

AMEE GODWIN - ON DOING OER*

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Abstract

Amee Godwin's contribution to the OSS and OER in Education Series. In this post, she writes about OER as an active collaborative process aimed at enhancing teaching and learning.

NOTE: Author - Ameen Godwin, On Doing OER. Originally submitted March 1st, 2008 to the OSS and OER in Education Series, Terra Incognita blog (Penn State World Campus), edited by Ken Udas.

1 Modeling “the promise” of Open Educational Resources

The Institute for the Study of Knowledge Management in Education (ISKME) has created an online network¹ that aggregates open educational resources (OER) within a social networking environment, for the purpose of stimulating engagement of diverse populations in accessing and using OER worldwide. OER are most often thought of simply as content—that is, teaching and learning materials that are freely available for downloading, sharing, and remixing.

However, the value of OER is best described not through their aggregation as static resources, but through their potential to engage a wide range of teachers, learners, practitioners, and other stakeholders in resource transformation, cross-pollination of ideas and expertise, and collaborative knowledge building.

Research about digital media has shown that the development, use, and adaptation of resources can serve as a catalyst for engaging diverse teachers, learners, and practitioners in sharing their expertise, building their knowledge, and otherwise providing leadership in their fields. This is similar to organizational research that has found that continual improvement and enhancement often emerges from knowledge sharing among practitioners. In other words, OER is an invitation to improve teaching and learning processes.

But what comprises “doing” OER? Does it take a new belief system? Are we doing it already? What examples are there to show off models for active engagement with OER?

The phrase, “the promise of OER,” resurfaces often around the nascent movement for ready-to-modify learning materials. If OER is seen as merely rewritten curriculum, it's not surprising that the movement might produce a few yawns. “Doing OER” is meant to embrace much more than this, starting with an evolutionary mindset about learning content and the learning itself.

Searchable, web-based resources with clear conditions as to how it can be used represent a platform for collaborative “mutation” or remixing. They are meant to be integrated into ways we are already engaging in collaboration and knowledge building, and in the process, incrementally to be part of growing new ways of teaching and learning that are more participatory, community-based, and bottom up.

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[†]<http://creativecommons.org/licenses/by/3.0/>

¹<http://www.oercommons.org/>

Those of us lucky enough to have a dependable broadband internet connection already IM, email, skype, poke, post pictures, edit wikis, blog, post in forums, share bookmarks, video conference, tag, rate, review, and recommend favorite things to both friends and strangers, as part of a digital lifestyle. The knowledge-building potential is enormous and growing due to repurposeable materials and the collaboration possibilities that surround them.

The recent addition of the Library of Congress' historical image collections² to Flickr, which are appropriately tagged with the word "commons," is a red-hot example of "doing OER." The images are not formally licensed, but are shared under the terms "no known restrictions." It is this type of engagement opportunity—i.e., the encouragement of communal tagging—that OER is meant to achieve.

Another example of doing OER is the BioQUEST Curriculum Consortium's use of problem spaces³. In contrast to static collections of data or lessons, problem spaces are dynamic workspaces where teachers and students share their work. Rather than using a more traditional lab approach where the students—who in this case are college instructors or pre-service teachers—may be asked to follow highly structured procedures, problem spaces emphasize the development and exploration of student questions as they come to understand biological principles, analytical procedures, and the formulation of data-based inferences. By collecting and displaying the work of others, problem spaces contextualize scientific inquiry within a community of practice where meaning is negotiated and problems have a history across multiple researchers.

Publicly available datasets, inquiry-based models for learning, collaborative tools and environments for sharing—these are the building blocks for "doing OER." At ISKME we support ways for teachers to benefit from existing practices of online communities. This includes facilitating their ability to create and share "microcontent," or smaller pieces of information drawn from multiple platforms (e.g., wikis) that can be augmented, revised, and re-combined, and engaging them in the use of web-based tools, such as OER Commons⁴, which allow them to attach their own tags to online content, thus creating meaning from the bottom up as opposed to that which is predetermined by content experts.

One of the things common to doing OER is that of crossing boundaries of traditional roles. Stepping into new collaborative processes creates opportunities for participants to move beyond established roles—by, e.g., providing spaces where teachers and students and teachers and their colleagues can co-create content. But such opportunities may also pose risks to a teacher's professional status. What benefits are there for teachers to share their content online?

How can teachers work within the frame of institutional structures that do not yet support collaborative ways of working, and do not reward teachers for the time and resources spent? Especially for the K-12 arena, these questions have yet to find answers. Several hundred K-12 teachers using LeMill.net⁵ are, in fact, creating and posting content for anyone to see and adapt; yet, teachers on the whole may need support in stepping into new roles such as that of OER author or online collaborators.

