So You Think You Can Manage an Institutional Repository

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Abstract
Traditionally, academic libraries have held the responsibility of housing, disseminating, and preserving the scholarly output of their universities. These materials, including but not limited to student dissertations and theses, as well as faculty publications were—and still are—primarily held in the libraries’ archives and special collections departments. With the unstoppable march of bits and bites, academic libraries experience an increasingly strong push towards preserving digital records of scholarly output in electronic Institutional Repositories (IR). While undeniably an exciting and versatile invention, the establishment and management of an IR can at the same time be an intimidating endeavor.

Over the course of the discussion session, the co-managers of the San Jose State University Institutional Repository shared their experiences on select IR issues, and invited the attendees of the session to discuss their own experiences and share innovative ideas, thoughts, and concerns.

Discussion

Introduction
Part of the California State University system encompassing 23 campuses, San Jose State University, an urban university located in the heart of the California Silicon Valley, offers more than 4,000 bachelor degrees and over 2,000 masters' degrees to 30,000 students.

Located on the campus of San Jose State University, the Dr. Martin Luther King, Jr. Library, a unique collaboration between the San Jose Public Library network and San Jose State University, opened in 2003 and has since served a diverse community, offering students and public patrons access to nearly two million items housed on eight floors. With its mission to “expand knowledge through research, instruction, and scholarship” the King Library strives, in partnership with the San Jose Public Library, “to provide students, faculty, and members of the community with information resources and lifelong learning opportunities” (Dr. Martin Luther King, Jr. Library, 2012).

In 2008, San Jose State University’s Sense of the Senate Resolution (SS-S08-3) created the Senate Task Force to Investigate Open Access to Faculty and Student Publications to learn about the various open access policies of other U.S. universities, leading forces in the creation of open access policies, and how to create and maintain an open access presence for San Jose State University (San José State University Senate Task Force to Investigate Open Access to Faculty and Student Publications, 2008). As a result, the SJSU ScholarWorks Institutional Repository was created - initially on the open source platform DSpace, from which it migrated in the summer of 2010 to the Berkeley Electronic Press (bepress) Digital Commons fully hosted platform. Since then the SJSU ScholarWorks Institutional Repository has successfully represented the scholarship of SJSU faculty, students and staff with the primary goal to provide access to and preserve the unique work of the SJSU community (SJSU ScholarWorks, 2012).

Description
Prior to the start of the session, participants were provided with a companion handout to the presentation (see Appendix 1). The handout consisted of a collection of 30 items to consider when managing an institutional repository, providing for each a brief description of the most relevant issues and suggestions for possible solutions.

At the onset of the discussion session, presenters introduced participants to the San Jose State University ScholarWorks digital institutional repository they jointly manage, provided the audience with background information on its inception, evolution, and current status, and gave a virtual tour of the IR’s most relevant, useful, and popular features.

To encourage audience participation early on, the presenters encouraged attendees to introduce themselves, name the institution they are affiliated with, provide a brief overview of their institutional repository (or plans thereof), and talk briefly about their IR-related positions and/or experience with institutional repositories.

This section was followed by the core of the discussion session, during which the presenters introduced six highly relevant items from the 30 Things to Consider When Managing an Institutional Repository companion handout; provided an overview of best practices of their own institution; and opened the forum to the audience by asking a set of questions the revolved around the six key points.

The discussion session concluded with a question and answer session during which the audience was able to ask questions unrelated to the previously discussed items.

**Key Points**

The goal of this session was to spark a discussion about the expectations and experiences of attendees who are working with institutions that have repositories or are considering investing in a repository.

To encourage maximum audience participation, the presenters had preselected from the 30 Things to Consider companion handout six items they considered of key relevance, as well as conducive to discussion. For each of the six items, the presenters introduced the topic, shared the best practices of the SJSU Institutional Repository, and posited questions for the audience to consider and discuss.

**Affordable Learning Solutions**

SJSU recently joined a CSU-wide initiative that actively seeks and promotes low-cost and no-cost textbook alternatives to make learning more affordable for students. As the SJSU IR contains faculty publications, masters' theses, conference proceedings, and a variety of other high-quality materials, it is expected that over time, the SJSU IR will play a central role in the affordable learning solutions initiative.

