

Everyday Evidence Applied to Assess Academic Library OER Initiatives

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Oklahoma State University (OSU) is a land-grant institution with a mission to make college education more accessible for students in the state of Oklahoma and beyond (Oklahoma State University [OSU], 2022a, n.p.). OSU serves over 35,000 students across five campuses, with more than 24,000 of those students working toward degrees through the main campus at OSU-Stillwater (OSU, 2022c). OSU is a Carnegie R1 institution, offering graduate students in more than 80 master's and 45 doctoral programs (OSU, 2022b) opportunities to study with faculty "working to answer society's questions with impactful research and new discoveries" (OSU Division of the Vice President for Research, 2022, n.p.). Under the leadership of Dr. Kayse Shrum, the university is proud to have an intentional focus on "growth, collaboration, and inclusivity" (OSU, 2022d, n.p.).

The university's emphasis on creating an inclusive and diverse community has been recognized by *INSIGHT into Diversity* magazine. OSU was a recipient of the 2021 Higher Education Excellence in Diversity (HEED) Award, becoming one of only seven institutions to receive the award for 10 consecutive years (Burke, 2021). According to the OSU Office of Institutional Research and Analytics (2022) Diversity Ledger, as of fall 2021, 34% of the OSU student body self-reported as members of racial/ethnic minority groups. Just under 20% of OSU students are first-generation students, and just over 20% of OSU students are eligible for Pell Grants. According to the OSU Office of Scholarships and



Financial Aid, in the 2018–2019 academic year, 85% of incoming students and 83% of the total undergraduate population on the main campus received financial assistance, frequently based on need.

The OSU Libraries that serve OSU include Edmon Low Library and Branch Libraries. The Edmon Low Library is centrally located on the main campus in Stillwater, Oklahoma. OSU Branch Libraries include the Architecture Library, the College of Veterinary Medicine William E. Brock Memorial Library, and the Education and Teaching Library. The OSU Libraries' mission statement is "to expand the learning potential of students and citizens of our state and to enhance the teaching and research capabilities of our faculty" (OSU Libraries, 2018).

Recognizing the impact that the cost of course materials can have on students' learning potential, OSU Libraries prioritized "the exploration and support" of open educational resources (Essmiller et al., 2020, p. 265). Open educational resources (OER) can be understood as "teaching, learning, and research materials that make use of appropriate tools, such as open licensing, to permit their free reuse, continuous improvement and repurposing by others for educational purposes" (Miao et al., 2019, p. 9). Use of OER can impact students' learning potential not only by reducing the financial impact of higher education as costly textbooks are eliminated but also through facilitation of innovative pedagogies (Baas et al., 2022; Bali et al., 2020; Nusbaum, 2020). Because of the alignment between the potential benefits of OER use on the student learning experience and the university's mission to increase access to college education for students in the state, OSU Libraries began seeking opportunities to partner with faculty to increase OER adoption. In 2015, a one-time private financial donation funded an initiative providing a \$6,000 stipend for each of six single-author textbook creation projects, guided informally by library subject liaisons in partnership with the faculty authors. OER advocacy was included as 10% of the primary assignment for the Research and Learning Services teaching librarian, with subject librarians providing support and advocacy for OER as they had time, energy, and interest (Larson, 2020).

In 2018, the OSU Libraries hired a full-time OER librarian and the emerging library OER program was branded OpenOKState in order to differentiate it from other library programming and position it for messaging as a university-wide endeavor. The single-author OER textbook creation grant projects initiated in 2016 were still underway and had no estimated dates for completion. In fall 2019, the OER librarian received a \$15,000 OSU President's Fellows Grant to provide financial and instructional design support for faculty redesigning their course design to switch from costly commercial textbooks to OER and library resources. This initiative, which we named HackYourSyllabus, paid faculty a one-time \$750 stipend for course re-designs targeted for implementation within the following academic year. See Figure 21.1 for a timeline of OSU Libraries' OER Program Development.

One of the goals for the OER librarian was to shift the libraries' OER efforts from a series of passion projects to a cohesive program enacted according to a carefully constructed strategic plan that included program evaluation. The OER librarian used the human performance technology framework to inform this shift (Essmiller et al., 2020;

Van Tiem et al., 2012). Human performance technology (HPT) is a framework, or process, that helps identify and close the gap between existing conditions and desired conditions (Van Tiem et al., 2012). The HPT framework was chosen because it is appropriate for systematic analysis and evaluation of complex human performance systems working toward sustainability (Wilmoth et al., 2002; Dessinger et al., 2012; Essmiller et al., 2020). The HPT analysis process includes "performance analysis, needs assessment, intervention design, and evaluation" (Essmiller et al., 2020, p. 265).

