

SPARC Digital Repositories Meeting 2008

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Closing Keynote

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A little historical/theological/film context: Once, both publication and distribution were difficult. As I wrote those words, the scene from History of the World, Part I came to me. God had just given Moses, played by Mel Brooks, three tablets engraved with the 15 commandments. As Moses reached the slope overlooking the Children of Israel, he spoke to them, “The Lord Thy God has given unto thee these 15 commandments for all to obey.” But as those words were spoken, one of the three tablets slipped from his hands and was dashed to rubble. Moses quickly revised his statement and announced, “The Lord thy God has given you these Ten Commandments for all to obey.”

Moses worked in a world where publication and distribution were extremely difficult. Writing required a chisel and smooth rock. Authority and certification for what was written came from God, and distribution was determined by the loudness of Moses’ voice and the proximity of the intended audience. By comparison, making digital repositories effective is easy.

Over the eons, media choices grew to include velum, papyrus, clay tablets and paper, as well as stone tablets, so publication became a bit easier. Literacy, however, remained a major limitation on distribution, limiting most to only that which they could hear. Certification of what was written and authority to write it largely remained under the aegis of the church or the state and these institutions husbanded their rights jealously. Distribution of both religious and state documents was controlled rigidly. Written documents in whatever form were available only to those authorized by state and religious authority - in many cases one and the same.

But writing was so powerful in facilitating commerce that it escaped the control of both state and religion. Philosophical, scientific and mathematical ideas appeared quickly in written form. Occasionally the state intervened in the name of preservation and collected these manuscripts in places like the Great Library of Alexandria where they would be “safe” and where access to them could be controlled. But you know this history. The printing press brought about economical printing; the Reformation reduced the power of the church, unchaining Bibles and translating them into the vernacular; the age of enlightenment (when the first scholarly journals appeared) enshrined the value of ideas and their free and open communication. Literacy gradually became more widespread, further easing distribution.

But despite reduced cost, it was still necessary to marshal resources to ensure that scholarly ideas circulated. Legal protection developed to ensure that articles published in scholarly journals could not be reproduced elsewhere, giving the journals (and books, newspapers, plays, etc.) a monopoly over the right to sell their content.

Scholarly societies used this legal protection sparingly, guided by the principle of the circle of gifts, charging just enough to offset reproduction and circulation costs and honoring the author's desire to give their treatises to others in exchange for access to theirs. After 400 hundred years, that willingness of publishers to honor the circle of gifts philosophy began to break down. In the 1960s, commercial publishers began to produce scholarly journals and charge prices that produced a profit for them. This profit motive now drives many scholarly societies as well.

The advent of high speed electronic means of distributing written works added texture to the post-sharing period of scholarship publication. Stewart Brand's 1984 analysis of what electronic sharing was to mean was exactly on target: ". . . information wants to be expensive, because it's so valuable. The right information in the right place just changes your life."

The value of the information in scholarly journals, information that populist politicians like to call "waste," in fact is very valuable when put to use to build more knowledge or as the raw material from which products of various types are produced. Increasingly, societies and commercial publishers, grasping the commercial value of the scholarship which scholars trustingly placed into their hands, ceased to be humble conduits, transmitting scholars' laboratories, computers and desk tops to the world, and instead became financial profit-seekers. But, as Brand's analysis continued, "information wants to be free, because the cost of getting it out is getting lower and lower all the time. "

You are here to talk about digital repositories. They, of course, are the most effective way to make scholarly information free and to get it to the public that needs it. We get confused by the "proximity effects." Those things closest to us in place or time seem to loom largest or most important whether or not they are. Publishers like to confuse us with the proximity effect. Their efforts to take scholarship to their set of subscribers are the most recent expenditure on that scholarship. And publishers are wont to insist that it is the most important. In fact, it is only the most recent.

Their expenditure was preceded by expenditures to buy real estate, build and maintain buildings, hire faculties and support staff and provide them with training and infrastructure that enabled them to write and obtain grants, etc. All of the expenditures in the chain except those of the journal publisher are expenditures that arise from taxpayers, donors and students. These prior expenditures were made because the supporters were eager to have the fruits of scholarship, even though they could not know with any precision what those fruits would be. They are the folks that Brand describes who want scholarly information because they know in their heart of hearts that, "The right information in the right place just changes your life."

