

The Other Sustainability Problem

The problem has been around for some time. It's been called a "crisis" and a "tragedy." Experts have been questioning the sustainability of the current model for over two decades. The evidence points to the need for change, but it is so hard to break from old habits and patterns, from the tried-and-true ways. And then there are the politics. Many people have a vested interest in maintaining the status quo, and they oppose any discussion of alternatives.

Are we talking about climate change again? Nope. This time the topic is the system of scholarly communication—and its ongoing concerns. Journal subscription prices continue to inflate at rates exceeding any other consumer index, even health care, and book price inflation continues to outstrip institutional budget increases. U.S. taxpayers still pay for, institutions still support, and faculty, students, and others still produce the research, then turn around and buy the published results back from journal publishers—many of them large, for-profit publishers and many of them overseas. When the U.S. dollar is weak against European currencies, this is especially painful. A good number of these journals are considered "top" in their fields, and they charge prices that reflect this status. For example, the 2009 U.S. price for an institutional subscription to *Brain Research* is \$22,940. At these rates, only the largest and wealthiest institutions can afford to acquire these publications. Thus access is denied to many students, teachers, and researchers throughout the world. The system of scholarly communication is in peril, and

the impact on teaching and learning is immeasurable.

There are signs, however, that workable new models, new possibilities for sharing scholarly content, are in development. Three years ago, Senators John Cornyn and Joseph Lieberman introduced the Federal Research Public Access Act of 2006 (FRPAA), which would require that "11 U.S. government agencies with annual extramural research expenditures over \$100 million make manuscripts of journal articles stemming from research funded by that agency publicly available via the Internet."¹ (A Harris Interactive poll conducted that year found that more than 80 percent of surveyed adults supported the concept behind the bill.²) Even though the bill did not pass, many hope that it will be revived and will eventually pass in the new congressional session.

In response to new opportunities such as FRPAA, academic libraries across the country began to prepare virtual spaces—institutional repositories—that will enable qualifying publications to be made readily available with minimal effort on the part of author-researchers. My institution, Trinity University, is no exception; with a group of peer liberal arts colleges (Bucknell and St. Lawrence Universities, Carleton, Grinnell, and Whitman Colleges, and the University of Richmond), we have established a digital repository to collect, index, and disseminate scholarly materials pro-

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duced by our students and faculty.

Some university presses have also embraced new models. In July 2006, Rice University announced plans to reinstate its university press (<http://ricepress.rice.edu/>) while making a commitment to changing the traditional way of doing business and to taking advantage of new technologies to accomplish that goal. Rice University Press now publishes all of its books online and makes them freely available. According to one report:

"Without the pressure to publish only works that can sell enough copies to justify a print run, Rice hopes to be able to publish scholarship that university presses increasingly feel they can't afford. And by using peer review as other presses do, the university hopes to make its books 'count' in tenure reviews just as any other press's would."³

The University of Southern California's Institute for the Future of the Book has created MediaCommons, a narrowly focused attempt to address the same problems, but within the field of media studies. In an introduction to MediaCommons, Kathleen Fitzpatrick described its goals:

"We believe . . . that the goals of scholarship, teaching, and service are deeply intertwined, and that a reimagining of the scholarly press through the affordances of contemporary network technologies will

enable us not simply to build a better publishing process but also to forge better relationships among colleagues, and between the academy and the public. The move from the discrete, proprietary, market-driven press to an open access scholarly network became in our conversations both a logical way of meeting the multiple mandates that academics operate within and a necessary intervention for the academy, allowing it to forge a more inclusive community of scholars who challenge opaque forms of traditional scholarship by foregrounding process and emphasizing critical dialogue. Such dialogue will foster new scholarship that operates in modes that are collaborative, interactive, multimediated, networked, nonlinear, and multi-accented. In the process, an open access scholarly network will also build bridges with diverse non-academic communities, allowing the academy to regain its credibility with these constituencies who have come to equate scholarly critical discourse with ivory tower elitism.”⁴

These and other efforts provide examples of ways to reclaim the scholarly output of universities and colleges and make it available to a wider audience, using the potential of new technologies. Meanwhile, more change is coming—change that will drive additional efforts to build new, sustainable models to support the exchange of scholarly information. Late in December 2007, Congress passed an appropriations bill that contained language requiring all National Institutes of Health (NIH) grant recipients to place their peer-reviewed, accepted articles resulting from NIH funding into a publicly accessible archive, PubMed Central (<http://www.pubmedcentral.nih.gov/>) within twelve months of publication. The rationale behind the NIH policy echoed the arguments behind FRPAA: taxpayers support the public health mission of the NIH, so they should have access to NIH-funded research results regardless of their institutional affiliation—or lack thereof. Makes sense, doesn't it?

