridan, Head of Technical Services, Frost Library, Amherst College, asserted that collaborations evolve more effectively, when the impetus comes from within the departments,

who are most familiar with need and most likely to set up solid parameters for projects. If technical services staff are engaged in the development of the projects, they also have an opportunity to buy into any proposed changes. “The more narrowly focused they are, the better the results will be,” said Sheridan. “The more discrete the tasks, the smaller you are, the better it works.”⁸² Sheridan noted that, “Electronic resources held in common by the five institutions tended to be the big packages that took the least time to manage. It is the databases/titles we do not have in common that takes the time and for which the public services staff want the quickest response time.”⁸³

Operating within a shared union catalog can also benefit collaborations, according to Sheridan, as does proximity and a good delivery system. There also has to be a commitment to doing the work for the other institutions. Project barriers can include different employee environments (union/nonunion), service expectations of faculty, and the lack of real cost savings.⁸⁴

Columbia University Libraries + Cornell University Library = 2CUL

Columbia University Libraries and Cornell University Library began to radically deepen their collaboration in 2009 through the 2CUL project (<http://2cul.org>). Created with the assistance of a Mellon Foundation Grant,⁸⁵ 2CUL’s goals included the major integration of operations, services, collections and resources.⁸⁶ Wicks & Wolven reported that “...each of our libraries has been involved in many collaborations, but 2CUL is different. The work permeates the organization and crosses functional boundaries. The objectives go beyond collaboration and coordination and aim at combination and consolidation.”⁸⁷ There are no plans to actually merge the two

institutions. Instead, Cornell's University Librarian said the project "...will ameliorate the impact of budget cuts while building our libraries' ability to innovate."⁸⁸ The two libraries come together with many organizational similarities, a record of collaboration and innovation, and a budget situation that generates a will and interest to work together in new ways.⁸⁹ All of these conditions foster the growth and development of new collaborations.

The first area of collaboration is technical services, including acquisitions, cataloging and electronic resource management. The two libraries already share one selector for Slavic and Eastern European Studies and are looking into doing the same for Latin American Studies. They are co-developing an online pre-order form. Cornell is cataloging Turkish-language materials for Columbia.⁹⁰ The next language collaboration is Korean.⁹¹ This is a carefully planned and managed project, and the two institutions have the ability to create and process memoranda of understanding.

However, there are real work culture differences below the surface of their cooperative relationship. One library has a union for paraprofessional staff and the other does not, there are differences in budget structures, levels of departmental autonomy, and the balance between efficiency and customized services.⁹² They know they need to build trust and confidence among staff at all levels, if 2CUL is to succeed.^{93,94} Within each library, balances must be struck between the 2CUL objectives and local priorities. 2CUL staff have also learned that, "it is easier and more productive to focus on activities that are new to both parties than it is to take existing processes and try to make them the same for both parties,"⁹⁵ In order for something to really take off, they need a unified backend, which they are hiring a consultant to explore.⁹⁶ 2CUL

proponents have also begun to recognize the physical distance between their institutions as a limitation.⁹⁷ Interestingly enough, already-existing cooperative relations have also been recognized as problematic to radical collaboration. The two institutions are involved in what has been characterized as a complex “web of dependencies” with other institutions via consortia and collaborative agreements which have not proved to be as transformative as desired. Thus 2CUL staff has concluded, why not start with only two and see what they can do?⁹⁸ If 2CUL proves transformative, there may be opportunities for expansion.

