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RESEARCH

Faculty Survey on OER: Perceptions, Behaviors, and Implications for Library Practice

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INTRODUCTION The Mary Couts Burnett Library at Texas Christian University (TCU) seeks to learn more about university faculty members' perceptions and behaviors related to open educational resources (OER), and to identify one or more initiatives to increase adoption of OER at the university. **METHODS** The researchers sent a survey to all university faculty using Qualtrics™, and 104 persons responded. The survey used a combination of multiple-choice and free-text questions, and covered OER adoption and creation by faculty members, their perceptions of OER, and recommendations related to possible initiatives to increase OER interest. **RESULTS** Among respondents, almost half used OER either currently or in the past, while a fifth created their own OER. When comparing OER to traditional textbooks in terms of being scholarly, the majority indicated that OER and traditional textbooks were about the same level, but a quarter of faculty indicated that traditional textbooks were more scholarly. When asked about initiatives the library could pursue to increase faculty OER creation, the leading responses included financial support of faculty using OER, along with training opportunities. **DISCUSSION** The researchers were pleased to see that many faculty have used OER either currently or in the past, and that many had positive views surrounding OER. The researchers now have data that support the establishment of OER initiatives. **CONCLUSION** The survey informs the TCU Library and academic libraries in general. Two initiatives that libraries should consider are establishing an OER training program for faculty and developing a grant program to support faculty members who are adopting or creating OER. Libraries should collaborate with other units on campus such as the center for teaching excellence or the faculty senate.

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IMPLICATIONS FOR PRACTICE

- 1. Many faculty members have already used Open Electronic Resources (OER) in their courses. Some faculty have even created OER. Both facts indicate there is an interest in OER on this campus.
- 2. Evidence from this survey suggests that the library undertake two initiatives: establishing faculty workshops about how to create or use OER and implementing a grant program that encourages faculty creation and use of OER.
- 3. The implementation of an OER program on campus should be collaborative in nature. The library should work with other units on campus such as the center for teaching excellence or the faculty senate.

INTRODUCTION

Alongside open access (OA) and open data, the concept of open educational resources (OER) has become of interest to academic librarians in recent years. The Mary Couts Burnett Library at Texas Christian University (TCU) seeks to discover the best ways it can work with faculty to increase their OER adoption and creation on campus.

TCU is a private institution located in Fort Worth, Texas, USA, with approximately 11,000 students by FTE, including 9,300 undergraduates. TCU awarded degrees to 2,800 students in the 2018–19 academic year. The average undergraduate student spends \$49,160 on tuition and \$900 on books and supplies each year. TCU has 785 faculty by overall headcount. TCU has over 100 fields of study, with highest student enrollments in the following: general business, nursing, biology, communication studies, and strategic communication. (TCU Office of Institutional Research, 2019)

The library supports all academic disciplines and has a specific liaison librarian assigned to each department. The library has developed other initiatives related to the open movement, such as developing an OA article processing charge subvention fund, creating a digital repository of university scholarship, supporting data management needs, and hosting faculty-led OA journals.

Over the past few years, the library has developed an interest in supporting OER, and has become aware of isolated instances of faculty using OER in their classes. Both the library and the university's center for teaching excellence have hosted an educational workshop related to OER. The library has continued to explore avenues to advance discussion around OER and considered the possibility of providing financial incentives to support faculty who create OER. The library ultimately decided to develop a survey of all university faculty to determine their needs. The primary objectives of this research are first, to learn about faculty members' existing perceptions and behaviors regarding OER, and second, to determine which ways faculty would like the library to support OER initiatives. The answers to these questions will help the library determine the penetration of OER on campus and guide the library's thinking as it considers which OER initiatives to implement. Ultimately, it is the library's hope to increase OER adoption on campus.

LITERATURE REVIEW

Textbooks in higher education have always been regarded as a vital part of the learning process. While access to textbooks on its own does not guarantee student success, some research suggests that reading course material improves overall class performance (Skinner & Howes, 2013; Yu, 2011). Over the years, the price of textbooks has increased significantly and become a substantial financial challenge students have to face (Senack, 2014). The College Board (2020) reports that on average, full-time undergraduate students will budget \$1,240 on books and supplies.