Where do the library, IT, and campus administrators fit into all of this? The

library resides—albeit virtually—where it always has: it must identify, acquire/provide access to, and describe the content that supports the institution's teaching, learning, and research needs. In the print-only days, those activities were called collection development, acquisitions, interlibrary loan, and cataloging. Format doesn't matter; easy access does. Another library responsibility is to help alert those in the rest of the academic community to their options in this changing environment. Even if faculty members are not comfortable testing the waters of open-access publishing, they might think about how they can manage the rights associated with their work. A creative response to this problem was the action taken by the Harvard Faculty of Arts & Sciences in February 2008. With the support of Provost Steven Hyman (a former NIH administrator), the faculty voted to approve a measure that enables the institution to retain the rights to all of the faculty's published, peer-reviewed work—allowing the institution to deposit that work and make it available in an openly accessible repository. The system is automatic; those who choose not to participate must opt out in writing.⁵ Harvard's library was instrumental in raising awareness of the issues related to the measure. Since then, other groups, including Harvard's law faculty and the faculty at Stanford's College of Education, have passed similar measures.

On the IT side, there may be calls to develop plans to host the institution's scholarly output locally or to consider an impressive array of off-site services that offer remote hosting. This is the kind of project that begs for close collaboration between library and IT staff, since developing this type of digital repository requires extensive planning. IT professionals in charge of security and access can look to resources such as Shibboleth protocols (<http://shibboleth.internet2.edu/>). Both IT and library professionals will have to engage questions on format, metadata standards, preservation, and migration.

Meanwhile, campus administrators have an opportunity to encourage the library and IT professionals to collaborate with the on-campus press, if there is

one, and to reconsider the mission of the press as it relates to the work of the institution. At the 2008 Digital Repositories Meeting hosted by the Scholarly Publishing and Academic Resources Coalition (SPARC), David Shulenberg, vice president of the National Association of State Universities and Land-Grant Colleges, called on the various constituencies of higher education to start thinking about what we can accomplish together, rather than letting outside forces drive us to operate at cross purposes.⁶

The scholarly communication sustainability problem is far from over. However, it may also offer an opportunity. This crisis might be just the catalyst that allows the higher education community to realize some of the greatest and most transformational benefits from investments in technology. First, we need to understand that we will solve the problem more quickly if we are willing to join forces and show how library and IT collaboration can provide workable, accessible alternatives. While we're at it, we might also be able to reinvigorate the public's interest in what we are doing on our campuses—by making our actions publicly available.

Notes

1. “Federal Research Public Access Act,” SPARC website, <<http://www.arl.org/sparc/advocacy/frpaa/index.shtml>>.
2. “Most Americans Back Online Access to Federally Funded Research,” *Wall Street Journal Online*, May 31, 2006, <http://online.wsj.com/article_email/SB114893698047965609-1MyQjAxMDE2NDM4MTkzMzE2Wj.html>.
3. “New Model for Scholarly Publishing,” *Inside Higher Ed*, July 14, 2006, <<http://www.insidehighered.com/news/2006/07/14/ricc>>.
4. “Introducing MediaCommons,” *if:book*, July 17, 2006, <http://www.futureofthebook.org/blog/archives/2006/07/introducing_mediacommons_or_ti.html>.
5. For more on the vote, see Caralee Adams, “SPARC Innovators: Harvard University Faculty of Arts and Sciences (June 2008),” <<http://www.arl.org/sparc/innovator/harvardfas.shtml>>.
6. Andrew Albanese, “At SPARC Digital Repository Meeting, Shulenberg Calls Out AAUP, ACS,” *Library Journal*, November 20, 2008, <http://www.libraryjournal.com/article/CA6616455.html?nid=2673&rid=reg_visitor_id&source=title>.

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