Example Potentially Successful Projects

Ontario Council of University Libraries (OCUL)

The Ontario Council of University Libraries (OCUL) consortium has a strong degree of cooperation among consortium members for quite some time. This consortium of twenty-one Canadian university libraries tends to do things through central initiatives, but governance is voluntary based on committee-defined strategic directions. Collaboration that crosses jurisdictional or financial boundaries is not fostered. There is no central catalog. There is interest in collaborative technical services, but not a strong interest, which may be a barrier. Another barrier is that local practices exist for established systems, and that potential therefore exists for stakeholder push-back. This situation may change for OCUL, as they are realizing a decline in technical services staffing through attrition and retirements.⁹⁹

CTW Consortium

The CTW Consortium is comprised of Connecticut College, Wesleyan University and Trinity College; all small liberal arts institutions located about sixty miles apart in Connecticut. The institutions have independent catalogs, but also offer a unified catalog that provides additional access to their electronic resources. The Consortium was founded in 1986, so collaborations among the three institutions have a history. CTW libraries currently collaborate more for collection development, commenting that if they do not have a cataloger in-house to catalog something, they can pay for it. However, there is no way to throw money at the selection process in languages, according to Lorraine Huddy and Beth Hansen, unless you get an approval plan with the vendor. According to CTW representatives, collaborations within technical services have also been hampered by politics, economics and geography.¹⁰⁰

Polk County Library Cooperative

The Polk County Library Cooperative, a loose affiliation of sixteen public libraries in Polk County, Florida, was formed in 1997 to extend library services county-wide. The cooperative provides the computer network and other automation services, and facilitates interlibrary loans, but they do not have a history of strong cooperation in other areas. Barbara Stampfil at Bartow Public Library, stated that Polk County was in the beginning stages of trying to centralize their cataloging operations and have found that it is easier to find the political will to create a centralized catalog. Characterizing the situation as territorial, Stampfil went on to say that they therefore will not be attempting to centralize processing, classification or acquisitions; just the bibliographic records.¹⁰¹

Orbis Cascade Alliance

The Orbis Cascade Alliance is comprised of thirty-six private and public universities and colleges in Oregon and Washington states (<http://www.orbiscascade.org>). Libraries in the consortium retain their own catalogs with a centralized discovery layer. This is a large, complex system that is governed by a council, which makes its decisions based on recommendations from work teams comprised of people from member libraries.¹⁰² There is a lot of administrative support for projects, and lots of team-based buy-in.

In February 2009 R2 Consulting delivered a discussion paper to the Orbis Cascade Alliance, where R2 listed prerequisites for the Alliance to effectively share technical services workflows. Some of these included a common integrated library system (ILS)/electronic resource management system (ERMS) infrastructure, a more completely shared catalog, a standardized approach to cataloging and processing new print titles, a fund structure or shared budget, and shared objectives regarding staff hours and local practices.¹⁰³

Since 2009 the Alliance's Strategic Agenda has included collaborative technical services projects, with a specific emphasis on shared staff. They have been working on common best practices, developing an ebook management team, and developing collaborative cataloging of difficult foreign language materials and federal documents.¹⁰⁴

The executive summary from the Collaborative Technical Services Team's Final Report (2010) listed the obstacles to achieving true collaborative technical services at the consortial level, and first and foremost was the lack of a shared catalog.¹⁰⁵ In December 2011, the Alliance issued an RFP for a Shared Library Management Service. They plan to select a vendor by July 2012.¹⁰⁶

Other barriers identified in the report included conservative staffing at the highest levels, and talent fragmentation among other staff. Also, they state that the lack of incentives to collaborate is a barrier, which leads to push back from the individual libraries.¹⁰⁷ The report recommends the creation of a directory for foreign language expertise and the implementation of a pilot project for Arabic and CJK cataloging.¹⁰⁸ The new strategic agenda included a pilot to consortially catalog ebooks, a foreign languages cataloging project, and the organization of a symposium to discuss current thinking about collaborative technical services.¹⁰⁹ They were also looking for Alliance funds to hire a map cataloger, to be housed at a member library but to serve all the libraries.¹¹⁰

