Assessing Faculty Perceptions and Use of Open Education Resources (OERs)

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Introduction

Inevitably, most library administrators will encounter students or student government representatives who request the library purchase and have current textbooks available for students.1 For the most part, though, libraries do not typically collect these materials. With the continued rise in textbook prices and increasing student debt—now \$28,400 for graduating seniors²—providing some economic motivation, it is not surprising students seek out alternative methods for accessing their class materials. For some, the choice for course or instructor is based primarily on the cost of their textbooks—making the quality of the course/instructor a secondary consideration. Other students may forego purchasing a text entirely.3 At some universities or colleges, students can instead enroll in classes that require no traditional textbooks but instead rely on OER or free-to-student resources, such as library-licensed materials.

Open educational resources (OER) initiatives and discussion have been ongoing for more than a decade. The Hewlett Foundation, for example, has funded work associated with OER since 2002 and UNESCO adopted the term OER that same year. While many definitions for OER exist, they all generally focus on the digital nature, usage rights, and the packaging of the resource. For example, the Hewlett Foundation defines OER as:

teaching, learning, and research resources that reside in the public domain or have been re-

leased under an intellectual property license that permits their free use and re-purposing by others [and may include] full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

Many education professionals view OER as an alternative to traditional textbooks and their adoption as one method for reducing the overall cost of higher education—a particularly relevant concern due to questions being raised over the value of our higher education system and the competitive pressure institutions face to attract students.4 Workshops, such as Developing Partnerships to Advance Open Access Initiatives,⁵ related to OER and with an eye towards institutional collaboration are occurring. At the local level, some institutions have classes where open textbooks have been assigned to large enrollment classes such as psychology⁶ or nutrition.⁷ Hilton and Laman's findings suggest that the introduction of an open textbook caused a reduction in the class withdrawal rate while also increasing the final examination scores. Lindshield and Adhikari's findings include data that student's prefer using a free, open textbook instead of paying for a traditional text and a growing satisfaction rate of the OER by on-campus users over a three-year timeframe.

In addition to departments adopting an open textbook, other institutions are offering grants to

faculty to increase the adoption rate of OER. Often, grant awardees are required to redesign their course in a way that uses free-to-student materials, such as open educational resources or library-licensed books or articles, to deliver course content. At many of these schools, the library has initiated the grant process. For example, North Carolina State University started the Alt-Textbook Project in 2014 (classes to be taught in 2015) which offers grantees up to \$2000 for transitioning away from traditional textbooks, while also demonstrating "cost savings and innovativeness in pedagogical practice."8 Similarly, Emory Libraries and Information Technologies began offering \$1000 minigrants "to encourage faculty and instructors to create and use open educational resources and library materials to support student learning."9 Other schools that have initiated comparable programs include University of Minnesota, UCLA, California State—East Bay, and Amherst. Additionally, the University of Mississippi began a grant program in the early part of 2013.

In Spring 2013 the College of Liberal Arts at the University of Mississippi offered grants to their faculty if they adopted free educational resources-OERs, library licensed materials, etc.—as their course texts. As part of the Assessment in Action (AiA)¹⁰ 2014-2015 cohort, the University of Mississippi Libraries partnered with the College of Liberal Arts to do a broad assessment of the grant initiative. While that assessment seeks to understand the effects free educational resources have on student learning and engagement, this paper presents data on the initial perceptions faculty had as they prepared their classes and used the resources. Due to the newness of the grant program and a request to not burden grant awardees who were piloting the grant program, the study relied on a survey to collect data from faculty. While more informative than generalizable, the survey data, particularly its open-ended questions, provides insight into the spectrum of thoughts faculty have regarding these resources.

Methodology

Data were gathered primarily via a 9 question—6 open-ended and 3 closed-ended—survey distrib-

uted to instructors at the beginning of the semester in which they were teaching the class associated with their grant application. Reminders were e-mailed to faculty after two weeks. Additional data were also gathered by looking in MyOleMiss—the University of Mississippi's SAP system—to determine grant awardees' faculty rank, their length of employment, and whether they required traditional textbooks in addition to their free educational resources.

