Changing Roles for Libraries: Providing Implementation and Ongoing Support for a Shared ETD Center at Two Ohio Universities

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Abstract

Through statewide cooperative programs, Ohio academic librarians have found themselves taking on new support roles not traditionally associated with the library. With OhioLINK's centrally managed electronic thesis and dissertations (ETD) center, librarians have taken on new roles. The presenters will examine their role in supporting the implementation and maintenance of the ETD center at Miami University and The University of Toledo. Learn about the cultural changes involved in moving from paper to electronic theses and dissertations. Discover new roles for librarians as facilitators of change, even outside the library.

Introduction and Background Information

In our changing information environment, librarians are finding that their roles are also changing and expanding into new directions not thought of years before. We work more critically in areas such as information management and have assumed greater roles

across colleges and universities in teaching not only how to find information, but also how to effectively use it. In turn, we also have assumed a great role in assisting our campuses on how to best share completed works back to the scholarly community. Librarians are generally seen as guides who can help navigate through the changes. They are particularly well-suited to help people learn how to make the change from using paper resources to electronic resources. However, librarians today have the opportunity to also guide users through the creation of electronic resources. This is a unique opportunity that librarians should grasp to provide stronger services to the academic community. This is particularly true where collaborative opportunities have been created that place libraries with leadership or major roles in changing the way that information is both generated and shared. With consortiums like OhioLINK, the traditional bounds of library services are surpassed, allowing the library to be central to programs where they might have only been a consumer

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in the past. Through the OhioLINK consortium, librarians can play a central role in the implementation and ongoing support of the statewide repository for electronic theses and dissertations (ETDs).

Ohio Academic Libraries are world renown for the resource sharing projects that they have undertaken through OhioLINK. OhioLINK is:

...a consortium of Ohio's college and university libraries and the State Library of Ohio. Serving more than 600,000 students, faculty, and staff at 85 institutions, OhioLINK's membership includes 17 public universities, 23 community/technical colleges, 44 private colleges and the State Library of Ohio. OhioLINK serves faculty, students, staff and other researchers via campus-based electronic library systems, the OhioLINK central site, and Internet resources.

OhioLINK's goal is to provide easy access to information and rapid delivery of library materials throughout the state. OhioLINK offers six main electronic services: a library catalog, research databases, a multi-publisher electronic journal center, a digital media center, a growing collection of e-books, and an electronic theses and dissertations center.

In 1999, OhioLINK staff, working with Miami University, The University of Cincinnati, Case Western Reserve University, and The Ohio State University started planning the first statewide repository for ETDs. As with all OhioLINK ventures, the goal was to provide a centrally available resource for ETDs that would eliminate the need for all the universities and colleges in Ohio to develop their own system and platform. The ETD center would be used for any graduate final paper, including: dissertation, master's thesis, and master's projects. The OhioLINK ETD center was launched in early 2000 and participation was opened up to all OhioLINK member libraries that offered graduate degrees. From its inception, the OhioLINK ETD was built with the desire to provide no limits to the access of these papers. The materials are available freely to anyone on the Internet, although a process has been established for embargo periods. Since this was a statewide resource, no provision was made for campus-only access for ETDs, an option available at some locally developed ETD management databases. The implementation of the OhioLINK ETD at a university requires coordination between the library and the graduate school since both are responsible for the document at various stages in the process. In fall 2004, Miami University started to add undergraduate honors theses to the OhioLINK ETD center. They are serving as a pilot project for this expansion of the traditional ETD and will be followed shortly by other colleges and universities in Ohio.

Current participants in the OhioLINK ETD center are:

- Bowling Green University (5)
- Case Western Reserve University (1,083)
- Cedarville University (6)
- Kent State University (3)
- Medical College of Ohio (19)
- Miami University (375)*
- Miami University Honors (1)
- Ohio State University (1,236)*
- Ohio University (268)
- University of Akron (0)
- University of Cincinnati (1,293)*
- University of Toledo (39)
- Youngstown State University (118)
- Wright State University (13)

(# of full text entries as of January 1, 2005; *indicates that university requires mandatory ETD participation)