The final phase in the HPT framework is to evaluate for continuous improvement (Van Tiem et al., 2012). The purpose of this chapter will be to describe, in particular, how the evaluation phase was implemented by applying the EBLIP model (Koufogiannakis & Brettle, 2016) to a reflective comparison of the OSU Libraries' single-author OER textbook creation initiative and HackYourSyllabus, the course revision initiative.

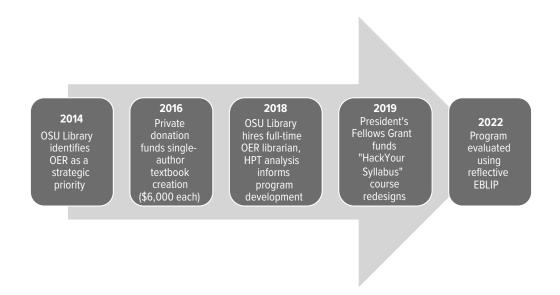


Figure 21.1

Timeline of OSU Libraries' OER Program Development.

Articulate

With the goal of developing a sustainable, effective OER program (Wiley et al., 2017), we wanted to understand (Koufogiannakis & Brettle, 2016) whether there was a difference in impact between the two OER projects, the single-author OER textbook creation initiative and the HackYourSyllabus course redesign initiative. As we shifted from a series of projects to a strategically planned program, we built out a mission and vision statement to help guide goal-setting and steps toward sustainability (Wiley et al., 2017). The OpenOKState mission and vision statements and program goals were closely aligned with both the OSU Libraries and OSU mission statements. As seen in Table 21.1, the language we use

to communicate the impact of the OpenOKState program is similar to the language used by OSU to describe university impact.

TABLE 21.1 OKLAHOMA STATE UNIVERSITY AND OPENOKSTATE MISSION STATEMENTS.	
Oklahoma State University Mission	OpenOKState Mission Statement
"Building on its land-grant heritage, Oklahoma State University promotes learning, advances knowledge, enriches lives, and stimulates economic development through teaching, research, extension, outreach and creative activities" (OSU, 2022a, n.p.)	"The OpenOKState OER program contributes to the success of OSU students, faculty, and the state of Oklahoma by facilitating open, customizable access to meaningful teaching, learning, and research resources and experiences" (OpenOKState, 2022, n.p.)

Single-Author OER Textbook Creation Initiative

The liaison-dependent, decentralized "kitchen sink" approach (Larson, 2020, p. 43), used with the single-author OER textbook creation initiative, left the library with tens of thousands of dollars committed to faculty OER creation without documentation, with no clear timeline for their completion, and without a plan for how their effectiveness could be measured. While the single-author OER textbook creation initiative followed strategies implemented at similar institutions, available data, and personal "working experiences" (Koufogiannakis & Brette, 2016, p. 12) suggested that the "context and circumstances" (p. 14) in which the projects were being implemented required a more intentional approach. The project management was loosely structured, workflows and platforms varied from project to project, and none of the projects had a memorandum of understanding (MOU) or clear timeline in place to inform their development and facilitate their completion. Additionally, there was no documentation of how the grants were awarded, the criteria informing project selection, or what the libraries could expect from faculty as the projects were completed.

By late fall 2018, two of the original six single-author OER creation projects had been completed and published as PDFs on the Libraries' website page or linked out from that page to the platform being used by the author to host the content. A third project was still underway, involving student authorship, but shifts in library personnel meant that few further details were available. Of the remaining three projects, one was complete, but the chapters were in several different places, and two had not progressed beyond payment of the initial 50% (\$3,000) stipend.

HackYourSyllabus Course Redesign Initiative

In spring 2019, the library applied for and received a \$15,000 OSU President's Fellows grant to support the emerging OER program. The purpose of the OSU President's Fellows was to provide one-time funding support to OSU individuals and programs geared toward the instruction, research, and extension goals of the university. Submitted proposals could include requests for needed equipment, stipends, new program development, or program sponsorship and were required to have support from the college or unit dean or vice-president. Projects were expected to be completed within one year after the grant was received.