OER was first defined by UNESCO in 2002 as "The open provision of educational resources, enabled by information and communication technologies, for consultation, use, and adaptation by a community of users for non-commercial purposes." Since then, many forms of OER have been created across a variety of platforms. The two main questions that arise from the use of OER are its effectiveness in regards to student learning outcomes and its perception of quality by faculty and students.

Student Success and Perceptions

Researchers have conducted many studies about the impact of OER on student learning and some of them found a positive impact. Colvard, Watson, and Park (2018) compared the academic performance of students in courses that adopted OER against courses that did not adopt OER and found overall statistically significant improvement in student grades in OER-using classes. The Colvard study also looked at comparison data by students' ethnic background and registration status and found that OER adoption improves grades at higher levels for non-White students, as well as part-time students. Winitzky-Stephens and Pickavance (2017) used a multilevel modeling approach to examine the impact of OER on student success when controlled for instructor and course levels. Data collected over eleven semesters show some benefit for new students' average grades in classes that adopted OER as compared to classes with traditional textbooks, however, the study showed no significant differences among continuing students. Hilton, Fisher, Wiley, and Williams (2016) looked at throughput rates (drop, withdraw, grade C or better) over four semesters. The results suggest that students in OER classes, both face-to-face and online, were significantly less likely to drop or withdraw, and significantly more likely to receive a C or better grade in their classes.

Some other studies did not find a difference in student learning outcomes. Lovett, Meyer, and Thille (2008) looked at in-class exam scores for two semesters in classes with OER adoption and classes without, and showed no significant difference between the two groups. They called these the "do no harm studies" (p. 6) as the expectation was that the students' learning would not be harmed by the different treatment. In 2014, UC Davis implemented a ChemWiki in which content was organized by a consortium of students and faculty. When they assessed the efficacy of this pilot project, the authors found that there was no statistical difference in course grades or individual learning gains between students using ChemWiki as compared to a commercial textbook (Allen et al., 2015). Finally, Fialkowski et al. (2019) analyzed results of a cross-sectional study over one semester in an introductory nutrition course. They found that the use of OER did not have an effect on students' academic performance.

Relatively few studies found that the adoption of OER has a negative effect on student success. Robinson's 2015 study showed that, of the seven courses investigated, students in business and psychology courses using OER received lower grades than students in courses using traditional textbooks.

In the literature, students' perceptions of the quality of OER has been overall positive. Hilton, Bliss, Robinson, and Wiley (2013) reported that the majority of students in their research felt that OER was at least as good in quality as traditional textbooks and 39% of students felt the quality was better than traditional textbooks. Pitt, Ebrahimi, McAndrew, and Coughlan (2013) similarly found positive perceptions among students. Pitt conducted pre- and post-surveys with students and found that 83% of students had overall satisfaction with OER quality and 87% of students recommend the use of OER in their courses. Wright (2018) also surveyed students and found that they were overall satisfied with OER in their courses, due to the materials being engaging, valuable, and effective.

Faculty Practices and Perceptions

Faculty Teaching Practices

Another, less researched, aspect of OER is how it affects faculty teaching practices. Ehlers (2011) argues that the OER movement has two phases: phase one is the creation of OER; phase two is the now-emerging field of open educational practices (OEP). Ehlers asserts that these practices should transform learning and improve the overall learning experience.

Cronin (2017) conducted interviews with faculty that revealed it "is impossible to draw a clear boundary between educators who do and do not use OEP. Instead there is a continuum of practices and values ranging from 'closed' to open" (p. 7).

Faculty Perceptions

In recent years, several studies have been conducted regarding the perception of OER by faculty. When considering the adoption of OER, quality is one of the main concerns by faculty. Wright's (2018) interview with faculty members showed that faculty rated OER materials as generally high in quality. Wright also found that the time commitment needed for finding, evaluating, and incorporating OER was substantial and was regarded as a barrier for adoption. Belikov and Bodily (2016), similar to Wright, found that faculty had a generally favorable perception of the quality of OER, and many stated that the quality of OER sources was equivalent to traditional textbooks. Bliss, Hilton, Wiley, and Thanos (2013) are also in agreement. Bliss surveyed faculty and revealed that faculty members were satisfied with the quality of OER based on their own perceptions of quality: 70% of faculty reported that students used OER with similar frequency as traditional textbooks, and 90% reported that students using OER were equally or more prepared than students had been in previous semesters using non-OER.

