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Opening up Educational Practices through Faculty, Librarian, and Student Collaboration in OER Creation: Moving from Labour-intensive to Supervisory Involvement

Ouverture sur les pratiques éducatives par le biais d'une collaboration entre professeurs, bibliothécaires et étudiants dans la création de REL: Transition d'une participation à forte intensité de main d'oeuvre vers l'une de supervision

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Abstract / Résumé

This article presents a case study for transitioning library-led open-educational resources (OER) initiatives away from labor-intensive activities to a model where library personnel focus on project management responsibilities. This shift from labour-intensive activities, such as workshops and training sessions, led to more collaborative partnerships with faculty and students to produce OER projects. In particular, we focus on labour implications for the various stakeholders involved and the sustainability of these initiatives. We describe several initiatives undertaken by the Ohio University Libraries to encourage open educational resource adoptions and projects, including a grant-funded initiative to provide support services for faculty creating OER. That

funding, which was awarded to enhance undergraduate education, has been used to support the development of five OER projects that have directly involved students in the creation of those materials. We provide an overview of the various ways in which students have become involved in OER creation in partnership with faculty and librarians and discuss the impact these partnerships have had on student-faculty-librarian relationships and student engagement. Among these projects are an Hispanic linguistics open textbook created using only student-authored texts, student-generated test banks to accompany existing OER materials for a large-enrollment art history course, and several other projects in which hired student assistants are helping faculty to develop content for open textbooks. This article helps to address a gap in the literature by providing transparency regarding the personnel, costs, and workflow for Ohio University Libraries' OER initiatives and addressing potential areas of concern surrounding student labour.

Cet article présente une étude de cas sur la transition d'initiatives de ressources éducatives libres (REL) menées par les bibliothèques, qui passent d'activités à forte intensité de main d'œuvre vers un modèle où le personnel de bibliothèque se concentre sur les responsabilités de gestion de projet. Ce passage d'activités à forte intensité de main d'œuvre, telles que des ateliers et des sessions de formation, à plus de partenariats collaboratifs avec le corps professoral et les étudiants pour produire des projets de REL. En particulier, nous nous concentrons sur les implications en matière de travail pour les différentes parties prenantes impliquées et sur la durabilité de ces initiatives. Nous décrivons plusieurs initiatives menées à la Ohio University Libraries pour encourager l'adoption et la réalisation de ressources éducatives libres, y compris une initiative subventionnée pour fournir du soutien aux professeurs qui créent des REL. Cet article donne un aperçu des différentes façons dont les étudiants se sont impliqués dans la création des REL en partenariat avec les professeurs et les bibliothécaires. Il présente également l'impact de ces partenariats sur les relations entre étudiants, professeurs et bibliothécaires et sur l'engagement étudiant. Parmi ces projets figurent un manuel de linguistique hispanique créé en utilisant uniquement des textes rédigés par les étudiants, une banque de tests générée par les étudiants pour accompagner des REL existants pour un cours d'histoire de l'art avec un haut taux d'inscription, et plusieurs autres projets où des assistants étudiants ont été embauchés pour aider les professeurs à développer du contenu pour des manuels ouverts. Cet article contribue à combler une lacune dans la littérature en fournissant une transparence concernant le personnel, les coûts et le flux de travail pour les initiatives de REL de la Ohio University Libraries et en abordant des domaines de préoccupation potentiels concernant le travail étudiant.

Keywords / Mots-clés

open pedagogy, open educational practices, partnerships, role of libraries

pédagogie ouverte, pratiques éducatives ouvertes, partenariats, rôle des bibliothèques

Introduction

Since 2015, Ohio University Libraries have been encouraging and supporting faculty in the adoption and creation of open educational resources (OER) through a variety of means, including workshops, focus groups, and the establishment of an institutional repository. Most recently, the Libraries piloted support services for faculty OER creation through a university grant aimed at enhancing undergraduate education. The funding provided through the grant was used to support the development of five OER projects that have involved students in the creation of those materials. This article describes several of the initiatives taken by the Libraries to encourage OER adoptions and projects, focusing not just on the projects that resulted from the Libraries' initiatives, but also demonstrating how the Libraries have moved from the more labour-intensive collaborative activities like workshops and training sessions, to project management responsibilities coordinating student employees who have become involved in OER creation in partnership with faculty and librarians. This shift also addressed barriers to OER adoption and creation faced by faculty, including a lack of time as well as access to and the skills to use technology. We address a gap in the literature through transparency about the labour and costs involved in our initiatives.

For institutional context, Ohio University is located in a rural, Appalachian college town and is classified as a Doctoral University (High Research Activity) by the Carnegie Foundation for the Advancement of Teaching. Including regional campuses, there are 1216 full-time faculty, 686 part-time faculty, and 34,871 students according to the most recent available figures (Ohio University Office of Institutional Research & Effectiveness, 2019).

Literature Review

From OER to OEP

In addition to moving away from initiatives that required extensive labour commitments from a variety of library personnel, the Ohio University Libraries' OER initiatives have also evolved over time from a focus on OER adoption to collaborations that would make a greater pedagogical impact and involve students more directly. To understand these differences, it is useful to work from a common set of definitions. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2019) defines OER as "learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others" (pp. 2–3). Wiley (2014) elaborates that OER must provide users with the permissions to reuse, revise, remix, redistribute, and retain those resources. Several studies have suggested that the use of OER is associated with similar or better student outcomes as compared to the use of commercial course materials (Clinton & Khan, 2019; Clinton et al., 2019; Colvard et al., 2018; Delgado et al., 2019; Hilton, 2016; Hilton et al., 2016; Jhangiani et al., 2018; Lin & Wang, 2018; Nusbaum et al., 2020; Shaw et al., 2019). OER are often framed in the context of educational affordability but using an OER textbook as a direct replacement for a commercial textbook, while beneficial to students

in terms of cost savings, fails to take full advantage of the entire range of permissions described by Wiley and others. Furthermore, it does not require changes in the delivery of or pedagogical practices employed in a course.

Leveraging permissions of open materials presents the possibility to shift toward open educational practices (OEP). Cronin and MacLaren (2018) note that there are varied definitions for OEP “ranging from those centred on the creation and use of OER to broader definitions of OEP, inclusive of but not necessarily focused on OER” (p. 128). These broad definitions include “the creation, use and reuse of OER, open pedagogies, and open sharing of teaching practices” (Cronin, 2017, p. 2). The Cape Town Open Education Declaration (2007) suggests a broad definition that “draws upon open technologies that facilitate collaborative, flexible learning and the open sharing of teaching practices that empower educators to benefit from the best ideas of their colleagues” (para. 4). Many of the definitions of OEP focus on teachers and students collaborating in the knowledge creation process (Beetham et al., 2012; Deimann & Sloep, 2013; Geser, 2007; Lane & McAndrew, 2010). Andrade et al. (2011a) define OEP as “the range of practices around the creation, use and management of open educational resources with the intent to improve quality and innovate education” (p. 4). Conole (2013) explains that OEP can move “from teacher-directed to learner-centeredness, where learners can be more actively involved in the creation and use of resources for their learning” (p. 250). Rather than positioning students as receivers of knowledge, OEP encourages them to create new knowledge that is shared and has value beyond the context of their class. Ehlers (2011) defines OEP as “practices which support the (re)use and production of OER through institutional policies, promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path” (p. 4). Koseoglu and Bozkurt (2018) make the distinction that OEP “focus on the process as opposed to product or outcome in education” (p. 455). Green et al. (2018) note that OEP can “engage students in actively shaping their learning (e.g., by developing personalized learning projects) and contributing to public knowledge (e.g., by creating and sharing OER)” (p. 1).

