

Digital Commons@UM Law: A Presentation for NELLCO

Good afternoon.

Thank you for inviting me to share some of the highlights and challenges we faced in implementing bepress' Digital Commons institutional repository at the University of Maryland School of Law.

First a bit of background. In the early 2000s, the University of Maryland School of Law established a Research Papers series in the Legal Scholarship Network (LSN), one of the many networks under the umbrella of the Social Science Research Network (SSRN). That arrangement was made by the law school – the library was not involved at all – and it was a year or so later, when the library was asked to step in and manage the project, that I first became aware of what had taken place. During the period when the law school managed the project, only 3 or 4 papers were posted, so once the library became involved, we began promoting the Research Papers series heavily, reaching out to faculty and encouraging them to contribute to the series. At first, I think there were some concerns about relinquishing control of the project to the library because a number of conditions were imposed on us in order to guarantee the quality of the material being posted. A small “editorial group” was created, which consisted of me, our electronic resources librarian and two faculty members. The idea was that we would handle the solicitation of the papers, manage any copyright concerns that might arise and work out the technical details while the two faculty members would vet the papers before they were posted.

In fact, this procedure was followed for the first 4 or 5 papers but it quickly became evident that if we were going to increase the number of papers being posted reviewing each one would be too time-consuming and would hamper efficient processing. In addition, I think it was also obvious that we were qualified to manage the entire process – we possessed the technical expertise but also had publishing experience and were comfortable working with faculty.

You will notice I said faculty were “encouraged” to send us material to be posted. Right from the start we agreed that the entire process would be mediated. We made that decision for a number of reasons. It is our philosophy at the law school to provide whatever services, resources, and tools the faculty need in order to be successful and productive in their research and scholarship. In addition, by serving as mediators, we could guarantee a uniform look and feel to the papers. We would add a branded cover page to each item. We could establish a few ground rules, outlining the type of material that was suitable for the Research Papers series, so that in the rare instance when we might be asked to post a paper which did not meet the guidelines we had a policy to which we could refer. (This is sort of like a collection development policy and gave us a degree of credibility and something concrete to fall back on).

Within the first 12 to 18 months after we assumed responsibility for the Research Papers series, we uploaded approximately 100 papers to SSRN, representing new faculty scholarship in the form of both working papers and accepted papers. We were quite satisfied with our efforts to recruit content for LSN, but as we gained experience and became more comfortable with the technical aspects of the work, we realized that we could do much more to enhance and advance faculty scholarship.

The LSN Research Papers series gives our faculty an outlet for their new scholarship and allows each individual to promote his/her work in a global marketplace. What we were seeking, in addition, was a means to promote not only individual scholarship but also create a framework to showcase the institution's entire body of scholarship which goes beyond the publication of articles and books.

In the fall of 2004 I attended a meeting sponsored by the Association of Research Libraries (ARL) and the Scholarly Publishing and Academic Resources Coalition (SPARC) in Washington on the topic of institutional repositories. At that time, the institutional repository ‘movement’ – if one can call it that –

was in its infancy. There were projects such as arXiv.org (the high energy physics e-print archive which began in 1991) and a handful of repositories dedicated primarily to thesis and dissertations. Institutional repositories and the Open Access movement which is so important to the development and expansion of institutional repositories were in their embryonic stage.

Upon returning from that meeting, we began gathering information about institutional repositories and carried out an informal analysis of the various alternatives that were available. We considered open source solutions such as D-space, but discovered that while the software was available for free, the cost of developing and maintaining a repository based on the D-space platform, or any other similar open source platform, was beyond our capabilities both financially as well as technically. The law school has a very active and capable Information Technology unit – which is now managed by the library – whose emphasis and focus is on academic and administrative computing, on media services, and on support for student computing. While the technical expertise required to develop a repository is present, the department has other priorities and adding development work and ongoing maintenance for an institutional repository to their already very full agenda just didn't seem feasible.

We also discussed collaborating with the University of Maryland in College Park (UMCP), our 'flagship' campus, where D-space was being implemented. We didn't consider this option very seriously however, because we wanted to retain control over the repository, both the development work as well as the ongoing maintenance and we knew from firsthand experience that it would be quite a challenge to retain control if we were to outsource even portions of the project to UMCP.

