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We're All In This Together: Supporting the Dissemination of University Research Through Library Services

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Abstract:
One of the primary functions of universities is the discovery and dissemination of new knowledge. Yet, most institutions only focus on supporting faculty in the initial discovery process, requiring researchers to fend for themselves when sharing their work. Institutional repositories (IRs) have a unique opportunity to expand traditional library services by supporting the dissemination of university research. Thinking beyond archiving graduate theses and faculty publications, librarians are developing new IR services which can assist faculty in a variety of ways. Managing researcher pages, consulting on copyright transfer agreements, exchanging publication information with other university stakeholders, even launching library-based publishing services are all ways repositories have begun reaching out to faculty. The effect of these new services is beginning to transform the scholarly communications cycle and the library's role in those processes.

Boise State University began developing its institutional repository (IR), ScholarWorks, in the fall of 2008. Unlike other libraries, we didn't begin our efforts with research studies and long term roadmaps. Instead we were very fortunate to have high level support from our Provost who understood the need for and value of having a system which could support faculty scholarship. This support enabled us to begin developing a set of services designed to capture and showcase scholarship produced at Boise State.

Also during this period, our Provost shared with the Vice President of Research, the Dean of the Graduate College, and the Dean of the University Library, a presentation given by David Shulenburger, Vice-President for Academic Affairs for the National Association of State Universities and Land-Grant Colleges. In his remarks to the Association of Research Libraries, Shulenburger discussed a survey he had conducted of Provosts, asking if universities had strategies for disseminating the scholarship they produced. Only a handful provided any kind of affirmative response, indicating that it was not a priority for most universities. In this presentation, along with the ideas set forth in the *The University's Role in the Dissemination of Research and Scholarship* which he helped author, Shulenburger exhorted universities to take responsibility for the dissemination of its research and advocated for the development of distribution strategies (Shulenburger, 2007; Association of American Universities, Association of Research Libraries, The Coalition for Networked Information, and the National Association of State Universities and Land Grant Colleges, 2009). Boise State embraced these concepts as we began to develop the ScholarWorks services.

Traditionally the dissemination of scholarship is left up to the individual professor and in most institutions the only acceptable method of distribution is through traditionally published peer-reviewed journals. This system of dissemination is virtually immutable since it is so strongly connected to the tenure review process. Because this is generally the standard for universities across America, there has been little impetus for faculty, or universities administrators for that matter, to investigate or change how the scholarship produced at their institutions is disseminated. The consequence is that access to new research and scholarship is limited to those who can afford to pay for these journals.

Universities have always had a research mission, but they have not necessarily taken responsibility for disseminating this work. In modern academia however, faculty have almost unlimited ways of describing and sharing the work they have created. This new environment is challenging the standard practices for publishing scholarship and as a result universities have an opportunity to change how their research is disseminated.

The University's Role in the Dissemination of Research and Scholarship - A Call to Action describes several strategies universities could use to support the dissemination of its research:

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- Retain the rights to disseminate and preserve scholarship developed
- Develop tools, policies, and infrastructure to help disseminate scholarship, especially for unique and localized content
- Develop reward systems which refocus efforts on dissemination

Libraries, especially institutional repositories, are well positioned to implement these strategies as universities incorporate dissemination as a core function.

In some ways it seems strange to talk about research dissemination as a role libraries should take on. The infrastructures that have been built are generally geared towards collection development and helping patrons use the materials we have gathered for them. When we do consider dissemination we typically frame it in terms of promoting access to those resources. Library school instruction focuses on managing resources and typically doesn't explore research dissemination practices or even discuss scholarly communication issues in depth. Even in the repository world, much of our early efforts have focused on developing and preserving digital collections. Information dissemination is a relatively passive, unsupported responsibility.

This perception is unfortunate as libraries can substantially contribute to a university's scholarly communication activities. Librarians already have the skills and resources to understand and work with the publishing industry. They have a foundation in negotiating licenses, building efficient infrastructures, and analyzing user needs. Additionally, few campus entities have as full and comprehensive understanding of what scholarship is being produced by their researchers as libraries do. These strengths offer libraries an opportunity to participate in discussions on scholarly communication issues, as well as actively participate in how their university's research and scholarship is disseminated, particularly through the development of institutional repositories.

Common Types of Repository Content

Although the development of institutional repositories is relatively recent, many IRs include some common types of content:

- Faculty journal articles
- Theses and dissertations
- University documents

As a result of harvesting these works, libraries have developed infrastructures and skill sets to handle this kind of content. At Boise State in order to efficiently manage the posting of published journal articles, we created a database for tracking copyright policies and author permissions. For theses and dissertations we worked with the Graduate College to create authorization forms that students would use to submit their documents. These early successes also gave us a better understanding of scholarly communication issues and provided an opportunity to develop our skills in the areas of copyright clearance, author permissions, ingest processes, and faculty consultations.

