Designing Online Faculty Development "Mini-Courses" at Community Colleges to Speed OER Adoption

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Introduction

Participating in informed discussions about Open Educational Resources requires a basic understanding of several copyright-related concepts, among them open licensing and the public domain. Over the past five years, Germanna Community College (GCC) has been involved in several high-profile, grant-funded OER initiatives, and various college units have regularly held OER-related professional development workshops and presentations. Still, at the end of 2017, the Germanna Libraries observed that many faculty members and administrators continued to hold misconceptions about the most fundamental aspects of OER. Moreover, the College's OER dialogue had not significantly progressed beyond a discussion of using OER to reduce student expenses. Other OER-related topics—including topics that indicate faculty are in the process of redesigning courses with OER—had not been addressed by the professional development workshops offered by the College's most vocal OER advocates. For example, librarians noticed that the College's OER professional development activities had not yet addressed the production of ancillary materials, or the use of OER quality rubrics when evaluating existing OER. Moreover, the College's OER Committee appeared to be unfocused and disengaged.

The lack of progress educating the College community regarding OER—despite high levels of enthusiasm and advocacy in some pockets—appeared to have one root cause. Prior to 2017, a small group of faculty OER advocates had led the majority of the College's OER initiatives and designed the majority of the College's OER professional development activities. This small group, which lacked representation from many of the College's academic departments, simultaneously steered and limited the College's OER dialogue. Moreover, in several instances, teaching faculty felt their questions and comments about OER had been summarily dismissed by some members of the College's small group of OER advocates.

In Fall 2017, the Germanna Libraries laid out a plan to improve the OER-related knowledge base of faculty and administrators, and to address the OER-related concerns that teaching faculty routinely shared with librarians, by designing a series of online "mini-courses," each of which could be completed within three weeks. Although community college librarians regularly contribute to faculty development, such events are often limited in terms of scope, duration, and level of interactivity. In particular, time constraints during faculty development events may diminish opportunities for extended reflection, discussion, and demonstration of newly acquired skills. The online faculty professional development "mini-courses" would be an opportunity to correct misconceptions and provide an intellectual foundation for productive discussion about Open Educational Resources, while overcoming the limitations on learning posed by the College's prior professional development activities,

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such as presentations during College-wide learning days. Moreover, the "mini-courses" would promote finding, evaluating, and adopting OER, and they would be facilitated by library faculty, who had been relegated to the sidelines of the College's OER discussions after expressing viewpoints about OER that were at odds with some of the College's most visible OER advocates.

Finally, the three-week OER "mini-courses" would provide a quick, low-stakes on-ramp to OER professional development, for which faculty would receive a certificate of completion. Prior to the development of the mini-courses, in 2016, the Germanna Libraries had piloted an intensive, 6-week, online OER professional development course. The intensive course, which was developed by a sister institution in the Virginia Community College System, addressed *both* adopting and adapting OER. GCC librarians teaching the intensive course noted that it was far too extensive for an introduction to OER, and it omitted several topics, such as OER quality rubrics, that should be addressed as an integral part of the OER adoption process. Rather than adapting the intensive course, librarians opted to create two new "mini-courses," OER Basics I and OER Basics II.

Understanding by Design

OER Basics I and OER Basics II were created with consideration given to the Understanding by Design (UbD) instructional design model, a backward design approach originated by Wiggins and McTighe.[1] The Germanna Libraries chose UbD as the instructional design lens for the project, largely because it prioritizes assessment by first focusing on learning outcomes, and then focusing on designing assessments aligned with those outcomes. In backward design, "our lessons, units, and courses should be logically inferred from the results sought," so that designing learning activities is the *last* step in the design process.[2]

An assessment-centric instructional design model like UbD places the focus on participants' demonstration of skills, which is crucial for understanding and improving learning. Moreover, the UbD model emphasizes a specific type of assessment that is particularly useful: it explicitly promotes authentic, performance-based assessment,[3] the high value of which has been consistently noted by Germanna librarians. When the Library analyzes assessment results, authentic assessment consistently yields more insight into student learning than other assessment approaches, as well as the most actionable data for closing the loop. Observing what mini-course participants are able to *do* as a result of their instructional experience permits librarians to verify that faculty and administrators are prepared to contribute meaningfully to College-wide OER discussions (OER Basics I) and to replace commercial textbooks with high-quality open textbooks and ancillary materials (OER Basics II).