Because of the short completion timeline, the grant funds were used to support a larger number of OER course redesign projects rather than replicate the single-author OER textbook creation projects enacted with the one-time private donation. We named the initiative "HackYourSyllabus" and invited submissions of proposals from faculty who would shift from requiring students to purchase resources to using OER or library resources (Essmiller et al., 2021). Grants awarded a financial stipend of \$750 to faculty as well as instructional design support from the OER librarian and the Libraries' instructional designer. In addition to the smaller scale and tighter timeline associated with the HackYourSyllabus initiative, grantees signed a non-binding MOU with the library, which included a timeline, details regarding copyright and permissions, and library expectations of faculty who accepted the grants (Iakovakis et al., 2021). The course redesign projects were managed by the OER librarian according to a systematic and replicable workflow, with the final deliverable being faculty-designed syllabi integrating the use of OER and library materials for their course. Since OSU faculty are considered scholars and experts in their fields, the course redesigns did not require outside peer review. The completed syllabi were shared with the library and held on record in each of the faculty members' departments. The OpenOKState HackYourSyllabus initiative workflow is detailed in The Scholarly Communications Cookbook, edited by Brianna Buljung and Emily Bongiovanni and published by the Association of College & Research Libraries (Essmiller et al., 2021).

With the OpenOKState mission statement as a guide, the OpenOKState team asked, "But what?" and "Or what?" (Koufogiannakis & Brettle, p. 22). We considered queries such as:

- But what happens when faculty intent for continued use of the OER is unclear?
- Or what would happen if large amounts of money were not committed across several fiscal years for a few projects?
- But what happens regarding diversity of grantees if more grants are available?
- But what happens in regard to student savings?

These queries helped us *articulate* a clear question for use in comparative analysis of the two initiatives summarized in Table 21.2. We asked, "Is there a difference in student impact between the OpenOKState single-author OER textbook creation initiative and the HackYourSyllabus course re-design initiative?" Having clearly *articulated* our question, we were able to determine what data might best provide answers helpful for our continued program evaluation (Koufogiannakis & Brettle, 2016).

TABLE 21.2 SUMMARY OF OER INITIATIVES	
OER Textbook Creation Initiative	HackYourSyllabus Course Redesign Initiative
Six single-author textbooks	15 course redesigns
\$6,000	\$750
Implementation date unknown	Implementation within 12 months

Assemble

The informal team involved in this iterative evaluative process included the OER librarian, instructional design and online learning librarian, the OpenOKState graduate research assistant (GRA), the Libraries' head of teaching and learning, and the Libraries' associate dean of research and learning services. The evaluation was part of the HPT process (Van Tiem et al., 2012) for continued development of a sustainable program. The evaluation was initiated and led by the OER librarian and carried out in collaboration with library administration, faculty, and students.

Research Evidence

To answer the question "Is there a difference in impact between the OpenOKState single-author OER textbook creation initiative and the HackYourSyllabus course re-design initiative," we sought both quantitative and qualitative data. In both research and evaluation, quantitative data can help identify relationships and patterns (Yin, 2019) and qualitative data can provide understanding of those relationships and patterns (Yin, 2019; Merriam & Tisdell, 2016). We wanted to identify and understand relationships and patterns related to access to materials and the student learning experience, both of which are referred to as metrics by which to measure the impact of OER use (Nusbaum, 2020; Ossiannilsson, 2020; Baas et al., 2022).

Researchers and scholars investigating the impact of OER use have demonstrated the strength of a variety of methods for the collection of both quantitative and qualitative data. Hilton (2020) identified surveys as a widely used and reliable method with which quantitative and qualitative OER research data is collected. Colvard et al. (2018) used existing data to explore the impact of OER use, and Clinton-Lisell et al. (2021) provided a review of research evidence exploring OER and its financial impact. Informed by the findings represented in these and associated articles, we decided to conduct our evaluation using existing data collected through surveys that had been administered to courses associated with the OER textbook creation initiative and the HackYourSyllabus course revision initiative. The surveys were adapted from instruments developed by the Open Education Research Group and included questions related to students' perceptions of OER versus commercial textbooks, how much money they typically spent on textbooks, how frequently they did or did not purchase required textbooks prior to this evaluation, and whether they would

select future courses that used OER. Prior to this evaluation, Institutional Review Board (IRB) approval had been secured for the use of this de-identified existing data.

The data was analyzed through the lens of diffusion of innovation theory (Rogers, 2003) to answer questions regarding the comparative impact of the initiatives on the diffusion of OER and open practices at OSU. Diffusion of innovations theory describes how ideas or practices perceived as new diffuse through social channels over time. The theory describes compatibility as one of the five attributes of innovation that impact users' interaction with the innovation (Rogers, 2003), an attribute appropriate for comparative evaluation of the initiatives in relation to the mission and goals of the OpenOKState program.

