



Coalition for Networked Information

Institutional Strategies for Open Educational Resources (OERs)

Report of a CNI Executive Roundtable

Held April 3 & 4, 2016

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Background and Synthesis

At the Spring 2016 CNI Membership Meeting in San Antonio, Texas, we held an Executive Roundtable on the topic of **Institutional Strategies for Open Educational Resources (OERs)**. While this is clearly a topic of growing interest in higher education institutions, we did not anticipate the overwhelming response by CNI member institutions seeking to attend this roundtable. To meet the demand, we offered two sessions of the roundtable (with different institutions participating in each) on Sunday, April 3, and Monday, April 4. We were fortunate to have a student OER advocate from one of our participating institutions join one of the sessions, further enriching an already very diverse set of roles and perspectives among the participants.

Historically, there have been two relatively distinct drivers for OERs. One is focused on improving teaching and learning by developing and sharing learning objects, particularly those that employ new media and information technology platforms. The second driver is economic, focusing on high cost printed textbooks, often associated with large enrollment introductory level courses.

In the first case, for many years, faculty, educational technologists, librarians, and others have been creating digital learning materials; often these resources have been developed by faculty specifically for the courses they teach. The materials include syllabi, readings and textbooks, problem sets, quizzes, images and videos, software, and interactive materials. Some are of use mostly to other faculty, who may adopt, and perhaps adapt, the materials for their own teaching needs, while other materials are of direct value to students both for self-study and within structured educational settings; some materials can play both roles. When such resources are either in the public domain or offered under licenses that permit free reuse and adaptation within educational contexts, they are often generically called open educational resources (OERs). A number of projects have attempted to support the creation, collection, curation, discovery, and sharing of these resources, but despite extensive and repeated investments (there is a history of major projects in this area such as Merlot and the National Science Digital Library funded by the National Science Foundation) and some passionate advocates, they seem to have had limited uptake in higher education institutions.

In the second case, the development of resources addresses both concerns with the rapidly rising costs of traditional printed textbooks (and efforts to minimize the second-hand market in such textbooks through frequent new editions) and concerns that as textbooks move to digital form, or add digital supplements (including material for students and material for faculty such as teachers guides, problem sets and solution manuals, or content for learning management systems) the overall costs of learning materials paid directly by students will continue to escalate rapidly. Given the pressures to control costs in higher education, interest in the economic case for OER materials is growing. A number of library and IT organizations in higher education have been actively involved in OER textbook projects, as have some foundations and government agencies. Note that economic success via an OER strategy is relatively easy to measure, and that the impacts may be highest on undergraduates receiving significant financial aid or those in community colleges, since textbook costs represent a larger part of the overall cost of access to higher education for these sectors. The difference of several hundred dollars per semester could be a significant factor in student retention, and therefore OERs could play an important role in students' ability to stay in school.

A third case that emerged through discussions at the roundtables was an emphasis on assisting faculty to identify materials that they could compile into digital "readers" by locating freely available content on the web and/or materials already licensed by the library, or even licensing new materials. These would result in collections of course readings that would be freely available to students. With this strategy, the licensed content is not an OER but results in students having access to course resources without any direct payment. In many of the participating institutions, all three strategies are being employed to offer educational resources to students at no direct cost to them (though the importance of understanding when genuine cost savings were being gained as opposed to simply shifting costs from students to the institution was repeatedly underscored).

At the roundtable, we found that there is a diversity of policy positions among universities and colleges on their stance towards OER, from a laissez-faire, hands-off stance or actual disinterest by the university administration to a commitment of institutional resources at the presidential or provost level to support an OER program, often focused on a particular OER strategy. Leadership was viewed as important; a number of institutions reported with some frustration the difficulty of moving beyond isolated and uncoordinated pockets of interest to substantive change at scale without such a locus. Institutions reported that developing OER was not just about saving money, but potentially to develop better educational resources, bringing in new voices and developing materials in new fields where no textbook currently exists; in some of those cases, the economic incentive is not a primary factor.

Participants emphasized the need to be clear about three separate processes involved in getting OERs into the classroom. One was trying to *identify* what relevant and suitable materials already existed and to understand what, if anything, would be necessary to adapt them to local needs. The second is to actually *adapt* materials, where needed, and perhaps to combine materials from multiple sources into a coherent collection. The third process, used when suitable materials don't exist already, is to *create* new OERs. Historically, the emphasis has often been on the third, the authoring of new OERs; but

this can be a long, costly, uncertain and expensive process, and, realistically, does not scale.