However these are still relatively passive projects when it comes to disseminating research. They do not require libraries to actively engage with faculty early in the scholarly communication cycle. To take responsibility for the distribution of a university's research as David Shulenburger advocated, libraries need to go beyond the traditional models of building a collection and begin thinking of institutional repositories as services. Many libraries are beginning to do just that, creating unique repository services which enable them to directly support faculty in distributing their work.

Unique Library Services Supporting Research Dissemination

Advocating for Author Rights

At Boise State, I have found consulting on author rights to be one of the most important services we can provide. There is no doubt that for most professors this is a difficult part of the publishing process. I have been told many times "I just signed the form and sent it back." This approach makes perfect sense when you consider what faculty must deal with. Publishing agreements are complex and use ambiguous language, authors are rushed and simply want to be published, and there are few self-evident publishing alternatives. This is especially true if a department or college requires a professor to publishing in certain "top tier" journals. This approach however can have long term consequences for both the author and the

university. In response to these issues, libraries are using a variety of strategies to assist their faculty in managing their author rights.

Oregon State University created an authors' rights workshop "designed to train librarians in their roles as authors and as envoys to educate others on campus" (Wirth & Chadwell, 2010). The workshop gives participants the opportunity to learn about the importance of author rights, identify library science journals that support self-archiving, and practice reviewing copyright transfer agreements.

Several university libraries have developed open access funds. PARC defines open access funds as "a pool of money set aside by an institution to support publication models that enable free, immediate, online distribution of, and access to, scholarly research." (Scholarly Publishing and Academic Resources Coalition, n.d.). Policies and amounts vary from university to university. The Provost Office of the University of Florida allocated $120,000 for a two year period with preference given to fully open access journals. By the end of the first year, the fund had supported 52 articles (Russell, 2011). The Z. Smith Reynolds Library at Wake Forest University shares the cost of their open access fund with the Office of Research and Sponsored Programs and supports articles that are published in either fully open access journals or traditional journals which offer a paid open access option (Z. Smith Reynolds Library, 2011). Although the effectiveness and long term sustainability of these funds is unclear, they do however help raise faculty awareness of publishing options.

Boise State supports its faculty in capitalizing on their author rights in several ways. We use a mediated deposit model where we identify journal articles that are eligible to be included in our institutional repository, investigate the publisher's copyright policy, and work with the author to obtain their permission to include their work. This approach alleviates professors of having to do all the depositing tasks and provides an opportunity to individually communicate with faculty about their publications. The addition of descriptive metadata and, when possible, open access to full-text also greatly improves the discoverability of the professor's work.

Many libraries have developed guides and information resources to help explain the options authors have when publishing their scholarship. The Transforming Scholarly Communication web site developed by the University of Minnesota Library provides information on author's rights, government information policies, and copyright and fair use. They also created a wiki to help staff and librarians develop their knowledge of scholarly communication issues (University of Minnesota, 2009). The Bernard Becker Medical Library developed a Scholarly Communications Portal which provides resources on protecting your author rights, preserving intellectual assets, and gaining assistance with complying with the National Institutes of Health Public Access Policy (Bernard Becker Medical Library, 2010).

Creating Researcher Pages

One of weaknesses libraries have had when marketing institutional repositories to faculty is that the focus has been on the institution and not on the individual author. Libraries have tended to emphasize the challenges of increasing serials prices, the importance of open access, and being able to showcase the institution as a whole. Although important, faculty are concerned with other issues such as obtaining tenure, freedom to conduct their research, and receiving recognition from their peers. It can be difficult to bridge the gap between these two different sets of priorities. In contrast researcher pages are a way to show an immediate and personalized benefit for faculty participation in institutional repositories. Unlike most repository collections which organize content by department or college, researcher pages are designed to highlight an individual author and their work.

One example of a well integrated researcher page service is the SelectedWorks option available from Digital Commons. Using a standard template, SelectedWorks pages provide basic information about an author's professional activities (expertise, courses taught, grants received, etc.). Additionally, documents can be posted directly to the SelectedWorks page or content can be harvested from the main institutional repository. At Boise State our repository is hosted on Digital Commons and we use this feature extensively when marketing the service to faculty. With over 45% of all tenure track faculty

participating, ScholarWorks staff build and maintain individual pages for the professors. The workflow developed for ingesting faculty publications into the main repository also includes processes that allow staff to pull publication metadata from ScholarWorks onto the professor's page.

