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# Letter from the Editors

Kristina Clement<sup>1</sup>

Hilary Baribeau<sup>2</sup>

Amanda Larson<sup>3</sup>

Sabrina Davis<sup>4</sup>

Chelsee Dickson<sup>5</sup>

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To our readers:

I am both humbled and exhilarated to extend a warm greeting as we unveil the second issue of the *Journal of Open Educational Resources in Higher Education*, which is dedicated to the exploration, discussion, and dissemination of Open Educational Resources, Open Pedagogy, Open Access, Open Data, and more. The journey from our inaugural issue to this moment has been nothing short of remarkable and is a testimony to the steadfast spirit of our team and the support of our scholarly community.

The first issue of JOERHE was a resounding success, an accomplishment that owes its existence to the efforts of our founding team. We embarked on an uncharted journey, fueled by a shared vision to catalyze innovation, inclusivity, and accessibility in higher education. Despite our small team, we managed to transform our nascent vision into a tangible reality, replete with insightful content that resonates with educators, learners, and librarians across the higher education landscape.

As the adage goes, “success is not the work of one, but the work of many.” In the wake of the inaugural issue’s success, we have seen a heartening expansion of our editorial staff. We were so pleased to have Amanda Larson and Sabrina Davis join our team as Associate Editors for Papers. Amanda and Sabrina bring diverse experiences and fresh perspectives to JOERHE. We were also pleased to add Chelsee Dickson to our editorial staff as the associate editor for a new section: Innovative Practices. The Innovative Practices section consists of short-form, practical, applicable, case-study type articles that are not research-based and provide a description of a practice, innovation, or program that is replicable and/or useful for individuals in higher education who are engaged in Open Pedagogy, Open Data, and/or Open Educational Resources. I have confidence that this will

become one of our most popular and useful sections of JOERHE. We were also pleased to bring on new copyeditors, Sara Satkowiak and Brianna Parfaite, to help manage the increase in content alongside our original copyeditors, Rhianna Murphy and Jennifer Carter. I would also like to recognize our returning Columns Editor, Elizabeth Batte, whose deep knowledge of OER always proves valuable. And, of course, we thank our Editorial Advisory Board for their constant support and counsel.

The process of expanding our team has been a rewarding experience. Witnessing the collaborative spirit, the exchange of ideas, and the shared commitment to excellence has been genuinely inspiring. Our combined effort has not only enriched the quality of the publication but also enhanced our capacity to explore more diverse and complex topics. In this second issue, readers will experience the direct impact of our team's expansion. The diversity in content and the quality of the open peer reviews for articles and Innovative Practices reflect the collective contributions of our expanded editorial staff. Our ongoing commitment is to ensure that every issue surpasses the previous one, offering our readers valuable insights, practical solutions, and engaging content that moves the conversation about Open Educational Resources forward.

I want to end this letter with a special recognition of our Managing Editor, Hillary Baribeau, whose tireless efforts and unwavering dedication have been the bedrock of JOERHE. She is, undeniably, the heart of our entire operation. Her skillful management, keen eye for detail, and unmatched commitment to excellence have been instrumental in shaping our publication. Without her, this journal would remain an unfulfilled aspiration. The breadth and depth of her contributions can hardly be encapsulated in words, yet is felt on every page, in every article, innovative practice, column, review, and open peer review, echoing the meticulousness and passion that defines her character. Thank you, Hilary, for being my constant partner with this publication. I absolutely cannot do this without you.

*Kristina Clement  
Editor-in-Chief*

This year JOERHE's mission has been about growth and trying new things. It's a mandate that embraces creativity and innovation that I hope will embody the spirit of the journal going forward. I am so pleased that this year we have grown our editorial staff to ensure that our publishing practices are continuously viewed through a critical lens. This journal embraces trying new things over prestige, and I am so proud of that. I truly believe that our publishing structure reflects the content that we publish: we work to create a transparent practice that builds community and creates an attribution structure that acknowledges the labor that goes into the production of JOERHE at all stages. This, in turn, helps us to support JOERHE authors to produce meaningful and insightful content. I am so proud of everyone on the JOERHE team, the Associate Editors, the Section Editors, and Copy Editors, for jumping into this experience with their whole hearts and for being willing to explore,

question, and create. I feel like this is the best of OER publishing. And my deepest, most heartfelt thanks to JOERHE's Editor-in-Chief, Kristina, for her unwavering faith in me as we committed to a process that would constantly be under development and open to new ideas, new voices, and always asking, "is there a better way to do this?" Thank you. To our authors and to our peer reviewers, you are the heart of this journal. Thank you for everything that you do for your institutions, your communities, and for OER.

*Hilary Baribeau*  
*Managing Editor*

I am thrilled to serve as an Associate Editor for Papers at the *Journal of Open Educational Resources in Higher Education*. My initial involvement with the journal was as a peer reviewer, which introduced me to the benefits of open peer review in practice. I was thoroughly convinced of its value to both authors and reviewers, as it fosters true "scholarship as conversation" throughout the review process. My first year at the journal feels like it was a whirlwind of communication – between authors and peer reviewers – to make the issue come together. The amount of care, compassion, and empathy that peer reviewers provided in their feedback to authors and the reciprocity of that care in the deep consideration that authors took in implementing that feedback in the articles I was charged with overseeing was truly awe-inspiring.

Even though, I already had editorial experience to my credit prior to joining JOERHE, enough cannot be said about the intentionally collaborative, nurturing, and transparent environment that Editor-in-Chief, Kristina Clement, and Managing Editor, Hilary Baribeau created for all of us as we onboarded onto the journal. I am appreciative of the brave space they offered for us to learn the ins and outs of this publication and for instilling in us a shared ownership over the process. I would like to thank Hilary, especially, for her endless patience with my questions and concerns, for always being willing to hop on a call to talk through decision-making, and for bringing us all together to discuss the process, ask questions, and build community. To my fellow Associate Editors and Copyeditors, I am grateful for the work that you've put in to bring this issue to fruition and for showing up to every meeting ready to collaborate and ask questions.

It is my pleasure to have overseen the editorial process for four articles featured in this issue. Among them, Rachel Chandler's "A Bibliometric Study of Research on Open Educational Resources and Higher Education: Assessing Trends and Scholarly Productivity in Library and Information Science" offers valuable insights into publication productivity, core authors, core journals, and research topics in the publishing landscape. Meanwhile, Dan Ehrenfeld and Christopher Iverson explore the impact of OER Processes on community re-establishment at Farmingdale State College after the COVID-19 pandemic in "The Creation of an OER to Restore and Maintain a Writers' Community at a Regional Public College." Abbey Elder and Intiajul Alam present their findings from a 2022 survey on instructor awareness of the three affordable course material initiatives available at Iowa State

University and how those results impacted their outreach programming about those programs in their case study, "Assessing the Impact of a Collaborative OER & Affordable Resources Committee: Instructors' Awareness of Course Material Options." Lastly, Amy Smith, Jamie L. Workman, Taralynn Hartsell, and D. Laverne Hill conducted a qualitative case study at a community college in "Open Educational Resources: Collaboration between Community College Librarians and Faculty" to gain a deeper understanding of how librarians and faculty collaborate to adopt OER.

*Amanda Larson*  
*Associate Editor for Papers*

I was so excited when I was asked to serve as an Associate Editor for Papers this year at the *Journal of Open Educational Resources in Higher Education*. As an OER Librarian, I value access to information and continually see the benefits of open scholarship for authors, students, and society at large. Having the opportunity to work with a diamond open access journal that does open peer-review seemed exciting. JOERHE is working to change the scholarly publishing environment and I'm thankful to have played a small part in making that happen.