Overall, there is broad agreement that the benefits of OER include free and open access, broad coverage, immediate availability, the ability to customize, and not having to reinvent the wheel. Some of the major barriers of OER that have been noted are the amount of time it takes to find and adopt materials, language barriers, and access to technology by faculty and students (Atenas, Havemann, & Priego, 2014; Belikov & Bodily, 2016; Hilton, Bliss, Robinson, & Wiley, 2013). Evaluation criteria for the quality of OER has also not been well established and lacks consensus. Atenas, Havemann, & Priego (2014) found that faculty selected educational resources using their own personal criteria; and Belikov's faculty thought that OER should be evaluated on a singular basis and not all grouped together (2016). The sharp rise in textbook costs and the inequity this creates in higher education are not lost on faculty. Mitchell and Chu (2014) conducted an online survey with faculty and found that the majority of faculty members were concerned about the cost of textbooks and also had a strong interest in OER. Considering all these factors, the TCU Library has decided to conduct a survey of faculty at this institution.

METHODS

The researchers used Qualtrics[™] software to develop and design the survey. The university's Institutional Review Board approved this research project. Before distribution, the researchers tested the survey on a small number of faculty and staff for both content and survey-flow features.

The researchers decided to distribute the survey to all university faculty via email (Appendix A), asking the dean of the library to send it out on a faculty email distribution list on the researchers' behalf. The dean sent out the survey link in September 2019, sending the same solicitation email as a follow-up a week later. Altogether, the survey stayed open for two weeks. In total, 104 faculty completed the survey, out of 785 faculty.

The first question determined eligibility and asked "Are you responsible for selecting course materials such as textbooks, exams, assignments, and other learning resources for classes you teach?" If the response was "Yes" (99 participants), the participant continued with the survey. If the response was "No" (4) or "I don't teach any classes" (1), the participant was routed to the exit page of the survey.

In the development of the survey, the researchers examined several definitions of OER from different organizations, each slightly different. For the survey, the researchers chose the OER definition from UNESCO as revised in 2016, and that definition was presented to participants prior to the first OER-related question. The definition reads:

"Open Educational Resources (OER) are any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OER range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation."

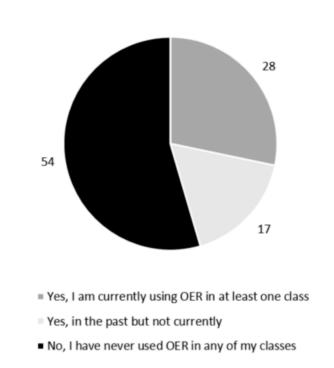
Overall, the survey consisted of 16 questions, and contained a mixture of multiple choice and open-ended queries (Appendix B). For multiple-choice questions, the answer choices were randomized. The survey used skip logic to display questions to participants based on their responses to previous questions. The survey was anonymous; at the end of the survey, participants had the option to share demographics information.

RESULTS

Perceptions and Behaviors

OER usage

The researchers asked questions about faculty members' experience with using OER. First, the survey asked, "Are you using OER in any of your classes?" (Figure 1) Out of 99 responses, 28 (28%) responded that they are currently using OER in a class, 17 (17%) have used it in the past, and 54 (55%) have never used OER in their classes. Overall, 45% of faculty had used OER either currently or in the past.



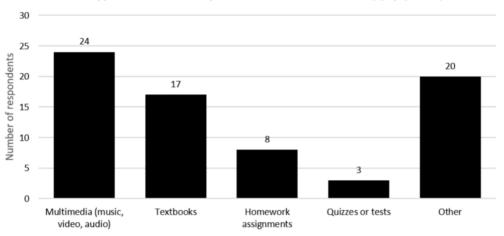
Are you using OER in any of your classes? (n=99)

Figure 1. Faculty usage of OER.

