Creating Faculty Professional Development on OER

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ABSTRACT

A Campus Textbook Affordability Grant was awarded to an instructional designer to create a professional development program for faculty. Twelve university instructors and teaching assistants participated in the program over one academic year. Workshops offered information about textbook affordability, Open Educational Resources (OER), and Creative Common Copyright. Additional support was provided for the instructors to either revise a course using OER, publish their own course material as an OER, or to collaboratively write a textbook to fill a gap in the university's curriculum. At the end of the program, the total textbook material savings was $22k for one semester. Surveys were sent to program participants and the students in their revised courses as part of a formative evaluation of the program. Feedback indicated that participants felt the program was effective at helping them choose and utilize low-cost course materials and that students felt the materials were as effective as traditional materials.

针对开放教育资源的教师专业发展创造

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摘要

一名教学设计师被授予一项校园课本可负担性补助金，用于为教师创建专业发展计划。十二名大学教师和教学助理在一个学年里参与了该计划。开展的不同讨论会提供了有关课本可负担性，开放教育资源（OER）和创造性共同版权方面的信息。此外还为教师提供了额外支持，用于使用OER修改课程、发布其在OER上的课程资源、或是集体编写课本，以填补大学课程空白。在计划完成的最后，一学期的所有课程材料一共节省了22，000美元。计划参与者和学生在其修订后的课程中填写了调查，以作为部分极具重要性的计划评价。调查反馈显示，参与者认为计划有效帮助其选择并使用低成本课程资料，学生则认为这些材料和传统材料一样有效。

RESUMEN

La beca de asequibilidad para libros de texto del campus se otorgó a un diseñador de instrucción para crear un programa de desarrollo profesional para profesores. Doce instructores universitarios y asistentes de enseñanza participaron en el programa durante un año académico. Los talleres ofrecieron información sobre la asequibilidad de los libros de texto, los Recursos educativos abiertos (OER, por sus siglas en inglés) y el Creative Common Copyright. Se brindó apoyo adicional para que los instructores revisen un curso utilizando REA, publiquen su propio material del curso como REA o escriban un libro de texto en colaboración para llenar un vacío en el currículo de la universidad. Al final del programa, el ahorro total de material en los libros de texto fue de $ 22 mil por un semestre. Las encuestas se enviaron a los participantes del programa y a los estudiantes en sus cursos revisados como parte de una evaluación formativa del programa. Los comentarios indicaron que los participantes consideraron que el programa fue efectivo para ayudarlos a elegir y utilizar materiales de bajo costo y que los estudiantes

consideraron que los materiales eran tan efectivos como los materiales tradicionales.

Palabras Clave: Recursos educativos abiertos, REA, asequibilidad de libros de texto, desarrollo profesional docente

INTRODUCTION

Creating Faculty Professional Development on OER

The rising cost of textbooks is a widely discussed topic at university and college campuses across the nation. Student movements have encouraged institutions to examine their textbook policies and to educate faculty about the financial burden that the cost of textbooks can often place on students. The hashtag movement *#textbookbroke* has propelled students to share their stories and challenges surrounding the ancillary costs of higher education. Libraries, bookstores, instructional designers, and administrators are working to raise awareness and create professional development programming around this issue. One potential solution is the use of Open Educational Resources (OER), digital course materials that are created under a Creative Commons copyright that allows for the reuse, and often revision, of the materials. These materials are low-to-no cost and can be accessed anywhere with an Internet connection.

The challenge with implementing these materials as a solution to textbook affordability is that faculty, who are often feeling overworked and pressured for time, struggle to find the resources they need to completely redesign their courses to include new texts and materials. Many institutions recognize the burden this places on faculty and are willing to offset this challenge with compensation in the form of course release, stipends, grants, or other funding. While time for course revision is not the only challenge of implementing OER as a solution to rising textbook costs, it can be one that is the easiest to address. By creating compensation models for faculty, those responsible for professional development can both educate and encourage faculty to implement textbook affordability solutions into their own courses.