My first year at JOERHE was an incredible learning experience in navigating the journal scholarly publishing landscape. When I first started as Associate Editor, I had not had the opportunity to submit a paper for publication in a journal and, to be honest, the entire process seemed daunting. Having the ability to see the process from the "back end" with the amazing group at JOERHE has helped to not only boost my confidence to submit my own work to a journal, but it has also helped me be a more compassionate scholar. At JOERHE, we want our authors to succeed by helping them produce the best possible output of their hard work, and that culture of care is embedded in all of those involved with the journal. This culture of compassion and care at the journal was strengthened by communication. Effective communication permeated all of the work that we did with one another as well as how we interacted with our authors. We strove to help our authors showcase the very best of their scholarship and I think that our culture of communication and compassion will be evident in this issue.

I would be remiss if I did not provide a huge shout-out to the Editor-in-Chief, Kristina Clement. Her guidance, words of encouragement, and humor have had a profound impact on my career thus far and I am thankful to call her both a colleague and friend. I also want to give an equally large shout-out to our Managing Editor, Hilary Baribeau. She was incredibly patient with me throughout this entire year and I cannot thank her enough for that! I also want to thank her for helping to create a collaborative environment between all of the Associate Editors and Copyeditors. Seeking our input and encouraging us to learn from one another only helped to make this issue better! Lastly, I want to shout-out my fellow Associate Editors and Copyeditors. This is an incredibly talented group of open scholarship enthusiasts and I am so grateful that I got to learn from you this year!

I had the pleasure of editing three articles for this issue. In “Catalysts of Open Education in Colorado,” author Maya Hey discusses the enabling forces that helped the state of Colorado become a leader in state-wide open education initiatives and how these forces could provide insight into how other states can build or sustain similar initiatives. Authors Andrea Schuler and Alyn Gamble outlined how they performed a faculty listening tour at their mid-size university to gain a better understanding of the perceptions, use, and development of OER at their institution in their article “OER by Any Other Name.” And, in “Reimagining Leadership in Open Education,” members of the Regional Leadership of Open Education (RLOE) Network wrote about their experience in creating a human-centered network that brought together open education leaders and helped them lead systematic-change at their institutions.

*Sabrina Davis*  
*Associate Editor for Papers*

My first year as the Associate Editor of Innovative Practices, Columns, and Reviews for the *Journal of Open Educational Resources in Higher Education* has been a fantastic learning experience in author-editor communication, open peer review, and new and exciting work in the field of open education. I have the unique perspective of both an associate editor and an author, as I published an OER review in the previous issue of JOERHE. Experiencing the process from both sides is eye opening—I was treated with such care, empathy, and respect as an author, and as an associate editor I was encouraged to provide the same treatment to my authors. Every article received was read thoughtfully and thoroughly, and authors received communications throughout every step. Communication is key and welcomes authors into the publication process—this is not always the case with other journals. It is my hope that each author felt appreciated and heard.

JOERHE is a trailblazer in many ways but most notably in their inclusion of open peer review. Though I am familiar with blind and double-blind peer review, I was unaware of open peer review until I began working with JOERHE. Open peer review has many positives in my opinion: it holds reviewers accountable for their critiques, allows authors to connect a name (and an actual human) with a review (rather than ambiguous and anonymous comments), and encourages transparency in the review process. Transparency is an integral aspect of open education, open access, and open scholarship, and opening the peer review process aligns with the mission and vision of JOERHE.

Working with the editors on the upcoming issue has also been enriching. Many thanks to our Editor-in-Chief, Kristina Clement, for her ideas, flexibility, and positive attitude. Managing Editor, Hilary Baribeau, has taught me much about communicating with authors, the thought work that goes into creating a diamond open access journal, and following correct procedures throughout the publication process. Our copy editors have ensured the content in this issue is polished, and their hard work is vital to JOERHE’s readability. My first year as an associate editor was exceptional because of the

collaboration and connections made with my fellow associate editors; thank you for your insights during our check in meetings (and beyond).

In this issue, our columns, overseen by Columns Editor, Elizabeth Batte, include an intriguing description by Nancy Lawson Remler and Janel J. Smith of an Affordable Learning Georgia funded open textbook about performance standards to support preservice teachers. Our second column, written by Molly Wiant Cummins and Melanie Mason, asks readers and educators to consider adding human audio components to OER. Innovative Practices, the newest section of JOERHE, focuses on actual, practical work with open educational practices, providing readers with easily digestible and inspiring case studies. Within Innovative Practices, Joanna Thompson and Joshua Peach have written a piece about building a community of OER supporters through a paid professional development training program for librarians; Tiffani Tijerina describes integrating “ungrading” within technical communication courses; Beth Burnett, Nikki Cannon-Rech, Rebecca Hunnicutt, and Jeffrey Mortimore ensure OER are discoverable in an institutional repository by using hybrid metadata standards; and Karina Lissette Cespedes and James R. Paradiso utilize PhotoVoice and qualitative research to incorporate students into an open pedagogy project. Finally, our Reviews section features a balanced take by Leslie Drost on an OER titled *Rhetoric Matters: A Guide to Success in the First Year Writing Class*. Our authors are quite talented and are pioneering novel ideas with OER. Let their words and stories challenge and inspire you.

*Chelsee Dickson*  
*Associate Editor for Innovative Practices, Columns, and Reviews*

# Acknowledgments

## *Peer Reviewers*

Open peer review is an adventure and a brave undertaking. We want to thank all of our peer reviewers who helped us to finalize decisions on our papers. We could not do this without you.

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Mélanie Brunet	Louise Lowe	Teresa Schultz
Lindsey Gwozdz	Dr. Megan Lowe	Denis Shannon
Sarah Hare	Joyce Martin	Brenda Smith
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*Note: 'Letters from the Editors' are not peer-reviewed and reflect the individual opinions of the editor(s).*

# KEYS to Teaching Success: OER Supports Georgia's Preservice Teachers

Nancy Lawson Remler<sup>1</sup>

Janel J. Smith<sup>2</sup>

Keywords: Teacher Preparation, OER, Preservice Teachers, Teacher Shortage

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## Introduction

“Professional dress doesn't make a teacher. Comfort does.”

A preservice teacher (PT) wrote this comment during a recent orientation session prior to starting a practicum experience. During a discussion about professional appearance, the PT had just reviewed Georgia's policy for teacher attire and grooming. While the statement makes sense in some respects and lacks logic in others, it speaks to the confusion PTs experience as they develop their professional skills.

In the past few years of supervising PTs at [Georgia Southern University](#), we observed that such confusion arises from several sources. First, PTs learn one set of expectations from teacher preparation courses but then different behaviors among faculty in practicum settings. Also, we have observed that PTs are often unprepared to communicate formally with classroom/university supervisors, especially when receiving constructive feedback or asking for clarification or guidance. Furthermore, PTs have questioned the

fairness of expectations to demonstrate multiple professional skills simultaneously—professional appearance, ethical compliance, professional communications, subject matter knowledge, and pedagogical knowledge—while they are still learning about them.

After reflecting on much anecdotal evidence, we recognized a critical gap in how Georgia prepares PTs for the profession. While the state provides a ten-standard rubric, titled [InternKEYS](#), to communicate how PTs will be assessed to earn initial certification, teacher preparation programs must draw from varied sources—texts, videos, and presentations—to help PTs meet those ten standards. So we wondered, *What would be the impact of a composite resource that directly aligns with the InternKEYS standards?*

With grant funding from [Affordable Learning Georgia](#), we recruited a team of writers, reviewers, and editors to develop and pilot the first component of [KEYS to Teaching Success](#), a digital, open text to support all PTs in Georgia, whether

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enrolled in traditional university teacher education courses or alternative teacher preparation programs. We're encouraged by its impact on PTs' performance and confidence. Even better, we're also reaping rewards in the development process as we collaborate with other teacher preparation faculty, classroom teachers, and PTs themselves.