As for OEP, definitions of open pedagogy vary. The theoretical roots of open pedagogy can be seen in the critical pedagogy work of Paulo Freire (1970) and bell hooks (1994). Freire describes moving away from a “banking concept of education” where teachers deposit knowledge into students, who are passive containers, to an alternative where students can engage their prior knowledge and formulate new knowledge through interaction with their teacher. This is taken further by hooks who calls for an “engaged pedagogy” in which students are active participants who connect knowledge to their lives. This progressive, holistic pedagogy aims to promote their self-actualization. DeRosa and Robison (2017) connect OEP to open pedagogy, describing it as a practice that gives students greater agency through their contribution to the larger body of knowledge, rather than being passively filled with information from a static textbook. Hegarty’s (2015) definition of open pedagogy includes the attributes of participatory technology; people, openness, trust; innovation and creativity; sharing ideas and resources; connected community; learner-generated; reflective practice; and peer review (p. 4). DeRosa and Jhangiani (2017) describe open pedagogy as “an access-oriented commitment to learner-driven education and a process of designing

architectures and using tools for learning that enable students to shape the public knowledge commons of which they are a part” (para. 14). Bali (2017) presents open pedagogy as an ethos that includes a “belief in the potential of openness and sharing to improve learning” and a “social justice orientation—caring about equity, with openness as one way to achieve this” (para. 5).

The competing definitions for OEP and open pedagogy as well as the areas of overlap between the two create confusion for those working and researching in this arena. Wiley and Hilton (2018) try to simplify this with their use of the term “OER-enabled pedagogy,” which they define as “the set of teaching and learning practices that are only possible or practical in the context of the 5R permissions which are characteristic of OER” (p. 135). This type of pedagogy represents a move from “disposable assignments,” which Wiley (2013) defines as “assignments that add no value to the world—after a student spends three hours creating it, a teacher spends 30 minutes grading it, and then the student throws it away” (para. 4). Instead, students complete “renewable assignments,” which require them to create and publicly share openly licensed artifacts that have value beyond their own learning (Wiley & Hilton, 2018). Renewable assignments can have a greater reach over time, span a greater range of spaces (from classroom to the world), and make a greater impact on learning (Seraphin et al., 2018). Wiley and Hilton (2018) suggest the following four-part test to decide if an assignment is renewable:

1. Are students asked to create new artifacts (essays, poems, videos, songs, etc.) or revise/remix existing OER?
2. Does the new artifact have value beyond supporting the learning of its author?
3. Are students invited to publicly share their new artifacts or revised/remixed OER?
4. Are students invited to openly license their new artifacts or revised/remixed OER? (p. 137).

Stommel (2015) reminds us that teachers “can open our classroom by creating assignments that have more reason than just a single teacher as an audience. By doing this, we give students reasons less banal than points to do the work of learning” (slide 23). Although these overlapping terms and differences in definitions can create confusion, these nuances force us to reflect critically upon our practice. These varied definitions of OER, open pedagogy, and OEP are often complementary resulting in a more inclusive field of action and possibilities.

Overcoming Obstacles to Openness

While OER have the potential to transform education, there are obstacles to contend with in order to encourage their use. Andrade et al. (2011b) identified five barriers that can be an impediment to the adoption and use of OER. These include a lack of institutional support, lack of technological tools, lack of skills and time of users, lack of quality or fitness of OER, and personal issues including a lack of trust and time (p. 159). Additionally, faculty often struggle with knowing where to look for OER without assistance (McKerlich et al., 2013). Seaman and Seaman (2020) note that many faculty

lack familiarity with open licensing and that they may not see the value in OER because they are already using commercial materials in ways similar to the 5Rs (retain, revise, remix, reuse, and redistribute). Faculty who need to use portions of copyrighted media are often deterred from producing their own OER because of the restrictions surrounding those source materials (Cooke & Bouché, 2017). Seaman and Seaman (2020) point out that alternate models (e.g., inclusive access) that tout similar benefits to OER (e.g., cost savings) dilute the effectiveness of OER messaging by causing confusion for faculty. Some studies have also acknowledged that despite the significant time and labour involved in creating OER, this activity tends to not be credited in tenure decisions, presenting another critical barrier (Cooke & Bouché, 2017; Coussement et al., 2016; Roberts, 2018). We will explore some of the ways that libraries have tried to address these obstacles as well as the labour implications for these various approaches.

Approaches to Open Education Initiatives

Academic libraries have taken a variety of approaches to promoting open education in its many forms. Spilovoy et al. (2020) note, “While no two OER initiatives are exactly alike, a common goal is a focus on reducing the cost of learning materials, enabling faculty to customize the curriculum, and increasing educational equity and access for students” (p. 14). One common approach is through library workshops. These are often part of programs that incentivize faculty participation through monetary stipends. While these initiatives may be wide in reach, they tend to focus on goals that require less long-term library support, such as encouraging faculty to review or adopt OER, rather than more high-touch efforts like creation of new OER and the implementation of OER-enabled pedagogy. Cooke & Bouché (2017) describe these as being “mostly at the marketing and advertising end of the [open access] conversation” (p. 242). The OER review approach, in which faculty are paid to provide peer-review for existing OER, is seen in the Open Education Network (formerly Open Textbook Network) workshop model that has been adopted at many institutions (Lantrip et al., 2019). In several instances, the workshops are aimed at encouraging faculty adoption of OER or even library-licensed resources under the wider umbrella of affordable educational resources (Bell, 2015; Salem, 2017; Schleicher et al., 2020; Walz, 2015). These initiatives can require significant labour for libraries in terms of planning, coordination, and facilitation.

Another approach is to partner with individual faculty either on a one-off basis or in small cohorts through a formalized faculty authoring program (Morris-Babb et al., 2012; Okamoto, 2013). These initiatives, though more limited in reach, tend to yield more labour-intensive projects, such as the creation of new OER. However, they also demand substantial labour and resources that may not be available to all libraries. In particular, libraries that want to provide robust open publishing support need a platform and personnel with specialized expertise (Chadwell & Fisher, 2016; Goodsett et al., 2016; Pitcher, 2014). Goodsett et al. (2016) explain that “libraries must select a publishing platform, establish a publishing mission, outline services, create branding, and provide a printing service” (p. 337). Ohio University Libraries and other libraries that lack functional specialists who can devote significant portions of their time to support faculty OER development and publishing must find other ways to distribute the labour for these

high-touch projects externally, to faculty, students, or other campus units, such as university presses and instructional designers.

Labour Concerns

The impact of labour demands on the sustainability of open education initiatives is a regular concern in the literature. Library-led workshops present labour challenges related to organizing and staffing events. Peacemaker and Roseberry (2017) suggest enlisting the help of an entire department in order to make the workload of planning, publicizing, and delivering a workshop series more manageable. However, they also note that it is inefficient and impractical to involve such a large group in all aspects of planning, ultimately leaving a smaller subset of librarians to shoulder a larger burden than the rest of the group. While involving a larger team can lighten individual workload, Bell (2013) points out that coordinating a group to deliver library programming can prove time consuming. Peacemaker and Roseberry note that combining several standalone workshops into a daylong workshop can lessen the amount of logistical work required; however, this approach is not practical for all purposes.

While it may be possible to reconfigure open education initiatives to eliminate several of the labour burdens, these changes may result in shifting labour burdens away from the library rather than eliminating them. Adopting and creating OER still requires a great deal of work, regardless of who is doing it, so labour that is shifted from library personnel may often become the responsibility of faculty and, in the case of open pedagogy, students. Developing OER as part of a course (re)design can be a burdensome task for faculty. Cooke & Bouché (2017) note that this investment of effort is only worthwhile if the course will be offered for at least 5 to 10 years, in part because it requires ongoing development and maintenance beyond the initial launch.

Implementing changes that shift labour burdens around requires some critical reflection and intentionality not only on the part of the library but also from all other stakeholders involved. Jhangiani (2019) emphasizes the need to be aware of visible and invisible labour, contending that “open pedagogy without respect for agency is exploitation” (para. 2). McDermott (2020) points out that academic labour is often overlooked or not made explicit in OER efficacy studies, which instead focus on study design and methodology. McDermott (2020) explains, “Rarest of all is the study that provides details about the academic labour required for OER initiatives.... Very few studies detail the personnel involved or the costs required” (para. 17). These oversights have significant implications for critical reflection on the infrastructure and decision making that undergird open education initiatives. While Hendricks et al. (2017) acknowledge that “it’s important to keep in mind the possible costs for faculty and institutions in terms of time and support when using open textbooks” (p. 94), they lack some transparency about the conditions of faculty, staff, and graduate student labour. In their discussion of the crowdsourced ChemWiki OER textbook, Allen et al. (2015) note that faculty, research assistants, and students develop and maintain the infrastructure and content, but the authors overlook how or if that labour is compensated.

