

Mary Early mgearly@uncg.edu
Anne Marie Taber amtaber@uncg.edu

A national review of relevant, current (since 2003), library and higher education literature on collaboration, workflows, and divisions of labor in electronic thesis and dissertation (ETD) programs consistently reflects the wide variety of skill sets called for in their management. Successful ETD programs require input from graduate school administrators, library or campus information technology (IT) staff, and professional cataloger librarians as well as from the students creating the documents. In most colleges and universities, the graduate school and library are equally involved in designing new ETD programs, forging a relationship that continues through workflows as the programs mature. Personnel from multiple departments must address ETD program needs and issues such as student training and instruction in metadata creation, the need for sophisticated cataloging, the growth of institutional repositories, and efforts toward long-term preservation. As electronic submission of theses and dissertations grows in popularity, the focus in literature has shifted – from the choice of platforms (local, open-source, or proprietary) for submission and storage to discussions on improving systems and training, building institutional repositories, increasing access and exposure, and ensuring long-term preservation. Though ETD workflows may vary widely in such aspects as content management and storage systems, extent of automation, and departments involved, these common themes emerge: the variety of skill sets involved in ETD, the common elements in workflow procedures, and the importance of communication and collaboration.

Several current articles discuss the complexity of ETD depositories and the resulting need for a variety of skill sets in their creation, development, and management: skills in leadership, project management, human relations, information technology, and cataloging all come into play. The movement of university students and resources from traditional to electronic mechanisms raises the bar for both students and staff, necessitating advanced skills or additional training on all sides. Kristin Yiotis ¹(2008), in an overview of the history and requirements of ETD programs, points out some of these issues: current metadata and interoperability standards

¹ Kristin Yiotis. Electronic theses and dissertation (ETD) repositories: what are they? Where do they come from? How do they work? *OCLC Systems & Services* 24, no. 2 (2008): 110-12.

Mary Early mgearly@uncg.edu
Anne Marie Taber amtaber@uncg.edu

for OAI-PMH, preservation and file format standards such as PDF, open-source vs. proprietary software platforms, intellectual property and levels of access, and start-up costs for human resources, infrastructure, and training. To address such varied concerns, ETD programs must cross departmental boundaries in new ways. Ideally, the flexibility thus gained should continue, since the skills required are likely to change as these programs evolve alongside technological change.

The arrival of an ETD at its final destination, typically an institutional repository, is the conclusion of a lengthy workflow process. The document itself, which may be the product of years of study, now must conform to institution and industry standards for digital form and format. To meet these standards, students are trained via workshops, websites, handouts, tutorials, meetings, or any combination thereof. The graduate school handles student instruction in most institutions; in a few, this role goes to the library. Once trained, the student prepares the document and uploads it to a vendor-operated or institution-built submission site. The document is reviewed, typically by the graduate school, and then either approved or returned to the student for changes. Once approved, the final digital file usually moves to the library, which provides both metadata – including cataloging to MARC and OCLC standards – and access. The order of these final steps depends upon the type and extent of automation built in to the institution's submission system. Throughout the literature, workflows are described as the combined effort of graduate schools, libraries, and sometimes IT departments. The interaction and interdependence observed in these workflows suggests the great importance of ongoing communication and collaboration among departments involved in ETD.

Thus connected by an ETD program, libraries, graduate schools, and IT departments find themselves in a relationship where tasks and skills sets may vary, but communication and collaboration must remain constant. In fact, this theme forms a thread that weaves through recent literature concerning ETD workflows. The birth and development of these programs is usually a collaborative effort between a variety of departments, spurring institutions to communicate, work together, and think collectively. Unfortunately, as colleges and universities grow comfortable with the ETD process, the level of communication tends to decline as staffs turn their attention to

Mary Early mgearly@uncg.edu
Anne Marie Taber amtaber@uncg.edu

other projects. Susan Hall et al., in a 2005 survey of US ETD institutions, summarize here their respondents' advice to administrators building new programs: "recommendations...greatly stressed the importance of clear and ongoing communication among constituents at all levels, and securing commitment for support at the outset."² Throughout the literature the call repeats, to continue discussions and team efforts to maintain and improve levels of service, quality of systems and procedures, and the relationships built on ETD.