REVIEW OF THE LITERATURE

Textbook Affordability

The cost of textbooks has continued to rise with the cost of tuition. Textbook costs have increased on average of 6% a year while tuition has increased on average 7% a year since 2002 (Government Accountability Office (GAO), 2012). Textbook costs are adding to students' financial burden, which can be a barrier to pursuing or continuing higher education. Some students have reported feeling like they have to choose between buying groceries or a required textbook for a course (Christie, Pollitz, & Middleton, 2009). The authors of this paper conducted surveys regarding textbook affordability and OER awareness in the Minnesota State Colleges and Universities system. Students reported similar information to previous research (Kinskey, King, & Miller, 2018). Over half of students surveyed reported that they have chosen not to purchase a required textbook during their college career. Despite students reporting that they did not find physical printed textbooks worth the price, students believed their grade would suffer from not purchasing a required textbook.

OER

OER are materials that exist either in the public domain or under a Creative Commons copyright. These materials are available for use, and under certain licenses, OER can be adapted by educators to meet the needs of their course. These open materials can be used as low-to-no cost replacements in lieu of traditional textbooks (Masterman, 2016; Wiley, Bliss, & McEwen, 2014). OER include complete courses and textbooks and supplementary materials (e.g., modules, videos, worksheets, articles, quizzes, etc.).

OER greatly reduce or eliminate the cost of expensive textbooks. However, some instructors are completely unfamiliar with OER as an option or have reservations regarding adopting OER materials to replace their costly textbook. One common concern regarding OER is that the material is not comparable or as high-quality as traditional textbooks. A review of nine studies evaluating the efficacy of OER found that students who used OER did just as well as, and in some cases even

better than, students who were in courses that used traditional textbooks (Hilton, 2016).

Course Reserves

One alternative to OER to reduce the burden of textbook costs on students is the use of library course reserves (Celik & Peck, 2016). Some traditional educational material may be placed in a library's course reserve, which allows students to check out course materials, such as the course textbook. Copyright law places restrictions on the materials that can be placed on course reserve. Materials may be available to reserve digitally or physically, which requires students to read the book in the library for a limited amount of time. This can be inconvenient for students if only one textbook is available on reserve and someone else is currently using it.

Textbook reserves have a positive impact on students, but not all courses have their required materials in a reserve. Additionally, the limitations and limited time with a textbook may deter students from utilizing a textbook reserve and purchase the textbook instead.

Professional Development

OER Professional development for faculty and textbook affordability generally center on both raising awareness and on locating suitable resources. Most programs offer a grant or stipend to compensate faculty for the time investment of converting course materials. The cost of the funding ranges from $1000-3000 depending on the institution. Librarians, instructional designers, and faculty development centers coordinate the professional development programming that includes topics such as Creative Commons Copyright, the 5 Rs of OER, and Open Pedagogy (Belikov, & Bodily, 2016; Bjork, Stanforth, Wood, & Robison, 2019; Karunanayaka, Naidu, Rajendra, & Ratnayake, 2015; Nann, Hess, Norris, & Raible, 2017; Xu, 2018).

Program Background

The Grant

In the 2017-2018 academic year, an instructional designer at a medium-sized public comprehensive university in the Mid-West received $25,000 in grant

funding to create a professional development program for university faculty on OER. The grant program was offered by the Minnesota State Colleges and Universities system office as part of an annual effort to provide seed-funding for Campus Textbook Affordability projects. Grant proposals were reviewed by a team of peers from across the Minnesota State system for merit, sustainability, and innovation.

Starting in the fall of 2017, a graduate student was hired to serve as a grant-specific project manager for the professional development program created by the instructional designer. The instructional designer and the graduate assistant distributed a call for proposals to participate in a year-long OER pilot program whereby faculty would adopt or create OER into one or more courses and receive $500 compensation for the work required to meet the program requirements.

Funding was allotted for 12 faculty participants and the program was also open to graduate students who were currently serving as teaching assistants or the instructors of record for a course.