Local Evidence

The de-identified existing survey data provided both quantitative and qualitative local evidence regarding students' perceived experiences. The de-identification of the data meant that we were unable to definitively associate survey answers with specific courses and therefore unable to tell whether the student had been in a course using materials from the OER textbook creation initiative or the HackYourSyllabus course redesign initiative. It did, however, surface patterns and provide insight into overall student perceptions of how OER use had impacted their learning experiences. For instance, Figure 21.2 shows that, overall, students who completed the surveys were somewhat or very likely to register for a course that used similar resources. Qualitative student statements such as, "Loved that we did not have to buy a textbook" and "No textbook because supplied by all notes and I love that!" helped provide understanding of the patterns present in examples such as that represented in Figure 21.2. The assessment also considered continued OSU use of the resources as well as how frequently associated courses were offered.

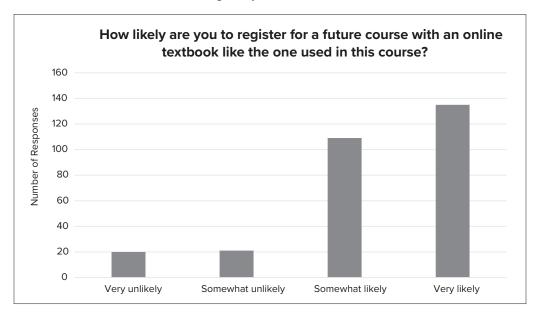


Figure 21.2 Example of existing quantitative survey data.

We also collected local evidence using the university's course catalog and enrollment dashboard. The enrollment dashboard showed the number of students enrolled in a particular course and how many remain available. The OER librarian and GRA used the dashboard to assemble data regarding how many students could be enrolled in courses associated with each initiative. This local data also facilitated a rough calculation of return on investment over time for each grant dollar awarded, represented as savings experienced by students whose courses used initiative-related resources in place of commercial textbooks.

Additional qualitative data included feedback from faculty involved in teaching courses using materials created or designed as part of the two initiatives as well as final and ongoing reports shared out by faculty creators and designers who received the actual grants. The feedback from teaching faculty provided insight into their experience using the resources, and the final reports shared out by faculty creators provided insight into their motivations for creating and using the resources. Additionally, the final reports by faculty creators provided qualitative data for use in understanding what was and what was not effective in the creation or course redesign process.

Professional Knowledge

Finally, the team determined that inclusion of information related to their personal experiences managing the projects and providing design support for authors and creators would provide relevant, authentic perspective helpful in evaluating what worked, what didn't work, and what lessons were learned over the course of the two initiatives (Koufogiannakis & Brettle, 2016). The practitioners brought professional knowledge in librarianship, teaching and learning, research, instructional design, learning science, and comparative research methodologies. This professional knowledge and experience helped fill in gaps present because of the reflective nature of the study.

For example, because the data was gathered informally rather than as part of a rigorously designed research project, we could not claim clear identification of themes; however, given the research and librarianship expertise within our team, we did feel comfortable coming to general conclusions and understandings based on the data. One of the librarians was in close contact with one of the OER textbook creation authors and knew that the OER had replaced a very expensive textbook. That contextual knowledge and expertise helped us realize how the qualitative data provided understanding of patterns surfaced in the quantitative data. Having a team member with professional knowledge of comparative research methodologies helped us see where the gaps in our methodology existed and how we might credibly address them in our analysis. The instructional designer, having experience with collaborative design and project management, was instrumental in identifying that how the workflow was structured in each of the initiatives may have been a factor that influenced their completion and eventual use.

Assess

Once the team had come to the questions that would be used to guide the reflective, comparative evaluation of the two initiatives and determined data that might provide

answers to those questions, it was important to assess whether the data would be accurate in and of itself, if it would measure what we intended to measure (Patton, 2015), and if the results would be applicable to the OpenOKState program (Koufogiannakis & Brettle, 2016). Guided by the EBLIP model, we considered whether the data told an accurate story, if it related to questions presented in associated scholarly literature, and considered both its quality and its quantity (Koufogiannakis & Brettle, 2016). The fact that the quantitative and qualitative data we collected were local ensured it would be relevant to our context.

To calculate the quantitative data related to the financial impact of OER use on student savings, the OpenOKState GRA used the enrollment dashboard to assess how many seats were available for each grant-supported course and multiplied that number by \$100. One-time use of the enrollment system to calculate students potentially enrolled in the course did not capture the reality of the number of students who may have dropped or added the course throughout the semester, but we determined that the potential seats available would still be a meaningful data point. Credibility of the \$100-per-student calculation was based on work shared out by the Scholarly Publishing and Academic Resources Coalition (SPARC). SPARC provided a transparent, detailed account of the methodology involved in calculating this recommended number for measuring savings (Nyamweya, 2018), and because of their detailed methodological account as well as their position in the field, we determined this a credible way to measure student savings.