At ISKME, we have just begun a pilot project with 18 middle school science teachers in four countries to see how they find and adapt resources, use available tools, and collaborate with each other and with their students around issues related to climate change and ecology. Creative remixing of teaching and learning materials will likely find its place here, but we expect to see challenges in cross-cultural, multi-lingual online sharing. We're interested to understand how much support and facilitation the group might need, and whether OER materials can be produced with relative ease and with minimal difficulty and risk on the part of teachers.

Furthermore, ISKME has developed a set of OER case studies⁶ by studying how a range of other OER projects form, change, and evaluate their own progress, and has created an OER How-To Manual that aims to offer practical assistance to anyone looking to start or evaluate their OER efforts. ISKME's case study work has revealed that a key element in "doing OER" has been to include face-to-face training, mentoring,

²<http://flickr.com/commons>

³http://bioquest.org/bedrock/problem_spaces/

⁴<http://www.oercommons.org/>

⁵<http://lemill.net/>

⁶<http://icommons.org/nodes/oer-case-study-project>

and working with peers and experts. In one of the cases, Free High School Science Texts⁷, it was clear that high-quality resources don't just happen online on their own. In this grassroots project based in South Africa, a highly collaborative and participatory infrastructure was built over time to bring authors together both online and in person, and to organize their workflow, establish quality criteria, reward their input, and deploy their "finished" publications.

Through the OER Commons initiative, our educative role is to identify and construct models that support a mindset about evolutionary change through OER collaboration, knowing full well that simply distributing OER content alone won't dig us out from old models. New models for teaching and learning are a necessary part of the doing, especially in terms of facilitating problem-based inquiry and data sharing, mentoring and cycling through feedback with peers.

Perhaps through considering examples of OER in action, we might have a chance to reflect on the "promise of OER" and ask if we getting any closer to it through the way that we are doing it.

Further readings:

- B. Collis and J. Moonen, *Flexible Learning in a Digital world: Experiences and Expectations* (London: Kogan Page, 2001)
- S.E. Metros K. and Bennett, "Learning Objects in Higher Education," *ECAR Research Bulletin* 19, (Boulder, CO: 2002)
- L. Petrides and C. Jimes, "Open Educational Resources: Toward a New Educational Paradigm," *iJournal Insight into Student Services* 14 (Oct. 2006).
- Y. Benkler, *Common Wisdom: Peer Production of Educational Materials*⁸ (Utah: Utah State University, 2005) (pdf)
- L. Petrides, *Turning Data into Knowledge: What's Data Got to Do with It?* (Phoenix: League for Innovation in the Community College, 2004)
- L. Petrides and T. Nodine, *Anatomy of School System Improvement: Performance-Driven Practices in Urban School Districts*⁹ (San Francisco: New Schools Venture Fund, 2005).

2 Comments

2.1 1. Ken Udas - March 4th, 2008 at 5:56 am

Amee,

First, thank for this fantastic (interesting & thought provoking) posting. There are a lot of ways of approaching the topic of "doing OER," and posing the types of developmental questions that you have takes us beyond the topics of licensing and storage. Looking at the BioQUEST Curriculum Consortium's use of problem spaces that you cite in the posting, for example, I think points us down a path not unlike the use of participatory action research for the development of curriculum, which I think is pretty exciting.

I have been involved in various roles with a number of institutions, principally in higher/tertiary education, that do a lot of distance and online education. Most of those organizations had adopted pretty traditional curriculum and course design and development process. The processes have tended to group in two general areas:

1. Sometimes these processes were really traditional, faculty-centered processes that were augmented with assistance from a learning designer, perhaps a graphics artist, multimedia professional, etc.
2. Sometimes the processes are based on a "production model" intended to achieve some economies of scale through divisions of labor and use of other techniques for achieving efficiencies.

Although I do not have a handle on the actual amount, but if I were to guess at the volume of content that is created for distance and online education annually through formal processes, it would be quite significant. It seems that in this posting, "Doing OER implies a third model that connects:

⁷<http://www.fhsst.org/>

⁸http://www.benkler.org/Common_Wisdom.pdf

⁹<http://iskme.org/what-we-do/publications/anatomy-of-schools/>

- Design
- Development
- Delivery/Use/Distribution
- Assessment
- Redesign/Redevelopment (for reuse)

in an environment where the whole process is educational and open to learners as well as faculty, designers, etc. This type of approach would obviously be quite powerful, particularly if the process included the introduction of new student generated content/artifacts.