## Meeting the Standards

The ten performance standards outlined in *InternKEYS* mirror the standards of the [Teacher KEYS Effectiveness System](#), the assessment Georgia uses for all its K-12 faculty. In short, all teachers and prospective teachers should meet standards under the following categories:

1. Professional Knowledge
2. Planning
3. Instructional Strategies
4. Differentiation
5. Assessment
6. Use of Assessment Data
7. Positive Learning Environment
8. Challenging Learning Environment
9. Professionalism
10. Communication

Through classroom instruction and field experiences, PTs engage in scaffolded opportunities to progress toward mastery of the ten InternKEYS standards. Field placements in K-12 classrooms enable PTs to address most of those standards. PTs also complete specific courses in content knowledge and pedagogical content strategies to accompany field placements. However, no courses in their programs include student learning outcomes targeting ethical compliance, appropriate teacher attire, appropriate online behavior (which are expected under Standard 9), professional written and spoken communications, or collaborating/ networking with colleagues (which are expected under Standard 10). PTs must use supplemental materials and model those skills through various courses.

From 2019 to 2021, PT behaviors indicated gaps in several performance areas: avoiding person-to-person interactions with school personnel; avoidance of conversations when confused about supervisors' feedback; sending unedited, unclear email messages to supervisors; or dressing in athletic wear for field placements (or wearing clothes too formal for such work). While such skills are mentioned piecemeal on syllabi and in orientation sessions, the absence of direct instruction suggested a need for specific information to *show* PTs what the state of Georgia expects of its educators.

The first component of *KEYS to Teaching Success*, then, aligns directly with Standard 9 and Standard 10. Each topic in this resource not only elaborates on expected behaviors and skills but also explains the reasons behind those expectations and offers various specific scenarios to exemplify appropriate and inappropriate choices.

For instance, an important topic included under Standard 9 is appropriate teacher attire. The content first includes an explanation of the state policy for Georgia teacher appearance. It then explains that the rationale for the policy is for teacher/student safety, reasonable teacher mobility, and avoidance of learning distractions. Images of actual teachers (licensed under [Creative Commons](#)) illustrate appropriate and inappropriate choices according to Georgia's policy. More importantly, those images demonstrate that where teacher appearance is concerned, PTs have flexibility in making appropriate choices while also avoiding definite inappropriate ones.

## Impact on PT Performance

We piloted the initial two components during Fall 2022 orientation sessions prior to teacher field placements in one secondary education program. For junior-level PTs beginning their initial coursework and field placements, they were engaged through reading assignments,

self-assessments, small group activities, and large-group discussions. These PTs examined their existing knowledge of professional skills and reflected on new knowledge that would help them succeed in their upcoming internships. Senior-level PTs read segments of *KEYS to Teaching Success* and reflected on areas for improvement based on their senses of self-efficacy and previous formal assessment results.

Assessment data were encouraging. After using the OER during Fall, 2022, we assessed not only PTs' abilities to meet Standards 9 and 10 but also their perspectives on the resource itself. PTs said the specific scenarios under each topic "enhanced [their] understanding of material" by showing them "ways to apply concepts," especially those illustrating compliance and non-compliance with [Georgia's ethical code for educators](#), which "brought professionalism to life and made it real."

Quantitative data from surveys also indicated a positive impact on PTs' professional skills. Over seventy percent of PTs at the junior level ranked the professionalism materials (Standard 9) as "very effective" and the remaining as "effective." Over ninety percent of these same candidates evaluated the communication resources as "effective" or "very effective" with some variation within the overall portions of the communication chapter. At the senior level, more than fifty percent of PTs evaluated the communication resources as "very effective" with the remaining evaluations as "effective" for content about professionalism and communication.

These results also reveal that PTs found the OER effective. Junior level students rated the communication chapter with more "effective" than "very effective" scores, which may be due in part to the depth and perceived relevance of the material in their program. Senior level students scored more "effective" levels, which may indicate a need to add specific examples and make other adjustments to support varied readers/users of the resource.

Anecdotal data also indicate the positive impact of this resource. For instance, when PTs email us with questions about internship procedures, they typically follow the formatting guidelines they learned from the content under Standard 10. When they submit teaching demonstration videos, we notice fewer attire choices that warrant intervention. Their spoken and written reflections indicate a heightened awareness of the effects of their online behavior. As one PT noted, "One assessment helped greatly, the call to Google myself in Chapter 9. [It] gave me an interesting perspective of how easy it is for people or companies to gain access to my information or photos I have made public."

## Cost Effectiveness

Another positive outcome of developing *KEYS to Teaching Success* is that it helps reduce the cost of teacher preparation. Although teachers earn modest salaries (at best), the path to teacher certification is costly (Espinoza, et al. 2018; Lambert, 2023). People seldom understand the expenses PTs incur as they work toward their profession. Tuition, fees, and textbooks take up the bulk of those costs, but preservice teachers must also pay for travel to and from field placements, which often involve distances up to 70 miles one way. Liability insurance, professional attire for the classroom, certification exams, and classroom materials add to a PT's expenses.

The pressure to cover those costs is a common reason for attrition in teacher education programs. Mitigating those costs is challenging, but scholarships, clothes closets, and carpools can only do so much. As a no-cost, digital text, *KEYS to Teaching Success* reduces and sometimes eliminates textbook costs.

While designed to address PTs' initial knowledge of InternKEYS indicators, *KEYS to Teaching Success* embeds instructional text, photos, and scenarios for reflection, which enhance its

versatility, thereby maximizing its cost efficiency. Because it can be used at multiple levels of a PT's development, faculty, supervisors, and other administrative personnel (such as advisors) can use it to introduce a topic, reinforce skills, support remediation plans, or inspire written PT reflections.

Not only that, but the resource is also a strong step toward supporting PTs' transition to the profession. [A 2022 study and symposium on teacher burnout](#) includes in its list of recommendations "establishing strong induction and mentoring programs for beginning and struggling teachers" (Carl Vinson Institute, 2022, p. 17). We already have initial data indicating the value of *KEYS to Teaching Success* in teacher preparation, but it can also be used as a support resource during professional improvement plans for PTs falling short of professional expectations. As an openly accessible resource, *KEYS to Teaching Success* is also available to faculty and school administrators as support materials for teachers in their crucial first years.

## Fostering Professional Community

One important goal of this project was to give all content a thorough peer review. Knowing that many faculty question the quality of OER (Martin & Kimmons, 2019; Irvine, Kimmons & Rogers, 2021), we organized a development process to garner feedback from those who would teach with that resource, those who would learn from the resource, and those who would eventually call those learners colleagues. Our grant enabled us to recruit a diverse team of PTs, public school teachers, and teacher educators to offer constructive feedback using a rubric modeled after Swaffield's (2004) [Critical Friends Protocol](#). They suggested content revision and reorganization, and occasionally requested additions influenced by their own professional experiences.

From urban, suburban, and rural Georgia districts, our team members represented multiple disciplines, including all four core subject areas (math, ELA, science and social sciences). They also represented various cultural backgrounds and multiple levels of experience.

The collaboration enabled new and preservice teachers to engage in a grant-funded endeavor, which was a valuable form of professional development. They also appreciated the opportunity to "review performance standards 9 and 10," which made them more aware of "how well [their] actions aligned with or could better align with exemplary levels" of performance. The more seasoned team members appreciated the chance to learn more about school districts in other parts of the state, especially how those districts oriented and supported new faculty.