Data

The initial grant cohort is comprised of 17 instructors (16 distinct classes): 2 professors, 10 associate professors, 2 assistant professors, and 2 non-professors. Within this group, 1 associate professor has not had the opportunity to teach his or her OER course yet, 1 associate professor still recommended his students purchase a textbook and 5 instructors (2 professors, 2 associate professors and 1 assistant professor) still required textbooks, presumably in addition to free resources, for their course. On average, grant awardees have been teaching at the University of Mississippi for 8 years. 10 of the 17 grant awardees responded to the survey.

A summary of the responses for the closed-ended questions can be found in Table 1, while open-ended question responses may be found in Appendix A, along with select quotes discussed later in the paper.

Discussion

Overall, survey respondents expressed an above average familiarity with open educational resources prior to applying for the grant. While the most common response was neutral (i.e., 4, on a 7 point scale), five participants indicated a more than neutral familiarity and only one participant indicated a less than neutral familiarity; however, the one respondent who expressed absolutely no familiarity with OER appears, based on other survey responses, to have not yet used them in his or her class. Faculty awareness is much higher than data reported in other studies, such as Allen and Seaman's 2014 report¹¹ which estimates only between one-fourth and one-third of faculty are aware

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| TABLE 1 Summary of Closed-Ended Questions | | | |
|--|-----------------------------------|--------|--|
| Question | Relevant Statistics | Count | |
| On a scale of 1-7, (1: not familiar at all 7: extremely familiar), please rate your knowledge of OER prior to the grant announcement. | Mean = 4.5 Low = 1 Mode = 4 | n = 10 | |
| One benefit of using free educational resources is assurance that each student is guaranteed access to the class text, whereas some students have difficulty obtaining textbooks due to various reasons. On a scale of 1-5, how much did this benefit factor into your decision to use free educational resources? | 3.56 Mean | n = 9 | |
| Are you aware that the library can order e-books that allow for unlimited multiple users? | 56% Yes 44% No | n = 9 | |

of OER. One possible explanation for the discrepancy is that faculty who submit a proposal for campus OER grants are more likely to already be aware of OER than instructors at large. While this reasoning would need to be further investigated given the small sample size and only one institution represented, librarians and others awarding grants may want to consider marketing more broadly to their faculty about the nature of OER prior to or during the grant proposal stage. On the other hand, incentivizing those who already know about OER can accomplish two things: have those instructors actually use OER in their classes and potentially create traction in a department to move towards wider adoption.

In addition to OER, survey participants were asked about their familiarity with library-licensed ebooks. More than half (n=9) of the respondents were aware that the library provided e-books that could be used as a free educational resource. This level of familiarity is higher than the researcher expected since the library does not currently actively market the availability of multi-user licenses for e-books. It is possible, though, that the instructors simply conflated e-books with multi-user licensed e-books since less than 1% of our e-books have been purchased with multi-user purchase option (MUPO) licenses, which are purchased only at the request of faculty or graduate student instructors. In an effort to increase awareness, the author is working with his library's web services librarian to develop an interface similar to UNC-

Charlotte's E-Textbook portal¹² that will allow faculty to quickly review e-books with MUPO licenses and request they be purchased. This should be a low-cost endeavor since there is only a relatively negligible cost to upgrade a single-user license to a MUPO license. The remaining discussion will focus on three specific themes that appeared mostly in the open-ended responses: material accessibility, class preparation, and student expectations.

Theme 1: Material Accessibility

Respondents to the second closed-ended question expressed mixed views on whether material accessibility affected their decision to use free educational resources. No participant responded neutrally (i.e., 3 on the 1-5 scale) but seven individuals indicated that accessibility concerns factored into their decision to include free educational resources. In addition 4 out of 9 participants specifically mentioned accessibility (e.g., "no struggles over getting the book", "ease of access") when asked what benefits they expected from using OER rather than textbooks. Moreover 6 out of 9 participants, including those who mentioned access, specifically mentioned cost as an expected benefit for students. From these responses, instructors clearly feel that OER, and other free educational resources, could improve text availability for students.

