Open Access for Online Scholarship: The Beginnings of Institutional Repositories in North Carolina

Joseph Thomas

Recent articles in this column have focused on unique print collections, including the Friends Historical Collection, the Moravian Archives, and the Schlobin Collection of Literature of the Fantastic. Changing direction somewhat, this article will focus instead on a type of collection that is online only—an institutional repository—and will feature some of the pioneer work done in the state of North Carolina.

Online repositories of scholarly work are not new; the e-print service arXiv has provided access to papers in Physics, Math, Computer Sciences, and related disciplines since 1991. Digital repositories focused on specific institutions rather than collaborative products oriented to subject areas are newer, but to some extent, all digital repositories were born out of a more general scholarly communication movement arising in the late 1980s and early 1990s. But what does "institutional repository" mean? Clifford Lynch defines institutional repositories (IR's) this way: "A university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution."[1] Basically, an IR exists to preserve and make available the research output of the college or university it belongs to.

There are several software products available for creating institutional repositories. The two most often used are **DSpace**, an open source software developed by MIT and Hewlett-Packard,[2] and **Digital Commons**, a proprietary product of ProQuest-CSA using technology developed by BE Press.[3] There are several other software products available for institutional repositories, including the following: **Fedora**, a freely available software solution which was developed by Cornell University and the University of Virginia Libraries with funding by DARPA, the National Science Foundation, and the Andrew W. Mellon Foundation;[4] also open access, **EPrints** was developed at the University of Southampton in the UK;[5] and **CONTENTdm**, a hosted subscription product by DiMeMa, which seems to be most used now for image repositories.[6]

A variety of articles and web pages are devoted to Scholarly Communication issues in general and Institutional Repositories specifically, so that librarians can learn more about IR. Among the most helpful are SPARC, the Scholarly Publishing & Academic Resources Coalition (http://www.arl.org/sparc/repositories/), and Raym Crow's article "The Case for Institutional Repositories: A SPARC Position Paper."[7] Clifford Lynch and Joan K. Lippincott have also reported recently on the status of institutional repositories in the United States.[8]

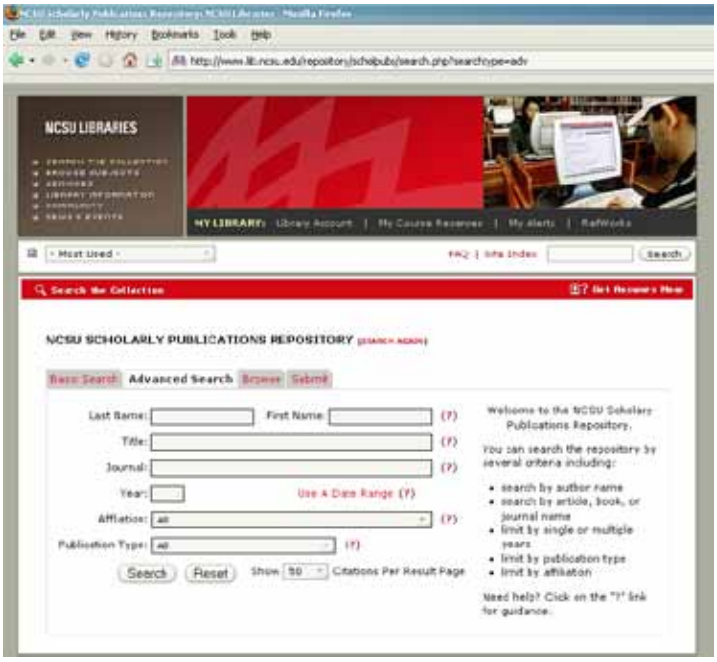
To aid institutions in planning for and implementing their own repositories, the Association of Research Libraries (ARL) and the Association of College and Research Libraries (ACRL) have partnered to create an Institute on Scholarly Communication. The first institute, held at UCLA in the summer of 2006, drew the maximum number of allowed attendants, 100, including representatives from Appalachian State University and the University of North Carolina at Greensboro. The second Institute was held at Duke University in December of 2006, and included teams from Duke University, East Carolina University, North Carolina State University, and the University of North Carolina at Chapel Hill. Representatives from these institutions have carried their ideas and plans back to their respective institutions to extend their work on scholarly communications issues on their own campuses.