Faculty who responded that they currently use OER or had used OER in the past were asked what types of OER they had used (Figure 2). Respondents (n=42) could choose more than one answer. The leading responses were multimedia (24 faculty), textbooks (17), and homework assignments (8). Twenty respondents chose "Other" and their responses included plays in the public domain, articles, tutorials on computer software, and lecture notes.

Respondents who answered that they had never used OER in a class were asked why. Respondents (n=52) could choose multiple answers. The top responses included a lack of awareness of OER (24), not knowing of others using it (15), the quality of available OER (11), effort with using OER (5), lack of peer review (5), and not having support (4). Nine faculty responded "Other." One faculty voiced concerns over quality: "Just not sure how to evaluate this material and determine its credibility." Some faculty mentioned that they had no need for using OER in their classes.





What types of OER have you used? Select all that apply (n=42)

Figure 2. Types of OER faculty have used.

OER creation

The researchers asked several questions about OER creation. First, researchers asked whether faculty had ever created their own OER. Of the 96 faculty responding to this question, 19 (20%) faculty responded that they had, while 77 (80%) had not. The researchers then presented three additional questions to the respondents who had created OER.

First, researchers asked faculty (*n*=19) which types of OER they had created, and could select more than one choice. The survey offered five choices, of which "homework assignments" was the most frequently selected (10). "Quizzes or tests" (5), "multimedia" (5), and "textbooks" (2) followed. Respondents could also select "Other" and provide their own answer, of which none received more than one response, but some examples include "Samples for students to study" and "Lab manual/procedures."

Second, the survey asked faculty that had created OER what was the most beneficial aspect of creating it, as a free-form text box question. Coding the responses (n=15), the researchers saw four responses relating to the concept of providing only the specific materials that students need. Three faculty alluded to the concept of having complete authorial control over the content. Two faculty indicated that having material online was itself an advantage.

Lastly, among those respondents who had indicated that they had created their own OER materials, the survey asked if they had any funding that supported the creation of OER. Of the 18 respondents to this question, only one respondent indicated that they had received funding in support of OER creation. That funding was from the National Science Foundation. Of the respondents who had not created their own OER, the survey asked whether they would be interested in creating their own OER. Out of 77 responses, 32 faculty (42%) responded that they would be interested in creating their own OER materials.

At the end of the survey, participants had an opportunity to provide comments in an open textbox. Of the 18 responses, four were related to OER creation, and alluded to the amount of time or effort needed for it.

Additional faculty perceptions

The survey asked if faculty (n=87) considered OER more or less scholarly than traditional textbooks. Results showed that 23 faculty (26%) thought that traditional textbooks were more scholarly, three (3%) considered OER more scholarly, while the majority (61 faculty, 70%) thought that OER and traditional textbooks were about the same.

The end-of-survey comment box responses showed concerns over quality as a few faculty specifically mentioned the quality and scholarliness of OER. One faculty lamented, "As compared to traditional textbooks, it would seem that the scholarly level would rely heavily on the attention and concern of the person creating the OER." This faculty member continued, "Some textbooks are not so good, and I expect some OER is highly scholarly as well as vice-versa." A second faculty member pleaded, "Do not spend resources (faculty time and money) that will not benefit the University. If a faculty member can produce something good, a publisher will publish it at low cost."

Next, the researchers asked if faculty (n=95) considered the cost of course materials when selecting educational resources to use in their classes. The large majority (95%) confirmed that they considered student costs when deciding on materials.

OER Library Initiatives

The researchers turned their attention to what needs, if any, faculty have for OER training and what potential initiatives the library could take on at the university. The question asked if faculty members (n=94) were interested in training opportunities related to OER, and 55 answered yes (59%).