Qualitative data that includes rich detail can yield "meaning in context" (Merriam & Tisdell, 2016, p. 1). The qualitative data gathered through the methods described in the previous section presented an opportunity for rich detail and was considered useful for helping make meaning of student and faculty experiences with OER. One of the unique aspects of the interpretation and use of qualitative data has to do with the fact that the researcher is the "primary instrument of data collection and analysis" (Merriam & Tisdell, 2016, p. 15), further indicating the strength that the team's professional knowledge brought to the evaluation.

The research question we articulated was, "Is there a difference in student impact between the OpenOKState single-author OER textbook creation initiative and the HackYourSyllabus course re-design initiative?" To assist our analysis and help scope our findings, we sorted the data and analysis into generalized themes based on the "but what" queries that had guided development of the overarching question whose answer we sought.

BUT WHAT HAPPENS WHEN FACULTY INTENT FOR CONTINUED USE OF THE OER IS UNCLEAR?

The quantitative data the GRA drew from the enrollment dashboard revealed that, over time, more of the HackYourSyllabus course redesign projects remained in use than the single-author OER textbook creation projects. As of fall 2021, all of the HackYourSyllabus course redesigns were still being used. Of the single-author OER textbook creation projects, two faculty members left the institution shortly after completion of their projects and the resources were no longer used to teach the courses at OSU. Another of the single-author OER textbook creation projects was used in a course offered intermittently and in fact did not show up on the five semesters included on the enrollment dashboard

when the GRA pulled data through fall 2021. Two of the single-author OER textbook creation projects were moved to dormant status, as one professor received a larger grant, which dominated his time and energy, and another was unresponsive to contact initiated by the library regarding the project. It appeared that when faculty intent for continued use of the OER is unclear, projects such as the course redesigns that were completed over a shorter amount of time had a higher rate of completion than the OER textbook creation projects that lacked specified completion dates and were more likely to be consistently used over time.

OR WHAT WOULD HAPPEN IF LARGE AMOUNTS OF MONEY WERE NOT COMMITTED ACROSS SEVERAL FISCAL YEARS FOR A FEW PROJECTS?

Professional knowledge, particularly that of the associate dean of research and learning services, provided insight into this query. Managing funds across fiscal years was challenging for the financial department of the library and made it difficult for the OER librarian to track. In addition, funds for projects without specific completion dates were subject to redistribution and eventual elimination. The impact of this increased workload on the financial department and OER librarian, as well as the risk to the availability of funds, suggested that shorter-term projects were easier to manage and implement.

BUT WHAT HAPPENS REGARDING DIVERSITY OF GRANTEES IF MORE GRANTS ARE AVAILABLE?

Because of the university's commitment to inclusive diversity, it was important that we consider the implications of how each initiative interacted with race and representation. Additionally, it was important to the library that not only high-enrollment courses be considered for OER funding support but also courses whose subject matter reflect the niche scholarship of our faculty and the interests of the OSU community.

The racial and gender composition of the OER textbook creation initiative grant recipients approached the composition of our student body as indicated by the OSU Office of Institutional Research and Analytics (2022) Diversity Ledger, as did the racial and gender composition of the HackYourSyllabus course redesign initiative. The team was unable, through existing data, to develop understanding of how this similarity had come to be, which meant it was difficult to predict and influence similar or better results in future initiatives.

Both quantitative and qualitative data indicated a narrow range of subject matter with the OER textbook creation initiative than with the HackYourSyllabus course redesign initiative. The large dollar amount of the individual grants awarded as part of the OER textbook creation initiative meant that only six proposals could be funded. Of those six proposals, four resulted in completed, published OER textbooks. The completed single-author OER textbook creation projects included one that represented OSU excellence in agricultural research, meeting our goal of reflecting the niche scholarship of OSU. The remaining single-author OER textbook creation projects were unique in that they were

customized for the local OSU context, but the subject matter they included was already well represented elsewhere in OER repositories.