Throughout the collaborative process, the team became a small statewide professional community, lending a pay-it-forward spirit of scholarly writing, which gives *KEYS to Teaching Success* a strong chance of persisting and growing.

## Conclusion

While we initially intended *KEYS to Teaching Success* to be applicable to curriculum courses and field experiences, its expansion will make it useful in methods and assessment courses. Colleagues at our university have adapted it for use in pre-professional education courses for students who intend to declare education majors. Now that we've seen how our initial installment of *KEYS to Teaching Success* has made a difference to our future teachers, we've identified several goals as we add content for the remaining standards.

One objective is consistent assessment of new and existing content, especially its use of professional language. PTs express frustration when different faculty/supervisors use different terminology to communicate the same skills and pedagogical concepts. Although these differences often reflect

nuances in the changing field of education, *KEYS to Teaching Success* can better support PTs' entry to the profession by maintaining language norms that will scaffold PTs' effective use of professional discourse. Over time, as the discourse evolves, we can adapt *KEYS to Teaching Success* to reflect those trends. Regular content updates enhance cost efficiency while also ensuring materials address current standards and highlight research-informed best practices.

Our team is already at work to develop additional segments addressing two more InternKEYS standards: Professional Knowledge (InternKeys Standard #1) and Positive Learning Environment (InternKeys Standard #7). Those segments will help PTs refine their skills in making subject matter relevant to students and build their confidence in managing K-12 classrooms. Developing these new components points to another goal for this OER: helping PTs understand the connection between policy and practice. In Georgia, recent legislation—collectively referred to as “[Divisive Concepts Laws](#)” and “[The Parents’ Bill of Rights](#)”—directly relates to how teachers lead classroom discussions, select instructional texts, and communicate these selections to parents (Office of the Governor, 2022). New content in *KEYS to Teaching Success* can illustrate effective ways PTs can employ best practices while also complying with the law.

Although *KEYS to Teaching Success* was designed with Georgia standards in mind, teacher preparation programs in other states can adapt its content to align directly with their own standards, especially after the resource grows. Any teacher, regardless of location, must plan appropriately, teach effectively, meet the needs of varied learners, and assess accurately. While the InternKEYS rubric outlines state-specific expectations of those teaching skills, the content of our digital resource can be adapted to suit the various ways other states outline their expectations.

Of course, as this resource grows, it opens more opportunities to investigate the overall value of OER. If further assessment data indicate potential to support preservice *and* new teachers, then those data will add to the knowledge base of OER's impact on America's teacher shortage and perhaps professional skills in general.

## Acknowledgment

*KEYS to Teaching Success* was funded by a Continuous Improvement Grant from [Affordable Learning Georgia](#), an organization dedicated to “supporting the adoption, adaptation, and creation of affordable and open educational resources” by faculty and staff within the University System of Georgia.

The development team for *KEYS to Teaching Success* included the two authors as well as the following Georgia Southern faculty, Georgia public school faculty, and preservice teachers: Nathania Cortes, Sabra Lawson, Ricky Robinson, Heather Scott, and Craig Showers.

Developing *KEYS to Teaching Success* presented no conflict of interest for the development team, their employers, their schools, or Affordable Learning Georgia.

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# Equity and Innovation: Adding Human Voice to OERs

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Keywords: OER, UDL, Audiobooks, Human Voice, Synthetic Voice

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## Introduction

In 2020, Bahrainwala posited that student precarity—continual wage insecurity—is “shaping a generation of U.S. college students that suffer continually under poor material conditions, exploitative work schedules, and institutions that do not recognize their precarity” (p. 250). Using various statistics, Bahrainwala (2020) explained that 60% of U.S. college students were food-insecure in 2019, that over two-thirds of students graduate with an average debt of \$30,000, and 25% of students work full-time while 40% work at least 30 hours a week (p. 250). For example, according to a U.S. News and World Report profile, as of fall 2021, 39% of students at our university (University of Texas at Arlington) were awarded Pell Grants in the 2020-2021 academic year. At least at our university, the traditional student (attending college right out of high school, living on campus, not working/caretaking for family) is uncommon. Instead, our students may represent the emerging majority student “characterized as being of a racial or ethnic minority, low socioeconomic status, 25 years of age or older, and [are] often the first member of their immediate family to go to

college” (Goode et al., 2022, p. 21). Or they may be what the American Council on Education (n.d.) terms post-traditional learners.

In addition to student precarity, especially as emerging majority or post-traditional students, many students also face accessibility challenges. For the 2015-2016 school year, the National Center for Education Statistics estimated that 19% of undergraduates had a disability ranging from physical to learning disabilities. Yet, according to Bernard Grant at Best Colleges (2023), “Only 17% of college students with learning disabilities take advantage of learning assistance resources at their school.” Thus, many students are facing multiple barriers to accessible education. While accessibility often relates specifically to accommodations for disabilities, we broadly consider accessibility to refer to the ability to access the materials, whether that be physical and learning disabilities, financial accessibility, technological accessibility, or otherwise.

Some instructors have attempted to help address these concerns through the adoption and use of Open Educational Resources (OERs). When

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questions of access arise, however, McWilliam (1999) reminds pedagogues to question what concept(s) does the word “access” refer to, as answers to this question belie motivations for access. For us, access is from a Universal Design for Learning (UDL) approach to education, which works well with OERs aimed at levelling playing fields toward greater student equity. Educators recognized that many students, regardless of ability, “faced barriers and impediments that interfered with their ability to make optimal progress and to develop as educated and productive citizens” (Meyer, Rose, & Gordon, 2014, p. 3). UDL is premised on “equitable opportunities to reach high standards” for all students through “multiple means” of engagement, representation, and action and expression (Meyer, Rose, & Gordon, 2014, p. 4). With the idea of multiple means of engagement in mind, we argue that OER creators and utilizers (i.e., authors and instructors) consider adding a human voice audio component to their OERs. We begin by discussing UDL in more detail before reviewing work on audio “reading” and the importance of human voice. This column details a feasibility study we undertook and underscores that, while a professional human audio component might be cost-prohibitive, creators and utilizers can still create (human) voice audio components for their OERs that open access to more students.

## A Better Understanding of UDL

Meyer, Rose, and Gordon (2014) claimed UDL focuses on “the three-network model of learning” of affective, recognition, and strategic networks to account for learner variability (p. 51). As a result, the UDL framework moves those students considered marginalized in traditional education systems (e.g., due to disability or unmet resource needs) and recognizes them as “part of the predictable spectrum of variation” of learners (p. 51). For instance, in a traditional education system, some students may struggle with the printed text

(e.g., students with difficulty seeing; students with dyslexia). This places the locus of the problem on the student. However, from a UDL perspective, Meyer et al. (2014) explained, “A core tenet of UDL is the understanding that what is ‘essential for some’ is almost always ‘good for all’” (p. 51). By this logic, the printed text becomes the locus of the problem. Instead, Meyer et al. (2014) suggest, “Providing content in multiple media supports those who require it (essential for some) but also supplies a rich cognitive learning environment where varied options and interactivity create a more nuanced experience, enabling learners to explore the content from multiple points of view (good for all)” (p. 54). Moreover, they posited that new media have “shattered the old model” of what is considered literacy. Instead, the “digital environment” allows for learners to “act on materials” to change the materials and for students to be accountable for their own learning (p. 50). Technology options are, as Meyer et al. (2014) pointed out, “among the most obvious” when it comes to offering multiple ways for learners to interact with text (p. 54). Multiple modes of representation can increase learners’ strengths and “need not hold learners back” (p. 54). In the case of printed text, another representation of the material can be text-to-speech.