The Program

The grant program consisted of two phases which included raising awareness and then implementing change in the form of created or adopted OER. In addition to creating marketing material for the program, the instructional designer and graduate assistant interviewed students around campus to gather their individual stories about how the textbook costs have impacted their lives. This series of video interviews was then edited together to create one cohesive story about the views of students on the university campus about textbook and textbook affordability. This video was placed on the program website and used to promote the pilot program, and, OER in general.
<https://mediaspace.minnstate.edu/media/OER+video/0_96kbxok1>

Twelve faculty applied and were accepted into the pilot program. The program itself was divided into four modules, each focusing on a different aspect of OER: *Why Open?*; *Intro to Open Licensing*; *Remixing OERs*; and *Publishing Your Own OER*. To receive the stipend, the faculty participants were required to a) attend the four workshop sessions; b) complete all assigned work in the learning

management system (such as a *Why Open?* Essay and an OER material discovery worksheet); and c) to either contribute to a collaborative OER writing project, publish their own course materials as OER, or to convert one of their own courses to OER.

After the initial meeting in the fall semester, the cohort was divided into groups based on their desired approach to the OER project. Four faculty members chose to contribute to one of the two collaborative OER writing projects, a graduate student handbook and a public speaking guide. Three faculty members converted their course materials--such as lectures, readings, and assessments to published OER. The remaining five chose to convert existing courses to using OER rather than traditional textbooks.

All participating faculty cited lack of time as a concern about completing any of the chosen projects. The program graduate assistant served as a point of contact, mentor, and coach for those wanting to locate or publish OER in order to mitigate this challenge. The instructional designer served as a guide and proponent of the program and OER in general to the university at large as part of an ongoing effort to raise awareness and promote culture change around textbook affordability.

As part of the grant requirements, a programmatic evaluation was conducted to determine the effectiveness of the program and the scope of the savings to students. An anonymous online survey was distributed to the faculty participants of the professional development program. A second anonymous online survey was distributed to the students in the revised courses to determine their feedback on the use of OER in place of traditional materials.

METHODOLOGY

Participants

In the 2017-2018 academic year, 12 instructors self-selected to enroll in a professional development cohort through the institution's Center for Excellence in Teaching and Learning. Five (42%) of the participants were male and seven (58%) were female. Four (33%) participants were teaching assistants (TAs) and eight (67%) were full-time faculty. All six academic colleges at this institution were represented by the participants:

- College of Arts and Humanities (25%)

- College of Allied Health and Nursing (8%)

- College of Social and Behavioral Science (33%)

- College of Business (8%)

- College of Science, Engineering, and Technology (8%)

- College of Education (17%)

All but three were instructors of record teaching their own courses that academic year. Three of the TAs were assisting other instructors of record and planned to teach the following academic year.

Data Collection

A qualitative research study was planned as part of the formative evaluation process for this program and for the purposes of reporting to the grant board. Qualitative data were collected from both faculty participants and their students through two online anonymous attitudinal surveys. Institutional Research Board permission was sought and granted to complete this study.

Faculty participants were asked to sign consent forms at the beginning of the course if they agreed to participate in the study and to distribute the student survey to students in the courses they revised to include OER. Attitudinal surveys were designed for both faculty participants and their students. Example questions from the faculty participant survey include:

- *How effective was this program at preparing you to adopt or create Open Educational Resources in your own course(s)?*

- *What is your biggest barrier to OER adoption or creation?*

Faculty participants sent out the online, anonymous survey to students in their classes revised to include OER. Students were asked questions about their experience using the material and about their perspectives on digital course materials in general. Example questions from the student attitudinal survey include:

- *How would you rate the quality of the texts used for this course?*

- *Does the free cost of the OER material used in this class make up for any shortcomings it may have?*

Data Analysis

The qualitative data were reviewed by the research team to identify themes and specific comments or trends that would indicate both program success and areas for improvement for subsequent workshops.