The job of digital repositories is to ensure that the extremely valuable scholarly or creative products that have been paid for by the public or by donors are ultimately accessible to them, as well as to students, faculty and researchers everywhere. With digital repositories in place, the limitations on distribution imposed by scholarly journals, proximity of the viewer, etc., no longer have to constitute a bar to access. The digital

repository can be the equivalent of the unchaining of the Bibles. Real access can be had from every kitchen table.

I speak to you at a time when university administrators are more uncertain about the future than I have ever seen them. Private universities have seen the endowments that support them tumble in value and the large salaries of parents that paid the relatively high tuitions they charged have too frequently been replaced of late by unemployment checks. Many private universities are postponing projects, cutting back on vast plans to build and to hire faculty, and retreating to the position that all of their student aid should truly be need-based.

Public universities have seen per student public appropriations fall in real terms for over 20 years. They are now experiencing sharp declines in appropriations, not just in real terms but in nominal terms as well. Some of those reductions range upwards of 20 percent. While their endowments are relatively small and few relied on them for support of on-going operations, the safety net they provided against really hard times has been seriously damaged, just as the really hard times are upon us. And generally poorer public school students are finding that jobs to help them stay in school are much less available. University budgets at almost all public institutions and at the majority of private institutions are severely challenged and will remain so for at least the next couple of years. Mark Zandi of economy.com last week proclaimed that the recession will end August 3, 2010

(http://chronicle.com/news/index.php?id=5492&utm_source=pm&utm_medium=en). I can't be as sure of the date as he, but it clearly will not end soon enough to save us from great pain.

And while fiscal support is cascading away, many of you are beginning a new activity, a digital repository. Many campus activities will be suspended by the budget crunch, many more will be modified, and few new activities will be initiated for a while. Given these circumstances, why should a digital archive be initiated on your campus or why should faculty and staff care about making an existing digital archive more viable? Because the folks who pay your bills both need and want to know how your university is benefiting them.

Unlike many other enterprises, universities do a poor job of letting investors know what they get for their money. Part of the difficulty is because the investments they make could lead to many different results. We don't know how to explain those things that might benefit or gratify a taxpayer or donor in order to convince them of the value of their support. Instead, when we promote universities we stress the value of only the most obvious activities. For example, we promote the value of our educational offerings to the students who seek degrees, the value of our research expertise to specific funding agencies, the value of the university in attracting new firms to chambers of commerce and local governments.

The result of such targeted appeals is the erroneous conclusion that only the specific beneficiaries ought to support the university. In recent years we have seen a sharp

increase in the proportion of college costs paid by tuition, of buildings paid for by research overhead, and specific biosciences programs begun in nearly every state. Since the general public has not been able to easily identify benefits flowing from universities, they have effectively urged that the cost of the universities be shifted to the more obvious beneficiaries. And it has been. This shift erodes support for many benefits the university produces and it drains total budgets. Now add to this the barriers that have kept many from feeling comfortable on our campuses. Is it any wonder that university support drops in hard times?

Imagine that all of the following university “products” were freely accessible in your digital repository:

- All faculty refereed publications;
- All grant final reports;
- All federally funded data sets;
- All dissertations;
- All masters theses and senior honors papers;
- All center and institute related publications;
- All extension publications;
- All theatre productions;
- Images of all of the objects in museums, etc., etc.

Suppose your supporters (taxpayers, donors, etc.) became accustomed to searching your institutional digital repository when they wanted information about something. About anything! If your university is of any size, I suspect few searches would go unfilled. Actually, I suspect most would produce overwhelming results.

To test this notion I went to one of our best populated repositories, the Digital Commons at the University of Nebraska, and entered simple searches for topics I thought would be of interest to some Nebraskans.

- Colic 17
- Muskrats 135
- Milton 334
- Switch Grass 103
- Clean Coal 71
- Electoral College 34
- Breast cancer
- Autism
- Alzheimer’s

There were no failures to find information and the only short list was for the somewhat antiquated term, “colic.” If Nebraska had full historical files on each of the items listed above, how many hits would there be?