The following discussion questions were provided to the audience:

*How has your campus implemented ALS? (If at all?)*

*What materials in your repository could be used for ALS initiatives?*

Audience members agreed in general that utilizing the institutional repository to further affordable learning solutions presents a valuable and viable opportunity. However, participants also voiced concerns that this may narrow the horizon of scholarship as assigning materials from their own institution’s IR may discourage students and faculty members from consulting outside resources. In addition, attendees discussed the benefits of having a search engine that would reliably display materials from all institutional repositories as a way to widen the scope of the IR as an affordable learning solution.
**Buy-in (Admin, Faculty, Librarians, Campus-wide)**

One of the most important steps in establishing an institutional repository and making it a viable location to deposit materials is seeking and achieving buy-in from multiple levels throughout the university. Firstly, administrators must buy in to the idea of investing time, staff, and money into an IR. Secondly, liaison librarians often serve as the conduit between the teaching faculty and the library (and, thus, the IR), which means they must also buy in to the importance of the IR’s mission and seek out faculty members who might be interested in depositing material. Thirdly, much of the content of an IR originates with the teaching faculty, making them a vital group to seek buy-in from.

The following discussion questions were provided to the audience:

*Where did the buy-in originate in your library/university?*

*Which group is/was the most important to get buy-in from?*

Attendees generally agreed on the importance of buy-in, and several expressed the initial buy-in group as that of administrators looking to preserve the scholarship of the campus faculty and make research open access. Librarian colleagues were also a key group discussed for buy-in.

**Intellectual Property**

The management of the SJSU IR believes it is of the utmost importance to keep abreast of and adhere to intellectual property law. Cutting corners to save time or money nearly always results in costly repercussions, and entering gray zones or ignoring copyright law damages the integrity and reputation of the IR, as well as the institution it is affiliated with. For copyright checks of materials to be included in the SJSU IR, the management currently relies primarily on Sherpa/RoMEO.

The following discussion questions were provided to the audience:

*Which steps do you/your institutions take to ensure your IR follows intellectual property laws and regulations?*

*What is the most important tool you use (or wish you had access to) for copyright checking?*

Audience members agreed that intellectual property law presents one of the biggest challenges for any open access project and especially so for institutional repositories aiming to attract a wide variety of quality materials. Each attendee involved with matters of copyright and intellectual property law tries as best as possible to be aware of current laws and regulations, and is striving to or has already found best practices suitable for adaptation. A few audience members worked at an institution that has hired legal counsel specializing in intellectual property law.

**Marketing**

The importance of marketing cannot be underestimated. The presenters discussed this as well as the marketing they have done in the past year to disseminate information about the IR. First, they conducted training for the liaison librarians so that the message conveyed to faculty about the IR would be consistent (Ramirez & Miller, 2011). Then they provided a standard letter for all librarians to send to their departments soliciting CVs to create author profiles and include eligible publications in the IR.

The following discussion questions were provided to the audience:

*What marketing strategies have been the most effective on your campus?*

*What strategies have you considered, but not (yet) implemented? Why?*

Intrigued by the faculty letter the presenters had sent out, attendees asked if a copy could
be made available as part of the presentation. As this document was a combination of two letters, one from the University of Nevada-Las Vegas and the other from the University of South Florida, which they had obtained as part of the bepress Digital Commons Collaboratory, the presenters had to decline this request, but the audience was encouraged to ask the managers of those repositories if they would share their letters.

Planning

The presenters emphasized the essentials of planning for a repository. During their first year as co-managers, they developed a three-year plan that was approved by their administration. During that planning process, they conducted a thorough assessment, including surveys of what other institutions had done. During the transition from DSPACE to Digital Commons, several vendors were brought to SJSU for demonstrations and pricing discussions. The move from an open source platform to a hosted platform was not one to be taken lightly--many factors needed assessment, including budget, hardware and software, personnel, training and marketing. Nabe (2012) concurs with the importance of evaluating possible funding sources, and presenting proposals to administration with goals and timelines.