RESULTS

Faculty Survey

All faculty survey participants (n = 9) rated the OER professional development program as above average in quality. They cited the information about Creative Commons copyright and finding OER as the most helpful information they received during the program. The biggest barrier to OER implementation according to half of the respondents was finding time to both search for material and to revise their course with OER. All but one respondent was familiar with the term OER prior to entering the program. All participants indicated that the OER professional development program was very effective at preparing them to adopt or create OER in their own courses. Four respondents created their own OER resources to be used in their courses and shared with the community and four adapted currently available OER materials. One participant adopted free library materials for their course that could not be classified as OER but still reduced the cost of the course materials. The specific concerns for finding and using OER included:

- Finding suitable current resources of high quality

- Acceptance of OER by administration and colleagues

- Uncertainty about copyright and intellectual property

- Lack of institutional support for OER

- Lack of time to convert courses

The most commonly used OER materials by the participants were videos and images followed by podcasts and individual course modules.

Student Survey

The student survey was sent to the students in courses taught by the OER professional development program participants to gauge their responses to the inclusion of OER or low-cost course material ($n = 59$). The respondents were asked to identify ways that they have been impacted by the cost of textbooks (see Table 1).

To answer the question of what actions the participants had taken as a result of textbook costs, 70% indicated that they had not purchased a required textbook due to the cost. A small percentage (10%) indicated that they earned a poor grade due to not purchasing an expensive textbook, and 20% indicated that they had not registered for a specific course due to textbook costs. When asked what percentage of their textbooks were not used enough to justify the costs, 31% of respondents indicated that at least 40% of their textbooks were not used enough to justify the cost.

If cost was not a factor, 62% of participants stated that they would prefer both digital and print copies of their textbooks. For those that preferred print copies only (30%), the primary reason stated for that preference is the ability to highlight and take notes on the pages.

The majority (77%) of student respondents buy only one textbook per course and 67% spent less than $20 total on the course for which they were being surveyed. The average cost spent on textbooks per semester for the participants was $200.

Eighty-three percent of the participants rated the OER materials of similar quality to traditional textbooks used in other courses.

The vast majority (82%) of participants indicated that they were likely to register for a course using OER materials in the future.

All participants agreed that they were satisfied with the OER material used in their respective courses and that the no-cost nature of the material made up for any shortcomings.

Table 1

In which of the following ways has the cost of textbooks influenced you?

#	Responses	%	Count
1	Bought used copies from the campus bookstore	13.56%	8
2	Book bought from a source other than the campus bookstore	11.86%	7
3	Bought a digital version of the textbook	10.17%	6
4	Bought the digital textbook chapters needed to the course	5.08%	3
5	Rented printed textbooks	16.95%	10
6	Rented digital textbooks	5.08%	3
7	Used a reserved copy from the campus library	3.39%	2
8	Used an inter-library loan	1.69%	1
9	Shared books with classmates	13.56%	8
10	Downloaded textbook from the internet	5.08%	3
11	Sold my used textbooks	11.86%	7
12	The cost of textbooks hasn't led me to attempt to reduce textbooks costs (I have purchased them at the regular cost)	1.69%	1
	Total	100%	59

Cost Savings

The estimated savings of the courses revised through participation in the professional development cohort for one semester each is $22,671, almost the amount of the original grant. The cost savings will continue to increase as more courses are converted, and OER materials are reused in subsequent semesters.

Below is a breakdown of the individual cost savings per course:

- The Business professor saved students $197 each ($7486 saved total in one semester)

- The Early Childhood professor saved students $80 each ($2125 saved total in one semester).

- The Special Education professor saved students $77 each ($2310 saved total in one semester)

- The Social Work professor saved students $85 each ($850 saved total in one semester)

- The Mass Communications professor saved students $22 each ($990 saved total in one semester)

In addition, a brand-new Graduate Student Handbook was created by the cohort and published under Creative Commons licensing so that other schools around the system could adapt and remix the handbook as needed. While this resource did not save students money, it did provide a proof of concept for collaboratively contributing and publishing an Open Resource.