Of course, many more hits would occur from an unconstrained Google search, but perhaps no Nebraska authored work would appear in the first several hundred hits. Imagine a Nebraska legislator during session wanting to know how much expertise on a

given subject resided in Nebraska. Imagine the news reporter in a nearby town wanting to find in short order a local expert on a hot topic to add interest to her story. Imagine a farmer with a suddenly wilting crop. I suggest that a well-populated digital repository promoted as a resource to the citizens of a state can do much to increase the value, and hence the funding, of the university.

This is to say nothing of the value of the digital depository to build interest in the scholarship of a specific faculty member as measured by citations, to enhance the reputation of the institution with funding agencies, to enable the institution to fully understand the breadth and depth of the work in which faculty are engaged, to help launch the careers of graduate students by giving their work full exposure, to assist those in developing countries to gain access to scholarship, to preserve scholarship that otherwise might be lost, etc. A well-managed and populated digital repository can do all of these things and there are, in truth, many, many reasons to begin one or to enhance an existing one.

But we are in a period of predicted long duration when the competition for public and philanthropic dollars will be intense. This is a time to lift the bushel and let universities shine. Information ultimately wants to be free in the wonderful digital environment in which we find ourselves. That “free” information nevertheless must be paid for somehow. That is why I suggest that you promote your digital repository as a means to entice additional funding from your state or your donors. Of course, standing between creating a digital repository and getting it fully populated are pesky little nuisances, such as campus intellectual property policies and practices, copyright transfers previously signed by faculty and the inertia of habit. These obstacles all need to be mastered. Fortunately, there are universities that have mastered them; you’ve heard from a number of them yesterday and today. You can find ways to master them as well.

The longest journey begins with a single step. I hope you will take the following seven steps:

- Make sure that there is a digital repository available for deposit of the work of your university’s faculty.
- Work with your president, provost and faculty governance to help develop an understanding that there are real benefits that will flow from broadening the distribution of scholarly products and that your university will reap those benefits by using the repository to more widely disseminate scholarship.
- Work to initiate discussions involving administration and faculty about modifying current practices and/or intellectual property policies, such that the university retains a set of rights sufficient to ensure that broad dissemination of the research and scholarly work produced by its faculty occurs, i.e., emulate Harvard.
- Support efforts to spread public access policies, such as those of NIH to all federal funding agencies and foundations.

-Work to educate campus units, such as university presses, to help convince them to support, not oppose, the best interests of their faculty. My prime example is Peter Givler, the President of the American Association of University Presses, who represents most of our campuses presses. He recently wrote to Representative Conyers concerning the Fair Copyright in Research Works Act:

“The members of AAUP strongly support open access to scholarly literature by whatever means, so long as those means include a funding or business model that will maintain the investment required to keep older work available and continue to publish new work. However, trying to expand access by diminishing copyright protection in works arising from federally-funded research is going entirely in the wrong direction, and will badly erode the capacity of AAUP members to publish such work in their books and journals.” He went on to support this act—an act that would make building digital repositories far more difficult.

The similar sentiments expressed by a few scholarly societies, such as the American Chemical Society, are not consistent with the scholarly welfare of their academic members. In these hard financial times we can ill afford to have those who benefit from the university environment working in ways so detrimental to it. While they have the freedom of speech to say what they believe, they need to understand the perspective of the community in which they live. Their organizations’ continued good health is dependent on the health of the larger academic community. The best way to change such organized resistance is through the members of these organizations on your campuses. Work with them.

-Work with departments and faculty to develop habits of deposit. An empty repository is of little use to anyone.

-While the information in a repository in this age of search engines may sell itself, you are attempting to “brand” the scholarship in your repository as information your university created or is making available to the public. Thus, you want your most important non-scholarly public accessing your repository through your portal. You will need to work with your public relations unit to ensure that the public, donors, legislators and the press know to look first to your institutional repository to find reliable information on the wide array of topics in which your university generates scholarship.

In summary, digital repositories are this epoch’s equivalent of unchaining the Bible. Making the cultural contributions and scientific knowledge generated on our campuses widely available can have profound effects. And by doing good, we will be doing well; positive support and financial effects are likely to result from your efforts to build, populate and promote repositories.