In addition to student and faculty labour, these initiatives often require the labour of other educational professionals, such as instructional designers and technologists. Fraser (2017) and Campbell (2017) both note that making a distinction between open pedagogy and open educational practices diminishes the agency and obscures the labour of those who are involved in education but who do not directly teach, despite the fact that their work contributes to teaching and pedagogy. Fraser questions: “Is it being used to underline the importance of formal education, or the primacy of teaching? Why not open heutagogy? Is it being used as a form of interpellation, a signal to include and exclude specific groups within open education?” (para. 3). These questions remind us that agency is not just an issue related to the power imbalance between teachers and students but also one that involves those who occupy less privileged positions within the academic apparatus. Even within these broad categories, there are hierarchies of power according to such factors as full-time vs. part-time status, salaried vs. hourly, and tenured vs. tenure-track vs. contingent status. This article helps to address a gap in the literature by providing transparency and details about the workflow and labour allocation for Ohio University Libraries’ OER initiatives and confronting issues of student labour. The following sections detail how Ohio University Libraries moved from the workshop approach to supporting more in-depth OER projects.

Ohio University Libraries’ OER Initiatives

Ohio University Libraries attempted to address some of the barriers described in the literature with its earlier OER initiatives. By educating faculty and encouraging them to work alongside their library liaisons the Libraries confronted the issues of trust and the inability of faculty to find OER on their own. These initiatives, while successful in encouraging some faculty to transition to open and/or affordable course materials, were also labour-intensive. Nevertheless, they laid the groundwork for an OER grant program that involved students in the creation of OER. Before describing the student-centered projects, we will detail those prior OER initiatives. Along with descriptions of all the initiatives the Libraries have taken on, workflow and labour allocation will be discussed with an emphasis on moving from labour-intensive initiatives to projects that require less time commitment and personnel from the Libraries. Moving forward in this discussion it is important to keep in mind that when the term ‘labour’ is used, there is a monetary component to labour reflected in staff salaries. Cost savings will be discussed in terms of the savings students experience related to their learning materials. However, as the Libraries’ initiatives move to a more student-centered model, there is also the implication that there is cost savings with regard to salaries, as fewer library staff are working on the initiatives.

2015-2016 Alt-Textbook Initiative

The first Alternative-Textbook (Alt-Textbook) initiative took place during the 2015-2016 school year. The goal was to decrease student textbook and materials costs by increasing the number of courses that incorporate OER or licensed material through the Libraries. Success would be judged by having ten instructors complete the workshop and decrease the cost of course materials by \$10,000 in aggregate. The Libraries’ operating budget provided \$5,000 to be used as incentives for faculty participating in the

program. For faculty to receive the incentive, they had to attend a two-hour workshop, meet with a librarian, and respond to a survey. Incentive funding was divided into two groups: instructors whose courses had more than 100 students would receive \$1,000, and those with less than 100 students would receive \$500.

The process and timeline for this initiative involved four months to receive applications and interview applicants to determine their needs with regard to OER, a three-month workshop development period which overlapped with the application process, two offerings of the workshop content, and three months of survey and data gathering as well as awarding the incentives. The entire process began in October of 2015 and the incentives were awarded in June of 2016. The metrics for determining course savings were determined in the Summer and Fall semesters of 2016 and the Spring semester of 2017.

The workshops were developed by library staff (primarily subject librarians and library administration), as well as staff from the campus units of Academic Technology and the Center for Teaching & Learning. The workshops were offered twice using the same content, with the intention that this would increase the chances of faculty being able to attend. The first hour of the workshop was devoted to highlighting how the units on campus that were providing the workshops could assist faculty in locating OER content, as well as providing a basic overview of copyright and fair use and an introduction to the add-on provided by EBSCO for its discovery system that could be used within Blackboard, the learning management system, to directly link to library purchased materials. The second hour of the workshop discussed how to locate media and image content and integrate it into courses. It also provided an introduction to backward design and how to locate OER. Perhaps the most important aspect of the second half of the workshop was the breakout sessions that allowed faculty to meet and discuss OER with the instructional designers and librarians in the room.

The initial goal of working with ten instructors ended up being a very conservative number as 26 of the 37 instructors who expressed interest and were accepted into the initiative completed the workshop, survey, and data gathering requirements. The Dean of Libraries backed the initiative and released an additional \$11,000 so that all the instructors who were interested in doing this type of work were given the opportunity to do so. The instructors that participated represented programs in Arts & Sciences, Business, Communication, Education, Engineering, Fine Arts, and Regional Higher Education. Eleven of the 23 courses that were impacted by the initiative had enrollments of over 99 students in one academic year, which translated to 2,358 students seeing a \$236,213 savings in textbooks in the 2016-2017 academic year. The cost of the initiative to the Libraries was \$16,000. The survey results indicated that the most valuable aspects of the program were training on copyright issues, librarian interaction, guides on OER, faculty discussion, and help with finding media.

The Libraries were happy with the results of this initial initiative as the goals were amply met and the ratio of library cost to student savings seemed to be well worth the investment. For the most part faculty were satisfied with the workshops, though some suggested longer workshops, more incentives, and additional workshops offered at

varying times. One thing that came up often in the faculty feedback survey was that the interaction with librarians was valuable and that this interaction helped them move forward with their projects. The downside to the success of this initiative was the amount of time consumed by those involved to provide a workshop series like this. Instructional designers, librarians, library administrators, and staff from other units on campus devoted time and energy to review the applicants and create the instructional content. This does not even touch on the more mundane tasks of calendaring the event, room reservations, food orders, and creating and tracking invitations. While the hourly contributions of those involved in the workshop would not exceed the cost-savings to the students, it does reduce the ratio of cost accrued to savings benefits.

Attendance was not taken for the librarians and other campus staff who attended the events, but approximately 10 subject librarians were involved in the two workshops as librarians were told to attend if they liaised with departments whose faculty were attending the workshop. The reason for librarian attendance was so that they would be able to speak with faculty after the presentation and begin helping with the implementation of the textbook projects. At least one assistant dean was present at both workshops, as well as staff from both Academic Technology and the Center for Teaching & Learning. A rough estimate for participation, excluding faculty, would be 16 librarians and other university staff. This number also includes staff who worked on ordering refreshments, reserving spaces, calendar invites, and other event planning activities. Given that each workshop was two hours long and that those staff organizing the workshops had to develop the curriculum, review applications, and analyze survey results over the course of a year and a half, the amount of time spent on these workshops was significant.

Alt-Textbook II Spring 2017

The second incarnation of the Alt-Textbook series was designed in a different fashion but produced similar results in terms of cost savings to students with less financial incentives to faculty.

As with the previous Alt-Textbook initiative, the intent was to reduce the costs of course materials by increasing the use of either open content or licensed library content. Again, the success measure was to have 10 faculty complete the program with an aggregate cost savings to students of \$10,000. Initially the Dean of Libraries budgeted \$2,500 in order to fund 10 incentives at \$250 per instructor, but increased interest by faculty led to additional contributions from the Office of Instructional Innovation and the Scripps College of Communication, who each funded an additional seven incentives for instructors. While the series of workshops was advertised and all were welcome to attend, in order to receive the \$250 incentive, the faculty member or instructor had to attend the entire workshop series and complete the data gathering survey at the end of the workshop series.

The workshop series was developed between November 2016 and January 2017. Applications were accepted during January of 2017 and the workshop series was

delivered in February, March, and April of 2017. The courses that were modified as a result of the workshops were implemented in Summer 2017 through Fall of 2018.