So, is this the type of thing that is worth doing? (It seems to be a natural enough extension of what Amee is talking about.) If so, who is starting to do or fund this type of thing?

Looking forward to learning!!! Ken

2.2 2. Amee Godwin - March 7th, 2008 at 2:09 pm

Hi Ken,

Thanks so much for your comments and for drawing the connections between all points of the “production cycle” of OER. Yes, the production and modification of content in this context definitely constitutes learning. It is a non-traditional take on education and on resources, and is supported by inquiry-based and problem-based teaching and learning practices.

In the example of BioQUEST, I should also point you to the NSF-supported SCOPE project, <http://www.bioquest.org/scope>, on which we are collaborating. The project’s first upcoming workshop will bring this investigative approach to faculty as learner-participants in a face-to-face setting and from there we aim to support continuous production and engagement online with the resulting resources and data. This is meant to be an experience in doing contemporary science that the participating instructors and curriculum authors can then share with their students.

-Amee

2.3 3. Ken Udas - March 9th, 2008 at 5:37 am

Amee, These are really very exciting developments and I think point to the next step in making OER part of a meaningful educational experience. I think that a vast majority of what is out there right now is about creating and posting content. I assume that content availability is very important. In fact, some would, I think quite legitimacy, argue that it is absolutely critical infrastructure for all sorts of other things related to open education and provides the necessary material (open intellectual capital) for reuse and creativity.

Let’s just assume for a minute that the volume of OER content, open access articles, FOSS, etc. is reasonable right now, would you have any advice for regular teachers to start doing “OER”, perhaps if they are not at schools, colleges, or universities with much OER experience? How about advice for academic administrators? How might they act as catalysts?

Thanks! Ken

2.4 4. christine geith - March 9th, 2008 at 11:02 am

Amee, Thanks for sharing your thoughts, and some real examples, on OER collaboration. “Doing OER” is a useful phrase for the wide range of creative and collaborate activities you describe.

It’s important that this message be shared more broadly and I’m glad to know that your institute, ISKME, is capturing case studies. As jsener noted in an earlier post, there is not enough out there on use and impact of OER.

Yet, I wonder how much of teacher, expert and practitioner collaboration is really due to OER. Like Ken asks, above, how important is it to have OER already out there to work from for “Doing OER.”? How much

¹⁰<http://www.bioquest.org/scope/index.php>

of the “Doing” is using existing materials, and how much is creating fresh? Also, what is it about OER that is expanding the scope and/or depth of collaboration? How much of what we’re seeing is due to having access to content versus having access to better tools for social collaboration?

Though I see it happening, it’s hard to put my finger on why.

- Chris

2.5 5. cynthiaj - March 21st, 2008 at 10:05 am

Thanks, Ameer. I think that you highlight an important aspect of doing OER—that it requires a paradigm shift in some ways. So the question is, how do we best support teachers, students, and institutions overall in collaborating and stepping into new roles around OER and the potentially new ways of working it offers.

2.6 6. Ameer Godwin - March 21st, 2008 at 2:04 pm

Christine, great questions and interesting point about where collaborating and OER might intersect.

Last week some of us heard John Seely Brown note in a talk at the Open Learning Interplay meeting at Carnegie Mellon that making MIT and other OCW materials public is having an ‘unintended’ effect of aligning previously unrelated courseware and faculty’s course objectives generally, just through the power of making all the materials public.

For those of us exploring the mechanisms around continuous improvement and sharing, this effect is very much an ‘intended’ enhancement, that is, access and use of open, adaptable materials is meant to impact teaching strategies. It’s hard to draw a line between “making fresh” and “building on existing”, but the participatory activities used in making materials is a form of learning that then might stimulate collaboration in the form of feedback, reviews, discussions, new examples. The access, the tools, the social factors are making new blends in and around the content and practices used in teaching it.

Ameer

2.7 7. Ken Udas - March 23rd, 2008 at 11:39 am

Hello,

The process that Ameer is pointing to sounds very much like the “promise” of OER as a change agent or catalyst. From your experience (anybody), what are some of the qualities of OER that make it best suited for continuous improvement and sharing? That is, what do you think are some of the qualities or characteristics of open educational resources or courseware that makes some “better” and more likely to be easily used in the “Doing” process?

Cheers

2.8 8. Ken Udas - March 26th, 2008 at 6:32 am

Given the final thought in Ameer’s posting:

Perhaps through considering examples of OER in action, we might have a chance to reflect on the “promise of OER” and ask if we getting any closer to it through the way that we are doing it.

I would like to get a sense for the answer...

Are we getting any closer to the “promise of OER” through the way that we are doing it?

and

How is “Doing OER” impacting education?