Instructors also discussed material availability but in the context of their ability to locate materials. Three instructors (R2, R7, and R9), two of which specifically mentioned literature texts, expressed concerns ("difficult to obtain modern texts that are under copyright"; "it is more difficult to obtain contemporary texts"; and "OER items can only help with older literature and I am a specialist in the 20th century") about locating non-copyrighted materials they could use in their class. Another participant found the number of available free educational resources limited and had to make changes to their curriculum. He or she also expressed concerns over the availability of materials compared to traditional textbooks: "There were a lot less to choose from, so I didn't have as many to review, compare, and contrast". Due to anonymity it is not possible to link the participant to a specific course, but overwhelmingly, the courses associated with the grants are advanced classes (i.e., at least 300 level); generally speaking, most open textbooks focus on general education classes—meaning there is a reasonable expectation that some faculty could have had difficulty locating appropriate resources. A different study¹³ identified difficulty finding relevant resources and copyright concerns as two of instructors' primary concerns regarding OER adoption.

Theme 2: Class Preparation

Participants were asked to estimate how long they spent locating resources, which after viewing their responses, was a poorly constructed survey question. Participants were allowed to respond anonymously which limits the usefulness of the data since it cannot be associated with a specific course or resource. Additionally, participants were not asked to answer in relation to traditional textbooks (e.g., "How long does the process normally take with traditional textbooks"). Their estimated times ranged from a few hours to 65 hours. More enlightening, however, were their responses concerning differences that occurred when selecting free educational resources instead of traditional textbooks. Based on several respondents' comments, it seems that their prior selection process for traditional textbooks was much briefer than that for OER due to their reliance on established textbooks or processes (R2: "I'd rely on 1 of the top 2 global survey textbooks" and "Turning

on this tradition would be considered radical in some circles"; R3: "I previously used the standard textbook"; R7: "salespeople whose job it is to explain and sell textbooks"). Disciplinary acceptance, and even reverence, for traditional textbooks can impose a significant -barrier on wide-scale adoption. While some instructors may be willing to challenge status quo textbook choices (i.e., be a radical), others may not or, for those pre-tenure or non-tenure track, may not feel they have as much of an option or the time to invest in redeveloping their course. Another concern raised is the time involved in course material selection. It seems plausible that using standard textbooks or relying on salespeople would allow for quicker selection than researching and evaluating OER or finding suitable library resources. Librarians and others who seek to increase the use of free educational resources will need to find ways to streamline faculty's selection process.

Theme 3: Expectations of Students

Student engagement is one of the factors being investigated in the Assessment in Action project associated with the free educational resources grant. To complement that data, survey participants were asked about their expectations regarding students' engagement with the resources they selected. Three respondents expect little or no change to their students' engagement with the material (R1, R2, and R5), while three others expect that the free and easily accessed nature will increase student use. One of the respondents (R4) redesigned their course to include "in-class quizzes where they could use the online textbook in-class", though it seems reasonable that students should have been able to use traditional textbooks during class in prior semesters. Another comment (R7: "they can always access on their phone") seems to echo the previous statement in that these two instructors don't necessarily expect students to always bring their traditional textbook to class, but they do expect them to have an electronic device on which they can access the electronic text(s). Studies such as the Pearson Student Mobile Device Survey14 seem to validate the two instructor's expectations on technology ownership by students.

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Implications and Conclusion

Through this initial study and future assessments on student learning and engagement with the free educational resources at the University of Mississippi, we hope to learn about concerns and challenges that need to be addressed in future iterations of the grant, as well as identify additional benefits other than textbook cost to support continued efforts. For our library and university, this small-scale survey continues the conversation with faculty by capturing their initial perceptions. The grant requires instructors to use free educational resources during two semesters, so this survey should establish a baseline to which we can compare faculty comments at the conclusion of the process. Also, from these initial perceptions, three focal points for the library appeared: developing better ways to market existing library-licensed resources, facilitating free educational resources discovery, and using survey responses to help shape communication strategies.

The creation of a web-based portal for searching MUPO license e-books could provide several benefits. Related to this project, it will provide a central location for subject librarians to direct instructors looking for materials they can assign to their class. The hope is that communication through various channels, as well as having a prominent portal on the library website, will increase the use of e-books as a "free-tostudent" textbook alternative while also reducing the mid-semester panic that sometimes occurs when an instructor assigns an e-book as a class reading without understanding license restrictions. A secondary benefit is potentially increasing the number of e-books we purchase via direct requests rather than through patron-driven acquisitions. Moreover we have not yet discussed changes to how we market our licensed databases and journals, but this would be a next logical step for us to pursue.