The series differed from the first incarnation in that there were six workshops that were each offered one time, instead of one workshop offered twice. While the format and content of the second series was different from the first series, the Libraries continued to partner with instructional designers and technologists to deliver content. The six workshop themes were Open Education Resources, Copyright, Creative Commons, Learning Management Systems and Teaching Platforms, Multimedia, and Hack your Course Content. This last workshop on hacking your course content provided scheduled one-on-one time to discuss faculty and instructor projects with the librarians, designers, and technologists. The content for each workshop session was delivered by experts on campus in those areas. For example, the multimedia content was delivered by a film librarian and the learning management system and teaching platform content was delivered by an education librarian, a library support specialist, and an instructional technologist.

The total cost of incentives was \$6,000, spread out across three different units on campus. Twenty-four instructors completed all six workshops, and these instructors represented programs in Communication, Arts & Sciences, Business, Education, Engineering, and Health Sciences & Professions. A total of 1,375 students were impacted by instructors implementing content learned in the workshop, with a savings of \$192,415 in course materials costs.

As with the previous incarnation of the initiative, the Libraries were very pleased with the cost-savings on course materials, but while the savings were not quite as high as they were the year before, the planning and preparation for this second workshop series was increased. The reason for this increase was that the workshop content was expanded, requiring all new instructional design. The overall timeline was reduced in comparison to the first workshop series by almost a year, but instead of calendaring for two workshops there were now six workshops to organize, and each workshop required developing learning objectives and coordinating with library and outside unit staff to deliver the instruction.

Once again, librarian and university staff attendance was not kept, but accounting for the staff that presented content, and for librarians who were required to attend if they represented faculty in attendance, the number of staff involved would be around 18 (including presenters from other units on campus), with varying amounts of time dedicated by each to the workshop. For example, the Assistant Dean for Research and Education Services was present for all six workshops, and each library presenter was responsible for creating and delivering a presentation on a specific topic. There was also time spent corresponding with faculty and assisting them in the finding of resources to include in their course materials. As with the first Alt-Textbook initiative, the majority of library staff participating were subject librarians and library administration.

Textbook Affordability Initiatives 2017-2018

For the 2017-2018 academic year, the Libraries chose to go in a different direction. While there was still a workshop with stipends involved, there were several other initiatives directed at developing and encouraging librarian collaboration with faculty in a more proactive and individual way.

Open Textbook Network Membership

Starting in August of 2017 the Ohio University Libraries joined the Open Textbook Network (OTN), which is now the Open Education Network. Through membership to this organization, staff were able to attend the OTN Institute and Summit. There was also the opportunity for two half-day workshops on the Athens campus of Ohio University conducted by OTN faculty and librarians. Ohio University faculty were invited to attend workshops which focused on how open textbooks offer benefits to student learning, and if they attended the workshops and completed a review of an existing open textbook, they would receive a \$250 stipend. This series of workshops still required a budget for stipends roughly identical to previous amounts, but it differed in the amount of time library staff spent on the program as the content was provided by OTN.

Syllabus Streamline Initiative

The Libraries moved away from the previous model of providing workshops for faculty and began to more proactively get subject librarians and faculty together to not only reduce cost to the students but also to point students to resources that the Libraries were already providing access to. The Syllabus Streamline Initiative encouraged subject librarians to reach out to the faculty and instructors in their discipline areas and ask for copies of the syllabi and course reading lists for their classes. The librarians would then, when available, locate materials that were either already provided by the Libraries or, in some cases, purchase materials. Resources like course reserves, both digital and physical, were utilized as well as providing permalinks to items like e-journal articles and media, so that syllabi and course management software could point directly to materials, avoiding copyright concerns or student difficulty in finding and obtaining their course readings and materials. While this is not OER by definition, it provides a cost savings to students by leveraging library owned and licensed materials, which in turn could replace expensive textbooks or supplemental materials and also nudge faculty toward the material that is already purchased through university funds.

The OHIO Open Library

In addition to the previous efforts, Ohio University Libraries also introduced the OHIO Open Library, an institutional repository intended to store and preserve OER created by faculty at Ohio University. As of this writing, there are five textbooks hosted on the OHIO Open Library: *Review of Clinical Pathophysiology*; *Introduction to Axiomatic Geometry*; *An Occupational Hygiene and Safety Primer, Volume 1 & 2*; and *La lingüística hispánica: Una introducción*. Both volumes of *An Occupational Hygiene and*

Safety Primer as well as *La lingüística hispánica: Una introducción*, a Spanish-language textbook, received some support from a university grant the Libraries obtained to encourage OER adoption and creation on campus. That grant and the other projects developed and funded under it are discussed in the next section.

All of these post-Alt-Textbook initiatives varied in the amount of time library personnel had to commit to the project. This round of initiatives included a smaller workshop series that differed from the previous sponsored workshops in that there was less internal library planning involved, but the syllabus streamlining project did require significant work time to evaluate syllabi and course materials, and the OHIO Open Library involves not only liaisons but also librarians on the technical services side of operations.

1804 Grant

While increased proactive collaboration between librarians and faculty continued to be a goal, the Libraries sought out ways to address the barrier to open education initiatives that labour created as well as make the labour requirements more sustainable.

Peacemaker and Roseberry's (2017) suggestion to combine several workshops into a daylong workshop proved impractical for our textbook affordability workshops because the wide variety of stakeholders involved and the amount of material covered lent itself better to a more scaffolded approach that permitted independent work and reflection in between workshop sessions. In order to mitigate some of the labour requirements, the Libraries tried to address some of the more complex barriers of institutional support, access to technological tools, user skills, and the quality or fitness of OER by instituting a grant-funded program to foster the development of OER by Ohio University faculty. We conducted informal focus groups with faculty who had prior experience or interest in OER creation in order to gather information that would inform our initial approach for offering faculty support.

In the summer of 2018, two librarians and a faculty member received a grant to encourage OER creation and adoption on campus. This money was awarded through the Ohio University Foundation's 1804 Fund, which is intended to promote collaboration among campus units and enhance learner-centered education. The grant, entitled Fostering Open Educational Resources at Ohio University, provided \$20,000 over the course of two years to promote and support the creation and adoption of OER by instructors. The only things the grant could not fund were requests for course release, stipends to faculty for their work, and faculty travel. The exclusion of stipends for faculty was a prerequisite of the grant and was therefore excluded in the grant proposal. However, the cost of the grant-funded projects ended up being equivalent to the cost of the faculty stipends that were offered in previous initiatives. What the grant could fund were student hours to work on projects, software needed to complete OER projects, and anything else that arises during the process of creating or using OER. Rather than sending a mass email to the campus seeking grant collaborators, the grant team chose to rely on a story posted to the campus newsletter about the Libraries' grant, and then reach out through email to all the instructors who had participated in the Libraries' previous programming related to affordable education. The projects that were developed vary with regard to academic discipline, scope of the project, amount of

student hours required, and the number of students the projects would impact through textbook savings. The variance in these projects was not intentional but rather attributable to the faculty that responded to the announcement of the grant opportunity.

Since the grant was awarded through the 1804 Fund's Undergraduate Learning funding category, it had to be framed in a manner that would enhance the undergraduate educational experience. While the creation of OER could benefit undergraduate learning by providing more affordable course materials, this grant aimed to take things a step further by attempting to involve undergraduate students in the process in various capacities. For instance, some of the funding was used to pay student employees to assist faculty with aspects of OER creation, such as editing, proofreading, checking facts and citations, verifying statistics, formatting, and authoring. If the faculty member needed student labour, the Libraries would hire the student and manage any necessary paperwork and timecards. The faculty member was able to be involved in choosing the student worker, in order to ensure that the student assistant possessed the requisite disciplinary knowledge to properly aid in the project.