Bloom's Taxonomy

The first course in the set of mini-courses, OER Basics I: Solving the Problem of Expensive Course Materials, was aligned with the lower levels of the revised version of Bloom's Taxonomy, including "remembering" and "understanding" the course content.[4] The second mini-course in the sequence, OER Basics II: Finding, Evaluating, and Adopting Open Textbooks, was largely aligned with the application level in the revised Bloom's Taxonomy. Using the revised Bloom's Taxonomy to clarify the cognitive level associated with each course outcome simplified the process of designing the courses, focusing the librarians' attention on the essential course content associated with each three-week course.

Course Structure & Course Content

Both OER Basics I and OER Basics II are self-paced, asynchronous courses designed in the Blackboard LMS. Each course week is organized using a Blackboard learning module that contains several course readings or videos, a single discussion board question related to one of the course readings or videos, and a single direct

assessment of student learning that doubles as the main learning activity for the week. To support learning, librarians comment on the work submitted by participants, but participants immediately receive full credit upon completion of a discussion board forum or assessment, regardless of the quality of their work. To supplement direct assessment of learning, an indirect assessment in the form of a brief survey that captures participants' perceptions of their learning, and their satisfaction with the course, is made available at each course's conclusion.

FIGURE 1
OER Basics I—Overview of Weekly Learning Modules

Weekly Activities

Week 1: How the High Cost of Required Course Materials Impedes Student Success

Week 2: Permission to Use a Work: What Copyright Permits & What Copyright Restricts

Week 3: Why Open Licenses Solve the Course Materials Affordability Problem

FIGURE 2
OER Basics I—Week 1 Learning Module

Week 1: How the High Cost of Required Course Materials Impedes Student Success

A. How Rapidly Has the Cost of College Textbooks Increased? (Reading)

B. How Much Should Community College Students Expect to Pay for Textbooks? (Reading)

C. How Are College Students Dealing with High Textbook Prices? (Reading & Infographic)

D. Discussion Board 1: How Can Teaching Faculty Reduce Student Expenses?

E. Week One Finishline (Assignment 1) - The Student Response to the High Cost of Required Course Materials

OER Basics I: Solving the Problem of Expensive Course Materials

In OER Basics I, which familiarizes students with the OER-related concepts necessary to participate in an informed discussion of OER, participants are expected to achieve the following learning outcomes:

- Participants will be able to explain why expensive course materials impede academic progress for some college students.
- Participants will be able to define the following terms: copyright, licensing, derivative, and public domain.
- Participants will be able to describe the four factors associated with fair use.
- Participants will be able to describe the defining characteristics of openly licensed content, namely the 5 permissions granted by open licenses.
- Participants will be able to explain why openly licensed content offers a solution to the problem of expensive course materials.
- Participants will be able to summarize the permissions and restrictions associated with each type of Creative Commons license.
- Participants will be able to explain the differences between openly licensed materials and library licensed materials.

The assessments in OER Basics I require participants to demonstrate their *understanding* of the course content. For example, the final assessment in OER Basics I requires students to consider the creative commons licenses attached to various open textbooks, and explain the permissions associated with those licenses.

FIGURE 3
OER Basics I—Week 3 Assessment

Instructions
- Each item below contains a link to an open textbook.
- For each open textbook, answer the corresponding questions.
- The questions address the permissions and restrictions associated with a given Creative Commons license.

Limit your responses to one or two sentences.

1. https://open.umn.edu/opentextbooks/BookDetail.aspx?bookId=62

Based on this open textbook's CC BY license, which other Creative Commons licenses could be applied to a derivative of this work? List all that apply.