Despite the fact that 13 universities are participating in the OhioLINK ETD center, new schools do not simply 'jump' into Center. The experience at the two universities discussed in this paper could not have been more different, despite the common platform. Miami University was one of the early adopters, being a principal in the creation of the ETD center. At Miami University, the desire to create a platform for ETDs predated the OhioLINK ETD center. It began with the graduate school dean and the dean of the libraries meeting back in 1998 after a joint meeting of many Ohio Graduate School deans where ETDs were being discussed. The idea was brought back to Miami that they would begin creating and testing their own in-house ETD database with the approval and guidance from the dean of the libraries. This early adoption of ETD creation allowed Miami to examine all the steps and procedures graduate students were required to complete. The libraries and graduate school were pleasantly surprised that the new database structure reduced the amount of steps and paperwork for both entities. Much of the workflow and database controls that Miami setup became part of the initial OhioLINK ETD center. With the creation of the central ETD center, they were allowed to relinquish control and responsibility for maintaining the central server. In 2002, three years after starting the OhioLINK ETD center, they moved to required electronic submissions.

The University of Toledo was a later adopter of the OhioLINK ETD model. Like all OhioLINK universities, Toledo received a letter of introduction about the program in 2000. The university was going through great changes at the administrative level and the new program was quickly forgotten. The library first approached the Graduate Council about this project in fall 2001. Because of other priorities, the formal presentation was not made to the Graduate Council until the following year. Despite the fact that other universities were using the OhioLINK ETD center effectively, the University of Toledo had to closely examine the process to see if it would work at the university. Copyright concerns from members of graduate council led to formation of "Ad Hoc Committee for the implementation of Electronic Theses and Dissertations" (2002-2003). On this committee were representatives of the Office of Research, Graduate School, Library, and members of the Graduate Council. The report, which was accepted and embraced by council, led to the creation of the "Intellectual Protection and Patent Sign-Off Form." Voluntary submissions of ETDs were first approved for the spring 2004 graduates, nearly three years after the issue was first raised to Graduate Council. The library created a tutorial (using Microsoft PowerPoint) to assist students with submitting their documents to the OhioLINK ETD center.² As originally designed, the ETD center electronic copy would replace the copy that went to the circulating collection, but the university would retain one paper copy for the archives. The first retrospective ETDs were posted during summer 2004. The University of Toledo expects that in the future, graduates will be required to submit their thesis electronically.

Why the Library?

Despite the fact that both universities had different

experiences with the implementation of the OhioLINK ETD center, the library played a key role to both schools in this process. While the library worked in concert with the graduate school, the structure of the OhioLINK ETD center lends itself to greater participation on the part of the library. At Miami and Toledo, this has ensured that this process has been easy to follow for both the graduate student submitting their document online as well as the patron who is reading the document over the Internet. The reasons that library has taken a key role in this process include their established relationship with OhioLINK, concern about accessibility to the completed documents and support for document conversion to PDFs, and a better understanding about copyright issues associated with electronic information.

The libraries enjoy a strong and established relationship with OhioLINK that make them pivotal partners in the ETD implementation. OhioLINK is a tight-knit group that works in unison to provide resources to practically all of the students, faculty and staff at Ohio's colleges and universities. OhioLINK has established a number of committees that are responsible for different components of resource sharing such as users services, inter-campus collaboration, technology, cataloging standards, and collection resource management. OhioLINK is critical to any college or universities information needs, and the primary connection to each campus is through the library. So while the campus as a whole views OhioLINK as a resource, the library views it as colleagues. This connection between OhioLINK staff and the librarians makes interaction far more comfortable for people in the library than in the graduate school.

Another area where the library plays a key role is the creation and accessibility of the PDF document that the student submits to the OhioLINK ETD center. The contribution that a library makes in this endeavor is mixed and depends in large part on the support services that are offered by the university in general. Libraries often can leverage their expertise and campus leadership in content creation. Many libraries, for example, have been engaged in electronic reserves initiatives for years and ETD's share some of the same technical challenges. At Miami University, the graduate school paid for licenses for the full version of Adobe Acrobat to be housed in the Libraries' Center for Information Management. And so the instruction

on how those software products are used became the responsibility of the library. Miami's library also provides seminars and workshops every semester on ETD preparation including formatting issues in Microsoft Word that are not always apparent to the users.³ Every fall at Miami's all-graduate student orientation, attended by 1000+ graduate students; the library has a 45-minute presentation about library resources and ETD creation assistance. These workshops are well attended by graduate students and faculty. In addition, to providing instruction to the graduate students, invitations are sent to all departmental secretaries to come to the library and learn about this new procedure and software.