We also investigated the possibility of implementing Digitool, a product developed by Ex Libris, which is designed to be used primarily to store digital assets and which Ex Libris has been marketing as an institutional repository. As an Ex Libris customer (we participate in the implementation of Aleph, the Ex Libris integrated library system at the University System of Maryland and Affiliated Institutions – USMAI) we thought that implementing Digitool might have some additional benefits in terms of integration and interoperability with the online system. Several things militated against that plan, however. One was the cost. Digitool was not purchased consortially, so for the law library to acquire it would have been cost-prohibitive. In addition, if the implementation and development work would have been done by the systems staff in College Park that raised the same misgivings we had when we considered some form of cooperation for D-space. Perhaps most importantly, though, Digitool just didn't seem to be the best fit for what was initially, and still is primarily a repository of text-based documents.

In addition to the software and development costs for any of the open source or proprietary solutions we considered, there would be the cost of hardware and hardware maintenance over the long term, neither of which would be insignificant sums. And then there would be the matter of where to install the hardware. Even though we had just moved into a new building, space was already at a premium. We also realized that even though disk storage was coming down in price, most likely we would have to upgrade the equipment on a regular basis, as we outgrew capacity, and that would require additional funds. And as part of any development work we would eventually have to develop a migration path to newer technology.

As we contemplated the pros and cons of the various options, we discovered that one option remained viable. The Digital Commons product seemed to have all the characteristics we were looking for and appealed to us for a number of reasons:

1. the development work was handled elsewhere, so we did not need to make a major investment in supporting the development
2. we did not need to acquire any hardware, or find space for hardware, and we didn't need to concern ourselves with hardware and software upgrades and establishing data migration paths
3. the system was perfect for a single discipline setting such as ours

4. the system is scalable, so we could start modestly and expand at our own pace
5. the system could handle a variety of content, not only text based material, but material in other formats
6. the cost was reasonable
7. the system was customizable giving it our institutional 'look and feel'
8. customer support was outstanding
9. implementation could begin relatively quickly and was straightforward

There were concerns about outsourcing the repository, storing the data off site, security of the data, and the eternal question of retrieving the data at some future time, and what format that output would have and whether it would be in a format that would be easily transferable to another system. All I can say about this is that we were satisfied with the answers we received from bepress about the security of the data and process for extracting our data should we decide to migrate to another platform. We began talking with bepress in the spring of 2005 but it took us an entire year to work out the contractual details. This was due partly to delays in the campus procurement office and with University counsel and partly because of the change in ownership of the Digital Commons during that period - ProQuest acquired the Digital Commons in 2005 and then sold it back to bepress year or so later. We used that time to plan how we would populate the repository, what sort of content we would include, how we would solicit content, and what metadata we would include. In April 2006 we finally launched the Digital Commons.

Tracy asked me to address a number of questions, so I'll do that next.

1. Did we have any kind of repository before we implemented the Digital Commons?

The short answer is NO. When we started the repository, in April 2006, the papers that had already been posted in our Research Paper series in LSN – roughly 100 papers - formed the initial content in the repository.

2. What are the features and functionality that make the Digital Commons worth the cost? What do we get for our money?

Let me first say a word or two about the cost. Had we decided to implement D-space, either locally or cooperatively with USMAI, we would have needed perhaps as much as \$100,000 to hire staff to do the programming and development work (programmers command very substantial salaries!) On top of that there would have been the cost of hardware and annual maintenance fees – not to mention overhead costs. The first contract we signed with bepress was for two years. It expired in March of this year and we negotiated another contract through March 2010. While I won't divulge the terms of our contract, I can assure you that it is reasonable and not nearly as expensive as it would be to implement an open source solution. I think we are definitely "getting our money's worth" in terms of customer support and assistance with development and design ideas.

3. Can you set up as many publication series as you want?

The Digital Commons is based on the creation of 'communities' and within those communities, 'series.' There is no limit to the number of communities or the number of series within communities. The arrangement is sort of like a nest of Russian dolls – one within the other. There can be a primary community and within that community there can be sub-communities, and within the sub-communities there are series, and series within series.

Our faculty publications are included in the bepress Legal Repository, but we do not maintain a separate publication series as we do with SSRN.

The most difficult part of implementation was conceptualizing what we wanted and then visualizing that scheme within the “community” and “series” structure. We began modestly, with just a couple of communities, and now have expanded as follows:

- [Faculty Publications](#)
- [Programs and Centers](#)
- [Conferences, Lectures, Workshops](#)
- [Congressional Testimony](#)
- [Maryland Legal History](#)
- [School of Law Journals](#)
- [Student Articles and Award Winning Papers](#)

Within each of these communities, we may have sub-communities, and at each level there are series connected to the communities.