What might be the intention of an author who selects a CC BY license for their work?

2. https://open.umn.edu/opentextbooks/BookDetail.aspx?bookId=411

Could a derivative of this open textbook be given a Creative Commons license other than CC BY-NC-SA? Why or Why not?

Why might an author select this particular open license--CC BY-NC-SA--for their work, rather than CC BY-NC?

3. https://open.umn.edu/opentextbooks/BookDetail.aspx?bookId=410

Could a derivative of this open textbook be given a CC BY license? Why or why not?

Why might an author select this particular open license--CC BY-SA--for their work?

OER Basics II: Finding, Evaluating, and Adopting Open Textbooks

OER Basics II, which focuses on open textbooks, gives students experience finding, evaluating, and attributing OER. Students in OER Basics II are expected to achieve the following learning outcomes:

- Participants will be able to explain the difference between openly licensed content and Open Educational Resources (OER).
- Participants will be able to explain the pedagogical benefits of using textbooks as course materials.
- Participants will be able to summarize a frequently used publication model for open textbooks.
- Participants will be able to apply an OER quality rubric in order to determine whether or not a given open textbook is likely to positively impact student learning.
- Participants will be able to summarize themes in the scholarly literature regarding the efficacy of OER.

OER Basics II contains assessments that require students to apply knowledge gained in both OER Basics I and OER Basics II. For example, the Week 3 assessment requires participants to apply an OER quality rubric to a chapter in an open textbook.

FIGURE 4
OER Basics II—Week 3 Assessment

Instructions
Follow the steps below to complete the activity.

1. First, visit the Open Textbook Library at https://open.umn.edu/opentextbooks/.
   Select a textbook that is aligned with at least 50% of the course learning outcomes in a course that you teach. (The Open Textbook Library includes many textbooks from OpenStax, so feel free to select the open textbook that you used in Week 2—unless you find something you like better.)

2. Focus on one chapter in the open textbook you've selected.

   - Apply the rubric at: https://open.umn.edu/opentextbooks/ReviewRubric.aspx to the chapter you've selected. (The "rubric" is more like a checklist, but let's call it a rubric.)
   - For this activity, record your observations in each rubric category, limiting your response to four or fewer sentences per category. In some categories (e.g. Grammatical Errors), your response may be as short as one sentence.
   - Finally, based on the chapter you reviewed, give the textbook a summary score on a scale of 1-10. A score of 10 means that the chapter was consistent with the performance description in all of the rubric categories. For example, the performance description for the Comprehensiveness rubric category is: The text covers all areas and ideas of the subject appropriately and provides an effective index and/or glossary.

"Streamlined" Courses

Initially, librarians were concerned that the mini-courses were *too* streamlined, questioning whether or not there was enough content in the courses for students to achieve the learning outcomes. However, participants' performance in the courses, as well as participants' responses to a brief satisfaction survey, indicated that the amount of course content was adequate. Moreover, each time OER Basics I and OER Basics II have been offered, several participants have requested (and received) one to three additional weeks to complete the course.

Course Schedule, Completion, and Progression

OER Basics I was offered during both the Spring 2018 and Fall 2018 semesters. Seven out of the 8 enrolled participants (88%) completed OER Basics I during Spring 2018, and six out of the eleven enrolled participants (55%) completed OER Basics I during Fall 2018. OER Basics II was offered only during the Fall 2018 semester,

and completion of OER Basics I was the prerequisite for enrollment. Two out of the three enrolled participants (67%) completed OER Basics II.

A Unique Professional Development Opportunity

Librarians at the majority of community colleges do not develop the curriculum for full courses. At GCC, librarians design outcomes-based, course-integrated library instruction sessions, but the College does not offer an information literacy course. And, although GCC librarians have experience scaffolding instructional activities across **sets** of courses (e.g. College Composition I and College Composition II), such scaffolding occurs only in the context of the single-shot (or double-shot) library instruction model. Accordingly, the opportunity to develop a mini-course offers community college librarians an experience and perspective on instructional design that they might not get otherwise, as well as an opportunity to collaborate closely with instructional designers and learning technology support staff.

