Open Access for Teachers

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The movement for open access to the scholarly and research literature emerged as a response to the enormous, unsustainable increases in the price of journals and journal bundles for academic libraries. When the internet made possible the dissemination of information for near-zero marginal cost (over the cost to package the information in the first place), both researchers and librarians began questioning the necessity of cost barriers to access.

Educators who are not themselves researchers or librarians have not been active in the open-access movement or the debates surrounding it as yet. Third-world access to research, higher impact factors, faster research dissemination, relieving overstrained library budgets while restoring selection decisions to librarians—all these concern researchers and the research libraries they use. Institutions whose primary focus is teaching can expect little change one way or the other.

Or can they?

What is open access?

The precise definition of open access is a matter of some debate. For the purposes of this article, the Budapest Open Access Initiative (BOAI) definition¹ will serve: "By 'open access' to this [scholarly and research] literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."

¹ Budapest Open Access Initiative. http://www.soros.org/openaccess/read.shtml

The BOAI statement also mentions that "The literature that should be freely accessible online is that which scholars give to the world without expectation of payment." In practice, this amounts to the journal literature. Most book publishing, including textbooks, does not come under the open-access aegis, since book authors do typically receive payment for their work.

Researchers provide open access to their work in two principal ways: by publishing in open-access journals or by self-archiving papers in "digital repositories" maintained by the researcher's institution ("institutional repositories" such as George Mason University's MARS project²), by a consortium of institutions (such as the Washington Research Library Consortium's Aladin Research Commons³) or by a third party interested in collecting work in a particular discipline ("disciplinary repositories" such as arXiv⁴).

Is open access just for research?

Educators as well as researchers are discovering that the internet allows them to exchange information easily with learners and colleagues. The majority of this exchange is ephemeral, lasting a semester or less; courseware such as Blackboard and WebCT fills the software niche for class-specific storage of instructional materials.

Slowly, the same free-exchange architecture that researchers are discovering and that the BOAI documents is catching hold in education as well. Not only do educators want to reuse materials from class to class (which course-management software often makes unnecessarily difficult), they want to share them with colleagues and make them easily discoverable in the wilds of the World Wide Web.

The same institutional repositories that accept the products of research often accept "learning objects" as well, though learning objects have their own metadata standards⁵

² Mason Archival Repository Service. http://mars.gmu.edu/

³ Aladin Research Commons. http://aladinrc.wrlc.org/

⁴ ArXiv. http://arxiv.org/

⁵ IEEE Learning Standards Committee. Learning Object Metadata.

and often their own dedicated repositories.⁶ Even so, educators without access to a learning-object–specific repository can and should investigate repositories created for their researcher fellows.

Public learning objects

Some universities are making a concerted effort to make their learning objects public. This movement began with MIT's Open CourseWare initiative⁷ in 1999⁸; the most recent entrant is the UK's Open University, which has just announced its receipt of a substantial grant to make "a selection of its learning materials" publicly and freely available⁹. Some have welcomed the opportunity to offer high-quality educational materials to learners who could not otherwise reach them; others feared that openly-available course materials would lead to the deprofessionalization of classroom teaching in favor of impersonal, unguided quasi-library work.

The truth rests somewhere in between. Distance education has indeed arisen as a challenge to interactive classroom tutelage; however, both learners and educators have acknowledged that classroom contact between teacher and learner carries advantages difficult to surmount in the virtual environment. Learning objects on their own have proven substantially inadequate substitutes for interactivity (whether face-to-face or virtual). In fact, open access to learning objects is an immediate aid to *other educators* more than to learners, circulating innovative approaches and novel materials faster and more effectively than has been possible previously. Moreover, individual educators can advance their careers when a learning object they create is adopted widely, much as researchers advance when their papers are cited.

http://elearning.utsa.edu/guides/LO-repositories.htm.

http://ocw.mit.edu/OcwWeb/Global/AboutOCW/our-story.htm

⁶ One list of Learning Object Repositories can be found at

⁷ MIT Open CourseWare. http://ocw.mit.edu/

⁸ MIT Open CourseWare. "Our Story."

⁹ Open University. "OU announces £5.6m project to make learning material free on the Internet." http://www3.open.ac.uk/media/fullstory.aspx?id=8573.

Open-access textbooks

The price of college-level textbooks has risen at impressive rates—not quite those of the journal literature, but close. Rapid republication cycles and expensive (frequently digital) "add-ons" such as CD-ROMs contribute to the price increases. Students already burdened by rising tuition and decreasing government support for education have been complaining loudly about the additional budget strain of buying books. State governments are starting to take notice: the Virginia Assembly recently passed a bill aimed at lowering textbook costs for higher-education students¹⁰.