## Audio Reading and the Importance of Human Voice

Because of the openness of OERs to various remixing, OERs work well with a Universal Design for Learning (UDL) approach that is invested in multiple modes of representation. Undoubtedly, the COVID-19 pandemic has worsened the precarity and lack of access many of our students are already facing (Lai, 2021). Especially with the pandemic, more readers are accessing books through audiobook formats (Tattersall Wallin & Nolin, 2020). Additionally, research has shown that human voice overs (rather than artificial intelligence) are preferred for stories

(Rodero & Lucas, 2021), and that spoken words have instructional benefits for students (Kalyuga, 2012).

Have and Pedersen (2016) noted that there is a major transition in the work required from the brain when moving from print to sound. A listener's cognitive mapping of a narrative is more demanding with reading, but this can be lessened by the performing voice. Commonly, some OER creators and utilizers turn to synthetic voices (e.g., voice-to-text software), but Gregg (2022) has shown that "high-quality synthetic speech is not at the point where it can replace a human audiobook speaker..." (p. 315). Despite the technology continuously improving, current synthetic voices add to extraneous cognitive load, or the working memory load, experienced by learners as they interact with instructional materials (Chandler & Sweller, 1991).

A trained, prosodic voice, on the other hand, can contribute to the text a "physical and mental interpretation, and the shift from experiencing the book with the eye to experiencing it with the ears has a great impact both on the literary experience and on how we experience our surroundings while reading" (Have & Pedersen, 2016, p. 29). Thus, a human voice audio component can enhance a listener's comprehension and experience of a text. Fortunately, the amount of cognitive load a reader experiences is something that educators and instructional designers have some ability to impact positively.

## Feasibility Study

With these ideas in mind, we undertook a feasibility study using Tucker et al.'s (2019) fourth edition of *Exploring Public Speaking*, an open-access text used across the multiple sections of our university's Fundamentals of Public Speaking course. Originally, we sought to create a professional audio component for one of the chapters of the text for use in the university course.

Both authors have backgrounds in theatre and/or performance studies and Melanie co-owns an audio recording company. We presumed that between us, we could choose an example chapter to then roll out across the sections for student and instructor use.

Our feasibility study considered the evaluation of resources in creating a human audio component to accompany the OER. This included the production of one chapter as well as employing a production manager, voice talent, and an audio engineer. We took care to consider conversion of an instructional text and images into an audio interpretation as well. However, as we thought through the details of how to create the chapter, we recognized the cost associated with a professional audio component could be cost-prohibitive, especially to OER creators, unless they were working through a grant and specifically budgeted for that cost. Current professional rates for audiobook narration can involve a complicated formula. For our purposes, a simplified formula that works well as an average is \$30 per 1000 words (the average reading rate of professional narrators is approximately 9000 words per hour for educational texts). Using our sample text, *Exploring Public Speaking*, which is over 161,000 words, would quickly become prohibitive to record the entire text as written. Thus, we had to reconsider how OER creators and utilizers might be able to increase the accessibility of their OERs.

## Suggestions

We recognize the call we are making asks for possibly more than OER creators and utilizers can deliver, yet we emphasize the importance of adding UDL-aligned modes of representation to our classrooms. To help address our call, we offer additional ways OER creators and utilizers might add a human audio component.

First, OER creators who cannot add payment for a human audio component into a grant budget

proposal could consider their overall book length. Is it possible to write a shorter book, one where a human voice audio component might better fit within a budget? OER creators could write chapter overviews and/or summaries that accompany their textbooks. Adding a human voice audio component of only the overview or summary might be more financially feasible. While not a direct translation of the OER text, it may provide additional insight beneficial to students and, in this way, can still expand access.

Second, OER creators and utilizers could partner with other on-campus departments and/or students with theatre and/or oral interpretation expertise to do some of the voicework. Some universities may be able to provide OER creators with university resources (e.g., sound design or podcasting studios) allowing students to record the voicework. This might be a paying job OER creators can build into a grant budget or might be negotiated as an independent study and/or service-learning project for students to gain valuable experience. This option allows OER creators to involve students at multiple levels, increasing access and student feedback.

Third, OER creators and utilizers can consider other digital platforms to host the human voice audio component. Specifically, OER creators and utilizers might use a YouTube channel (with or without video) to offer the human voice audio components of their OERs on a more open platform. Similarly, podcasting platforms could also be a space for OER creators and utilizers to add audio components aligned with their texts. Again, while it is not the same as a professional production, it does offer another mode of representation of the OER, increasing access to more students.

Certainly, our preferred method of adding a human voice audio component would be to have a professional voice actor hired to voice the text alongside the OER. We believe a voice actor with expertise in oral interpretation allows for the

highest potential of student engagement. Yet, we recognize the possible infeasibility of such a claim, and we would rather students have UDL-aligned access than throw out opportunities because of cost. With the quick and increasingly lifelike developments of synthetic voice, OER creators and utilizers could also consider what adding an audio component to their texts, regardless of whether the voice is human, does in increasing accessibility for all students, as this is the most important goal.

## Conclusion

There is no doubt that the COVID-19 pandemic has changed our understanding of education, especially regarding access to technology (e.g., fast, consistent WiFi). As a result of the necessities of education to shift suddenly and drastically due to the pandemic, educators must take advantage of the lessons learned to increase accessibility where and how we can. Given that one of the main arguments for OERs is often tied to lowering student cost, OERs are positioned as instigators of access. Providing free and open knowledge to students certainly increases access for a variety of students—financially, culturally, and dis/ability. Yet, OERs are also poised to push education toward greater access through adding multiple modes of representation from a UDL perspective. By adding a human voice audio component to their texts, OER creators and utilizers increase access to more students thereby potentially increasing and reinforcing student learning. Students have options to learn in ways that benefit their personal styles, allowing education to be transformed as we reckon with the pandemic. While we consider a human voice audio component to be the best option for increasing student access and learning, we recognize that it may not be readily available to all OER creators and utilizers. Still, we hope OER creators and utilizers will consider the options we have provided here as well as other options they may come across to ultimately create open resources that are, indeed, open access for all.

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## Conflict of Interest

The authors have no conflicts of interest to report.

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# A Bibliometric Study of Research on Open Educational Resources and Higher Education

*Assessing Trends and Scholarly Productivity in Library and Information Science*

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Keywords: Open Educational Resources, OER, Bibliometrics, Higher Education, Libraries

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## ***Abstract***

Open Educational Resources (OER) play a key role in reducing the financial burden and increasing the accessibility of learning for students in higher education. OER can be considered an important field of research for academic librarians and supports the democratic mission of academic libraries. This study aimed to track the publication of scholarly literature about OER and higher education from 2002 to 2022 using a bibliometric research methodology. In addition, this research sought to assess the productivity of Library and Information Science (LIS) scholarship on this topic and investigate research trends, like open textbooks. Web of Science (WOS) was searched for publications and the search results were mapped to determine publication productivity, core authors, core journals, and research topics in the scholarly literature about OER and higher education. Research on OER has been steadily increasing since 2002, and this study indicates that research has increased significantly on the topic in the last six years. The data in this study support that most productivity in research on this topic is in the field of Education, but also found a presence of scholarship on the topic in the field of LIS.