For example, within Faculty Publications, we have just a single series, called Faculty Publications. Within Conferences, Lectures, Workshops we have 6 communities and within each of those communities there are series. The Business Law Conference has a separate series for each annual conference. Within the Maryland Constitutional Law Schmooze, there is just a single series, for the “tickets” – the term used for admission to the Schmooze every year! Within Programs and Centers, there are 7 communities and within each of those communities there are series. The Environmental Law community has two series: Environmental Law Faculty Publications and Student Environmental Law Films.

It is also possible to assign a paper to more than one series. For example, within the faculty publications series, there are a number of papers which also fit into one of the specialty series. In cases like that, the paper’s primary link is to the faculty publications series but it has a secondary relationship to another series as appropriate.

In addition to uploading the pdf of a paper, the Commons can also accommodate related files, as in the example from the Immigration Clinic, where supplemental information is provided.

Just a few months ago we created a new community for Congressional Testimony and a series within that community for the individual pieces of testimony. Our next goal is to add additional content to the Conferences community to reflect the many conferences hosted at the law school annually. And we are on the verge of adding our alumni magazine to the repository.

4. Are we exploiting all the potential the Commons has to offer?

We have done very well, I think, within the limitations of staff and time, to build the repository as quickly and as completely as we have. I know that there are features which we have not developed as fully as we could or as I would like. This is primarily a question of time and is based on a strategic decision to invest first and foremost in populating the repository.

There are a number of capabilities which we will consider using, particularly as we complete the task of adding retrospective content to the repository. I would like to learn more about using RSS feeds as a promotional tool for the repository. I know there are reports, particularly those having to do with downloads, that we could be providing to faculty.

5. What would we do with Digital Commons that we are not doing now?

I think we haven't yet tapped into the full potential of the Commons. There is additional content that could be incorporated into the repository. I mentioned that we are hoping to add the alumni magazine to the Commons. Initially what we will do, most likely, is post a pdf version of each issue, but perhaps in the future, we will publish the journal electronically instead, or have an electronic version. This would be an excellent tool for marketing purposes and for outreach to the legal community.

We may explore what would be involved in adding administrative documents to the repository and we are considering the pros and cons of incorporating some of our digital projects into the Commons. These are all valid ideas so implementation will be a matter of establishing priorities, especially given the human resources at hand.

6. How have we used the Commons to engage faculty?

This is a difficult question to answer. Despite the fact that we talk about the institutional repository with individual faculty, I think they are still not as aware of the Commons as they are of SSRN and LSN. When faculty contact me about posting a paper, they always refer to SSRN, and occasionally they will mention the repository. There may be a number of reasons for that: 1) SSRN has been around longer; 2) SSRN is designed primarily to foster individual scholarship and thus appeals to the faculty member on a personal level; 3) a great deal is made about the significance of SSRN download numbers, which faculty members care about and which are highlighted and readily accessible in SSRN, but are not so obvious in the Commons.

Last summer at the CALI conference, Carol Watson and James Donovan presented a paper (<http://digitalcommons.law.uga.edu/ir/4/>) on their experiences in implementing the Digital Commons at the University of Georgia Law School. Although they took a much more systematic approach to their analysis than we did, we both reached the same conclusion about using Digital Commons. One of the things they mentioned as part of their assessment was the long range impact of posting to the repository. They compared download statistics for papers posted at the same time to SSRN and to the Digital Commons and they discovered an interesting fact. Papers posted to SSRN have an immediate burst of downloads, but after a period of time, the number of downloads levels off. Whereas papers posted to Digital Commons show a steady increase in the number of downloads over time. So, I decided to see if that was true in our case.

I chose three papers by three different faculty members:

Paula Monopoli's paper, Gender and Constitutional Design was posted in October 2006. As of Oct. 5, it has 37 downloads in SSRN and 223 in the Commons

Maxwell Stearns' paper, The New Commerce Clause was posted in April 2006. As of Oct. 5, 2008, it has 145 downloads in SSRN and 440 in the Commons

Mark Graber's paper Looking off the Ball was posted in August 2007. As of Oct. 5, 2008 it has 63 downloads in SSRN and 165 in the Commons

This led me to think that we need to do a much better job of making the faculty aware of the long term value of the Commons by marketing and promoting the Commons more aggressively.

7. Did faculty pages come with the Digital Commons? What have we done with faculty pages? How does the Commons interface with faculty pages?