IMPLICATIONS

Faculty participants in the OER professional development cohort found the program useful and helpful in revising their own courses to include OER materials or other low-cost options. By revising at least one of their courses, they collaboratively saved almost the amount of the grant over one semester. The results of the survey and anecdotal evidence collected by the program facilitator indicate that faculty members feel additional compensation is needed in order for them to dedicate the time to a major course revision using OER or low-cost course material.

This is a foundational problem for development staff, as a wide variety of options does not exist for funding programs such as this one, particularly for university faculty. Funding for OER professional development programs has generally come from state allocations for the purpose of OER adoption, larger Department of

Education grants, or projects like Achieving the Dream, which focuses on Community and Technical Colleges. Institutions looking to create professional development around the topic of OER, or hoping to increase OER adoption or creation, need to first determine whether the faculty should be compensated above their regular salary, and if so, where that funding will come from. Furthermore, what restrictions or barriers exist to compensating faculty, such as bargaining unit contracts, should be investigated and identified before starting a search for funding.

As an example, universities within the Minnstate system, under the Inter-faculty Organization bargaining unit, are unable to provide faculty stipends, or flat-rate compensation for a task. Duty days, which are work days paid as a daily percentage of a faculty member's salary, is the only acceptable form of compensation. Because this method can include a wide range of dollar amounts, depending on the faculty who participate, careful budgeting must be made for this type of compensation.

In addition to compensation, professional development programs aimed at lowering the cost of textbooks via the integration of OER materials must consider their ability to provide adequate support for locating and vetting OER materials. Cooperation with the institution library or instructional design team is recommended, if experts in this area are available. Institutions without these resources are encouraged to reach out to fellow institutions to form partnerships around OER use and creation. Regular accountability meetings should be held to provide a forum for participants to ask questions, receive guidance, and address challenges. These meetings do not need to be location-bound and can easily be held via video-conference software, furthering the possibility of cross-institutional partnerships.

There are additional concerns regarding the acceptance of OER publishing and use as part of the Tenure and Promotion process for new faculty. There appears to be no standard on whether OER creation or revision of courses to include OER material will serve as qualifying, documentable activities for a tenure and promotion request. The tide is slowly turning as the scholarship of teaching and learning on the topic of OER creation and adoption is being more accepted by administration as acceptable service and scholarly work. Empirical research studies

in the area of OER use is a wide-open field that has opened the door for larger conversations around OER acceptance for tenure and promotion considerations. At the institution in this study, the acceptability of activities around OER creation or adoption for tenure and promotion largely depended on the academic deans, but was allowed by the bargaining unit contract.

CONCLUSION

Time and awareness are the most frequently cited barriers by faculty when asked about revising courses to include OER materials. Professional development programs for faculty that provide resources and support in addition to monetary compensation can be a first step to building a campus culture that considers the issues of textbook affordability and the possible solutions represented by OER.

Under this grant program, the faculty participants made significant changes to at least one course in terms of textbook and material cost and they created a collaboratively-written Graduate Student Handbook that is now distributed to all incoming graduate students and available for other institutions to download and use as a template.

In one semester, the participants saved $22K with their course material revisions-- almost the cost of the original grant.

Results from participant and student surveys showed that the program was perceived as effective at helping faculty revise their courses with lower cost material and that students perceived as adequate replacements for traditional textbooks.

The responses from the student survey participants indicated that they have concerns about textbook costs and affordability and they find the OER materials a viable alternative, even if they prefer printed material for note taking and study habits.

Future programming has been revised to include higher stipends for participants and reduction in meeting times for the cohort, to provide faculty with more time to work on their course revisions. Additional grant funding will be sought to continue to provide financial support for the cohort. A textbook affordability fair for the campus at large is planned for the spring semesters and an analysis of course

cost will be conducted (course material cost x course enrollment). Implications for other institutions looking to implement an OER or textbook affordability initiative include the importance of support for finding materials, such as an instructional designer or librarian familiar with both OER materials and Creative Commons Copyright, and incentives for compensating faculty for their time.

Authors

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