Then the survey informed participants that the library was interested in finding ways to increase OER creation by faculty. If the library were to take on this endeavor, what methods would faculty recommend that the library pursue? (Figure 3) Faculty could select more than one answer to this multiple-choice question. Results showed that they would be almost

equally interested in a grant program for faculty creating OER (62), informational workshops (61), and hands-on training opportunities (59)

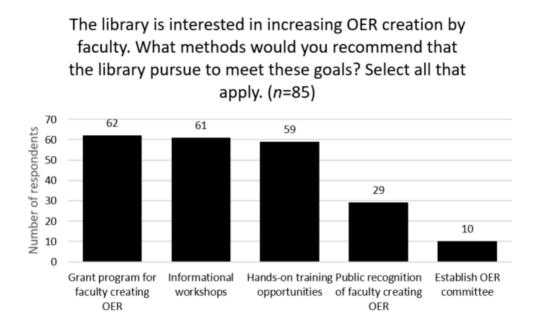


Figure 3. Methods for the library to pursue to increase OER creation by faculty.

The comments section at the end of the survey provided more insight into faculty ideas on OER creation. Two faculty members suggested that the creation of OER should be recognized in the tenure process; and one faculty recommended the establishment of a committee to oversee OER creation and quality control. As one faculty member put it: "As long as textbooks continue to be treated by academic departments as derivative works, rather than scholarly contributions, the work won't count toward tenure, promotion, or annual review. That's a substantial variable that needs to be present [...] in future library initiatives." Some of the ideas that faculty offered to increase OER usage and creation were: "Lobby for special inclusion on annual reports as a creative work that stays on annual reports as long as research," "Facilitate the creation of an online repository for HW [homework], exam, and quiz questions," and "Establish a peer review process that rewards reviewers for their contributions."

DISCUSSION

Faculty Behaviors and Perceptions

The first of the researchers' primary objectives was to learn about faculty members' behaviors and perceptions related to OER.

OER behaviors

It is incredibly encouraging to see that over 45% of faculty respondents have used OER, either currently or in the past. Prior to the survey, there had been only sparse anecdotal reports of faculty using OER, so seeing such a high number was unexpected. In a nationwide survey of faculty, Seaman and Seaman (2020) showed that 24% of faculty at 4-year colleges had used OER. It is important to note, however, that the OER definition presented in the Seaman survey differed. In the present survey, the definition included examples of OER types such as textbooks, curricula, syllabi, lecture notes, and other materials, while the Seaman survey definition did not.

It can be challenging to understand where faculty perceive the boundaries of OER to be. For example, some YouTube videos carry an open license, but not all. Without further study, the researchers do not know whether faculty members perceived multimedia as OER only when there was an open license, or if faculty members equated OER with it simply being freely available on the web. Another example of possible confusion can be found in the faculty comment "I do use e-textbooks from the library, but I'm not sure [if] those count as OER or not."

Only 19 faculty members had ever created any OER, and only two had created an OER textbook. However, it is encouraging to see that among those faculty members who had not created OER, many are interested now. This indicates a need for the library and other campus units, such as the university's center for teaching excellence, to provide assistance and/or training to faculty.

Perceptions

The researchers wanted to learn about how faculty perceive OER. When faculty members were asked about why they were not using OER, the biggest single answer was a lack of awareness. Focusing on the faculty who did not mark that they were unaware of OER, the most frequent responses were the overall quality of OER and that they did not know of others using it. Similar studies that reported on OER adoption barriers showed that time constraints, language barriers, student access to technology, and ability to evaluate appro-

priately were the largest concerns (Atenas, Havemann, & Priego, 2014; Belikov & Bodily, 2016; Hilton, Bliss, Robinson, & Wiley, 2013; Wright, 2018).

In terms of overall perception of OER as being scholarly, the researchers are pleased to see a large majority of respondents expressing that they viewed OER as about the same as traditional textbooks, and that only about a quarter of faculty said that they considered traditional textbooks more scholarly. Prior research has shown that the lack of established evaluation criteria is a major barrier for faculty to use OER (Atenas, Havemann, & Priego, 2014; Belikov & Bodily, 2016). The researchers posit that this perception could be rooted in analogous perceptions to predatory open access journals.

In the comments, some respondents offered opinions about OER and how it affects them, or how they might be involved with OER campus programs in the future. One recommendation was for the creation of OER to be considered in the tenure process. Another mentioned that OER creation should be included on annual reports in a similar way as research. On the multiple-choice question about library initiatives, some faculty (12%) expressed interest in the establishment of an OER committee that oversees the use and creation of OER, thus develops guidelines and standards to ensure quality. Pulling all these points together, this data tells the library that there is a possibility of working with faculty on the establishment of a committee or other collaboration to assist those interested in the creation or usage of OER.