MaRLI – Manhattan Research Library Initiative

The New York Public Library, Columbia University and New York University had a long history of cooperation and coordination¹¹¹ when they announced the creation of MaRLI, the Manhattan Research Library Initiative, in March 2011. This collaboration will coordinate their research collecting and make their collections mutually available to researchers through reciprocal borrowing.¹¹² The three libraries expect to formally define individual areas of collecting strength, according to Jaggars. "If you want to have robust print collaborative

collection development you need the delivery infrastructure,”¹¹³ according to Damon Jaggars, Associate University Librarian for Collections & Services, Columbia University Libraries. The MaRLI institutions also wanted to seek opportunities in new licensing areas where they could, although all three institutions were already heavily engaged in this area, which could pose as a limitation. Jaggars predicted that digitization will probably be their first shared infrastructure project, in part because it is a good match for two of the institutions in terms of haves and needs.¹¹⁴

Example Less Successful Project

Appalachian College Association (ACA)

Another group that participated in the CLIR/Mellon grant opportunity was the Appalachian College Association (ACA), a consortium of thirty-six private liberal arts colleges spread across the central Appalachian Mountains in Kentucky, North Carolina, Tennessee, Virginia, and West Virginia. Located in Berea Kentucky, the association manages the Bowen Central Library, a repository of electronic resources. The ACA Mellon grant focused on finding ways to improve work processes and expand services, particularly in technical services. The grant proved highly successful at improving internal technical services efficiencies for the libraries.

However, ACA libraries also wanted to find ways for libraries to share staff expertise with other ACA libraries to acquire, catalog or process library materials,¹¹⁵ thinking they could also improve efficiencies by making it easy for libraries to stop doing things that they do not do well.

ACA devised a voucher system called Tony Tokens to encourage the sharing of expertise among libraries. They found that while libraries were willing to earn tokens, only a few libraries used the tokens to acquire services from another ACA library.¹¹⁶ The program never took off and ultimately was stopped.¹¹⁷

Tony Tokens failed for several reasons, according to Anne Chase, Director of Library Services, Hutchins Library, Berea College. Geography proved problematic, as the association is spread out over a five state area, with no courier service. Libraries were reluctant to put rare or expensive materials in the mail (and they only meet face-to-face twice a year). Despite advertising Tony Tokens, they could not get people to think about it in their libraries and found that library staffs were barely aware that it was there. Chase postulates that perhaps ACA librarians and staff did not want to admit they had extra capacity. Chase also thinks that commercial outsourcing may be letting just enough steam out of the system.¹¹⁸

The next section provides an analysis aimed at discerning the environmental factors that impact inter-institutional collaborations.

Phase Two Analysis

Looking at these projects in the aggregate is interesting because patterns emerge that identify conditions that are common to one degree or another, among successful collaborative projects versus unsuccessful collaborative projects. Here are conditions that appear to facilitate successful collaborations:

- They have strong support from the top or from strong local advocates.
- They have pressing economic reasons to collaborate.
- They are geographically proximate, or they at least have good delivery systems.
- They have experience creating memoranda of understanding and other workflow agreements.
- They exhibit similar work cultures and collections.
- They have experience cooperating with each other.
- They hire a consultant and utilize good project planning and management practices.
- They utilize grant money to provide structure, accountability and cash.
- They manage communications and staff buy-in well.
- They have a shared backend on their library automation system.
- They plan a collaboration that is manageable in size.
- They neutralize territoriality, particularly for already-existing workflows.
- They trust each other.

These conditions that foster collaboration did not all appear to be present in every project, but some mix of them did, and successful projects exhibited a synergistic balance. It all has to add up in a positive way, but how they get there is always unique. For example, several projects were initiated using grant money. One might assume that all elective structure, accountability and grant funds would foster success, but this was not always true.

This concludes the discussion of phase two of the research. The next section of this paper provides the context, methodology, and analyses for phase three of this research.

Phase Three. After it was Built, Did They Come?