CNI's executive director Clifford Lynch noted that the conversations at the roundtables gave him a much better sense of how much more complicated and nuanced the OER landscape is, and how the discussion has evolved in important ways (see "Concluding Thoughts"). Also, he noted that unlike some previous roundtable topics where we held two sessions that followed very different trajectories of discussion, the commonality of issues between the two sessions here was striking.

Institutional Perspectives

Some key perspectives from participants included:

- Many of the participating institutions have some type of program to provide monetary incentives for faculty and partners to develop or adopt OER. Some programs have a specific target such as textbooks for high enrollment courses.
- Funding for OER programs comes from a variety of sources on campuses, and in some cases from multiple sources on a campus. Sources include state (US) or provincial (Canadian) government, the Provost's office, the IT unit, the library, library consortia, and private giving (foundations or in one case a Parents Campaign). In most cases, the funding goes directly to faculty for the creation or implementation of OER materials for specific courses. Most grants reported by participants were in the low thousands of dollars per faculty member; the highest amount of a grant to a faculty member reported in the roundtable was \$15,000.
- For public institutions, particularly in the context of university systems or multi-type systems (as in California, where there is the 10 campus University of California, the California State University, and the California Community Colleges System), state-level or system-wide initiatives, often established with specific legislative and/or gubernatorial support and earmarked funding, can be important drivers of change and sources of financial support in moving an agenda of cost savings.
- Many institutions are documenting the substantial savings for students that result from OER initiatives. Some of the specific savings for students in courses adopting OER reported by participants included: over \$100,000 for students in one course in one semester; \$600,000 to replace a \$150 book used by 4000 students in an introductory course; and \$200,000 saved in courses involving 1900 students. In a related effort, one institution reported savings to students of \$2.7 million by putting licensed library resources into the learning management system.
- To develop collections of OER materials to use in addition to or to supplement textbooks, some campuses encourage faculty to partner with library subject experts to locate course materials. The challenge is that, course by course, this

process takes time. The benefit is that the library and librarians build closer relationships with faculty and academic departments.

- Some institutions reported a multiplier effect, for example when one faculty member (or one course taught by a number of faculty) adopts OER, other faculty in that department follow suit. Similar examples included faculty in one section of a multi-section course adopting OER and then influencing all sections to adopt OER, and faculty using OER in one course then adopting OER in the other courses he or she taught.
- Many institutions offer workshops to introduce faculty to OER and to encourage them to adopt existing resources or participate in campus programs to develop resources for their courses. A number of campuses mentioned bringing in outside speakers to provide context. Many institutions commented that overall, faculty are not well informed about what OER actually are or what benefits they can offer.
- A small number of institutions reported that student government has been either a driver or supporter of OER initiatives. Many expressed surprise that students have not been more engaged in this issue; one participant speculated that it was due to students feeling powerless in this situation. In another case, students on one campus held a Twitter campaign showing the bills for their textbook purchases to bring attention to the high costs of those resources. In cases where the students can be successfully engaged and mobilized, they can be powerful drivers of change, but it's important to recognize that they cannot themselves effect the shift.
- A strategy that was highlighted by several participants was to make the costs of textbooks or other resources for courses very clear and transparent up front, preferably through the registrar and the course catalog.
- A small number of institutions reported that there has been faculty pushback, citing academic freedom issues, when faculty have been asked to use OER in their courses. In addition, some faculty express overall concerns about the quality of OER and/or are concerned about their own potential loss of royalties if they have produced successful, commercially published textbooks, or potential re-use of their materials without attribution if made available open access. One librarian expressed concern about librarians' roles in what could be perceived as a limitation to faculty freedom, and added that OER did not necessarily reflect cost savings but merely a shift in costs from student to institution.
- A small number of institutions reported involvement of the university press in OER initiatives. In one case, the university press, under the administration of the library, has digitized its back run of titles, and some are being used without fee by campus courses.