This literature review has focused on ETD workflows, collaboration, and divisions of labor and has found three important themes echoing throughout the discussion. First, the design, implementation, and maintenance of these programs require a variety of skills that cross traditional departmental boundaries in academia. Second, although ETD workflows vary widely from one college or university to the next, common elements include student training by the graduate school and description and access provided by the library. Finally, because the success of these programs depends on the contributions of multiple departments, the communication and collaboration necessary for their initiation continue to be important – and it is important that they continue.

² Susan Hall, Lona Hoover and Robert E. Wolverton, Jr. Administration of electronic theses/dissertations programs: a survey of U.S. institutions. *Technical Services Quarterly* 22, no. 3 (2005) p. 9.

Mary Early mgearly@uncg.edu
Anne Marie Taber amtaber@uncg.edu

Bibliography

ARL Digital Repository Issues Task Force. The research library's role in digital repository services.

Association of Research Libraries [web site].

<http://www.arl.org/resources/pubs/reports/index.shtml>

Bishop, Patricia, Ruth Marshall, and Debra Winter. A robust electronic thesis and dissertation program at UCF. *EDUCAUSE Center for Applied Research Research Bulletin*, no. 3 (2007).

<http://net.educause.edu/ir/library/pdf/ERB0703.pdf>

College Blue Book. 36th ed. New York: Macmillan, 2009.

Fineman, Yale. Electronic theses and dissertations. *portal: Libraries and the Academy* 3, no. 2 (2003):

219-227. http://muse.jhu.edu/journals/portal_libraries_and_the_academy/v003/3.2fineman.pdf

Fyffe, Richard, and William C. Welburn. ETDs, scholarly communication, and campus collaboration.

College & Research Libraries News 69, no. 3 (2008): 152-155.

Hall, Susan, Lona Hoover and Robert E. Wolverton, Jr. Administration of electronic theses/dissertations programs: a survey of U.S. institutions. *Technical Services Quarterly* 22, no. 3 (2005) 1-17.

http://www.informaworld.com/10.1300/J124v22n03_01

---. Publishing electronic theses and dissertations: reconfiguring library services. *Technical Services*

Quarterly 21, no. 2 (2003): 63-70. http://www.informaworld.com/10.1300/J124v21n02_05

Hoover, Lona, and Robert E. Wolverton, Jr. Cataloging and treatment of theses, dissertations, and ETDs.

Technical Services Quarterly 20, no. 4 (2003): 3-57.

http://www.informaworld.com/10.1300/J124v20n04_02

Jewell, Christine, William Oldfield, and Sharon Reeves. University of Waterloo electronic theses: issues and partnerships. *Library Hi Tech* 24, no. 2 (2006): 183-196.

www.emeraldinsight.com/10.1108/07378830610669565

Mary Early mgearly@uncg.edu
Anne Marie Taber amtaber@uncg.edu

Jones, Richard, Theo Andrew, and John MacColl. Case study: the Edinburgh Research Archive. In *The Institutional Repository.*, ed. Richard Jones, Theo Andrew, and John MacColl. Oxford: Chandos, 2006. Accessed via Edinburgh Research Archive, <http://hdl.handle.net/1842/859>

Lippincott, Joan K. Institutional strategies and policies for electronic theses and dissertations. *EDUCAUSE Center for Applied Research Bulletin*, no. 13 (2006).
<http://net.educause.edu/ir/library/pdf/ERB0613.pdf>

McCutcheon, Sevim et al. Morphing metadata: maximizing access to electronic theses and dissertations. *Library Hi Tech* 26, no.1 (2008): 41-57. www.emeraldinsight.com/10.1108/07378830810857799

Piorun, Mary, and Lisa A. Palmer. Digitizing dissertations for an institutional repository: a process and cost analysis. *Journal of the Medical Library Association (JMLA)* 96 no.3 (2008), 223-229.
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2479051&rendertype=abstract>

Surratt, Brian E., and Dustin Hill. ETD2MARC: a semiautomated workflow for cataloging electronic theses and dissertations. *Library Collections, Acquisitions, and Technical Services* 28 no.2 (2004): 205-223. DOI: 10.1016/j.lcats.2004.02.014. <http://www.sciencedirect.com/science/article/B6VSH-4C56GYX-1/2/6ba89629c4d348a973e7debbb9c26e37>

Yiotis, Kristin. Electronic theses and dissertation (ETD) repositories: what are they? Where do they come from? How do they work? *OCLC Systems & Services* 24, no. 2 (2008): 101-15. DOI: 10.1108/10650750810875458, www.emeraldinsight.com/10.1108/10650750810875458