The following discussion questions were provided to the audience:

*What stage of the planning process are you or your library at?*

*What will be or has been the most important stage in your process?*

The audience agreed with the importance of planning, and discussed the various stages of planning at their institutions. They continued to share their opinions about what might be included in a one-year, two-year, or multi-year plan.

Policies and Procedures

While developing the SJSU IR, the presenters quickly realized that policies and procedures are the lifeblood of the institutional repository. Policies and procedures provide structure and guidelines while at the same time serving as a mechanism for information delivery (Nabe, 2010). Establishment of firm and common-sense guidelines is essential; however, as the IR grows and expands, policies may have to change as well. Flexibility is key.

The following discussion questions were provided to the audience:

*Which came first, your policies or your procedures? Why?*

*Which policy or procedure was the most difficult or important to establish?*

Audience members shared their own experiences with establishing, maintaining, and changing of policies and procedures of their institutional repository. Emphasis was placed on how important it is to provide firm guidelines for those aiding in specific tasks, such as student assistants entering metadata, scanning materials, or engaging in copyright checking. Most attendees agreed that while policies and procedures are key, they currently operate with minimal personnel or even as a one-person operation, leading to formalized policies and procedures being neglected in favor of a go-with-the-flow approach.
References


Appendix 1

CARL 2012 April 5-7, 2012, San Diego, CA
Discussion Session Friday, April 6, 4:15pm – 5:30pm, Room Sierra 5-6

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Companion Handout
30 Things to Consider, In Alphabetical Order for Increased Findability
(Items in bold typeface discussed during session)

1. Accessibility (to materials for the disabled community)
   While accessibility is not mandated by law in every case, materials should be made accessible as much as possible to increase access, availability, and usability for all members of the community.

2. Affordable Learning Solutions
   Consider using the materials in your IR to bring down the cost of course readings for students - faculty/grad-students are producing valuable peer-reviewed materials.

3. Buy-in (Admin, Faculty, Librarians, Campus-wide)
   It is very likely you have received administrative buy-in for the IR, but what about buy-in from your faculty, staff, and colleagues? Think about how to bring on board these important “allies.”

4. Collection Development Plan
   Decisions on what to collect and what to leave out of the IR might have far-reaching consequences. Think about whether your institution may want to implement a mandate for certain types of materials (i.e. university graduate theses). Carefully evaluate the content you wish to include (and why), and make collection development part of your policies and procedures.

5. Digitization
   Set realistic goals: how much of the material to be included in the IR is actually digitized or could be digitized? It sounds straightforward but even the digitization of something as simple as an unbound thesis takes more time and man hours than anticipated by those new to the digitization process. Also, consider the equipment needed.

6. Embargoes
   Carefully consider and adhere to embargoes set by publishers, institutions, and individuals; keep abreast of the latest general developments, as well as the rules and regulations of your own institution.
7. Fees
Depending on the platform you choose, you may have the ability to charge fees for content hosted. While in general you may want to avoid charging fees for hosting-space, you might have to do so if a part of your organization or a subscription journal is in need of a lot of additional hosting space.

8. File Formats
Carefully consider which file formats you wish to utilize; unusual file formats are likely to create problems down the road (see “Preservation”). Stick with well-established formats such as PDF.

9. Intellectual Property
Copyright, “Fair Use,” Embargo, Author Rights, Publisher Rights and Policies - we all have encountered/heard of these concepts. In the virtual realm, intellectual property law has taken center stage, and will continue to increase in importance. It is vital for the integrity of your IR (and your institution!) to know and adhere to intellectual property law. Do not cut corners to save time or money, and keep in mind that faculty members posting publisher versions of materials on their own websites does not give you the automatic right to include the same version (or any version) in your IR.

10. Liaisons (Librarians)
In an academic institution, (liaison) librarians are your closest allies - they are the persons able to reach out to their departments/faculty and recruit content for your IR. Set aside time to establish buy-in (see Marketing), and conduct training, but carefully evaluate how much time and involvement you are going to ask of your librarians. Tip: Make things as simple as possible; for example, prepare a form letter your liaisons could send to their departments/faculty.