The reduced number of subject and functional librarians involved in these initiatives proved to be a significant departure from previous initiatives involving Ohio University Libraries and OER. The five projects supported by the 1804 grant are discussed below. It is important to keep in mind that while the cost savings to students was lower than other previous initiatives in the past, the expenditure of library time was also reduced. There were no workshops to organize, and only one or two librarians were liaising with the faculty creating the content. While the amount of library labour decreased and this reduction in labour is emphasized in this article, it is also important to stress that the 1804 grant removed the need for the Dean of Libraries to allocate monies to OER initiatives. The previously discussed Alt-Textbook initiatives were both funded by the Libraries, and as discretionary budgets were shrinking, it was decided that external funding supplemented by library services and support was the next step.

This change in focus from workshops toward OER creation served several purposes. It attempted to make the Libraries' OER initiatives less dependent on librarian labour, and thereby more sustainable, by identifying ways to streamline processes and spread labour out among other relevant partners, such as student assistants and instructional designers. One of the stated outcomes of the grant was to produce a set of recommendations to campus administrators, specifically the Dean of the Libraries, the Ohio University Press, the Office of Instructional Innovation, and Faculty Senate, about necessary support services in order to continue to build a culture of open and affordable course materials. While we envisioned long-term leadership of OER initiatives happening under the sponsorship of the Libraries, this approach aimed for greater sustainability by distributing labour and pooling resources among other campus units as appropriate and securing broader buy in. Indeed, the heads of the Ohio University Press, the Center for Teaching & Learning, and the Office of Instructional Innovation were all brought on board from the start of this OER grant program, with each offering letters of support for the grant application. This approach addressed barriers of institutional support.

In addition to confronting sustainability concerns, this focus on OER creation addressed quality and fitness issues by enabling faculty to generate their own materials that are tailored to their needs and the needs of their students. Likewise, faculty were provided with access to the technological tools necessary to produce and distribute their newly created OER. Moreover, the creation of OER provided opportunities for faculty to enhance student learning by incorporating open pedagogical methods into their coursework, something that would not be achieved by merely adopting existing OER. Rather than completing disposable assignments, students who were involved in the creation of OER produced educational outputs that will have a value beyond the satisfaction of a grade requirement, such as textbooks or question banks and other ancillary materials that will be used by students in future iterations of the course at their institution and potentially at others.

La lingüística hispánica: Una introducción

One of the projects supported by the 1804 grant was the Open Access Hispanic Linguistics Textbook (OAHLT) project, which aimed to create a textbook using solely student-authored texts. This project began in Spring 2017 and the details of the project – motivations, logistics, and process—have been documented in McGeary et al. (2020). The project evolved in part from conversations between the instructor leading the project and the subject librarian during the Alt-Textbook II series and the Reimagining the Research Assignment workshop (Saines et al., 2019).

Students contributed to the project as authors of materials such as short texts, essays, and linguistics exercises and as editors of those materials. The instructor created assignments as an essential part of the course work that students had to complete. At the end of the semester after grades were submitted, students who completed the assignments were given the option to contribute their work toward the textbook, and all students chose to include their work. The assignments included students providing short answers and essay answers to specific topics in Hispanic linguistics and creating linguistic exercises with answer keys (see McGeary et al., 2020 for examples).

As materials were gathered, student-editors were hired through different grants available at the university (the Undergraduate Research Apprenticeship grant, the Program to Aid Career Exploration grant, and the 1804 grant) to compile and edit these texts. The student editors were hired based on their linguistics knowledge as well as their proficiency in Spanish. Editors worked closely with the instructor, who guided the editing, organizing, and formatting process to create coherent and cohesive completed chapters. Editors learned about citing sources, using the Pressbooks book publishing platform, Creative Commons licensing, and OER. Learning about Creative Commons and OER turned out to be helpful in giving editors more agency since most editors took the opportunity to create original content for the textbook, especially when inspired by topics in the book and their application and relevance to the current world.

Other contributors to the textbook were a fine arts student hired to draw images for chapter two of the textbook and an alumna and current employee of the university who designed the book cover. The 1804 grant also enabled the instructor to have one of the

editors audio record the chapters of the textbook to eventually make it accessible in a different format. The entire process described above included a lot of back and forth communication between the instructor and students and was quite dynamic. For example, while editors were working on putting together chapters, perhaps they noted a gap in content, and the instructor needed to go back to the students in the classroom to fill those gaps with different assignments. Other times, editors took the initiative to fill those gaps themselves. An advantage of publishing on an open platform was that it allowed for content to be released as it was completed, in this case, chapter by chapter, and as of this writing, two completed chapters of the textbook are openly available online and can be downloaded as PDF, EPUB, and MOBI files.

Additional OER Projects

The grant supported four other OER projects in addition to the textbook project mentioned above. Other than paying for several Pressbooks licenses, the majority of monies were used to pay student workers to work on faculty projects. Focus groups conducted in the library prior to obtaining the grant funding indicated that many faculty members who have taken on an open textbook project were able to do so because they had achieved tenure, citing time constraints and an emphasis on scholarly publishing within the tenure process. Because of this fact, the librarians felt that our grant might be useful in reducing the amount of time necessary to produce OER content by allowing student hours to be covered by grant funds.

For example, an art history professor asked for a graduate student to be hired so they could create a test bank of questions. The undergraduate art history course has a large enrollment, and the faculty teaching this course had made the jump from a popular commercial textbook to OER content. The grant monies were used to pay a graduate student to write questions for this OER content. By combining the existing OER content with this new test bank, the instructor could eliminate the need for the more expensive textbook and test bank combination. This model also allows the instructor to focus the exams on more individualized course content if necessary, enabling the instructor to pull in other resources, possibly open materials, and have test questions prepared. The implications for student cost-savings are substantial. A large, survey-style course that is repeatedly taught can reach large numbers of students each year. With a test bank in place, the course materials can continuously move to more and more open content, with questions being added to the test bank as the content changes. Coming up with test questions for an entire semester's worth of content can be daunting, but creating test questions for a small change in the course content is more sustainable. Another option for this model is to ask the students taking the exam to provide one question of their own to the exam. A large course being taken by hundreds of students could start to create an even larger test bank, semester after semester. This project alone could lead to student cost-savings of approximately \$52,500 a year. While being one of the largest projects to come out of the grant funding in terms of cost-saving to students, the art history OER project it is also one of the least impactful on librarian time, as the student creating the test bank questions works with the faculty member. Apart from approving time sheets, the librarian has no other responsibilities.

Another professor working with the grant money created a two-volume textbook because the one he uses for his course was becoming out of date. Because much of the content revolves around government standards, a significant amount of the material is openly available online through government websites. What the professor needed was someone to help in creating diagrams, finding images that were freely available to use, and then placing all of this content into Pressbooks. In this situation, the Libraries paid for student work hours and a Pressbooks license, and there was very little library staff time devoted. As with the previous art history example, the librarian approved time sheets and stayed in contact with the student workers and instructors to ensure all was running smoothly. The cover of the textbook was created by a library student employee who was working from home during the campus shutdown due to the COVID-19 pandemic. As with the art history test bank, after hiring the student to do the work, and the occasional upgrading of software licenses, the student and professor did the heavy lifting.

The other two projects involved in the grant were similar and involved paying students to work with instructors to develop content. During the first project, a librarian identified a Safari book (online collection of technology and business-related books; now called O'Reilly) the Libraries already had in the collection that the professor could use for a textbook, and the grant paid a student to work with the professor to create a workbook and multimedia content to go with the textbook. The last project involved very little student time at all and involved working with a librarian to find readings available through the Libraries' website that could be linked into their online Consumer Sciences course, thereby eliminating the need for a textbook.

Calculating the savings on projects like those mentioned above can be difficult for multiple reasons. The most obvious is that when estimating savings, it is often necessary to project outward and to determine how many students may be taking the class the following semester, given current enrollment figures. The second assumption that needs to be made is that all the enrolled students would have bought the textbook that the OER project is replacing. There is also an assumption that the students would have bought the textbook at market value, and not opted for a used copy, a friend's copy, or a borrowed or illegally scanned copy.