At The University of Toledo, the library supports students by not only assisting in the conversion of the document to a PDF format, but with other formatting issues that they might be having. When using Microsoft Word, the predominant word processing program used at The University of Toledo, many students encounter problems with formatting documents, especially when the page numbers change locations on a page as they do with University of Toledo theses and dissertations. Many students keep their documents as separate files to generate a printable copy that maintains pagination and number location as required by the graduate school. Many students are frustrated when they are asked to combine these documents into a single file. While this can be merged using the full version of Adobe Acrobat, most students do not have Acrobat, nor access to the full version. At Toledo, the library has been working with students to convert their documents via an email service that requires manual processing by a librarian. We also work with students to ensure that their document is usable and not too large. While there are ETDs in the OhioLINK Center that is larger than 10MB, they are not very easy for patrons to download and use. When working with students, librarians at The University of Toledo identify documents and images scanned directly into Word or resized after importing into the document. While this does not have an impact on the printed document, it does make the electronic file almost too large to use. One instance, at The University of Toledo, saw four scanned in pages alter the size of a Word document from about 900KB to nearly 9MB. By scanning the pages directly into Acrobat (software the student did not have), the file was only around 1MB. The experience that the library gained

in working with these different file sizes also helped prepare the staff for issues relating to the creation of retrospectively converted ETDs from those already in the collection in paper form.

Finally, the librarians often have a better understanding about copyright issues that students might face those other entities on campus. The librarians gain this insight into copyright through work with resource sharing; electronic course reserves, and assisting professors obtain and identify copyright holders.

At the very least, they can serve as a clearinghouse for information that students might need on this subject. During the process of implementing the ETDs at The University of Toledo, the library worked with the Graduate Council and the Office of Reserve to look at the copyright issue closely and have been able to use that knowledge to ease students and faculty advisors fears about placing their document on the Internet. At the same time, the library was working on educating faculty and graduate students on fair use in the classroom. This allowed the librarians to better understand copyright and its important role in information sharing. For the spring 2005 semester, The University of Toledo library will sponsor a workshop specifically on the issue of retaining and establishing copyright for the completed ETD.

Charting the Course of Change

While the library has maintained a key role in this process for the reasons outlined above, there are three specific areas that the library can play an added role as a university implements and utilizes the OhioLINK ETD center. Through interaction with other universities that implemented this shared resource, we expect that these same three issues will be brought up at any new university to this resource, despite the apparent success in those already using the resource. Furthermore, any consortium that creates cooperative data resource sharing that is managed through the library might face these issues as individual schools elect to participate. These three areas are: technology, workflow and support issues, and cultural issues.

Technology

Technological issues are one of the central concerns for any move from a paper-based environment to an electronic one. The same is true for ETDs as it might be for journals, databases, indices, and electronic books. Although, as a user of information, we predominantly prefer electronic means of access, as a creator of information, we are not always convinced about issues such as security, usability, and accessibility. Furthermore, with every new electronic resource, librarians are exceptionally aware of the need to educate the users how to take advantage of the new format and how to more effectively use search tools available via the computer. As creators of information, we are also deeply concerned about issues inherent in digital media such as security, usability, preservation, provenance, authenticity, and long-term institutional stability. Addressing these concerns for digital projects developed in-house requires an investment in specialized staff and computing resources that are just not available to many libraries.

With OhioLINK ETD center, the technology problem is "off the table." OhioLINK Staff manages all server issues, including storage, users forms, and searching. Taken alone, it makes the process of implementing ETDs possible for many OhioLINK universities (such as The University of Toledo) that do not have the resources or abilities to mount such a database and ensure its long-term viability. All that is required for a new member of the OhioLINK ETD is to provide a list of degrees, departments and contacts (ideally via generic email addresses, such as etd-lib@utnet.utoledo.edu) to OhioLINK for setup. As the university establishes new programs, part of the workflow needs to include contacting OhioLINK with the new information. If a university embarks on retrospective addition to the OhioLINK ETD center, additional changes to the list of degrees and departments might be needed. At The University of Toledo, the graduate school has been very happy to contact familiar people in the library to get these changes made, rather than contact OhioLINK, an entity that they are not yet familiar with. In contrast, Miami has an active team of technology librarians who develop innovative digital collections and electronic public services for library clients. However, the advantages of the OhioLINK ETD center also extend to libraries like Miami that have good technology resources at their disposal. Having the ETD center developed by OhioLINK has allowed Miami to focus resources and attention on unique projects that are tailored more closely to local user needs.