OER Library Initiatives

The second primary objective of this study was to determine what OER initiatives TCU faculty would like the library to support. Two main areas of interest emerged from the results: financial support and training.

Financial support

Successful creation of OER is contingent on faculty participation. Existing literature and the current survey show that creating these materials is time-consuming and requires a significant amount of effort. As such, incentivizing OER creation is essential to engage faculty. Many examples of successful grant and financial support programs exist in higher education (UC Davis, University of Pittsburgh, Rice University, etc.) ranging from a few hundred dollars for adoption to \$5,000+ for creation of OER.

In the current survey, faculty members who created OER were presented with a question regarding funding. Only one out of 18 respondents reported that they received funding

to support OER creation. When faculty members were asked about different methods the library could pursue to assist with OER creation, establishing a grant program was the most frequently chosen answer. The creation of a grant program has been an interest of the TCU Library for a few years; however, this is the first time that the library has university-specific data to support the establishment of such a program. With support from faculty who have created or have interest in creating OER, approaching administration with a proposal is a less daunting task. One of the university's strategic goals is to strengthen its academic profile and reputation. Supporting and advancing the use and creation of OER is directly in line with this goal.

Many studies found that the use of OER in classrooms has a similar or better effect on student learning outcomes as compared to traditional materials. It can also positively affect student retention, completion, and throughput rates, as well as student satisfaction. All of these aspects of higher education are concrete and measurable. With this in mind, the development and execution of an OER grant proposal has potential to strengthen the university's academic standing.

Training

There was a strong interest by faculty for training opportunities indicated in both questions that covered this topic. On the simple yes/no question about training, over half of surveyed faculty expressed interest. On the question about ways the library can support OER activities, the two responses regarding creating informational workshops and hands-on training opportunities were the second and third most frequently selected answers. From the free-text comments, the researchers gathered the following: "It should not become onerous or time-consuming to create such materials" and "Creating such resources takes much time and energy. Getting to know copyright basics for OER would be helpful."

These results provide the TCU Library and academic libraries in general with guidance on the types and nature of training that are helpful for faculty. Workshops on how to integrate OER effectively into classrooms would cover topics ranging from basic OER overview, to addressing quality concerns, user accessibility, and copyright issues. Education about the benefits of OER use and creation would also be helpful at the department head/dean levels. This would create a positive and encouraging climate within departments, and would help with the establishment of clear policies. Gaining the active support of faculty who had created OER in the past is essential. The use of familiar and local experts would ease the minds of faculty who might have concerns on this topic.

Another important aspect of faculty participation in OER creation is access to and ability to use specific software. This provides academic libraries with opportunities to collaborate with university IT departments, as well as encourage faculty to participate in already existing technology workshops, or for libraries to create these workshops as needed.

These responses also spark a question about platforms to host OER and making sure that training includes information on the most popular sites. The library should also consider the value of the library's institutional repository, having a conversation about whether it is best to host OER locally or with OER from other universities in well-known repositories. Even if hosted locally, the library should explore making sure that the repository is appropriately indexed on well-known OER aggregator websites.

All of these training and workshop opportunities highlight library partnerships with different academic and support departments, and they emphasize the need for a campus-wide collaboration model. Academic libraries should be committed to providing faculty with the support they need to understand the different OER adoption and creation options available to them.

The survey was conducted in fall of 2019, before the COVID-19 pandemic had begun. COVID has already affected higher education profoundly and its influence on academia will be long lasting. These influences include economic issues for individuals and institutions, and the growth of online learning in institutions that were not previously using distance learning in their classrooms. Furthermore, COVID has highlighted technological and financial inequities in higher education. In the researchers' opinion, OER is poised for significant growth during and after the COVID crisis. Libraries and other change agents should maximize this opportunity to promote OER as a possible alternative to traditional textbooks. This is an area ripe for further investigation.