The smaller dollar amount of the individual grants awarded as part of the HackYourSyllabus course redesign initiative meant that 15 proposals could be funded. Of those 15 proposals, 13 resulted in completed course redesigns, syllabi, and final reports from the grantees regarding the redesign process and partnership with the library. Courses associated with the HackYourSyllabus course redesign initiative included three sections of Introduction to Gender and Women's Studies, one section of Afrikana Studies, and one section of Diverse Flash Fiction, among others. The subject matter of these courses was not known by the faculty to be widely, if at all, represented in available OER materials at the time of the initiative. In addition, each of the three courses described above were redesigned by scholars well-known in their respective fields. The faculty member redesigning the Afrikana Studies course also drew on her personal lived experience and included scholarship and research associated with the Civilized Tribes and people of color in Oklahoma history, something that served both to contextualize her course for the local setting and add to a niche area of OER scholarship.

IS THERE A DIFFERENCE BETWEEN THE INITIATIVES IN REGARD TO STUDENT SAVINGS?

Once the quantitative information curated by the OpenOKState GRA was available, it became clear that, overall, the HackYourSyllabus course redesign initiative had yielded greater returns than the OER textbook creation project on investment per grant dollar spent. Analysis of the diffusion of OER on campus, however, showed that some of the efforts that yielded the largest student savings took place subsequent to and independent of each of these initiatives. For instance, a faculty member who had assisted with copyediting during the single-author OER textbook creation initiative approached the library to propose creation of a multi-author OER textbook to replace a commercial textbook in use for Technical Writing, an upper-level, high-enrollment, multi-campus course. In another example, following the HackYourSyllabus course redesign initiative, all of the faculty teaching Introduction to Gender and Women's Studies redesigned their courses to use OER and library resources.

Using diffusion of innovations theory to make meaning of this data, it appears that communication through interpersonal channels played a significant role in some of the efforts, which now boosts student savings tremendously. Looking comparatively at the available data identifiable as specific to each initiative, it appears that due to the number of courses included in the HackYourSyllabus course redesign initiative as well as their consistent implementation over time, it saves students more money by far than the projects enacted during the OER textbook creation initiative; however, the collaborative Technical Writing OER textbook creation project undertaken following the single-author OER textbook creation initiative has had a significant impact on student savings on multiple campuses.

After analyzing the quantitative and qualitative data to identify and make sense of and understand patterns and relationships responsive to our overall question about OER project impact, we found that there were complex differences and similarities. Findings of

our reflective application of the EBLIP model indicated that both the single-author OER textbook creation initiative and the HackYourSyllabus course redesign initiative added value congruent with the OpenOKState mission and vision statements. The HackYourSyllabus course redesign initiative, on the surface, had the greatest impact on student savings, number of students impacted, and subject matter included in course offerings, but further study was needed to assess the impact resulting from projects undertaken independent of the initiatives resulting from informal communication channels.

Agree

As we determined how best to "move forward based on assessment of the various sources of evidence" (Koufogiannakis & Brettle, 2016, p. 59) we considered the summarized findings shown in Figure 21.3.

Note: Comparative analysis finds there is a difference in student impact between the two initiatives.

The team agreed that a comparative analysis of the initiatives indicated that there were differences in student impact between the OER textbook creation initiative and the HackYourSyllabus course redesign initiative. Since each initiative added value congruent with the OpenOKState mission and vision statements, however, the team agreed it would be meaningful to incorporate elements of each initiative in continuing iterations of OpenOKState program interventions.

The findings of the evaluation suggested it would be useful to provide flexibility regarding project scope and timing as well as maintain availability of funding for short-and long-term projects. The team also agreed that OpenOKState program sustainability would improve if it included a predictable series of learning and creation opportunities rather than individual initiatives dependent upon private donations or grant funding from outside the library. In order to provide the consistent, flexible opportunities for engagement and creation of OER suggested by the findings of this reflective application of EBLIP, the OER librarian collaborated with the instructional designer in consultation with library administration to develop the OpenOKState Fellows initiative.

The OpenOKState Fellows initiative is intended to promote and provide flexible opportunities for ongoing, collaborative engagement with OER use and creation. The initiative includes multiple points of entry, and faculty can participate in a variety of ways. Faculty giving presentations about their experience with OER or other open practices can apply for research grants supporting conference travel. Semester-long learning circles provide a \$500 stipend for each of five faculty members working as a cohort to explore OER and open practices as they move toward a self-selected deliverable, such as locating and evaluating OER for their subject area, developing and understanding of open licenses, and developing ancillary materials for existing OER to be incorporated into their course. Faculty seeking to engage further with OER are encouraged to use their time together in learning circles to craft a materials grant proposal.