In the case of the Consumer sciences course, the grant paid a student approximately \$100 to work with the instructor and the librarian to upload library licensed content and freely available content to the online course. This uploading made it possible to forego the purchase of a textbook by the students taking the class. It was estimated by the instructor that approximately seventy-two students take that course every year, and factoring in the cost of the previously used textbook, the \$100 that was paid out through the grant for student labour translates to a savings of approximately \$4,000 to the students taking the course each year. This is a rough estimate as it is projecting enrollment and assumes that all the students taking the course would have purchased the textbook at the market price.

The art history project has the potential to create significantly higher savings figures, as it is an entry-level course taken by large numbers of students. In this case, it is

projected that over the course of the year, 700 students will be enrolled in this course. The original textbook cost was \$75 for the online version. Assuming that all students would purchase that book, that would be a cost-savings to students of \$52,500 per academic year. The grant monies made it possible for a smoother adoption of OER because it paid for a student to develop questions to go along with the openly available material. Often these ancillaries come as part of an e-book package, making it easier for instructors to get everything with one purchase of the course materials. Using OER can be a daunting experience for instructors because it involves locating course content as well as developing lecture slides, tests, and quizzes.

Of the \$20,000 of funding awarded through the 1804 grant, a total of \$13,193.61 was spent, the majority on student salaries and benefits. A minimal amount was spent on publishing software. The most liberal estimate of cost-savings for students taking the courses involved with the 1804 grant gives an indirect total savings of \$79,640. The reason this figure is indirect is because two of the faculty had already made the switch to OER, either through free content available online, or by adopting an e-book already licensed and available through the Libraries' databases. The grant money helped with the switch to OER by funding the creation of the ancillaries, either in the form of test banks or in the creation of multimedia and workbook exercises.

An area to consider when discussing the amount of library staff labour involved in the 1804 grant initiative is how much the labour involved in the previous open education initiatives played a role in the success of the more recent grant projects. In particular, the faculty member who worked on the Spanish textbook was very active in previous library programming related to OER. In a sense, the librarians working on the 1804 grant were able to build off of the labour of previous initiatives, thus requiring less library staff time to make the grant projects a success. That said, two of the faculty working on grant-associated projects did not attend previous library workshops, and while a knowledge of the types of OER projects faculty could engage in would have been valuable, it was not a prerequisite for being involved in the grant funding.

Discussion

What represented the greatest difference between the previous incarnations of the Libraries' OER initiatives and the 1804 grant, is that for all the initiatives under the 1804 grant there were one or two librarians who served as project managers, and the rest of the work and creative input was being handled by students and the faculty members. It cost \$13,193 and a very limited amount of time for one or two librarians to collaborate on the five projects briefly described above. Because the grant activities stretched across two fiscal years, that means the savings listed were made possible by \$6,500 a year plus project management hours. There was no workshop planning involved in the grant supported activities, and the majority of the work was done by paying students to collaborate with faculty.

Table 1*Breakdown of factors for open education initiatives of Ohio University Libraries*

<u>Open Education Initiatives</u>	<u>Time Span</u>	<u>Library Staff</u>	<u>Campus Staff</u>	<u>Faculty</u>	<u>Number of Workshops</u>	<u>Library Cost Excluding Salary</u>	<u>Cost Savings to Students</u>
Alt-Textbook 2015-16	Approx. 1 year	13	3	26	2	\$16,000	\$236,213
Alt-Textbook 2017	Approx. 5 months	15	3	24	6	\$2,500 +3,500 from external	\$192,415
OTN	2 days	N/A ¹	0	24	2 (OTN provided)	\$6,000	+\$25,000
1804 Grant	2 years	1-2	0	5	0	\$13,193	\$79,640

Table 1 illustrates the variability of different factors in different types of open education initiatives, and it then invites institutions to decide which of those factors is most critical in their own decision making. For example, the 1804 grant involved a smaller amount of faculty than the Alt-Textbook initiatives reached, and the 1804 grant lasted longer than both textbook initiatives combined. However, the amount of staff time devoted to the 1804 grant was minimal and would have remained minimal even if more faculty had decided to participate. All faculty that were involved in the Alt-Textbook initiatives were invited to participate in the 1804 grant, and an announcement for the grant initiative was sent to all faculty on the main and regional campuses. The 1804 grant projects described above were the only ones that fit into the parameters of the grant stipulations. While the librarian who managed the grant performed basic project management duties like approving time sheets, hiring students to work on the projects, and checking in with both the faculty and the student collaborators, the majority of the academic work was done by faculty and the students. While traditional librarian services were offered, like the Consumer Sciences course example mentioned above, the remainder of the projects were handled by faculty and students with little interaction from the Libraries. In terms of labour and funding, the grant could have paid for many more projects if faculty had responded to the call for applications for funding.

The librarians acting as project managers did not receive formal project management training. The primary investigator for the 1804 grant had previous experience in managing projects that involved classroom redesigns in the physical library space.

¹ OTN provided the staff and content for these workshops.

Those projects, while not related to open educational resources, did provide experience that proved beneficial in managing the grant projects. These classroom redesigns required working not only with internal feedback from instruction librarians, but external campus units like technology and facilities, as well as the vendor providing the classroom equipment and furniture. Other libraries hoping to take on a more management-based interaction with OER projects should consider the experience the project lead has with cross-campus initiatives. Knowing how to communicate and interact within a department is a different skill set than working with individuals in outside units.

Libraries interested in taking on OER initiatives will find it beneficial to discuss how many staff will be required to participate in the initiatives, as well as what goals they are hoping to achieve in regard to cost-savings and the amount of faculty engaged in the projects. As Table 1 illustrates, there are a variety of ways to pursue OER initiatives. Depending on factors like staffing, allocated funds, and desired outcomes, libraries can be strategic in how they go about planning. In the case of the Ohio University Libraries, there is no librarian with a specific job title that revolves around OER or copyright, as it is also the case with the work involved with the institutional repository, which is a new adoption and has very little content at the time of this writing. For libraries with more or specialized staff, the idea of reducing labour might not be as important or may be of less importance than cost-savings or numbers of projects. The subject librarian serving as the primary investigator on the 1804 grant liaised with the faculty and students working on the projects, and also liaised with the functional librarians within the Libraries who are working on building the institutional repository. Liaisons were asked to mention the grant to the faculty they work with, but because the grant announcement was sent campus-wide, the work of the liaisons in this project was limited.

It is unclear at this point why there was less interest in the 1804 grant and more faculty interest in the Alt-Textbook series. The stipends were absent from the grant, but the grant provided all the labour necessary to take a project through to fruition. At Ohio University, librarian roles are primarily split between subject librarians and librarians with more functional roles. Subject librarians for the most part do not have terminal degrees in their liaison areas, so the role of subject matter specialist falls on the faculty member. That said, libraries can contribute to OER projects by using knowledge and expertise in the areas of pedagogy, editing, multimedia, and metadata. Other libraries interested in developing OER will need to consider what the instructional faculty at their institutions will respond to. If the means are available to provide stipends to faculty interested in engaging with OER, that in conjunction with subject and functional librarian support and paying student employees to assist may be a successful model. Another model that would perhaps be even more sustainable would be to have current students that have specific talents related to OER creation use some of their work time contributing to projects. Current library student employees with editing, illustration, or data entry skills could be of enormous benefit. These projects would also benefit students by providing them with work experiences that they could add to their resume or curriculum vitae.

If funds are available, stipends or incentives appear to be a valuable component of generating interest in OER projects. Perhaps the next step in our progression would be

to offer stipends again, but instead of tying stipends to a labour-intensive workshop series, structure the initiative similar to the grant project and have a single librarian or small team of librarians managing the projects. If the grant had been able to supply stipends similar to the Alt-Textbook initiatives (at \$500 per faculty member), the faculty involvement would have cost \$2,500 for the five projects associated with the grant. Ideally, the grant would have provided for both student wages and faculty stipends. If the grant had not had conditions prohibiting faculty payments, the money that was returned to the grant fund could have been used towards stipends and perhaps attracted more participation from faculty.