The Digital Commons does not include faculty pages. An author search in the Commons will result in a chronological list of all content by that individual. Bepress offers a 'faculty page' option called Selected Works, which is closely linked to the Digital Commons and is populated with information from the Commons. It is possible to license Selected Works without using the Digital Commons and quite a few institutions have chosen to do that. As participants in the Digital Commons, the relationship between the two products is a definite benefit because content for Selected Works can be harvested from the Digital Commons. It is worth noting however, that at present, maintaining both products does require some duplicate effort, which I hope will eventually be eliminated or at least reduced.

At Maryland, each faculty member has a faculty page on the law school website. That page contains a link to "selected publications" and the publications are linked to the Digital Commons. In the spring of this year, we began a separate project offering Selected Works pages to faculty. Selected Works gives faculty members a number of options to showcase their scholarship above and beyond what is possible from the law school site, while at the same time retaining the law school's institutional branding. Selected Works pages can be customized so individuals are able to organize and categorize their scholarship in ways that are meaningful to them. For example, content can be arranged by publication type – articles, book chapters, books, etc., as well as by subject. Faculty can determine the subjects themselves – and content can be listed in more than one subject. Each person can decide whether the default view should be by type of content or by subject.

In our case, it may seem that Selected Works duplicates the faculty pages on the law school site. However, because Selected Works has a number of customization options which the law school page does not have, we decided it was worth offering it to faculty.

When we began the Digital Commons, its purpose was to focus on faculty and law school scholarship. In Selected Works, faculty have the option of including other types of work which may not be as scholarly, such as presentations, letters to the editor, popular press and op-ed opinion pieces, etc. Selected Works has greater flexibility on arranging content and faculty have options for highlighting information.

As with the Commons, I know that libraries and institutions have negotiated prices with bepress for Selected Works and if you are interested in that product I'm sure that bepress would be happy to provide details.

8. What is the connection to ExpressO?

ExpressO is another bepress product, designed to facilitate submission of scholarly work to law journals (primarily law reviews). Our use of ExpressO has increased steadily since we first offered it to faculty in 2006. We now maintain an account with bepress based on our domain, so any member of our faculty, logging in with an email address from that domain can use it to submit his/her papers to law reviews. After a faculty member uses ExpressO, I receive a message alerting me that a paper has been submitted. I then ask the faculty member whether the paper can be posted to the Commons (and to SSRN.)

Over the last year, we have also made access to ExpressO available to a select group of students, generally those whose work is considered by faculty to be of sufficient interest and superior quality that it deserves to be published. Because student email accounts are in a different domain, each student's email address must be registered with bepress so they can 'authorize' the student to use the service. Bepress has been very responsive whenever I've called and asked them to make an exception so a student can use the service.

9. How important is branding?

The Digital Commons site complements the law school's website. As a marketing tool and to promote the law school, the repository is first and foremost a showcase for the law school's research and scholarly output, therefore branding was an important consideration. The Commons needs to look sufficiently similar to the law school site to be recognizable, but different enough to be seen as an independent entity. The staff at bepress worked with us on the designs for both the Commons and Selected Works and I think we accomplished the right balance of similarity and difference.

10. What are we doing with content other than text?

Initially our focus was on including printed documents in the repository, but in the last year or so, we have added a few non-print items as well. For example, we have several powerpoint presentations and least one video. If we are not able to obtain permission to post a video, we include a link to the presentation.

One of the really exciting things about the Commons is that it is possible to include a wide range of content, either by uploading and storing it on the bepress server, or by adding a link to it online. For example, when there is no full text available, as is the case with books authored by our faculty, we provide a link to the publisher's site where the details about the book can be found.

I am asked periodically how much time is devoted to managing the repository and how many staff members are involved in providing support. I should first make a distinction between the addition of new content, regular maintenance and adding retrospective content. About a year ago, we made a decision to include all publications by our current faculty in the repository, so for the last year, we've been working systematically through the faculty list in order to include all appropriate material in the repository. This is quite time-consuming, but we believe that the benefits are worth the effort in terms of providing a comprehensive body of work and as a means to enhance the law school's image within the legal and scholarly community.

From the outset we decided that there would be no self-archiving in the repository. We knew that this would mean more work for us, but we thought the end result would be a better, more professional product. Therefore:

- we retain control over the quality and type of the content
- we confirm that the author has the right to post the material online
- we maintain a consistent format that gives the repository a uniform look

Therefore, our role consists of the following; establishing and maintaining contact with the faculty (if they haven't contacted us first!); taking responsibility to obtain copyright clearance or verifying copyright status, depending on the situation; doing all the document processing, which usually involves converting the document from WORD to pdf; handling the submission to the repository. All documents are submitted 'with security' which in our case means that the document can be read and printed, but cannot be manipulated in any other way. This process helps us to maintain a consistent look and feel and format for the repository and minimize confusion by serving as the single point of contact with bepress.