The open-ended survey responses provide enough insight for us to understand some initial areas where the library can focus. One clear concern that the library can work to address is developing a way to reduce the time required by faculty to locate usable resources. Even with the list provided in the initial call for proposals, which included fifteen sites instructors could review for resources, several survey participants remarked on the lack of resources or the time required locating them. Two areas specifically identified as problems are modern literature texts and upper-division courses. As the library expands our outreach to support OER initiatives, we will be cognizant of these concerns and work to proactively address them.

Although touched on in the survey responses, a communication concern was made clear from an email with a grant participant who elected to not participate in the survey:

To be honest, I didn't really understand [the survey]. I'm using materials from the internet and from the library, but I don't think of them, necessarily, as OERs: it's scholarship, and freely available (or at least free to our students), but the jargon is unfamiliar to me, and I'm not sure I would be responding properly. Then I realized that, at the very least, I could at least share that information.

As a survey administrator, more consistency and less jargon (using the more familiar free educational resources throughout instead of OER) should have been used; however, this also serves as an example for any organization looking to expand alternative textbook use on their campus. Instructors may largely be unaware of technical terms, but we may also want to be more deliberate in how we frame conversations. Many grants (including ours titled "Replacing Textbooks with Open Educational Resources") and websites related to the grants focus on OER. However, as this individual mentions, instructors may be using freely available material on the internet, regardless of whether it is an OER or labeled as such, or fee-based, library material accessible to our students. While the two initiatives are intricately linked, communication with faculty needs to be clear as librarians push for both an increase of openness in higher education and decreased costs for students.

Appendix A. Open-ended Question Responses

| TABLE 2 Open-ended Question 1 Responses | | |
|---|--|--|
| Open-ended Question 1: | How did your process for selecting free educational resources differ, if at all, from your past selection of traditional textbooks? | |
| Respondent 1 | I use open sources for primary sources to supplement the traditional textbook that I continue to assign. | |
| Respondent 2 | In the past, I'd rely on 1 of the top 2 global survey textbooks that are the standard in our girls. Very little choice is usually involved, because these books are traditionally used. Turning on this tradition would be considered radical in some circles. | |
| Respondent 3 | The textbook I previously used is the standard textbook in Intro to literature classes throughout the country. The book is comprehensive but lacks some authors and contexts. I wanted the OERs to provide more diversity and variety than the textbook. | |
| Respondent 4 | There were a lot less to choose from, so I didn't have as many to review, compare, and contrast. | |
| Respondent 5 | There is more options to choose from for OERs. | |
| Respondent 6 | Difficult to separate from other concerns about changing syllabi (e.g., making the introductory course more diverse in its representations and methodologies), but it was still a noticeable but not unreasonably longer process. | |
| Respondent 7 | I had to search for each individual item I wanted to use rather than a single source for all the items. In addition, there are salespeople whose job it is to explain and sell textbooks. | |
| Respondent 8 | I did not select any | |
| Respondent 9 | | |

| TABLE 3 Open-ended Question 2 Responses | | |
|---|--|--|
| Open-ended Question 2: | How much time would you estimate you spent locating free educational resources to use? | |
| Respondent 1 | The Internet History Sourcebook makes locating sources very straightforward. | |
| Respondent 2 | 65 hours | |
| Respondent 3 | A few hours/ | |
| Respondent 4 | 8 hours | |
| Respondent 5 | Hard to say. It wasn't all at once. Maybe a total of 12 hours | |
| Respondent 6 | 20-30 hours | |
| Respondent 7 | It is still happening! Minimum ten hours, but probably more like 20 hours, just to locate and not to evaluate or make available for the students | |
| Respondent 8 | None | |
| Respondent 9 | 10 hours | |