Besides stipends, another factor related to faculty participation, particularly those faculty who have not yet achieved tenure, is committing considerable time to developing open course materials while still fulfilling expectations for scholarly research and service. As Roberts (2018) explains, there is an “enormous barrier presented by systemic policies and the tenure and promotion process” (para. 12) that precludes many tenure track faculty from dedicating their efforts to the open education movement. With OER not carrying the same weight as peer-reviewed articles for the purposes of promotion and tenure, faculty often prioritize creating the latter. Coussement et al. (2016) suggest that as the Scholarship of Teaching and Learning (SoTL) gains traction, this may provide a way to acknowledge this work as scholarship. Along those lines, Pawlyshyn et al. (2013) mention that for their OER initiative, using grant money to pay for faculty to attend conferences where they could present their OER work provided a more significant incentive than the individual stipends they were provided. This may help faculty to assign some value to OER work via the usual avenues recognized for promotion and tenure. Our grant prohibited the use of funds for faculty travel, so we would need to secure another funding stream in order to implement this measure in the future. However, we also recommend that funders recognize the scope of possible expenses that might be beneficial to projects by providing more flexible funding.

Across campus there are other initiatives related to affordable learning and OER that warrant mentioning. There is a campus license for the cloud-based teaching platform Top Hat (which was used for the Consumer Sciences course described above), as well as inclusive access arrangements with multiple publishers, both being provided and supported through the Office of Instructional Innovation and the Office of Information Technology, that are working to reduce the cost associated with textbook purchases. This is important to acknowledge because the Libraries are a part of a larger campus-wide push to make course materials more affordable. In the overall calculations of cost, labour, and time, these larger campus-wide efforts provide an incalculable factor regarding time and effort needed by the Libraries.

Conclusion

While the adoption of open textbooks and other course materials is itself a worthwhile goal, the Ohio University Libraries have moved beyond this by re-envisioning the Libraries' role while addressing barriers faced by faculty with regard to OER adoption and creation. As the literature showed, faculty encountered barriers that included lack of time as well as a lack of access to technology necessary to produce OER, and the skill

set to use that technology. The Libraries provided faculty with the technology they needed, as well as student collaborators who knew how to use the technology and reduce the time and labour commitment for faculty. These collaborations moved our work from mere OER adoption to open educational practices, allowing students to participate in their learning and contribute to the broader scholarly discourse by creating and sharing OER in partnership with faculty.

From a funding standpoint, knowledge production of this sort is sustainable. The grant program we have instituted can be replicated at other institutions without great monetary investment, as costs have been low for our program thus far. The amount we have spent on helping to develop OER has not been different from money spent on faculty incentives in prior initiatives. Unlike those previous initiatives, the grant program is developing new OER, paying student employees, and involving students in the learning and creation process. The issue of labour is more complex, as labour not only involves payment but also the time devoted to project planning and implementation. Not all libraries have enough personnel to be able to devote a significant amount of librarian labour to OER initiatives. However, we have found the grant-funded initiative to be less labour-intensive for the Libraries than offering large-scale workshops involving all of our subject liaisons. As was suggested in the literature, our initial workshop-based approach was labour-intensive and focused more on adoption or reviewing of OER materials. Unlike the OER creation initiatives mentioned in the literature, our grant-funded initiative demonstrated that the Libraries could support the production of new OER using less librarian labour and without in-house publishing services or functional specialists.

The partnerships formed via the grant initiative led to greater engagement with academic departments and positioned the Libraries as a source of leadership and expertise on campus for OER. They also gave the Libraries something tangible to point to in terms of demonstrating their impact on student success. Faculty benefit from the resources and expertise provided by the Libraries and students. Open pedagogical practices also improved the teaching and learning experience in faculty's courses, and the outputs of these endeavors have the potential to enhance the professional notoriety of faculty as their works are adopted and adapted at other institutions. The cross-disciplinary nature of librarian work puts libraries in a position to be not only supporters of OER and OEP, but active participants in the process, whether that be through project management, funding, or working with faculty to locate and incorporate library-provided or OER resources for use as course materials. Students at Ohio University and beyond will benefit from the use of the finished products, and those students who have contributed to the creation of these projects deepened their knowledge of the subject matter and gained experience as content creators, as opposed to just content consumers.

References

- Allen, G., Guzman-Alvarez, A., Molinaro, M., & Larsen, D. (2015). [Assessing the impact and efficacy of the open-access ChemWiki textbook project](#). EDUCAUSE Learning Initiative Brief.
- Andrade, A., Ehlers, U., Caine, A., Carneiro, R., Conole, G., Holmberg, C., Kairamo, A., Koskinen, T., Kretschmer, T., Moe-Pryce, N., Munding, P., Nozes, J., Policarpo, V., Reinhardt, R., Richter, T., Silva, G., & Varoglu, Z. (2011a). [Guidelines for open educational practices in organizations](#). Open Educational Quality Initiative (OPAL).
- Andrade, A., Ehlers, U., Caine, A., Carneiro, R., Conole, G., Kairamo, A., Koskinen, T., Kretschmer, T., Moe-Pryce, N., Munding, P., Nozes, J., Reinhardt, R., Richter, T., Silva, G., & Holmberg, C. (2011b). [Beyond OER: Shifting focus from resources to practices](#). Open Educational Quality Initiative (OPAL).
- Bali, M. (2017, April). [What is open pedagogy anyway?](#) Year of Open.
- Beetham, H., Falconer, I., McGill, L., & Littlejohn, A. (2012). [Open practices: Briefing paper](#). JISC.
- Bell, A. (2013). [Paws for a study break: Running an animal-assisted therapy program at the Gerstein Science Information Centre](#). *Partnership: The Canadian Journal of Library and Information Practice and Research*, 8(1), 1–14.
- Bell, S. (2015). [Start a textbook revolution, continued: Librarians lead the way with open educational resources](#). *Library Issues*, 35(5), p. 1–4.
- Campbell, L. (2017, April 24). [Open pedagogy—A view from a distance](#). Open World.
- Cape Town Open Education Declaration. (2007). [The Cape Town open education declaration: Unlocking the promise of open educational resources](#).
- Chadwell, F. A., & Fisher, D. M. (2016). [Creating open textbooks: A unique partnership between Oregon State University Libraries and Press and Open Oregon State](#). *Open Praxis*, 8(2), 123–130.
- Clinton, V., & Khan, S. (2019). [Efficacy of open textbook adoption on learning performance and course withdrawal rates: A meta-analysis](#). *AERA Open*, 5(3), 1–20.
- Clinton, V., Legerski, E., & Rhodes, B. (2019). [Comparing student learning from and perceptions of open and commercial textbook excerpts: A randomized experiment](#). *Frontiers in Education*, 4:110.

- Colvard, N.B., Watson, C.E., Park, H. (2018). [The impact of open educational resources on various student success metrics](#). *International Journal of Teaching and Learning in Higher Education*, 30(2), 262–276.
- Conole, G. (2013). *Designing for Learning in an Open World*. New York, NY: Springer New York. <https://doi.org/10.1007/978-1-4419-8517-0>
- Cooke, R.M., & Bouché, A. (2017). [Team-teaching art appreciation online without a traditional textbook](#), *The Reference Librarian*, 58(4), 238–256.
- Coussement, M.A., Johnson, S., & Goodson, L.A. (2016). [Developing an e-textbook for the consumer and family sciences classroom: Challenges and rewards](#). *Journal of Family and Consumer Sciences*, 108(2), 64–72.
- Cronin, C. (2017). [Openness and praxis: Exploring the use of open educational practices in higher education](#). *The International Review of Research in Open and Distributed Learning*, 18(5), 1–21.
- Cronin, C., & MacLaren, I. (2018). [Conceptualising OEP: A review of theoretical and empirical literature in open educational practices](#). *Open Praxis*, 10(2), 127–143.
- Deimann, M., & Sloep, P. (2013). [How does open education work?](#) In A. Meiszner & L. Squires (Eds.), *Openness and education* (pp. 1–23). Emerald Group Publishing.
- Delgado, H., Delgado, M.S., & Hilton III, J. (2019). [On the efficacy of open educational resources: Parametric and nonparametric analyses of a university calculus class](#). *International Review of Research in Open and Distributed Learning*, 20(1), 184–203.
- DeRosa, R., & Jhangiani, R. (2017). [Open pedagogy](#). In E. Mays (Ed.), [A guide to making open textbooks with students](#) (pp. 7–20). Rebus Community for Open Textbook Creation.
- DeRosa, R., & Robison, S. (2017). [From OER to open pedagogy: Harnessing the power of open](#). In R. S. Jhangiani & R. Biswas-Diener (Eds.), *Open: The philosophy and practices that are revolutionizing education and science* (pp. 115–24). Ubiquity Press.
- Ehlers, U. (2011). [Extending the territory: From open educational resources to open educational practices](#). *Journal of Open, Flexible and Distance Learning*, 15(2), 1–10.
- Fraser, J. (2017, April 20). [Waves not ripples: Reflections on #OER17](#). SocialTech.
- Freire, P. (1970). *Pedagogy of the Oppressed*. Seabury Press.
- Geser, G. (2007). [Open educational practices and resources: OLCOS roadmap, 2012](#).