- A small number of institutions reported that the library had hired or designated an OER specialist.
- Only one institution mentioned developing a print-on-demand textbook solution.
- One library described a program to license some heavily used course resources (not previously licensed) which has resulted in a documented \$500,000 in savings; while these are not OER, it is another means to reduce course content costs for students.
- Only one institution mentioned focusing on OER for course content for massive open online courses (MOOCs); whether this indicates less attention being paid to MOOCs or some other factor is unclear.
- Many institutions underscored that the actual from-scratch authoring of open educational resources was a long and uncertain process, and one that would have limited impact unless the OER received wide and repeated adoption. Also noted was that commercial textbook publishers often also pay for the development of other materials, such as teaching guides, problem sets and model answers, etc. To make their textbooks more attractive to faculty, and to be competitive in producing teaching resources, programs that help incent and subsidize authorship of new OERs need strategies to also create and maintain these important ancillary materials.

Concluding Thoughts

As OER initiatives mature, institutions may find that a campus committee structure can help advance progress. Some institutions include a wide range of units in such committees: faculty, student government, student affairs, student success center, bookstore, university press, library, information technology, learning technologies, and teaching & learning center. In addition, for state higher education institutions, statewide committees may be important in shaping and gaining resources for OER initiatives. Many institutions reported that the campus bookstore was a willing partner in OER initiatives; a minority reported that the bookstore was an impediment, in some cases because of existing contractual agreements giving the bookstore exclusive rights to supply textbooks or veto power over textbook arrangements. Some institutions reported that while there are pockets of interest in OER on campus, the lack of a locus of leadership or a specific campus initiative was impeding progress.

A representative from SPARC (the Scholarly Publishing and Academic Resources Coalition) participated in one of the roundtables and reported that federal policy initiatives are addressing OER in some instances, such as requiring open access on products developed from federal funding of educational materials. These are developments to watch in the future.

While there is a lot of excitement and enthusiasm by proponents for developing OER initiatives on campus, one should not underestimate some of the potential roadblocks.

For example, on campuses that have a strong research emphasis, faculty have little incentive to spend time identifying or developing OERs. In addition, one participant remarked that proprietary publishers have a workflow figured out for learning materials that does not require the faculty to think hard, and selecting or developing OER for a course can be time consuming and difficult. The faculty making the choices about educational content are not the ones paying the bill. There is also concern about publishers or other commercial actors creating their own integrated interactive courseware solutions (merging platform and content), in competition with more open campus learning management system platforms. These commercial solutions may engage faculty both because of their ease of adoption and their functionality, but they may come at a high price.

Finally, and perhaps most strikingly, is the recognition that the entire OER debate has evolved substantially and in some sense become subordinated to broader and more important questions. The nature of teaching is changing quickly at many institutions, moving away from the old paradigm of lecture classes accompanied by a textbook to new models that embrace recorded lecture videos, “flipped” classrooms, and other innovations. Part of this change involves re-evaluating and re-conceptualizing what learning resources are needed; the old answer of simply assigning an often very thick and very expensive textbook because that’s what is always done has now very much come under examination. In the words of one participant, we should be thinking about OERs as an integral part of a learning *experience* rather than simply as artifact-like resources. Simplistic questions about whether one can substitute an OER for an expensive, traditional, commercially published textbook without loss of quality or faculty freedom have now become complex and multi-dimensional at many institutions.

CNI Executive Roundtables, held at CNI’s semi-annual membership meetings, bring together a group of campus partners, usually senior library and information technology leaders, to discuss a key digital information topic and its strategic implications. The roundtables build on the theme of collaboration that is at the foundation of the Coalition; they serve as a forum for frank, unattributed intra and inter-institutional dialogue on digital information issues and their organizational and strategic implications. In addition, CNI uses roundtable discussions to inform our ongoing program planning process.

The Coalition for Networked Information (CNI) is a joint program of the Association of Research Libraries (ARL) and EDUCAUSE that promotes the use of information technology to advance scholarship and education. Some 230 institutions representing higher education, publishing, information technology, scholarly and professional organizations, foundations, and libraries and library organizations, make up CNI’s members. Learn more at cni.org.



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Addendum I

CNI Executive Roundtable Call for Expressions of Interest *Institutional Strategies for Open Educational Resources*

The Westin Riverwalk, San Antonio, Texas

Monday, April 4, 2016

8:30 – 11:00 AM

At the Spring CNI meeting in San Antonio, Texas, we will have another in our series of Executive Roundtables. The topic for this Roundtable will be **Institutional Strategies for Open Educational Resources (OERs)**.