For the retrospective content, we received permission from Hein to use the Heinonline pdfs for any item written by our faculty and published in any journal, but we still have to obtain permission from the journals themselves in order to download the document. Adding the retrospective material is done as time allows, and is dictated somewhat by how easily or how quickly we are able to get permission from the publishers.

For the current content, we are under a little bit more pressure to add the material quickly. In most cases we still have to request permission to post it, because the authors generally do not know or remember what sort of permission their contract allows. And for current material, we post it simultaneously to SSRN, which adds another step to the procedure.

I'm generally the primary contact with faculty and I have assistance from another staff member who contacts publishers and handles requests for copyright permission. At the moment, I'm doing all the posting myself, but I hope to have some assistance with that task again soon.

As with any new service, the preparation and initial ramping up was the most time-consuming. Certainly the most significant hurdle we had to overcome was convincing the law school administration of the value of establishing and maintaining the repository, particularly since we were already committed to the Research Papers series in SSRN. This raised the inevitable question about duplication of effort and cost. We were fortunate that we were able to resolve these questions to the satisfaction of the administration and we continue to have a presence in SSRN as well as maintain the Digital Commons.

Having conquered both those hurdles, there are of course new challenges:

1. soliciting current content, particularly working papers – some faculty are still concerned that posting a working paper online will jeopardize their chances for acceptance in a print publication, so we still have a fair bit of educating to do to overcome that notion
2. handling copyright permission requests on behalf of authors – most of our authors pay scant attention to the agreements they sign with publishers, so again, I think we should be doing more to educate faculty about the importance of retaining the rights to their intellectual property
3. managing both the repository and SSRN, keeping the two databases in synch – making sure that both databases have the same version of a document at all times. Because SSRN requires an abstract as a condition of posting, and the Commons does not have that requirement, there are times when an item will be added to the repository, but cannot be added to SSRN because the author did not provide an abstract. When this happens, I try to work with the faculty member to provide an abstract – a sentence or two is sufficient – or I ask if we can extract something from the introductory paragraph in lieu of an official abstract. If we've posted to the Commons without an abstract and then finally receive one, we will update the posting and add the abstract.
4. enhancing the repository with new communities and series – we need time to prepare the material and plan how and where it would best fit into the repository structure
5. adding faculty pages – so far we have created a dozen Selected Works pages
6. raising the profile of the repository both internally and externally – this takes coordination with the law school and I think once we have the alumni magazine online, we will begin to see increased interest and use of the repository

Things that I would do differently:

I would develop a policy and procedures manual. That would make it so much easier to train others to help and it would formalize the guidelines we established for the project. I keep thinking I need to take time to do that, but something always comes up that has a higher priority.

I would also try and do more outreach so that the repository has a higher profile both within the institution and externally.

What is the future of the repository here at Maryland? The more experience we have with the repository and related products and services, the more potential we see. I have a wish list of features and capabilities that I hope will not only maximize the repository's existing capabilities but make it an even more

valuable resource in the future. As interest in adding new formats and additional content occurs, we may revisit some of the procedures we established initially so that we are better able to manage future development and growth.

In terms of content, we might consider adding administrative material or even some instructional material to the repository. Creating new electronic journals and digital files of existing publications, such as our alumni journal or the various law reviews we publish – might also lend themselves well for inclusion in the repository.

In terms of features, at the top of my wish list I would like to achieve tighter integration between the repository and Selected Works. This would result not only in considerable workflow efficiencies but also opportunities for greater collaboration with faculty.

I would be very interested in making repository content accessible through a federated search capability together with other content. This would enhance the value of the data and give it wider exposure.

Libraries are always concerned with measuring usage, so enhanced statistical capabilities would be very valuable. I would like the information about downloads to be more readily accessible. It would be interesting to have more detailed information about where our content is viewed or retrieved, and whether something is just viewed (an abstract, for example) as opposed to downloaded. Could we find out which domains are accessing our site and how often?

Although the system is remarkably flexible considering the wide variety of implementations it serves, it would be nice to be able to make some additional local adjustments. For example, I would like to be able to add subjects that are of local interest, rather than having to request the addition of a subject to bepress.

I think the Digital Commons and its companion products have tremendous potential for institutions such as ours. I'm excited about the prospects for enhancing our site and for additional opportunities to showcase the range of our scholarship.