UR Research from the University of Rochester features another example of researcher pages. Developed as an open source repository software, the system provides a workspace for faculty to post different versions of their manuscripts, share files with other researchers, and provide links to works not hosted in the repository. One advantage of this system is that authors can control which documents are made openly available (University of Rochester Libraries, n.d.).

A faculty member's professional reputation is developed through their scholarly activities. When repositories post a work online, they are helping create an author's digital footprint. Researcher pages help showcase the full scope of a professor's research and increase the discoverability of that work. Providing space where authors can publicly host their documents and show their institutional affiliation, while also being professionally presented, enhances their online reputation. Libraries that are also able to develop systems that support the maintenance of those pages provide a tremendous service to their faculty.

Reaching Out to Other University Stakeholders

Although authors are the primary target for most outreach efforts, other university stakeholders greatly benefit from the work of institutional repositories. Since most faculty are left on their own to disseminate their research, many universities do not have an organized and consistent method of identifying new publications. Repositories which focus on faculty publications, particularly those that use a mediated deposit model, become excellent sources for this kind of data.

Oregon State University developed a partnership with their University Advancement office to provide access to original research. When writing articles about a research project, the Advancement office contacts the library staff who works with the faculty to include the publication in the institutional repository. Once posted, University Advancement can direct readers to the archived document. This collaborative approach provides an additional impetus for faculty to participate in the repository, supports another department's efforts to showcase university research, and provides the library an opportunity to discuss author rights and research dissemination. (Kunda, 2010)

At Boise State, the Library has begun collaborating with the office of Institutional Analysis, Assessment & Reporting to share publication data. Faculty were asked to submit their curriculum vita to ScholarWorks. Repository staff then identify publications created while the professor was at Boise State and verify that the submitted citations are complete and correct. This information is used to populate the repository, and then shared with the Assessment Office who then uploads the information into Digital Measures, a tool used to track faculty outputs. Previous efforts to populate Digital Measures with quality publication information had not been successful due to the amount of work required to manage this sort of information. By utilizing the workflows and processes already developed by the Library, the University has access to quality data when developing institutional reports.

Many repositories are beginning to host conference proceedings and other event information. These types of projects provide a wonderful opportunity to reach out to other campus groups who may not have the resources to preserve and disseminate this kind of scholarship. One example of how repositories are supporting access to this unique research is by posting content from student research conferences. The University of South Florida, Pacific University, and Boise State University have all collaborated with other university departments to post undergraduate research conference content. In addition to featuring original scholarship, these collections give new researchers an opportunity to gain experience in disseminating their work. We have also found at Boise State that collecting this type of content has created opportunities for us to talk with faculty about intellectual property issues related to student scholarship.

Generating Publication and Usage Data

Since research dissemination is an individual activity, it is very difficult to keep track of what is being produced at a university. It is even more difficult to understand what issues our faculty face when trying to publish their scholarship or how their research is being used once it is published. Institutional repositories however are designed to serve the entire university. As a result they contain some of the most comprehensive information regarding faculty scholarship and serve as a wonderful record of a university's contribution to their community. This information can be used to provide a clearer picture of how a university's scholarship is being disseminated and utilized.

When Boise State first began developing its repository, only full-text documents were added. However, as we invested more and more time on individual faculty SelectedWorks pages, we realized that to create a complete and attractive site for a professor, we often needed to include metadata-only records. Initially we were not taking full advantage of these efforts as the metadata-only records resided exclusively on an individual faculty member's SelectedWorks page. In the spring of 2011 we changed our policy and began including in our main repository metadata-only records for any publication for which we were unable to obtain copyright clearance or author permission. This change had many advantages for us, the principle one being we could create complete lists of the university's scholarship that could then be segmented as needed. No other group on campus has been able to compile such a comprehensive and accurate record.

At Boise State we have also begun using our institutional repository to host our University Author Recognition bibliography. The original bibliography was created by a separate committee and was part of an annual recognition event. It consisted of a plain list of citations and although hosted online, it did not provide access to any full-text documents. By incorporating those bibliographic tasks into the regular institutional repository workflow, a citation list is automatically generated showing a current collection of faculty publications. Additionally, since the bibliography utilizes our IR platform, we are able to provide full-text access or direct links to the final published version. Besides serving as a wonderful way to honor our authors' hard work, the bibliography is a public display of what has been produced at our university during a given year.