Workflow and Support Issues

With workflow and support issues, greater cooperation is needed between graduate school and the library. While the cooperation typically exists between the two entities because of treatment and storage of paper copies of the completed theses and dissertations, a greater or expanded role needs to take place. Prior to the adoption of ETDs at The University of Toledo, the graduate school would send the two copies of each completed thesis; dissertation or masters project to the library. One would be bound for the archives and one would be bound for the circulating collection. Little more cooperation or coordination was needed to make the process easy for students and staff to follow. With the ETDs, a much closer examination of the process needs to take place. What we have noticed at The University of Toledo is that students will contact both the graduate school and the library both prior to and after submission with questions about access. A clear line of communication must exist between the two entities to ensure that students are getting the correct answer. Also at Toledo, the implementation of ETDs allowed us to look more closely at our entire processing workflow for these documents. What we have been able to do is to improve access and speed up full cataloging by re-evaluating the process.

At Miami University, the graduate students would have to bring a final reviewed and signed copy to the library that was ready to bind. Similar to Toledo, one copy would be bound for the archives and one bound for the circulating collection, and sometimes one would be bound for their particular department and or themselves. Unfortunately, every department at Miami treated theses and dissertations differently and this usually lead to uneven services and workflow. Some departments paid for the bound copies while others pushed the cost to the students. Once the mandatory ETD system was in place and required all the unevenness was brought to light and many were corrected.

At Miami, the graduate school knows that it can send over a student at any time to have a librarian sit with them and be the hand that they hold while converting their document to a PDF file and uploading it to the central site. As mentioned before, as a commitment to the graduate school, the library offers instructional workshops every semester but there are always students who cannot attend due to scheduling issues. In the beginning, when the ETD requirement

was new to everyone, including the library and graduate school staff, there were many hurdles and learning experiences. Trainings were held for the graduate school staff and librarians alike and today there are many that are very confident helping graduate students.

As mentioned above, the library can play a key role in managing the support mechanisms to help the graduate student convert their document(s) to the PDF format. This is often viewed by the students as an obstacle and not a skill that they really need to learn as they move towards the completion of their degree. Also, this can be seen as a stressful component of the process as the student moves towards the completion of their degree. It many regards, it is a matter of timing. Most students, who are close to finishing their graduate degree, are probably not the best suited to take the time to learn how to convert a document to a PDF. At both Miami University and The University of Toledo, the library has played a key role in the support of students converting their document and in many instances; finish that part of the student's work for them.

Cultural Issues

Cultural issues and the changes that take place can present some of the most difficult challenges that a university faces when implementing ETDs or any new electronic processes. There are many issues that the institution is forced to address such as giving up bound copies in the library and the department and the need to revisit access to these completed works, especially where patents and republication are expected results of the completed dissertation.

At The University of Toledo, the biggest challenge was bringing the entry to the OhioLINK ETD to the table for discussion. Many people in the graduate school and the graduate council saw this as a library program and did not move this to the top of the agenda. The library was told that it was not to move ahead with the ETD without approval of the graduate council (despite explicitly telling the other entities on campus that the library would only be the facilitator, not the instigator for this project. Also, another big challenge was that the ETD center was not a high priority for either the graduate council or the graduate school. The library, through representation by Corey Seeman, attended numerous graduate council meetings where they were relegated to the end of the agenda or promised time in the "new business" section of the meeting that only hit when half the members had already left. The library, guided by a desire to make this project happen, persevered and finally had the ETD center early on the agenda. It took nearly three years from first introduction to implementation because of these types of delays. Even though the library played a key role in keeping the ETD center in discussion, only the graduate school and graduate council can make these types of programs officially accepted by the university.