Limitations

There are some limitations associated with this research study. First is self-selection: Participation in the study was voluntary and as such, results may represent opinions of faculty who have strong feelings and levels of experience with OER at the opposite ends of the spectrum. Self-selection can preclude participation from faculty who have modest/moderate levels of experience and opinions. Second, participation was limited to TCU faculty (a private college in the south), which can create a bias that would not be a representative of a national sample. A third limitation concern is the interpretation of free-text responses. As with any qualitative data, text analysis is somewhat subjective. To address this, the three researchers consistently reviewed each other's work, coding and interpretation. Lastly, while the researchers provided a definition of OER at the beginning of the survey, some responses indicate that faculty members may not have a clear understanding of what OER is, so their responses may not be fully relevant to answer the research questions.

CONCLUSION

The survey indicates that OER activity is occurring on the TCU campus. The survey shows ways that the TCU Library and academic libraries in general can support OER creation and usage, including training opportunities and financial support. Libraries should also strongly consider how they can cooperate with other campus units. Working with groups such as the center for teaching excellence, IT, or faculty senate can be beneficial toward promoting OER on campus.

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APPENDIX A Solicitation Email for Survey

TCU Library Needs Your Help

The Library is investigating TCU faculty members' perceptions and behaviors regarding Open Educational Resources (OER), such as freely available online textbooks and other course materials. Whether or not you are using OER, we would like to hear from you. This survey will provide valuable insight for the library on how we could better support initiatives related to OER going forward.

Please take our short survey, which will last about 5-10 minutes.

The survey will remain open until Tuesday, October 8.

Link to the survey: <Link to Qualtrics Survey>

If you have any difficulty accessing the survey or have questions, please contact Jeff Bond, Principal Investigator, at j.bond@tcu.edu or (817)-257-7107.

APPENDIX B Survey Question and Results

This appendix contains the questions to the survey and quantitative results. Selected comments from respondents are also included. Answer choices for multiple-choice questions were randomized when presented to participants.

Open Educational Resources Survey

Thank you for participating in this survey about Open Educational Resources.

The survey is anonymous and will take approximately 5–10 minutes to complete. Taking part in this survey is completely voluntary. Clicking the "Next" button indicates your consent to participate. You may choose to terminate the survey before completing it without any adverse effects.

If you have any questions about this survey, please contact Jeff Bond, principal investigator, at j.bond@tcu.edu or (817) 257-7107.

Are you responsible for selecting course materials such as textbooks, exams, assignments, and other learning resources for classes you teach?

- Yes 99
- No 4
- I don't teach any classes 1

If the participant selected any choice other than "Yes," skip to end of survey.

Definition of Open Educational Resources (UNESCO, 2016)

Open Educational Resources (OER) are any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OER range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation.

Are you using OER in any of your classes?

- Yes, I am currently using OER in at least one class 28
- Yes, in the past but not currently 17
- No, I have never used OER in any of my classes 54

The next question is only displayed if one of the "Yes" responses to the above question is selected.

What types of OER have you used? Select all that apply.

- Textbooks 17
- Quizzes or tests 3
- Homework assignments 8
- Multimedia (music, video, audio) 24
- Other 20

Selected "Other" comments:

- Plays in the public domain
- Articles
- Class readings other than texts
- Adobe, InDesign [...] manuals
- Personal web page
- Lecture notes

The next question is only displayed if the participant answered "No" on the question "Are you using OER in any of your classes?"

Why have you never used OER in your classes? Select all that apply.

- Not aware of OER 24
- Copyright issues 3
- Costs of using OER 2
- Effort with using OER 5
- Impact on professional profile 0
- No support 4
- Quality of available OER 11
- Desire to use print materials only 3
- Lack of peer review 5
- Don't know of others using it 15
- Other 9

Selected "Other" comments:

- Just not sure how to evaluate this material and determine its credibility
- I do use e-textbooks from the library, but I'm not sure if those count as OER or not.
- I enjoy making customized course content and assignments to best meet my student needs. There are likely other high quality materials, yet I enjoy creating my own.
- No need

Have you ever created your own OER materials?

- Yes 19
- No 77

The next three questions are only displayed if the participant answered "Yes" to the above question.

What types of OER have you created? Select all that apply.