Appendix A. Open-ended Question Responses

| TABLE 4 Open-ended Question 3 Responses | | |
|---|---|--|
| Open-ended Question 3: | What expectations do you have regarding your students' engagement with the free educational resources, especially compared to your past students' use of traditional texts? | |
| Respondent 1 | I expect them to be just as engaged as they would be with traditional sources. | |
| Respondent 2 | I expect increased viewing of these more-readily-accessible materials. After all, cost is no barrier. | |
| Respondent 3 | My expectations are not that different. | |
| Respondent 4 | I expected them to use them more in class than the traditional textbook. I restructured the course to have in-class quizzes where they could use the online textbook in-class as assistance with their quizzes. | |
| Respondent 5 | Same. Review the material, preferably prior to class. | |
| Respondent 6 | Fewer students doing the readings earlier. Generally I've found most students do most of the earlier readings, fewer in the middle, and very few by the end of the course. | |
| Respondent 7 | I think they will be more likely to use them because they can always access on their phone | |
| Respondent 8 | | |
| Respondent 9 | I think students will be happy not to have to purchase a book. | |

| TABLE 5 Open-ended Question 4 Responses | | |
|---|---|--|
| Open-ended Question 4: | What benefits do you expect from using free educational resources rather than textbooks? | |
| Respondent 1 | It saves students money, which should make it more likely that they can acquire the assigned readings. | |
| Respondent 2 | More depth, although we'll be covering a slightly decreased breadth of material. | |
| Respondent 3 | Cost, ease of access. | |
| Respondent 4 | I think it is a benefit for students in terms of price and ease of use. It was easy to use in my class because I taught in a computer lab, so students were allowed to frequently access the text online. | |
| Respondent 5 | More sources, video exercises, instant feedback in some cases. | |
| Respondent 6 | Student savings. No struggles over getting the book. Online, interactive self-tests. | |
| Respondent 7 | Main benefit is less cost to students. Additionally there are multimedia aspects that were not available before, even when a textbook provider had an additional website. Textbook providers never wanted to incorporate freely available items | |
| Respondent 8 | I wrote the material the students are going to use | |
| Respondent 9 | Cost. Accessibility. | |

Appendix A. Open-ended Question Responses

| TABLE 6 Open-ended Question 5 Responses | | |
|---|--|--|
| Open-ended Question 5: | What concerns, if any, do you have with using free educational resources in your class? | |
| Respondent 1 | None. | |
| Respondent 2 | I give quizzes every 2 weeks on in-class/OER materials. After 2 quizzes I can discern that my students struggle with taking notes. Specifically, a few confessed that they have difficulty determining what the main points are, and what the details are. | |
| Respondent 3 | It will be more difficult to obtain modern texts that are under copyright. | |
| Respondent 4 | My main concern was finding an appropriate text for the course from the limited selection. | |
| Respondent 5 | Depth, rigor, underlying principles/theory. | |
| Respondent 6 | Students doing less of the reading. | |
| Respondent 7 | Copyright concerns since we are talking about artistic products (literature). The OER items only help with older literature and I am a specialist in the 20th century. | |
| Respondent 8 | | |
| Respondent 9 | It is more difficult to obtain contemporary texts (literature) due to copyright. | |

| TABLE 7 Open-ended Question 6 Responses | | |
|---|--|--|
| Open-ended Question 1: | How did your process for selecting free educational resources differ, if at all, from your past selection of traditional textbooks? | |
| Respondent 1 | None. | |
| Respondent 2 | My syllabus states how much time it takes to view/read the required links. I have trimmed the lectures by about 20% to allow for a more in-depth engagement with the material. | |
| Respondent 3 | I've changed some of the texts to avoid copyright issues or because of availability. | |
| Respondent 4 | I allowed in-class open book quizzes to encourage the use of the textbook in class. | |
| Respondent 5 | No major changes. | |
| Respondent 6 | | |
| Respondent 7 | Many, including the creation of a website to maintain a library of resources for ourselves and other faculty who might use the course, the homework is more open (rather being assigned certain pages, a student is told to read a certain text and to read generally about the author, the text and the period), and I feel I need to provide more guidance about how to use websites (plagiarism, judging good ones, etcthis is where the library could really help me/us) | |
| Respondent 8 | None | |
| Respondent 9 | I changed some of the texts I normally use in my intro to literature class. | |

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Notes

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