11. Marketing
Marketing is more than just talking about your IR: Know your audience. Devise a plan for training those intended to disseminate your message. Be consistent: Have all persons involved deliver the same message. Key to success: Consistent training internally disseminates a consistent message externally. (Ramirez & Miller, 2011).

12. Open Access
Offering materials for free is a wonderful concept; however, there are numerous potential issues to consider, most of which are related to intellectual property law. Carefully consider questions related to the benefits of including materials: Who can use open access content and to what extent? How can it be used? Can it be withdrawn upon request? (Nabe, 2010).

13. Persistent Links (Permalinks) Feature
Ensures there are no broken/expired links in your IR, content is always available, and archiving is facilitated. A valuable feature to look for when evaluating platforms.

14. Planning
So you really want an IR at your institution? Start with a thorough assessment, including an environmental scan and survey of what other institutions have done. Contact vendors to obtain pricing, and evaluate open source platforms for comparison. Factor your budget, which should
include hardware and software, personnel, as well as training and marketing. Evaluate possible funding sources, and present proposals with goals and timelines (Nabe, 2010). Tip: Set realistic goals and expectations, and do not hesitate to explain why something cannot be done/should not be done.

15. Platform (Choice of)
The choice of platform for your IR comes down to commercial versus open source. Open source may be free but it requires significant commitment to installation, initial implementation, maintenance, upgrades, and further development. Commercial platforms, on the face of it, may seem expensive/unaffordable, but might, after an environmental scan and sound budgeting, turn out to be the less expensive solution, and especially so in the long run.

16. Policies and Procedures
Policies and procedures are the lifeblood of your IR, giving it structure and guidelines while at the same time serving as a mechanism for information delivery (Nabe, 2010). Establish firm and common-sense guidelines but keep in mind that as the IR grows and expands in all directions, policies may have to change as well. Flexibility is key.

17-23. Publication Types (Conference Proceedings, Faculty Publications, Journals, Newsletters/Non-academic Publications, Student Publications, Zines, etc.)
Consider including a wide variety of publication types in your IR; doing so provides an opportunity to present a fuller picture of the achievements of members of your institution. Think we cheated by giving each publication type its own item number? Not really - each type necessitates separate evaluation as to, for example, file format, current place of hosting, and placement within the IR’s collection.

24. Preservation (Long-term)
Take into consideration the long-term preservation of your files: as hardware and software changes, files need to be migrated and/or emulated. In addition, think about off-site storage of your files: redundancy is key to loss prevention.

25. Resource Discovery (Increase in)
Choose a platform which allows you to push content to Google Scholar, OAIster, etc. Doing so dramatically increases resource discovery for your materials. Caveat: This feature needs to be carefully evaluated (i.e. is it included in the pricing), and set up for each case individually.

26. Sherpa/RoMEO
“RoMEO contains publishers' general policies on self-archiving of journal articles and certain conference series,” summarizing “the publisher's policy, including what version of an article can be deposited, where it can be deposited, and any conditions that are attached to that deposit” (http://bit.ly/pwtInN).

27. Technical Support
Tech support should be factored in when choosing your IR platform: Before deciding on open source software, compare the personnel and maintenance costs with the cost/benefit of a hosted platform.
28. Training (Staff)
Do not underestimate how much time it will take to train staff; plan for extra hours and additional funds to be spent on training. Also, establish training manuals/handouts and hold workshops whenever possible.

29. Use of Repository (Increase of, Statistics)
Increase in use of your IR can be achieved by the following: Include as much metadata as possible for each entry; register at all OAI sites; learn how to increase your search engine popularity rankings; and increase your access points (Nabe, 2010). Statistics are invaluable resources to present to the administrative agency overseeing the IR. Solid statistics have the power to get you additional funding and personnel, if and when needed. In addition, statistics are a great measure of your own success. And, should they reveal failure, statistics can help you figure out how to improve your IR.

30. Visibility: (Increase of)
A huge benefit of an electronic IR is the increased visibility of all materials housed within. A great selling point when looking for buy-in. Goes hand-in-hand with Use of Repository.

References