Although there are already tools available to help determine the merit and impact of an article or journal, repositories can also provide more localized usage data. The Digital Commons platform enables repository managers to run a variety of download and page view reports. This information can be organized by date, collection, or usage. Additionally, the system generates monthly email reports for each author providing information on how many times their works have been downloaded. Besides being a great marketing tool for the repository, authors often comment on how surprised they are that an older or more obscure publication is accessed as often as it is.

Since Boise State uses a mediated deposit model for managing faculty publications, we have extensive experience reviewing copyright transfer agreements and publisher copyright policies. To manage this information we developed an Access database in which we store publisher policy information regarding how an author can disseminate their work. This has allowed us to gain a clearer picture of who is publishing Boise State scholarship, what rights faculty have over their work, and most importantly who truly owns Boise State's intellectual property. Without a repository infrastructure and staff working to understand and support research dissemination, it would be very difficult to gather this kind of data.

Developing Publishing Services

In Fall 2007, a survey was conducted of ARL member libraries regarding their publishing services. The survey defined library-based publishing as "the organized production and dissemination of scholarly works in any format as a service provided by a library" (Association of Research Libraries, 2010). The follow-up report noted several common services provided by libraries including: hosting, digitization, copyright advising, and editing. The report also noted that many libraries did not treat publishing services as a separate unit. Rather, they were often "embedded in an emerging program of related services—digital repository development, digitization programs, copyright management advising, etc."

(Hahn, 2008). This very broad approach to library-based publishing provides a lot of room for libraries to develop services that challenge traditional publishing models and develop new ways for universities to distribute their research.

Although there are many different components involved in publishing, one of the most common activities libraries are engaging in is the hosting of journals. Two platforms frequently used are the Open Journal Systems, an open source publishing tool and the electronic journal feature included in Digital Commons. Both systems allow librarians to work with faculty to solicit submissions, manage peer-review processes, and provide indexing and other discovery tools. The Center for Digital Scholarship at the University of Kansas Libraries hosts several journals using Open Journal Systems. They offer assistance with moving print journals to an online environment, as well as original electronic publishing (Center for Digital Scholarship, n.d.). Many libraries using Digital Commons have supported the development of unique, local content through that electronic journal system. For example, Pacific University published *Res Cogitan* which consists of selected papers presented at the Pacific University Undergraduate Philosophy Conference (Pacific University, 2011).

Other universities have collaborated with their traditional university press to develop open access monographs and alternative dissemination models. Utah State University incorporated its press into the Library's structure and has begun publishing an open access digital collection of monographs written by Utah State faculty. This approach places the focus of the press on service to the university (Clement, 2010). Similarly the Office of Digital Scholarly Publishing at Penn State University is led by staff from both the library and university press. This initiative has allowed both groups to contribute their expertise and develop innovative publishing projects. One example is *Romance Studies* developed in collaboration with the Department of French and Francophone Studies and the Department of Spanish, Italian, and Portuguese. These materials are available in both open access and print-on-demand formats (Office of Digital Scholarly Publishing, 2011).

There is no doubt that the publishing world has gone through tremendous changes in recent years. Transitions in preferred reading formats, customers with limited economic resources, and emerging technologies that offer countless methods of disseminating an author's work all contribute to an environment which stretches traditional publishing resources. By combining the strengths of libraries and publishers, universities are able to provide an innovative infrastructure for distributing scholarship.

Curating Data

Researchers, funders, and university administrators are beginning to realize that data is an important but fragile information asset. No longer are academics only seeing value in the final published results of a research project. Instead, scholars are identifying important and on-going uses for the data that supported the published document. The National Science Foundation has also begun to place increasing value in preserving data as it is now requiring grant applicants to submit Data Management Plans with their proposals. Despite these advances, being able to use and study that data is tenuous as computer technology is constantly changing, making access to certain file formats and technology almost impossible. Additionally, few scholars have the expertise or resources to properly manage and preserve their data sets. Yet as with the other research dissemination services previously mentioned, the need for long term data curation services provides a tremendous opportunity for libraries to support their faculty throughout the research process.

The concept of data curation is generally defined as "managing and promoting the use of data from its point of creation to ensure it is fit for contemporary purpose and available for discovery and reuse". (Lord, Macdonald, Lyon, & Giaretta, 2004) By actively curating data not only are universities complying with funder regulations, they are also allowing a type of transparency for the research produced on their campus. This not only supports scientific progress, it also helps ensure the authenticity of the data preserved. Additionally curation work completed by skilled staff actually improves the data through the addition of metadata and other contextual information usually lost over time.

Data curation services provided by libraries vary greatly. Researcher needs, level of librarian expertise, and availability of resources to support such initiatives influence how data is described and preserved. Some libraries will provide simple record keeping services, only including in their repository a basic descriptive record for research projects conducted at their university. Other university libraries have invested substantial resources in developing extensive data curation services that may include consultation, metadata support, and long-term file preservation.