- Goodsett, M., Loomis, B., & Miles, M. (2016). [Leading campus OER initiatives through library–faculty collaboration](#). *College & Undergraduate Libraries*, 23(3), 335–342.
- Green, C., Illowsky, B., Wiley, D., Ernst, D., Young, L., DeRosa, R., & Jhangiani, R. (2018). [7 Things You Should Know About Open Education: Practices](#). EDUCAUSE Learning Initiative.
- Hegarty, B. (2015). [Attributes of open pedagogy: A model for using open educational resources](#). *Educational Technology*, 55(4), 3–13.
- Hendricks, C., Reinsberg, S. A., & Rieger, G. W. (2017). [The adoption of an open textbook in a large physics course: An analysis of cost, outcomes, use, and perceptions](#). *The International Review of Research in Open and Distributed Learning*, 18(4), 78–99.
- Hilton, J., III. (2016). [Open educational resources and college textbook choices: a review of research on efficacy and perceptions](#). *Educational Technology Research and Development*, 64, 573–590.
- Hilton, J. L., III, Fischer, L., Wiley, D., & William, L. (2016). [Maintaining momentum toward graduation: OER and the course throughput rate](#). *The International Review of Research in Open and Distributed Learning*, 17(6), 18–27.
- hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge.
- Jhangiani, R. (2019, April 11). [5Rs for open pedagogy](#). That Psych Prof Blog.
- Jhangiani, R. S., Dastur, F.N., Le Grand, R., & Penner, K. (2018). [As good or better than commercial textbooks: Students' perceptions and outcomes from using open digital and open print textbooks](#). *The Canadian Journal for the Scholarship of Teaching and Learning*, 9(1).
- Koseoglu, S., & Bozkurt, A. (2018). [An exploratory literature review on open educational practices](#). *Distance Education*, 39(4), 441–461.
- Lane, A., & McAndrew, P. (2010). [Are open educational resources systematic or systemic change agents for teaching practice?](#) *British Journal of Educational Technology*, 41(6), 952–962.
- Lantrip, J., Hofer, A., & McGeehon, C. (2019). [Extending Open Textbook Network workshop and reviews to include all OER and library materials](#). *OLA Quarterly*, 24(3), 18–28.
- Lin, Y., and Wang, H. (2018). [Using enhanced OER videos to facilitate English L2 learners' multicultural competence](#). *Computers & Education*, 125, 74–85.

- McDermott, I. (2020, Feb. 19). [Open to what? A critical evaluation of OER efficacy studies](#). *In the Library with the Lead Pipe*.
- McGeary, B.J., Ganeshan, A., & Guder, C.S. (2020). [Harnessing the power of student-created content: Faculty and librarians collaborating in the open educational environment](#). In K. Davies Hoffman & A. Clifton (Eds.), [Open pedagogy approaches: Faculty, library, and student collaborations](#) (pp. 7–28). Rebus Community for Open Textbook Creation.
- McKerlich, R. C., Ives, C., & McGreal, R. (2013). [Measuring use and creation of open educational resources in higher education](#). *The International Review of Research in Open and Distributed Learning*, 14(4), 90–102.
- Morris-Babb, M., & Henderson, S. (2012, January). [An experiment in open-access textbook publishing: Changing the world one textbook at a time](#). *Journal of Scholarly Publishing*, 43(2), 148–155.
- Nilson, L. B. (2015). *Specifications grading: Restoring rigor, motivating students, and saving faculty time*. Stylus.
- Nusbaum, A.T., Cuttler, C., & Swindell, S. (2020). [Open educational resources as a tool for educational equity: Evidence from an introductory psychology class](#). *Frontiers in Education*, 4:152.
- Ohio University Office of Institutional Research & Effectiveness (2019). [Ohio University Fact Book](#).
- Okamoto, K. (2013). [Making higher education more affordable, one course reading at a time: Academic libraries as key advocates for open access textbooks and educational resources](#). *Public Services Quarterly*, 9(4), 267–283.
- Pawlyshyn, N., Braddlee, B., Casper, L., & Miller, H. (2013, November 4). [Adopting OER: A case study of cross-institutional collaboration and innovation](#). *EDUCAUSE Review*.
- Peacemaker, B., and Roseberry, M. (2017). [Creating a sustainable graduate student workshop series](#). *Reference Services Review*, 45(4), 562–574.
- Pew Research Center (2014). [Demographic and economic profiles of Hispanics by state and county, 2014](#).
- Pitcher, K. (2014). [Library publishing of open textbooks: The Open SUNY Textbooks program](#). *Against the Grain*, 26(5), 22–24.
- Roberts, J. (2018, May 16). [Where are all the faculty in the open education movement?](#) EdSurge.

- Saines, S., Harrington, S., Boeninger, C., Campbell, P., Canter, J., & McGeary, B. (2019). [Reimagining the research assignment: Faculty-librarian collaborations that increase student learning](#). *College & Research Libraries News*, 80(1), 14–17, 41.
- Salem, J. A., Jr. (2017). [Open pathways to student success: Academic library partnerships for open educational resource and affordable course content creation and adoption](#). *The Journal of Academic Librarianship*, 43(1), 34–38.
- Schleicher, C. A., Barnes, C. A., & Joslin R. A. (2020). [OER Initiatives at liberal arts colleges: Building support at three small, private institutions](#). *Journal of Librarianship and Scholarly Communication*, 8(1), eP2301.
- Seaman, J. E., and Seaman, J. (2020). [Inflection point: Educational resources in U.S. higher education, 2019](#). Bay View Analytics.
- Seraphin, S. B., Grizzell, J. A., Kerr-German, A., Perkins, M. A., Grzanka, P. R., & Hardin, E. E. (2018). [A conceptual framework for non-disposable assignments: Inspiring implementation, innovation, and research](#). *Psychology Learning & Teaching*, 18(1), 84–97.
- Shaw, C.S., Irwin, K.C., Blanton, D. (2019). [Impact of open educational resources on course DFWI rates in undergraduate online education](#). *International Journal of Open Educational Resources*, 1(2).
- Spilovoy, T., Seaman, J., & Ralph, N. (2020). [The impact of OER initiatives on faculty selection of classroom materials](#). WCET & Bay View Analytics.
- Stommel, J. (2015). [Open door classroom](#) [SlideShare slides].
- United Nations Educational, Scientific, and Cultural Organization. (2019). [Draft recommendation on open educational resources](#).
- Walz, A. R. (2015). [Open and editable: Exploring library engagement in open educational resource adoption, adaption and authoring](#). *Virginia Libraries*, 61(1), 23–31.
- Wiley, D. (2013, October 21). [What is open pedagogy?](#) Open Content Blog.
- Wiley, D. (2014, March 5). [The access compromise and the 5th R](#). Open Content Blog.
- Wiley, D., & Hilton III, J. L. (2018). [Defining OER-enabled pedagogy](#). *International Review of Research in Open and Distributed Learning*, 19(4), 133–147.