The economic model for textbooks, however, differs significantly from that for journal articles. Textbook authors are paid, and textbook authoring typically offers minimal career prestige, counting for little in tenure or promotion hearings. Textbooks are also far more expensive to produce than the typical journal, partly due to higher standards of production quality (e.g. four-color printing, eye-catching typography). The more salient—and typically hidden—cost, however, stems from a far more punishing copyright-clearance climate. An article author need only cite the resources she works from; a textbook publisher must list them, find their owners, negotiate for royalties, and then pay those royalties before the textbook even sees print.

Publishers can realize a minor cost savings if they rely on existing open-access research materials. The bulk of the material they wish to use, however, is not and is unlikely to become open-access; even cultural-heritage institutions such as museums now charge textbook publishers to publish images of their materials, considering this a "commercial use." Asking authors to forego textbook royalties for the sake of learners is another tactic unlikely to succeed.

Moreover, learners have not greeted electronic textbooks with open arms, even when those textbooks are made available more cheaply than paper. Many of the uses learners associate with textbooks—marginal notes, highlighting, resale—are difficult or

¹⁰ Helderman, Rosalind S. "Va. Assembly Passes Bill to Cut College Textbook Costs." Washington Post, 8 March 2006. http://www.washingtonpost.com/wp-dyn/content/article/2006/03/08/AR2006030802182.html

impossible with e-textbooks.¹¹ So the standard arguments for open access in the research arena simply do not hold water for textbooks.

Even so, some publishers are experimenting with new business models, offering free (though sometimes not exactly "open") access to e-textbooks for learners. Fields too small or specialized to provide sufficient economic incentive for conventionally-published textbooks are one source of such experiments. One example is the Amedeo Challenge¹², which invites physicians and medical researchers to publish open-access textbooks in their fields, with a special emphasis on small and underserved specialties.

Another notable experiment is Freeload Press¹³, whose breezy, inviting website offers business and accounting textbooks free to learners who download the electronic version and at a significantly reduced cost for those who prefer paper. Freeload Press pays its costs through advertising (as, it should be noted, do some research journals, both open- and toll-access).

The future of open-access textbooks is murky, but bears watching. Open access to research has been slow to catch on because researchers (owing to their libraries' efforts) remain stubbornly unaware of journal and article-database cost problems. Students are under no such illusions, and for that reason are rebelling against price increases more quickly and vocally.

What problems can open access solve for educators?

Open access to research articles and learning objects, if widely adopted, would enable educators to connect their learners—all their learners—with the best and most current research and teaching techniques available in the field. Surely that alone justifies an educator's enthusiastic support?

E-reserves

Electronic-reserve systems, in which an academic library scans an article or book chapter and places the scan conveniently online for the exclusive use of a particular

¹¹ Associated Press. "Trying to Crack the E-Book." Published in the *Washington Post Express* February 21, 2006.

¹² Amedeo Challenge. http://amedeochallenge.org/

¹³ Freeload Press. http://www.freeloadpress.com/

class, have become deservedly popular with educators and learners. Print reserves have dwindled nearly to nothing in favor of e-reserves, and academic libraries are purchasing scanners at impressive rates to handle the new workload.

E-reserves are possible legally because of occasionally-vague provisions of the U.S. Copyright Code too complex to explain concisely¹⁴. Attempts to create standard fair-use guidelines for e-reserves have thus far failed¹⁵, leaving libraries to thread the minefield as best they can. Suffice it to say that some educators who have fallen in love with the simplicity, extra reach, and convenience of e-reserves are finding out that they must stop using tried-and-true articles they have assigned for years because further use will incur royalty payments. Obviously, if the article in question was open-access, this problem simply would not arise.

Moreover, a disquieting situation arose in May 2005 at the University of California at San Diego¹⁶. The Association for American Publishers (AAP) wrote to university officials demanding that the library take "prompt action to investigate and terminate the illegal reproduction, display, and distribution of copyrighted works" as part of its e-reserves system. The library replied that its system contains sufficient oversight to ensure that its e-reserves comply with applicable copyright law.

Clearly publishers are worried about the impact of e-reserves on their royalties, just as they worried about photocopied course-packs in the 1990s. A successful legal challenge along the lines laid out by the lawsuits against Kinko's¹⁷ and other course-

http://www.utsystem.edu/ogc/INTELLECTUALPROPERTY/confu.htm or the Association for Research Libraries CONFU page at

http://www.arl.org/info/frn/copy/confu.html.