Conclusion

For libraries to continue to be considered valuable members of the academic community, they must support both the university's mission at large as well as the individual professor's research efforts. Consciously developing services that promote the dissemination of research accomplishes both of these goals. Libraries can use several strategies when starting such initiatives:

- Frame your institutional repository as a service that responds to researcher needs and is an active member of the research process. Go beyond thinking of institutional repositories as only a digital collection of university scholarship and instead think of ways that the library can engage with faculty as they begin their research.
- Conduct an environmental scan to gain an understanding of how research is developed and disseminated on your campus. Determine who is supporting those efforts and what policies or infrastructures exist that affect research dissemination.
- Gather information on who is publishing your university's scholarship and investigate how this is impacting the effective dissemination of research. Find out who owns your university's intellectual property and if there are ways to use author rights to further disseminate these assets.
- Offer library staff, including both those directly managing repository services, as well as those fulfilling other duties such as serving as a departmental liaison, opportunities to learn about scholarly communication issues. Help librarians develop the expertise they need to support their faculty in disseminating their work.

Librarians have important contributions to make to the research process. They are well positioned to help faculty members handle the expanding opportunities and changing expectations they face when creating new scholarship. They are also capable of helping capture and showcase the full scope of a university's scholarship. Developing services to assist in the dissemination of a university's research allows libraries to be central in accomplishing these core institutional goals.

References

Association of American Universities, Association of Research Libraries, Coalition for Networked Information, National Association of State Universities and Land Grant Colleges. (2009). The University's Role in the Dissemination of Research and Scholarship—A Call to Action. *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC,* no. 262, 1–6. Retrieved from http://www.arl.org/resources/pubs/rli/

Bernard Becker Medical Library. (2010). Scholarly communications portal. Retrieved from http://beckerweb.wustl.edu/services/scholarly/index.html

Association of Research Libraries. (2010). Campus Publishing and Library Publishing Services. Retrieved from http://www.arl.org/bm~doc/cplp_survey_2007.pdf

Center for Digital Scholarship. (n.d.). Digital publishing. Retrieved from http://cds.lib.ku.edu/services/journal-publishing

Clement, R.W. (2010). *Recapturing the essence of the past: Integrating the university press into the library* [PowerPoint slides]. Retrieved from http://digitalcommons.usu.edu/lib_present/23/

Hahn, K. L. (2008). *Research library publishing services: New Options for university publishing*. Retrieved from Association of Research Libraries website: http://www.arl.org/bm~doc/research-library-publishing-services.pdf

Kunda, S. (2010, November). Innovative partnering: University advancement and the IR. Retrieved from http://www.arl.org/sparc/meetings/dr10/innovation-fair-outcomes.shtml

Lord, P., Macdonald, A., Lyon, L., & Giaretta, D. (2004). From data deluge to data curation. *Proceedings of the UK e-Science All Hands Meeting 2004*, Nottingham, United Kingdom: EPSRC.

Pacific University. (2011). Res cogitans. Retrieved from http://commons.pacificu.edu/rescogitans/

Office of Digital Scholarly Publishing. (2011). Scholarly Publishing at the University Libraries. Retrieved from http://www.libraries.psu.edu/psul/odsp.html

Russell, J. (2011). *University of Florida open access publishing fund pilot project mid-term report*. Retrieved from George A. Smathers Libraries website: http://www.uflib.ufl.edu/oa/UFOAP_midterm%20report2011_revised3.docx

Scholarly Publishing and Academic Resources Coalition. (n.d.). *Campus-based Open-access Publishing Funds*. Retrieved from http://www.arl.org/sparc/openaccess/funds/

Shulenburger, D. (2007). *University research publishing or distribution strategies?*. Remarks presented at the 151st ARL Membership Meeting, Washington D.C., October 11, 2007. Retrieved from http://www.arl.org/bm~doc/mm-f07-shulenburger.pdf

University of Minnesota. (2009). Transforming scholarly communication. Retrieved from https://www.lib.umn.edu/scholcom/index.phtml

University of Rochester Libraries. (n.d.). UR Research. Retrieved from https://urresearch.rochester.edu/

Wirth, A. A., & Chadwell, F. A. (2010). Rights well: An authors' rights workshop for librarians. *Portal, 10*(3), 337-354. doi: 10.1353/pla.0.0105

Z. Smith Reynolds Library. (2011). Open access fund: Transforming the scholarly publishing landscape. Retrieved from http://zsr.wfu.edu/forms/open-access-fund