- Textbooks 2
- Quizzes or tests 5
- Homework assignments 10
- Multimedia (music, video, audio) 5
- Other 6

Selected "Other" comments:

- Reader for students
- Samples for students to study
- Lab manual/procedures
- Collection of primary sources in public domain

What was the most beneficial aspect of creating your own OER?

Selected comments:

- The ability to distribute it to my students without having to worry about copyright infringement
- complete control over the manuscript

- Paring down to exactly what the students needed, assist students in cognitive integration by presenting pieces of information across different resources together.
- I'm not locked in to a textbook.
- It allowed for students who were unable to be physically present in class to have access to the assignments.
- Choosing content that is most useful to me
- Moving assignments online saved a great deal of class time!

Did you have any funding that supported your creation of OER?

- Yes—if so, what was the source? 1
- No 17

Yes—if so, what was the source?

• NSF

The next question is only displayed if the participant answered "No" on the question "Have you ever created your own OER materials?"

Would you be interested in creating OER of your own?

- Yes 32
- No 45

As compared to traditional textbooks, do you view OER as more or less scholarly?

- Traditional textbooks are more scholarly 23
- OER is more scholarly 3
- They are about the same 61

Do you consider how much the students pay for course materials when you select which resources to use in your classes?

- Yes 90
- No 5

Would you be interested in training opportunities related to OER here at TCU?

- Yes 55
- No 39

The library is interested in increasing OER creation by faculty. What methods would you recommend that the library pursue to meet these goals? Select all that apply.

- Establish OER committee 10
- Informational workshops 61
- Hands-on training opportunities 59
- Grant program for faculty creating OER 62
- Public recognition of faculty creating OER 29

Comments?

Selected comments:

- It should not become onerous or time-consuming to create such materials.
- None of the above. [Author note: Regarding the question about methods to increase OER creation.] How do you know the materials created will be used? There is so much trash out there, do we need more? Do not spend resources (faculty time and money) that will not benefit the University. If a faculty member can produce something good, a publisher will publish it at low cost.
- I am very conscious of how much my students have to pay for books. I once looked into creating a custom course packet for a class, but it was quite difficult and still expensive for students. I am certainly interested in using resources in my classes that student can access freely. I am disappointed, sometimes, when I see that the library has a book but not the e-book version (I know not all books are available electronically). I would certainly be interested in knowing more about free electronic resources. Currently, I don't feel like I have time to create new OER materials, but maybe someday I would.
- Creating such resources takes much time and energy. Getting to know copyright basics for oer would be helpful.
- As compared to traditional textbooks, it would seem that the scholarly level would rely heavily on the attention and concern of the person creating the OER. Some textbooks are not so good, and I expect some OER is highly scholarly as well as vice-versa.
- Peer or editorial review is vital for accuracy and quality of information.
- Probably actually need a committee, but the number of service assignments seems to be continuing to increase with increased service expectations. If there were a way to do it without a committee that would be better, but probably not possible

- As long as textbooks continue to be treated by academic departments as derivative works, rather than scholarly contributions, the work won't count toward tenure, promotion, or annual review. That's a substantial variable that needs to be present in this survey and in future library initiatives.
- For faculty, I think the OER needs to be recognized in the tenure and/or merit process.
- I would not support any of these options. When I utilized an online learning package (Pearson) several years ago, student learning was decreased because of the overload of information--so that basic concepts from the paper textbook went overlooked. I find that this tendency is rather dangerous in terms of basic comprehension of textbook readings.
- More ideas to increase OER by faculty: (1) Lobby for special inclusion on annual reports as a creative work that stays on annual reports as long as research. (2) Facilitate the creation of an online repository for HW, exam, and quiz questions. Maybe something similar to OpenStax, but for student assignments. Establish a peer review process that rewards reviewers for their contributions. (3) Provide support for the creation of free online HW servers.

This section is optional. What department are you in? [text box] [Excised for privacy reasons]

How long have you been a faculty member at TCU?

[Author note: for this question only, answer choices were not randomized.]

- 0–5 years 31
- 6–10 years 15
- 11–15 years 21
- 16–20 years 13
- More than 20 years 10

End of Survey