So, who has institutional repositories in North Carolina? And who is developing them? According to an ARL Spec Kit, nearly 80% of ARL respondents had either implemented an IR or were planning to do so by the end of 2007.[9] So the list of North Carolina colleges and universities offering institutional repositories will probably grow.

Here are the first in the state:

The first operational, publicly available institutional repository in the state of North Carolina is the Digital Commons at Fayetteville State University (FSU). Spearheaded by Library Director Mr. Bobby C. Wynn and Associate Director for Collections Evelyn Council, the Digital Commons went live in the summer of 2006, with the aid of funding from a Title III grant. Ms. Council initiated planning for an IR after attending a meeting of Historically Black Colleges and Universities, where librarians were challenged to do something momentous within the space of one year. FSU decided to use the Digital Commons product that about 50 other schools have chosen, based on its being a turn-key operation. Mr. Matthew Lawson, Head of Technical Services, is involved in day-to-day operations for Digital Commons, primarily focusing on populating the IR. The library's goals in establishing an institutional repository were to provide an alternative for scholarly publishing, opportunities for faculty to mentor student research and publication, increased library collaboration, and visibility to the Fayetteville State University family.

Currently DigitalCommons@FSU contains roughly 80 items, including electronic theses and dissertations (ETD's), working papers from various departments on campus, and the *Interdisciplinary Social Work Journal*, a new open access journal published at FSU. The library's agreement with ProQuest allows for permanent ownership of any material within the repository, including the option to migrate if/when necessary. Thus, marketing Digital Commons to the Fayetteville State family stresses the IR's preservation function in addition to the creation of added visibility for the University's research.



North Carolina State University (NCSU) Libraries have also begun creating an institutional repository, using the DSpace open source software. Their IR will have several components, including ETD's, a faculty publications database, and technical reports. Selected items from special collections may also be included. The Libraries decided to start their IR with library-managed collections and use the planning process to create services that could be developed into further partnerships across campus, to further encourage faculty participation to an already-populated repository. NCSU's planning committee includes the library's deputy director, head of collections & special collections, the head of the digital library, assistant head of digital library initiatives, collection managers, the scholarly communications librarian, and the head of the digital publishing center. Planning committee members stress that the Digital Repository is not an end in itself, and place their focus instead on how developing it will help the Libraries better understand the campus's needs and determine how the Libraries can meet them.

While an advisory group will eventually consider a broad range of materials and material types for the repository, NCSU is beginning with ETD's, faculty publications, and technical reports which are generated by researchers in departments across campus. The NCSU Libraries captured and cataloged as many of these technical reports as possible in the past when they were produced in print, and now are continuing their efforts of the born-digital reports. The faculty publication database will build on an academic publications citation database that the library staff began about 10 years ago. Now pointing to roughly 22,000 publications, citations are mined by library staff, primarily from ISI's Web of Science Citation Indexes.[10] Currently, the Libraries link when possible to licensed subscriptions; the plan is to add links to articles submitted to the Institutional Repository. As of March 2007, the Technical Reports Repository contained around 900 reports from four series; users may search or browse, and then read the fulltext of the reports.[11] The Institutional Repository should be ready for launch during the summer of 2007.

The University of North Carolina at Charlotte will also soon release an institutional repository. Under the leadership of Stephen Westman, Digital Initiatives Librarian, eScholar uses DSpace to store and allow dissemination of digital versions of the campus's scholarly production. Specifically, the mission of eScholar is "to disseminate, preserve, and provide persistent and reliable access to the research and scholarship of faculty, staff, students, and research groups on the University of North Carolina at Charlotte campus."[12]

Why should the library assume responsibility for an institutional repository? According to Westman, "In undertaking this initiative, we saw this as being a task that the library needed to play, given that such a project is a logical extension of our traditional role

as being the campus entity responsible for acquiring, organizing, providing access to, and preserving faculty research."[13] Currently, eScholar houses ETD's, presentations, and publications by library faculty. One of the unique features of UNCC's IR is that it will allow faculty members to personalize a research page of their own, where they can upload documents and provide additional background information on their research. Other interesting personalization features include the ability to see the number of times each document has been downloaded and the option for email alerts.

Momentum is building within North Carolina for institutional repositories, and initiatives are underway at other schools. Institutional repositories provide a means whereby campus scholarship can be aggregated, organized, preserved, and offered out for dissemination, and hopefully this means of maintaining access to the institution's knowledge production can be more comprehensive than it has in the past. Let's congratulate these institutions for their bold steps forward, and work with them when we can!

References

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