

THINGS YOU SHOULD KNOW ABOUT... OPEN EDUCATIONAL RESOURCES

Scenario

Dr. Bartlett is on the history faculty at a small, private institution, where his academic work focuses on U.S. race relations and the civil rights movement. For several years he has cultivated his interest in the labor movement in the United States, and he hears from several students that they would like to take a course on that topic. Unsure whether he has the time or expertise to pull together a curriculum on such a course, Bartlett turns to educational resources online. Among the materials that he finds is a full course on labor relations that initially looks like everything he will need to teach the course at his university. It is available for free; it includes readings, a bibliography of supporting sources, assessments, and sample projects; and it comes from a repository of courses that were developed at a respected institution.

As he digs deeper into the materials and thinks about the specifics of the course he wants to teach, he starts to see gaps in the resources from the open course. He browses additional resources and begins to search through collections in related disciplines. Of course, materials from history programs are important, but Bartlett also uncovers free educational resources from political science, economics, and sociology departments that fill out the syllabus of the course as he envisions it. Much of the historical context for the labor movement parallels that of the civil rights movement, but Bartlett starts seeing his own specialty from a somewhat different perspective, based on the research he does for his new course.

In a relatively short time, and at no cost other than his time, Bartlett not only constructs a syllabus and coursepack for the course on labor, he also incorporates some of the open resources that he came across into his courses on race. Some of the resources he finds allow users to modify them and repost them online, and Bartlett takes advantage of this option for some of the materials he uses. The students who take his new course on labor relations tell him how much they like the course, and he also hears compliments about the new materials included in his civil rights classes.

1 What is it?

Open educational resources (OER) are any resources available at little or no cost that can be used for teaching, learning, or research. The term can include textbooks, course readings, and other learning content; simulations, games, and other learning applications; syllabi, quizzes, and assessment tools; and virtually any other material that can be used for educational purposes. OER typically refers to electronic resources, including those in multimedia formats, and such materials are generally released under a Creative Commons or similar license that supports open or nearly open use of the content. OER can originate from colleges and universities, libraries, archival organizations, government agencies, commercial organizations such as publishers, or faculty or other individuals who develop educational resources they are willing to share.

2 How does it work?

The term OER generally refers only to digital resources and, as such, tends to focus on usage in online or hybrid learning environments, though electronic content can certainly be used in face-to-face environments as well. Each resource is issued under a license that spells out how it can be used: Some materials may only be used in their original form; in other cases, learning resources can be modified, remixed, and redistributed. OER are typically found in collections or repositories. These can be offerings from a single institution, such as when a college or university makes available online the resources from its courses, or they can be collections of materials gathered from individuals or departments from a wide range of separate institutions. Instructors and individual learners can download OER and use them in formal or informal learning situations, and one of the hallmarks of OER is their flexibility—many are modular in nature, allowing them to be used in novel combinations to suit particular learning activities. Because open resources are so malleable, they can be adapted to keep pace not only with new technologies but also with changes to academic disciplines and teaching methods. Depending on the resource, these updates might be made by the creator or by users of the resource.

3 Who's doing it?

One of the longest-running and highest-profile OER initiatives is the OpenCourseWare project from MIT, which began in 2002 and today features all of the course materials from roughly 2,000 MIT courses. The OpenCourseWare model has been replicated by dozens of colleges and universities around the world, which are putting full course materials online for anyone to use. Having access to an institution's course resources is not intended to be equivalent to taking a course at that institution, but users can take advantage of that access to supplement or direct their own learning. Other OER efforts include Connexions, which was begun

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at Rice University, and the Open Learning Initiative from Carnegie Mellon, as well as the University of the People and even iTunes U. Although OER projects use different models for how they function, all endorse the notion that teaching, learning, and research are improved when educational resources are more open and more accessible.

4 Why is it significant?

Educational resources developed in an open environment can be vetted and improved by a broad community of educators, resulting in materials that represent what the educational community sees as most valuable. By providing educators with new access to educational material, open resources have the potential to spur pedagogical innovation, introducing new alternatives for effective teaching. OER have the potential to expose students and instructors to the long tail of content, most of which never finds its way into widespread educational use. Moreover, learning resources that can be modified and reused promote collaboration and participation—two key elements of a Web 2.0 approach to teaching and learning.

The resources required to develop high-quality learning materials and activities for a full complement of courses can be prohibitive for many institutions and instructors. By distributing the costs over a larger number of users, OER brings a greater range of tools within reach of more users. OER can also lower the costs for students to obtain educational content. OER and online or hybrid learning are natural partners in efforts that take advantage of—and prompt—developments in educational technology that facilitate new media, new formats, and new means of distribution.

5 What are the downsides?

Like all educational resources, the quality of OER can be uneven and depends largely on their sources. Some OER are simply ineffective at presenting content in a valuable manner, and not all OER collections have a feedback mechanism by which users can share their evaluations about the quality of a resource. The value of educational resources tends to decrease without periodic updating, and many open resources are not kept current. Even within an OER repository that is operated and sanctioned by a respected institution, individual resources might not be held to the same standard of quality as the institution's other offerings. The flipside of the flexibility of open resources is that many need to be adapted for use in a departmental or institutional context to meet local requirements or needs. Some open resources do not comply with accessibility requirements for users with disabilities. Whenever content is shared, and especially when it can be modified, questions arise over intellectual property and copyright concerns. In some cases, faculty resistance to opening their resources can be an obstacle.

6 Where is it going?

The abundance of OER can leave users spending a long time searching for a resource that fits their needs, and the volume of OER will only increase. OER repositories and the tools to search for and filter resources will need to build out their capacities and capabilities to help instructors and individual learners navigate the growing sea of open content. Part of this process is evaluating the credibility of individual resources or collections, and new mechanisms are likely to emerge to facilitate this. To some extent, partnerships (with certain publishers, for example) have begun to fill this role, allowing faculty members to choose from lists of reviewed (or “approved”) open resources; other means of assessing the quality of OER will surely be developed. Even when a resource is deemed accurate and effective, resources might need to meet even higher standards to be included in for-credit courses. What organization will have the authority to sanction a resource or a collection of resources for degree- or certification-granting programs?

7 What are the implications for teaching and learning?

Few disagree that the infusion of OER into higher education is likely to have far-reaching effects on the character of teaching and learning, though the nature of that change is the subject of some debate. One of the more radical viewpoints is that the OER movement will lead to a future in which all of the components of an education will be available online for free and that learners will have the opportunity to construct a course of study—though it might not be called a “degree”—from the wide and growing pool of open content. Others envision a less disruptive future for OER, suggesting that the model for higher education will persist in a form not wholly different from what it is today, but enhanced with high-quality, open, digital content. Regardless, OER will expand access to educational resources to more learners, more of the time. In particular, adult learners, students who work full time, and other nontraditional students stand to benefit from open resources because they are available for independent, self-directed study.

Open resources are one way to address the rising costs of education, and they also have the potential to facilitate new styles of teaching and learning. Giving faculty the ability to pick and choose the individual resources they want to use—and to modify those resources and “assemble” them in unique ways—promises greater diversity of learning environments.

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