## **Introduction**

The Open Educational Resources (OER) movement seeks to encourage the development and dissemination of openly accessible resources and is a key aspect of increasing accessibility and promoting innovation in higher education (Pitt et al., 2020; UNESCO, 2002). Research and

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implementation of Open Educational Practices (OEP) at universities and colleges has been demonstrated to facilitate a more equitable environment for students of different socioeconomic backgrounds (Martin et al., 2017). Availability and accessibility of OER texts for students is critical when the Education Data Initiative reports that the average full-time, in-state undergraduate student at a four-year public university pays over a thousand dollars for books and supplies in one academic year, and 11% of students report skipping meals to afford course materials and books (Hanson 2022, para 2). Open textbooks, a common type of OER, have been demonstrated to lessen students' high costs while still being equal in quality to commercial textbooks and eliciting comparable academic performance (Jhangiani, 2018). The OER movement naturally aligns with the democratic mission of academic libraries, and an academic library is one way to distribute OER texts to students. As a movement that increases access and promotes learning, OER are an important research topic for academic librarians.

As the OER movement continues to develop, it is important to observe the patterns and trends in research about OER and higher education. Hopefully, this encourages the implementation of more OER programs and the development of more OER materials. This study employed a bibliometric analysis method to investigate scholarly research about OER and higher education published from 2002 to 2022 and to measure how productive research is on this topic. This research determined how many scholarly articles on this topic were published yearly, the core journals, the core authors, the most popular article keywords, and the most highly cited publications about OER and higher education. In higher education, academic librarians can serve as strong advocates for OER programs and make OER texts accessible to students via an institution's library. To investigate scholarship about OER and higher education in the field of Library and Information Science (LIS), this study identified the productivity of LIS-specific journals on this topic, the presence of article keywords about libraries, and the occupations of the core authors to determine if any were librarians. A previous study by Mishra et al. (2022) found that open textbooks are decreasing in popularity as an OER research topic. This could be problematic because other popular research topics, like open courseware, do not address or negate the issue of high textbook costs for students. This research observed the productivity of scholarship on the subtopic of open textbooks in OER research using article keywords. This specific analysis of subtopics was useful to assess what topics have been addressed in the literature and where further research is needed to increase the availability of open textbooks and other OER.

## Literature Review

The term "Open Educational Resources" (OER) was created during UNESCO's Forum on the Impact of Open Courseware for Higher Education in Developing Countries in Paris, France (UNESCO, 2002). During the forum, OER was defined as "the open provision of educational resources, enabled by information and communication technologies, for consultation, use, and adaptation by a community of users for noncommercial purposes" (UNESCO, 2002, p. 24). The definition of OER now includes more resources like Massive Open Online Courses (MOOCs), public domain materials, and materials under Creative Commons licenses (Wiley et al., 2014). The rate of scholarly publication about OER has been steadily increasing since the UNESCO Forum in 2002, with a sharp increase in pace starting in 2012 (Tlili et al. 2021; Zancanaro et al. 2015).

Scholars have demonstrated that research on OER is focused on higher education (Mishra et al., 2022; Tlili et al., 2021; Zancanaro et al., 2015). Tlili et al. (2021) attribute this to the Massachusetts Institute of Technology (MIT) OpenCourseWare initiative, one of the first to provide high-quality open educational resources. McGowan (2019) observes that faculty support mechanisms and initiatives for OER development are becoming more sustainable at many universities and colleges. Though research into OER has been steadily increasing and is considered a promising field of research, OER initiatives often face drawbacks and challenges. Mishra et al. (2022) consider the language, lack of awareness of potential learners, lack of funding, and lack of infrastructure as limitations on globally implementing OER and OER initiatives, especially in underdeveloped countries. Despite the trend in research and the creation of OER, there is still a struggle to instill OER as permanently-funded resources at academic institutions (McGowan, 2019).

### ***Libraries and OER Initiatives***

The mission of the OER movement overlaps with the mission and function of academic libraries to serve students and faculty (Davis et al., 2016; Goodsett et al., 2016; Kimball et al., 2022). Though Goodsett et al. (2016) noted that the university library is the natural leader of OER initiatives, McGowan (2019) found that institutional teaching and learning centers often evenly share sponsorship of OER initiatives. Specifically, McGowan (2019) found that almost half of their sample of OER initiatives were sponsored by the institution's library and the rest by the institutional teaching centers. Sponsorship of OER initiatives by teaching centers is consistent with services they already offer through training to help faculty and teachers acquire OEP competencies and utilize OER (Tlili et al., 2021). Research has demonstrated that allocating part of the library budget, promoting OER with library resources, and providing training via librarians are good practices for open education (McGowan, 2019).

Academic librarians are ideally suited to helping faculty overcome barriers to discovering, evaluating, and utilizing OER (Kimball et al., 2022; Smith and Lee, 2017). Smith and Lee (2017) determined the roles of academic librarians in the OER movement as advocacy and promotion, providing strategies to evaluate the quality of OER, maintaining subject-based guides for OER resources, providing access to OER via institutional repositories, enhancing access to OER with metadata and indexing, managing intellectual property rights and open licensing of OER, and facilitating and curating OER collections. Two of the most common strategies academic libraries have for facilitating OER initiatives are hiring a dedicated OER librarian or implementing OER with subject librarians' expertise and their established faculty relationships (Kimball et al. 2022; Smith and Lee 2017). Though Kimball et al. (2022) found success with their subject-librarian-based OER program, Smith and Lee (2017) found that OER initiatives often add too many additional responsibilities to already heavy workloads. Smith and Lee (2017) suggested that forming "communities of practice" among regional academic librarians can provide a sustainable way to support open education and the advocacy of OER.

## ***Open Textbooks***

The OER movement seeks to ensure that knowledge is freely accessible and can be reused (Tlili et al., 2021). OER can significantly reduce college students' financial burdens (Clinton, 2018; Fischer et al., 2015; Kimball et al., 2022). One of the most significant financial burdens post-secondary students face is the high cost of textbooks, which can approach or even surpass the cost of tuition (Fischer et al., 2015). The price of textbooks and other academic costs are barriers that disproportionately affect students from lower socioeconomic backgrounds (Fischer et al., 2015; Jhangiani, 2018). High textbook costs are a driving factor in developing open or OER alternative textbooks to increase educational access for all students (Clinton, 2018; Kimball et al., 2022). As defined by OpenStax, a nonprofit OER initiative, open textbooks are those that are publicly available, free to access, and free from copyright restrictions (Swift, 2022). Though the price of renting or purchasing electronic textbooks is usually less than the price of purchasing print textbooks, open textbooks are often the least prohibitive and expensive option for students (Fischer et al., 2015). Fischer et al. (2015) found that students whose faculty assigned OER saved a significant amount of money compared to students whose faculty assigned commercial materials, with the same learning outcomes. Even further, students in courses using open textbooks were significantly more likely to enroll in more credits the following semester. Clinton (2018) had concurrent findings that open textbooks saved significant costs for students without negatively influencing students' perception of quality, learning outcomes, or user accessibility.

Kimball et al. (2022) determined that the primary responsibility of the OER librarian was to discover and promote open textbooks.. Facilitating access to open textbooks and hosting open textbooks in institutional repositories is aligned with the academic libraries' mission. This is supported by Thomas et al. (2021)'s user accessibility case study on digital open textbooks in which the authors found that the institutional repository was the student's preferred access point for open textbooks. However, McGowan (2019) found that most institutional awards or sponsorships did not favor open textbooks as library resources. They attributed this to the long-standing use of library course reserves and a lack of foresight from institutions to consider OER development as a financial investment. Some academic libraries have partnered with university presses to encourage investment in open textbooks and promote scholarly output (Thomas et al., 2021; Waller et al., 2017). Collaboration can give the university greater ownership over the content of open textbooks content and provide more opportunities for user experience testing to improve open textbooks (Thomas et al., 2021; Waller et al., 2017).