Another issue that was dealt with at The University of Toledo was the notion of retention of paper copies of the works in the OhioLINK ETD. Since participation in the OhioLINK ETD center was voluntary, we needed to come up with two different means of submitting the completed thesis or dissertation to the university. Traditionally, students would submit three paper documents for dissertations. One would be bound and sent to the university archives, one would be bound and circulated and the last would be sent to UMI for microfilming. For master's theses and projects, only two copies would be requested: one for the archives and one for the circulating collection. The new requirements were done in cooperation between the library and graduate school to ensure that we had both the needs of the student and the library in mind. Since submission is voluntary, we wanted to have a tangible enticement for students to submit to the ETD center. So in the end, after consulting with the university archivist, Toledo opted to ask that students who submitted to the ETD center would only be required to submit one copy of the paper. This copy would go to the university archives and would not circulate. This would not be needed because patrons could get the document via the Internet. This was a satisfactory solution to all parties and it offered students a small benefit for submitting electronically. What was critical in this collaboration was that the needs of the archives, library and the graduate student were all taken into consideration. This might not have been the case had this initiative not involved the library.

Future Directions

A recent topic of an email discussion among ETD center adopters was the possibility of including undergraduate research as well as graduate theses and dissertations. In late 2004, OhioLINK added the ability to add undergraduate honors theses. This development was welcomed at Miami because the Miami

libraries had already been collecting honors theses in a homegrown database. The database arose from a desire to recognize and capture the research of the most academically talented undergraduates. At Miami, approximately 850 students are enrolled in the university honors program. Students are required to produce and submit a research thesis at the end of their program. Approximately 50 theses are submitted each year as a result of the program.

The system that was built consisted of an online submission page that asked authors to provide basic abstracting information about their thesis in a form similar to the OhioLINK system. Once completed, authors would then upload an Adobe PDF version of their thesis and complete the submission process. By late December 2004, nearly 150 honors theses had been submitted and approved. Since the announcement to include honors theses in the ETD center, Miami has transitioned the submissions of honors theses to the OhioLINK server. The transition happened quickly in part due to the excitement of the honors program staff themselves. Their primary motivation was a strong desire to make the work of their students visible to a much larger worldwide audience. Ultimately, as impressive as the technical implementation of the OhioLINK ETD center is, the ability to open up research materials to a larger audience has, and will be, the most successful selling point for authors, educators, and administrators. Recently, Miami registered the first new honors thesis to be submitted to the OhioLINK ETD center. The topic was body modification and self-image among college students. As with the original implementation of graduate theses and dissertations, OhioLINK can expect the number of schools submitting undergraduate research to grow.

Conclusions

Through the experiences of Miami University and The University of Toledo, the traditional role of the library is expanded as these schools started using the OhioLINK ETD. Also in both of these cases, there was great cooperation between the library and the graduate school to make these changes possible.

While the library became partners with the ETD center because OhioLINK is viewed as a "library" entity, the librarians at Miami and The University of Toledo were able to use their ability and understanding of information management to serve as important navigators through both the implementation and ongoing support of the ETD center. This understanding of information outweighs pure technical expertise since the librarian views these documents not just as a paper that needs to be finished, but as a resource scholars need to be used. This is the unique vision that the library brings to resource sharing environment and has led to more user friendly documents in this important resource. The lessons learned in implementing the OhioLINK ETD will prove useful as Ohio universities and colleges implement the Ohio Commons for Digital Education (a state-wide shared resource similar to "D Space".

Notes

- 1. The URL for the OhioLINK ETD center is http://www.ohiolink.edu/etd/. The OhioLINK ETD center FAQ is located at: http://www.ohiolink.edu/etd/faq.html.
- 2. The library has a webpage to assist students in submitting their document to the OhioLINK ETD center (http://library.utoledo.edu/serv/etd.html). Using a method for other tutorials, the guide was written with Microsoft PowerPoint and presented in three different ways: as a webbased PowerPoint presentation (http://library.utoledo.edu/serv/ETD_Handbook.html); as a PowerPoint file (http://library.utoledo.edu/serv/ETD_Handbook.ppt); and as a PDF handout (http://library.utoledo.edu/serv/ETD_Handbook.pdf).
- 3. For more information, please visit http://www.lib.muohio.edu/theses/.