For many years, faculty, educational technologists, librarians, and others have been creating digital learning materials; often they have been developed out of faculty teaching. These materials include syllabi, readings and textbooks, problem sets, quizzes, images and videos, software, and interactive materials. Some are of use mostly to other faculty, who may adapt the materials for their own teaching needs, while other materials are of direct use by students both for self-study and within structured educational settings; some materials can play both roles. When such resources are either in the public domain or offered under licenses that permit free reuse and adaptation within educational contexts, they are often generically called Open Educational Resources (OERs). A number of projects have attempted to support the creation, collection, curation, discovery, and sharing of these resources, but despite extensive and repeated investments, they seem to have had limited uptake in higher education institutions.

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The second driver is economic, focusing on high cost printed textbooks, often associated with large enrollment introductory level courses, and a related concern that as these textbooks move to digital form, or add digital supplements (including material for students and material for faculty such as teachers guides, problem sets and solution manuals, or content for learning management systems) these costs would continue to escalate rapidly.

Given the pressures to control costs in higher education, interest in the economic case for OER materials is growing. A number of library and IT organizations in higher education have been actively involved in OER textbook projects, as have some foundations and government agencies. Note that economic success via an OER strategy is relatively easy to measure, and that the impacts may be highest on undergraduates receiving significant financial aid or those in community colleges, since textbook costs represent a larger part of the overall cost of access to higher education for these sectors. At the Roundtable, we will discuss a wide range of issues related to OER.

We will hold the Executive Roundtable on Monday, April 4, the morning of the first day of the spring membership meeting. **At this Roundtable, institutions may be represented either by one individual or a pair of individuals who have different roles, e.g. a library director, CIO, and / or education specialist, OER author, or OER publisher. All sectors of the CNI membership are invited to express interest in attending this Roundtable.** If you wish to propose a team of more than two people, please contact Joan Lippincott.

Cliff Lynch will moderate this session and provide some framing remarks, and then participants will have an opportunity to discuss issues with peers from other institutions. The Roundtables build on the theme of collaboration that is at the foundation of the Coalition. We want to promote institutional dialogue and inter- and intra-institutional information exchange on digital information issues. We see these Roundtables as one means of bringing together stakeholders.

CNI uses Roundtable discussions to inform our program planning process. We will disseminate a summary of the issues that emerge from the Roundtable, but in order to encourage frank discussion, there will be no individual or institutional attribution of statements without prior permission from the relevant party. Reports from recent Executive Roundtables are here <http://www.cni.org/executive-roundtable-reports/>

The meeting will be held at The Westin Riverwalk in San Antonio on Monday, April 4, 2016 from 8:30 AM – 11 AM. The broad topic for this Executive Roundtable is **Institutional Strategies for Open Educational Resources**. Participants will share strategies, policies, experiences, and perspectives on institutional and consortial activities in this area.

Potential topics to be explored – time permitting – could include:

- Institutional or consortial programs to encourage faculty authorship of OER materials; incentives, priorities.
- Goals of OER programs (economics or improved teaching and learning).
- Organizational decisions: responsibility for implementing and assessing OER programs, and other governance questions.

- Types of OERs (textbooks, e-textbooks, learning objects broadly) that are being targeted.
- Platform strategies for OER resources
- Funding (internal, external) for OER, including redirection of funds away from traditional textbooks.
- Support for the production and maintenance of OER – what units are involved and what skills are needed.
- Stewardship of OER materials.
- Experimentation with advanced features in OERs, including interactivity, collaboration tools, visuals, problem sets, grading and feedback mechanisms.
- OER and online learning programs (including MOOCs).
- OER and learning analytics, including data collection, sharing, analysis.
- Privacy issues involving OER materials
- Assessment and quality control of OER materials and OER programs.
- Collaborations with university presses or other groups in the creation and dissemination of OER materials.

To express interest in participating, please send a message by end of day Monday, January 25 to Joan Lippincott joan@cni.org with the name(s), title(s), and e-mail address(es) of the **one or two individuals** from your institution who would like to attend. We will choose approximately 20 individuals, using the criteria of position, experience, and balance of institutions (type, geographic area, etc.) to determine who will attend. **We will notify you by Friday, January 29 as to whether you have been accepted or whether you will be on a waiting list for participation.** If you have any questions about the Roundtable, please contact Joan Lippincott at joan@cni.org.