The third phase of the research project surveyed usage of the CollaboraTeS Toolbox to confirm or deny anecdotal evidence that usage of the Toolbox to promote collaborations between OhioLINK libraries was low. The researchers then asked: are the environmental conditions identified in North American collaborative projects a factor in the usage of the CollaboraTeS Toolbox?

In February 2011, DMSC charged the authors with surveying the CollaboraTeS institutional contacts to ascertain whether and how OhioLINK libraries were using the CollaboraTeS Toolbox. Based on anecdotal evidence that the Toolbox was not being utilized as anticipated, DMSC wanted to gage the amount and type of use the Toolbox was receiving. Because the authors did not anticipate the results of this survey being used within this research, less care was taken to solicit responses and there was no follow-up with non-residents. Therefore the response rate was low. This weakens the representativeness of the results, but the authors still find the results interesting, and indicative.

The CollaboraTeS Toolbox is housed on the OhioLINK website (<http://platinum.ohiolink.edu/dms/collaborate>). The CollaboraTeS inventory is available to OhioLINK institutions seeking information about other OhioLINK libraries' resources and contacts. There is also information about managing collaborative projects that is available to

everyone, including advice, descriptions of project workflows and specifications, costing models and information on creating memoranda of understanding. A bibliography, information about other North American projects and links to presentations on CollaboraTeS is provided. Organizational information is also present on the project mission and contacts.

2011 Survey Methodology

CollaboraTeS contacts at OhioLINK institutions were contacted by the authors to link to SurveyMonkey to answer a brief survey on CollaboraTeS Toolbox use. They were asked how they had used the website and inventory, and whether they had been contacted by other OhioLINK institutions that had used the Toolbox inventory. At the time of the survey, the CollaboraTeS Toolbox had been available just over a year. The survey was available for response for almost two weeks. A copy of the survey is available on the internet.¹¹⁹

2011 Survey Results and Analysis

As stated previously, the response rate to the survey was low. Of the eighty-nine institutions surveyed, twenty (twenty-two percent) responded. Also, only sixteen of the forty-one libraries that responded to the first survey responded to the second survey. A summary of their responses is available on the web.¹²⁰

While the majority of the respondents knew about the project, none had used the Toolbox to manage collaborations with other OhioLINK institutions, although these individuals are

responsible for authorizing the use of their resources by other OhioLINK libraries. Furthermore, only one respondent had been contacted by other OhioLINK institutions because of the CollaboraTeS Toolbox. Twelve of the respondents indicated that they had viewed the CollaboraTeS Toolbox and knew about it.

Survey findings indicate that the Toolbox has not been used as intended. What follows is an assessment as to why this may have occurred. It is, of course, impossible to isolate all of the variables that contributed to this outcome. The 2009 survey provides information about the capacity for collaboration, and the willingness to collaborate within OhioLINK libraries, and the second survey indicates the lack of use of the Toolbox to collaborate by OhioLINK libraries. But looking at the conditions identified in the phase two analysis as fostering successful collaborations may provide insight into why the CollaboraTeS Toolbox had not been more actively utilized.

The researchers did perform this comparison. Of the thirteen conditions identified as fostering collaboration in phase two of this research, only two conditions were true within the OhioLINK consortium: OhioLINK libraries had a good delivery system and had expertise coordinating with each other. However:

- Strong administrative support for collaborative technical services did not exist and any local support was fragmented among institutions.
- Economic conditions were not yet a driver.
- OhioLINK libraries do have somewhat similar collections, but the work cultures were and are very different.

- Well-developed workflows existed already, which fostered individuality.
- No organized effort existed to grow buy-in, to manage staff push back, or to foster collaborative workflows.
- OhioLINK libraries trusted each other enough to cooperate, but perhaps not to collaborate.
- OhioLINK libraries had little experience managing workflows across institutional lines, and had not yet explored seeking grant money or consultants to begin this work.
- OhioLINK is a large consortia, and while collaborations will probably take place in the midst of a manageable group, it is daunting initially.
- The technology did not make it very easy to do work for other OhioLINK libraries, because they still do not share the backend of an ILS. OhioLINK libraries do their work in independent catalogs with a shared virtual central catalog.
- Everyone in OhioLINK probably outsources something, which probably allows just enough steam out of the system to constrict collaborative planning.