## ***Bibliometric Research Literature Review***

This study builds on the research methodology of three previous studies. Mishra et al. (2022) used bibliometric methods to survey recent developments in OER research, specifically looking at five subtopics of OER: "open textbook, open online course, open courseware, open-source software related to open education, and open social learning" (p. 1). Mishra et al. used the Scopus database to gather open data and map research development, journals, subject categories, authors, and research productivity by country. They found that the rate of publications about OER increased dramatically starting in 2012, with 2,474 scholarly articles published in their 18-year timeframe. Most interesting to this study, the

authors found that of their sub-themes of OER research, open textbooks are declining in popularity as a research topic.

Zancanaro et al. (2015) also used a bibliometric analysis to map publications about OER starting from 2002. The authors used the Web of Science Core Collection (WOS Core Collection) database, the OER Knowledge Cloud, and Scopus to gather data, but only for an 11-year period. The authors' results reflected a similar surge in publications about OER around 2012-2013, with a total of 544 publications that also included book chapters, conference proceedings, and reports. Notably, Zancanaro et al. did not limit the language of publications to English. From their bibliometric mapping, the authors found the main subtopics of global OER research to be theoretical discussion, quality, barriers to use, open education, incentive policies, surveys, technology, type, sustainability, production, and open licenses. Most importantly, they found that in 2015 when the study was completed, open textbooks were not one of the significant research subtopics of OER, simply a subcategory of the "type" research topic. By the time Mishra et al. (2022) conducted their study, open textbooks were an established research topic of OER research.

Tlili et al. (2021) also used both the WOS Core Collection and Scopus databases to gather data for a bibliometric mapping analysis, but instead of focusing on OER, their search keywords were "open educational practice" and OEP. The authors based their methodology on Zancanaro et al. (2015); they also did not limit the language of publications to English. After narrowing their search results by eliminating duplicate articles and filtering according to their inclusion criteria, they found 156 scholarly publications published within a 10-year period from 2000 to 2020 to analyze. Similarly, to Mishra et al. (2022), Tlili et al. used only peer-reviewed scholarly publications for analysis, excluding book chapters and conference proceedings. The authors found that OEP was first published as a research topic in 2007 and that the publication rate on the topic has been steadily increasing. The authors also found that most studies on the topic were qualitative and called for more quantitative studies of OEP initiatives.

Previous research established that the principles of the OER movement and academic libraries are aligned, and that OER can be successfully implemented on college campuses via the libraries and dedicated OER librarians or subject librarians. Because textbooks are a significant part of the academic cost of post-secondary education, open textbooks are crucial to reducing the financial burden of post-secondary students. Though Mishra et al. (2022) found that open textbooks are decreasing in popularity as an OER research topic, the issue of high textbook costs is not abated. Our study is similar to the previously discussed bibliometric studies in that it maps scholarly publications about OER and identifies core authors and journals, but it differs because it focuses on identifying the research about OER in higher education and in the field of Library and Information Science (LIS). Literature about OER and open textbooks is valuable to gather and share to support academic LIS professionals to provide access to open textbooks to students or host OER initiatives in their libraries. Analysis of the gathered literature can reveal where more research is needed on OER materials such as quality control, efficacy, and innovation, areas suggested by Fischer et al. (2015) and McGowan (2019).

## Methods

This research employed a bibliometric analysis methodology to discover core journals, core authors, and frequent keywords of scholarly articles about OER and higher education. The data was collected from the WOS Core Collection database because it is one of the premier citation databases for scholarly publications, containing records for high-impact journals and conference proceedings with coverage back to 1900 (Zancanaro et al., 2015; Huang et al., 2022). In addition, the WOS Core Collection is used frequently for bibliometric analysis because it has high-quality indexing of peer-reviewed articles and is publisher-independent. The extensive coverage of the scholarly literature, citation reporting, and reference tracing are all ideal for bibliometric mapping (Huang et al., 2022). The methodology used in this research builds on the bibliometric methodology used by Zancanaro et al. (2015) and Tlili et al. (2021), both of which used the Web of Science (WOS) to conduct searches. WOS is also one of the preferred databases for Bibliometrix, the bibliometric mapping software used by Mishra et al. (2022) and used in this study (Aria and Cuccurullo, 2017). This research did not utilize the Scopus database, unlike the previously cited studies, because the host institution where this research was conducted did not have access to Scopus.

A search strategy was crafted based on the search term methodology used by Mishra et al. (2022) and Huang et al. (2022) but with search terms explicitly tailored to OER and higher education. It used a combination of keyword terms to find publications related to OER and higher education. The string of search terms was searched in the Topic field (symbol TS), which searches in the title, abstract, author keywords, and KeywordPlus fields for the search terms. WOS does not utilize controlled vocabulary or subject terms but has KeyWordPlus keywords which are index terms automatically generated from the titles of cited articles. The TS field terms were combined with a search string for the Document Type field (symbol DT) for Article, Review, and Proceedings Papers, which excludes the document types that are not scholarly papers like Book Reviews. Combining those search strings provided the following, which was copied and pasted into the search query box of the Advanced Search function:

*((TS=(("open education" OR "open educational resources" OR "Open Pedagogy" OR "open textbook" OR "open access textbook"))) AND TS=((academic OR college OR universit\* OR "higher education" OR "post-secondary education" OR "tertiary education" OR "graduate school")))) AND DT=(Article OR Proceedings Paper OR Review)*

The “Publication Date” field was set to “Custom.” The start date was limited to the year 2002 when the term “open educational resources” was coined (UNESCO, 2002). The ending date was limited to 2022 because it is the most current full year to date. The following search string for publication was entered into the Advanced Search option below the Query Box:

*Publication Year > Custom (2002-01-01 to 2022-12-31)*

For data analysis, this research used the Bibliometrix R package, an open-source data analysis program designed for bibliometric data visualization and mapping (Aria and Cuccurullo, 2017). Bibliometrix is one of the most popular software for visualizing information from author keywords (Mishra et al., 2022). Once the sample was imported into Bibliometrix the data were filtered. The

records exported from WOS included Early Access articles released in 2022 but published in 2023. The Bibliometrix Publication Date filter was set from 2002-2022 to exclude these articles. After the data were filtered, they were analyzed for core authors, core journals, an increase or decrease in the literature on the topic, and keyword frequencies. The sample of journals was analyzed to find LIS-specific titles and to find LIS-specific keywords, then this data was used to assess the titles' frequency and impact. The core authors' occupations were determined with WOS records and ORCID iDs, if applicable, including if any core authors were librarians. The results were displayed in tables and figures created using Bibliometrix or Excel.