Developing mini-courses also provides an excellent opportunity for community college librarians to gain a better understanding of the Learning Management System (LMS) with which students and teaching faculty routinely interact. Many community colleges do not have online learning librarians. And, although the routine reference and instruction duties of community college librarians usually permit them to gain some familiarity with the LMS, most community college librarians lack experience creating course content in an LMS. Germanna librarians have conducted library instruction sessions via Blackboard Collaborate, and they provide research assistance that sometimes involves interacting with the front end of the LMS, but designing an online course by customizing a Blackboard shell was a novel professional development opportunity that contributed to the growth of the participating librarians' LMS-related skills.

Influencing the College-wide OER Dialogue

To promote the mini-courses, the Library sent an email to all College teaching and administrative/professional faculty, emphasizing the skills acquired in the courses, as well as the minimal time commitment. The promise of a completion certificate also incentivized faculty members to enroll in and complete the courses. In addition to library outreach, the College President mentioned the mini-courses in her weekly, College-wide email update. Ultimately, outreach concerning the availability of the mini-courses functioned not just as an advertisement for the courses, but also as an advertisement for the Library as an OER leader and provider of faculty professional development.

In February 2019, the Library sent a brief, post-course survey to the 13 faculty members who had completed OER Basics I and OER Basics II. 6 out of the 13 completers (46%) responded to the survey, although all of the survey respondents had taken OER Basics I, rather than OER Basics II. Importantly, all of the survey respondents agreed that OER Basics I achieved what Germanna librarians had set out to do: equip participants with the knowledge base to engage in informed discussions about OER. However, only one of the survey respondents had since redesigned at least a portion of one course with OER. Still, two respondents reported that they intended to redesign at least a portion of one course with OER at some point in the future. In general, the post-course survey results indicated that the OER Basics I course was a success. The two OER Basics II completers did not respond to the post-course survey.

Conclusion

UbD will inform ongoing revisions to the learning outcomes, assessments, and activities in the mini-courses. For example, although students have an activity in OER Basics II that requires them to accurately attribute

OER, a learning outcome addressing this content piece was not included in the first version of the OER Basics II course. Librarians have deemed proper attribution to be a critical course concept, so a learning outcome addressing this skill will be added to the next iteration of OER Basics II. Librarians have also noticed that the mini-courses contain relatively few "in-house" graphics, such as flowcharts, which could be used to illustrate course concepts. The lack of such graphics is largely due to the time expenditure required to create them.

Librarians' initial concerns about the streamlined nature of the mini-courses were unfounded. To the contrary, feedback from course completers suggests that increasing the length of both mini-courses to four weeks would promote additional reflection on course concepts and successful course completion. An additional course week would function as a safety net, providing course participants with extra time to address particularly challenging course concepts.

Whether or not faculty are adopting OER as a result of what they learn in the mini-courses is a question that requires additional exploration. However, the evidence from both direct and indirect assessments indicates that course participants who complete *OER Basics I* have acquired the knowledge base necessary to participate in meaningful discussions about OER. In addition, offering the mini-courses has contributed to the maintenance and development of relationships with teaching faculty, several of whom have expressed appreciation that the Library is acknowledging concerns about redesigning courses with OER, even as some OER advocates at the College continue to gloss over them. Finally, as GCC library faculty have become increasingly visible participants in the OER dialogue at the College, teaching faculty have increasingly turned to the Library for OER-related research consultations. The Library plans to continue cultivating its OER leadership role at the College by developing advanced mini-courses to address adapting and creating OER, and by submitting a grant proposal to help faculty develop open ancillary materials.

Endnotes

1. Grant P. Wiggins and Jay McTighe, *Understanding by Design*, 2nd ed. (Alexandria, VA: Association for Supervision and Curriculum Development, 2005), 13.
2. Ibid., 14.
3. Ibid., 153.
4. "Bloom's Taxonomy," Vanderbilt University, accessed February 13, 2019, https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/