“On looking at the CollaboraTeS spreadsheet, it seems to me that the willingness is generally there for TS collaboration, but nobody has figured it out yet,” according to Rocki Strader at The Ohio State University, “Several folks, including Ohio State, seem to have all the parts, but the glue is not sticking. I am going to guess that there is some combination of communication and infrastructure that has not been hit upon yet. I am also going to hazard that some people may see technical services collaboration as giving up some degree of freedom so that they are unwilling to dip a toe in, let alone take the plunge. I do not know how to overcome that attitude on an organizational scale.”¹²¹

Discussion and Conclusions

In order for collaborations to occur, institutions must have expertise, and they must be willing to collaborate. Phase one of the research reveals that there is a wealth of expertise in OhioLINK libraries. Larger OhioLINK libraries consistently demonstrate having more expertise, but that this does not mean that smaller libraries do not have expertise to offer. In fact, the researchers did not find a pattern of large libraries being more willing than medium or smaller ones to help others.

One finding is that participation in national cataloging programs is an indication of a library having a higher level of expertise. OhioLINK libraries that participate in national cataloging programs have more resources than do OhioLINK libraries that are not participants in national cataloging programs.

The researchers also found that across all the survey categories, more OhioLINK libraries indicate having expertise than needing it. This is an interesting finding which may indicate adequate capacity in the system for technical services expertise, or it may indicate that outsourcing is being exploited at adequate levels. Regardless, libraries have to need something to collaborate to obtain it, and this may be one of the reasons why the CollaboraTeS Toolbox has been underutilized. More OhioLINK libraries are willing to share or barter expertise than are willing to do the work for other libraries on contract. OhioLINK libraries are less experienced

with the latter model, of course, which may be a factor. It would be interesting to measure this again at some point in the future.

In phase two, the researchers found evidence of a modest but wide-spread level of collaborative activity in North America, suggesting that conditions do exist to develop collaborations. It is also evident that libraries collaborate because they have some incentive to do so that is directly connected to specific conditions, and that the success of the collaboration is also connected to the nature of those conditions. In fact, it does not seem that libraries will gracefully gravitate to collaboration in the absence of specific conditions. Not only must one build the collaborative infrastructure, one must build it in the right time, and at the right place. OhioLINK libraries are more willing to identify haves versus needs when surveyed, and you have to need something to seek it. While it is possible to lay the foundation for future use, as with CollaboraTeS, libraries are not picking up the Toolbox until they need it.

Building off of Marilyn Mitchell's work, as well as discoveries emerging from this qualitative research, three broad categories of conditions emerge that impact the development of cross-institutional collaborations. The first category includes administrative, management and communication conditions. It is clear that top-down administrative support works well. If directed to collaborate, libraries will collaborate. Management incentives also help the library to balance service expectations to the school, the library and collaborative projects. In the absence of strong centralized administrative support for collaboration, other factors or incentives must evolve to foster collaborative projects. Strong advocacy from middle managers and staff can be effective, because they know enough about the details of the work to design good projects and

they can sell those projects up the management chain. However, the more established systems exist, the greater the potential for pushback from the staff stakeholders in those systems. To succeed collaboratively all staff must be encouraged to think critically about the details of the work they are doing, which can be a real culture shift. Only through staff engagement in decision making can staff buy-in evolve, and in the absence of top-down support, staff buy-in is critical. Ultimately, trust and confidence are essential, regardless. Careful planning and good institutional communication also foster collaborations, as they would any project.