¹⁴ The best treatment of the legal questions surrounding e-reserves I have yet found is a slim volume entitled *Legal Solutions in Electronic Reserves and the Electronic Delivery of Interlibrary Loan* by Janet Brennan Croft, The Haworth Information Press, 2004. (Also volume 14 number 3 of the *Journal of Interlibrary Loan, Document Delivery, & Information Supply.*)

¹⁵ See "CONFU: The Conference on Fair Use" at

¹⁶ Albanese, Andrew. "Battle Brews over E-Reserves." Library Journal 130(9), May 15 2005. http://libraryjournal.com/article/CA601047.html

¹⁷ Basic Books, Inc. v. Kinko's Graphics Corporation, 758 F. Supp. 1522 (SDNY 1991).

pack purveyors¹⁸ could well destroy libraries' e-reserves programs. Yet after its initial flurry of letters and the attention those letters generated, the AAP has taken no further action. Why not?

If the currently-slumbering research-faculty behemoth suddenly finds popular e-reserve programs threatened, that behemoth might well stampede to open access to preserve easy online availability for learners. With widespread awareness of open access potentially a greater strategic threat to toll-access journals' business models than library-controlled e-reserves, publishers may well be reluctant to initiate legal proceedings. Again, educators should monitor this evolving situation carefully, and promote open access whenever possible as a defense against loss of e-reserves systems.

Distance education

The growth and newfound popularity of distance education, particularly among adult learners, have created significant challenges for academic libraries. Distance learners may be too far away or too pressed for time to use their institutions' physical libraries; some even encounter difficulties acquiring appropriate authorization to use electronic resources (such as e-journals and article databases) that their institutions have paid for.

Open access to research and learning objects helps solve both problems. Learners need not travel to a physical library nor possess any particular proof of affiliation to use open-access materials. This resolves considerable burden and distress on learners, educators, and libraries alike.

How do educators find open access materials?

Until open access becomes a common and accepted practice in scholarly communication, replacing other forms of access will be scattershot at best. Except in a very few and lucky fields, only a tiny percentage of research material is open-access, and that only the most recent.

Still, useful starting places include:

OAIster (pronounced "oyster"), a search engine for digital repositories:
 http://oaister.umdl.umich.edu/

¹⁸ For example, Princeton University Press v. MDS Services, Inc., 1996 FED App. 0357P (6th Cir.).

- Directory of Open Access Journals: http://www.doaj.org/
- OpenDOAR, the Directory of Open Access Repositories: http://www.opendoar.org/
- CiteSeer, http://citeseer.ist.psu.edu/
- Multimedia Educational Resource for Online Learning and Teaching (Merlot),
 http://www.merlot.org/
- eduSource Canada, http://www.edusource.ca/
- Google Scholar, which crawls digital repositories to make their contents part of its index: http://scholar.google.com/

When searching for specific known items, should the above resources not locate them and their author is still alive, searching for the author's website (or that of the department, research unit, or institution with which the author is affiliated) may prove fruitful. Some researchers archive their work on their own rather than participate in digital repositories; this usually makes the material hard to find, and harder to distinguish from non-scholarly Web materials. Moreover, material saved on a website rather than in a repository can and does disappear without notice or recourse.

How can educators make more materials open access?

Whether you publish research or not, you can help make more materials open-access:

- Encourage colleges and universities to open institutional repositories. Often,
 these efforts are spearheaded by academic libraries; check with librarians
 about planning. Do not hesitate to open a small repository for your own
 institution or department, however; the hardware/software outlay is
 minimal.
- Educate your colleagues about open access. Current statistics indicate that awareness is still quite low, and misunderstandings are rampant. Useful starting points include Peter Suber's Open Access Overview (http://www.earlham.edu/~peters/fos/overview.htm) and the Create Change website (http://www.createchange.org/).
- Encourage your colleagues to make their materials open access, either by publishing in open-access journals or by self-archiving in a digital repository.

- Ask your department and your institution to make formal statements in favor of open access¹⁹.
- Instead of putting your own research on e-reserve for your learners, self-archive it. You will ensure continued access for yourself and your learners, increase the reach and citation impact of your work, and benefit other researchers, educators, and learners worldwide.
- Package up your lesson plans, syllabi, and learning materials as learning objects and deposit them into repositories.
- Instead of putting an article on e-reserve, contact the author(s) and ask that the article be self-archived.

Conclusion

Open access cannot be left wholly to researchers and librarians; educators and learners often lose most when research results and teaching techniques are locked behind toll-access firewalls. Trends in information access and educational techniques continue to tip toward online access to materials; open access ensures that online access remains convenient, inexpensive to educators and learners, and viable in the long term.

http://www.library.cornell.edu/scholarlycomm/resolution.html. Peter Suber provides links to more statements at

http://www.earlham.edu/~peters/fos/lists.htm#actions.

¹⁹ A fine example of such a faculty statement is Cornell University's Resolution Concerning Scholarly Publishing,