The OpenOKState Fellows initiative designed as a result of the EBLIP analysis described in this chapter includes materials grants offered at three levels. Faculty can

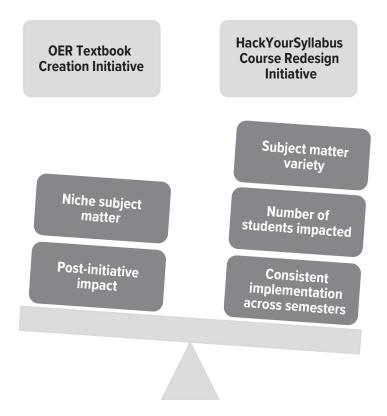


Figure 21.3Summary of findings

apply for up to \$600 to adopt and/or create ancillary materials for existing open or library resources. Up to \$2,500 can be requested by faculty seeking support to adopt, adapt, or remix resources to create customized OER. Finally, up to \$4,000 is available for faculty authoring original content and ancillary materials where no existing OER is available. The initiative also provides one \$1,000 scholarship for an undergraduate student selected by an OSU faculty member to assist in the modification or amplification of existing course materials to be made available as OER and provides funds for use in student-selected recognition of faculty, instructors, or staff who have made outstanding contributions to advance open practices and OER at OSU (Essmiller, 2022).

Adapt

We hope that the OpenOKState Fellows initiative will build on the successes evident in the OER textbook creation initiative and the HackYourSyllabus course redesign initiative. Ideally, the opportunity for sustained, scaled engagement with OER as a result of the variety of OpenOKState Fellows opportunities will address gaps pertaining to consistent implementation of grant-funded OER while also providing continued opportunity for informal communication, which appeared to continue the impact of both initiatives beyond the projects they directly funded.

Plans are underway to form a research team responsible for intentionally designed research studies that will collect and analyze data for continued measurement of the impact of OpenOKState initiatives on the student experience. These research projects will include collection and analysis of data similar to that undertaken for the assessment described in this chapter but will also incorporate systematic and intentional research methodology as recommended by Hilton (2019).

Further study is necessary to provide insight into whether and to what extent OpenOKState initiatives have informed the diffusion of OER beyond library-sponsored initiatives. This study will likely include social network analysis and focus groups to determine how informal communication channels within and across departments influences OER engagement. In addition, the research team will explore how OER and open practices facilitate innovative research practices and increase the visibility and impact of OSU scholarship beyond the state of Oklahoma.

Lessons Learned

The reflective and collaborative application of EBLIP to craft and explore the question, "Are there differences in student impact between the OER textbook creation initiative and the HackYourSyllabus course redesign initiative?" surfaced areas to celebrate regarding the OSU Libraries' climate and opportunities to build upon in relation to setting clear goals and intentionally facilitating collection and analysis of evidence for use in future program evaluation.

Trust the Experts

The climate in which this assessment took place played a crucial role in its effectiveness. The OSU Libraries center their librarians' professional knowledge (e.g., understanding, perspective, and experiences) when evaluating existing projects and considering new initiatives. The librarians associated with the OER program had flexibility and support conducive to the creative questioning necessary to identify and solve problems (Csikszentmihalyi & Wolfe, 2014).

Set Clear Goals

The OER team had "clear goals" and expectations (Koufogiannakis & Brette, 2016) informed by the findings of a human performance technology analysis previously applied to assess program sustainability (Essmiller et al., 2020). These goals and expectations provided markers that helped bring the evidence and findings generated through the team's reflective application of the EBLIP model into concrete use in designing, implementing, and assessing future initiatives (Koufogiannakis & Brettle, 2016). As the program iterates toward sustainability, this clear goal-setting will expand to include intentional design and implementation of research, which can document program success, areas for growth, and facilitate dynamic interaction with scholars and students at OSU and beyond.