The second category of conditions that impact the development of cross-institutional collaborations include economic incentives. Often economic changes drive change in libraries as new initiatives are created in response to new economic realities. Staffing reductions and other economic strains open a window of opportunity for collaboration. Of course, the more radical the collaboration, the greater the start-up costs will be. Grants also fall into this category. As has been seen, they can be used to jump-start collaborations by providing structure, accountability and cash.

The final category of conditions that can impact collaborations involve the intricacies of the workflow. Having previous experience cooperating appears to foster collaborations, as does possessing similar collections and work cultures. Geographic proximity or at least the existence of a good delivery system can impact the success of collaboration.

Some areas of technical services work are more conducive to collaboration. For example, foreign language cataloging appears to be low-hanging fruit based on the number of collaborative

projects discovered. OhioLINK institutions are willing to collaborate in foreign language cataloging and in format and schema expertise as well. Areas where libraries don't already have good workflow solutions, such as electronic resource processing, can more easily be done collaboratively, principally because no workflow stakeholders are disturbed by the collaborations. Areas where outsourcing is not readily available also can be done collaboratively, although outsourcing itself tends to take some of the pressure out of the system overall, and therefore some of the need for collaborations.

One of the strongest findings is that collaborations tend to be more successful when the institutions have a common, shared backend on their ILS. This appears to be related to project complexity. For example, collaborators without a shared ILS must make bibliographic record delivery arrangements for cataloging collaborations.

The overall complexity of the collaboration is a factor. At least for now, collaborations involving just a few partners appear to work well. The larger the group involved, the more complex the project becomes in many ways. For example, the degree of differences in local practices increases exponentially as libraries are added. Talent fragmentation can create added workflow steps. There is some evidence that participation in multiple consortia adds to the layers of complexity. It is interesting, within this context that OhioLINK libraries were more willing to do work on a more informal, share/barter basis, than they were willing to do work on contract.

This research examines how libraries are collaborating, why libraries collaborate and seeks the environmental conditions that foster successful cross-institutional collaborations. An

examination of the skills inventory at the CollaboraTeS Project has revealed a capacity for collaboration between OhioLINK libraries, as well as some interesting patterns in their willingness to collaborate. An examination into collaboration projects in North American libraries reveals a capacity for collaboration, as well as environmental conditions that appear to foster collaboration between libraries. An informal survey of OhioLINK CollaboraTeS libraries corroborated anecdotal evidence that the CollaboraTeS Project was being underutilized, so the researchers examined the project for the environmental factors in North American collaborative projects and found that only two of the favorable factors existed at OhioLINK at that time.

It is clear that OhioLINK libraries have a wealth of expertise and appear to be moderately willing to share it with each other, regardless of size. It is also safe to say that the CollaboraTeS Toolbox has been underutilized by the OhioLINK community.

The work the CollaboraTeS Project is doing to understand how to build the infrastructure may be ahead of its time for OhioLINK, but it is important, and the researchers will continue to lay the foundation for what is seen as the collaborative future to come.

Further research into providing inventories of expertise for cross-institutional collaborations is encouraged. Further research into building the conditions that foster cross-institutional collaborations is also recommended.

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¹⁴ Hilary Davis, "A Look at Recessions and their Impact on Librarianship," *In the Library with the lead pipe* (blog), January 14, 2009. <http://www.inthelibrarywiththeleadpipe.org/2009/a-look-at-recessions-and-their-impact-on-librarianship/>.

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¹⁶ Nicolle Steffen and Zeith Lietzau, "Retirement, Retention, and Recruitment in Colorado Libraries: The 3Rs Study Revisited," *Library Trends*, 58 (2) (Fall 2009): 190-191.

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²⁰ Council on Library and Information Resources, *No Brief Candle: Reconceiving Research Libraries for the 21st Century*, (Washington, DC: Council on Library and Information Resources, 2008): 9. Last accessed March 2011, <http://www.clir.org/pubs/reports/pub142/pub142.pdf>.

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