References

- Baas, M., van der Rijst, R., Huizinga, T., van den Berg, E., & Admiraal, W. (2022). Would you use them? A qualitative study on teachers' assessments of open educational resources in higher education. *The Internet and Higher Education*, 54. https://doi.org/10.1016/j.iheduc.2022.100857
- Bali, M., Cronin, C., & Jhangiani, R. S. (2020). Framing open educational practices from a social justice perspective. *Journal of Interactive Media in Education*, 2020(1). https://doi.org/10.5334/jime.565
- Burke, M. (2021, September 20). OSU wins national diversity honor for 10th straight year. *OSU News and Headlines*. https://news.okstate.edu/articles/communications/2021/osu_wins_national_diversity_honor_for_10th_straight_year.html
- Clinton-Lisell, V., Legerski, E. M., Rhodes, B., & Gilpin, S. (2021). Open educational resources as tools to foster equity. In C. Ozaki & L. Parson (Eds.), *Teaching and learning for social justice and equity in higher education* (pp. 317–337). Palgrave Macmillan, Cham.
- 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.
- Dessinger, J. C., Moseley, J. L., & Van Tiem, D. M. (2012). Performance improvement/HPT model: Guiding the process. *Performance Improvement*, 51(3), 10–17. https://doi.org/10.1002/pfi.20251
- Essmiller, K. (2022, July 22). *OpenOkState Fellows*. Edmon Low Library & Branch Libraries. https://info.library.okstate.edu/openokstatefellows
- Essmiller, K., Iakovakis, C., & Upson, M. (2021). The HackYourSyllabus mini-grant: A bite-sized OER incentive program. In B. Buljing & E. Bongiovanni (Eds.) *The scholarly communications cookbook* (pp. 78–81). Association of College and Research Libraries.
- Essmiller, K., Thompson, P., & Alvarado-Albertorio, F. (2020). Performance improvement technology for building a sustainable OER initiative in an academic library. *TechTrends*, 64(2), 265–274 (2020). https://doi.org/10.1007/s11528-019-00467-2
- Hilton, J. (2020). Open educational resources, student efficacy, and user perceptions: A synthesis of research published between 2015 and 2018. *Educational Technology Research and Development*, 68(3), 853–876. https://doi.org/10.1007/s11423-019-09700-4
- Iakovakis, C., Essmiller, K., & Upson, M. (2021). Unspoiled broth: A memorandum of understanding for chefs cooking up OER. In B. Buljing & E. Bongiovanni (Eds.), *The scholarly communications cookbook* (pp. 114–117). Association of College and Research Libraries.
- Koufogiannakis, D., & Brettle, A. (Eds.). (2016). Being evidence based in library and information practice. Facet Publishing.
- Larson, A. (2020). Open education librarianship: A position description analysis of the newly emerging role in academic libraries. *The International Journal of Open Educational Resources*, *3*(1). https://doi.org/10.18278/ijoer.3.1.4
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation.* John Wiley & Sons.
- Miao, F., Mishra, S., Orr, D. and Janssen, B. (2019). *Guidelines on the development of open educational resources policies*. UNESCO Publishing. https://unesdoc.unesco.org/ark:/48223/pf0000371129
- Nusbaum, A. T. (2020). Who gets to wield academic Mjolnir? On worthiness, knowledge curation, and using the power of the people to diversify OER. *Journal of Interactive Media in Education*, 2020(1). https://doi.org/10.5334/jime.559
- Nyamweya, M. (2018, December 20). A new method for estimating OER savings. SPARC.org. https://sparco-pen.org/news/2018/estimating-oer-student-savings/
- Ossiannilsson, E. (2021). Human rights and social justice through open educational resources and lifelong learning. *Macro Management & Public Policies*, 3(1). https://doi.org/10.30564/mmpp.v3i1.2925
- OSU Division of the Vice President for Research. (2022). OSU research matters. https://research.okstate. edu/ $\,$
- OSU Institutional Research and Analytics. (2022). *Cowboy data round-up*. https://ira.okstate.edu/cdr/index html
- OSU Libraries. (2018). *Mission & vision*. https://library.okstate.edu/about/dean-of-libraries/mission-statement
- Oklahoma State University [OSU]. (2022a). About OSU. https://go.okstate.edu/about-osu/

- Oklahoma State University [OSU]. (2022b). *Graduate and professional education*. https://go.okstate.edu/graduate-academics/index.html
- Oklahoma State University [OSU]. (2022c). OSU institutions. https://go.okstate.edu/about-osu/institutions. html
- Oklahoma State University [OSU]. (2022d). *University leadership*. https://go.okstate.edu/about-osu/university-leadership.html
- Patton, M. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Sage Publications.
- Rogers, E. (2003). Diffusion of innovations (5th ed.). Free Press.
- Van Tiem, D., Moseley, J. L., & Dessinger, J. C. (2012). Fundamentals of performance improvement: Optimizing results through people, process, and organizations. John Wiley & Son.
- Wiley, D., Webb, A., Weston, S., & Tonks, D. (2017). A preliminary exploration of the relationships between student-created OER, sustainability, and students' success. *International Review of Research in Open and Distributed Learning*, *18*(4), 60–69. https://doi.org/10.19173/irrodl.v18i4.3022
- Wilmoth, F. S., Prigmore, C., & Bray, M. (2002). HPT models: An overview of the major models in the field. *Performance Improvement*, 41(8), 16–24.
- Yin, R. (2019). Case study research and applications: Design and methods (6th ed.). Sage Publications.