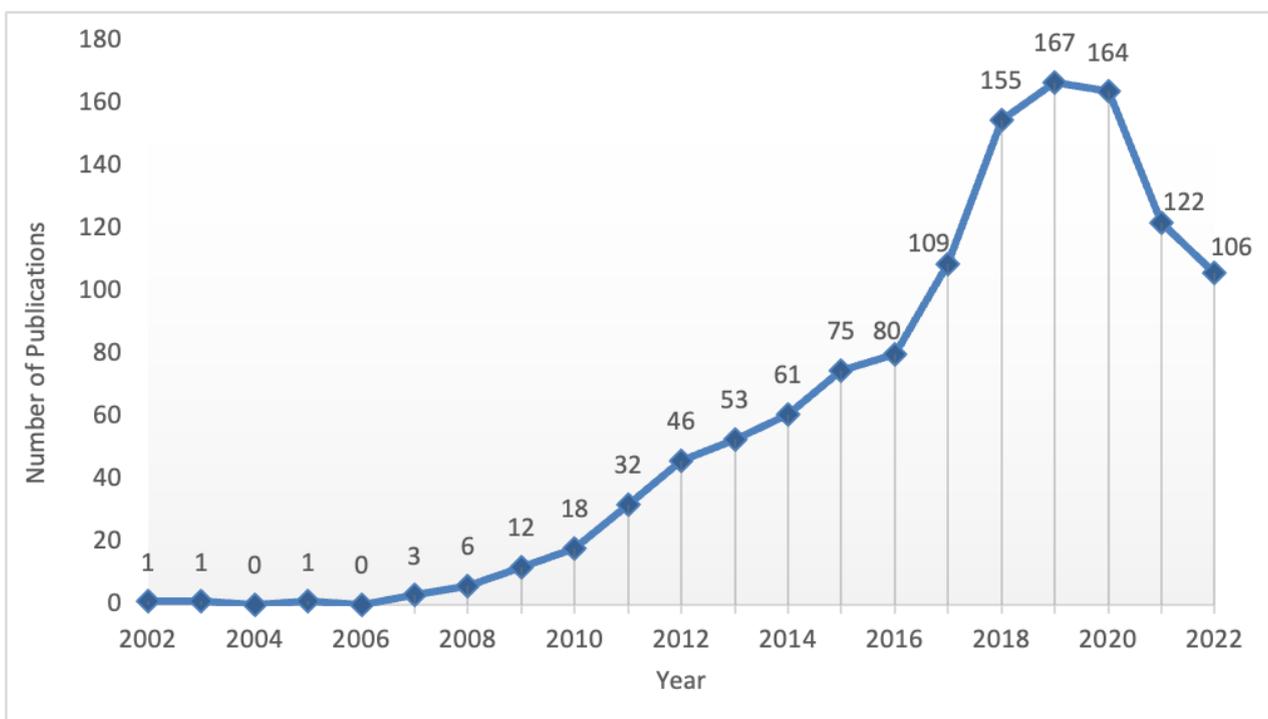
## Results

### *Productivity of Research about OER and Higher Education from 2002 to 2022*

This methodology resulted in 1,212 returns for full-text articles published from 2002 to 2022. The range of articles published on OER and higher education each year from 2002 to 2022 was 0 to 167 (see Figure 1). The lowest number of articles published in a given year was in 2004 and 2007 when no articles on the topic were published. The most articles published in a given year was in 2019 when 167 articles on the topic were published. Figure 1 shows the change in publication over time and demonstrates a steady increase in the number of articles published per year, with a peak from 2018-2020 and a slight decrease in the last two years in 2021 and 2022.

**Figure 1**

*Annual Production of Scholarly Articles about OER and Higher Education*



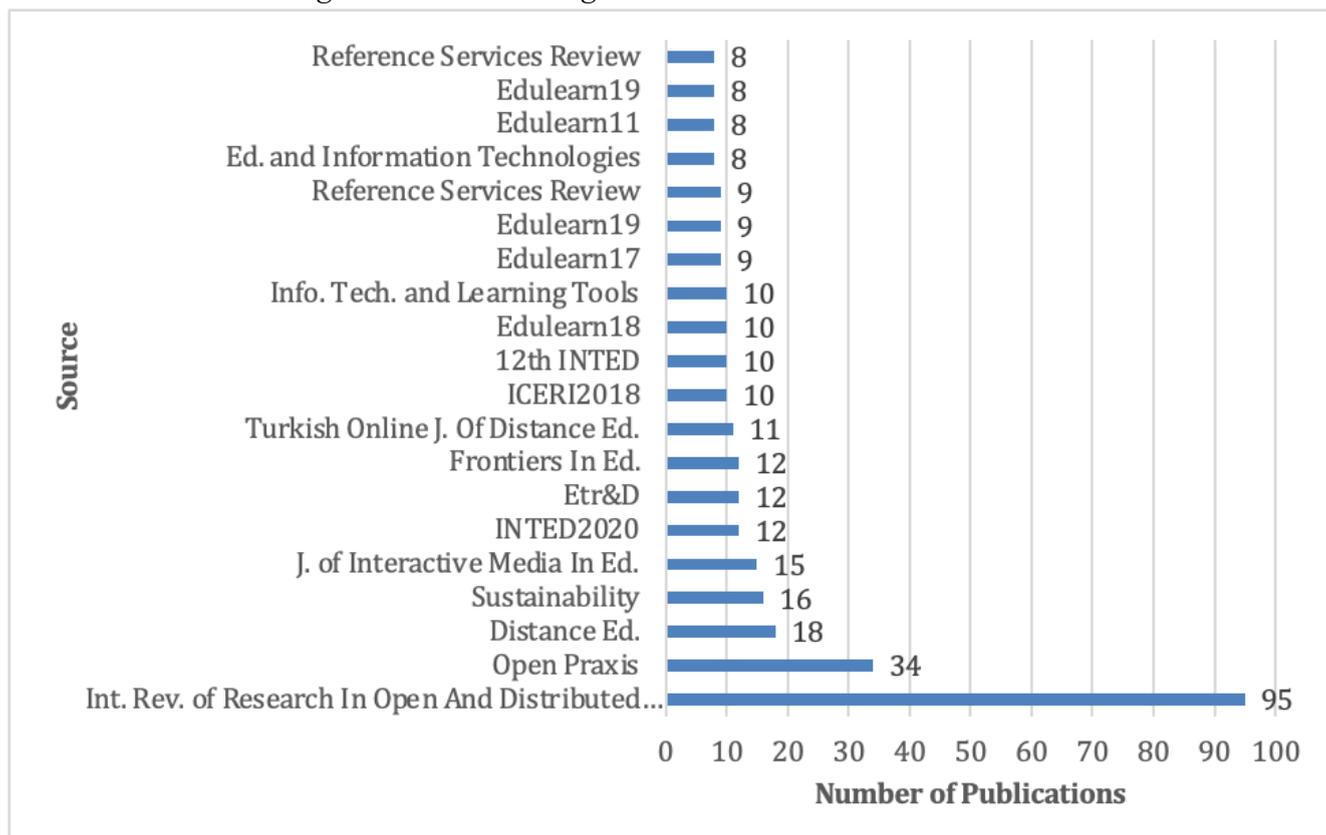
*Note: The amount of scholarly publications about OER published per year from 2002 to 2022, n=1212 total publications.*

The annual growth rate of publications was 26.26%. The mean number of articles published per year was 57.7, which can be rounded up to an average of 58 articles per year over 20 years. The mode number of articles was 1, the number of publications per year that frequently occurred in the first four years after the term OER was coined in 2002. Starting in 2014, the number of articles published per year was above the average, or more than 58 articles per year. The median number of articles published per year was 46 in 2012. 75% of articles on the topic were published in the last 6 years, from 2017-2022.

### ***Core Journals and Core Authors of Publications about OER and Higher Education from 2002 to 2022***

The core journals with the most publications on this topic were the *International Review of Research in Open and Distributed Learning (IRRODL)*, *Open Praxis*, *Distance Education*, *Sustainability*, *Journal of Interactive Media in Education*, *14th International Technology Education and Development Conference (INTED2020)*, *Educational Technology Research and Development (ETR&D)*, *Frontiers in Education*, *Turkish Online Journal of Distance Education*, and *11th International Conference of Education Research and Innovation (ICERI2018)* (See Figure 2).

**Figure 2**  
*Core Journals Publishing about OER and Higher Education*



Note: The top twenty of 612 sources with the highest number of documents published on OER and higher education from 2002 to 2022, n=1212 total publications.

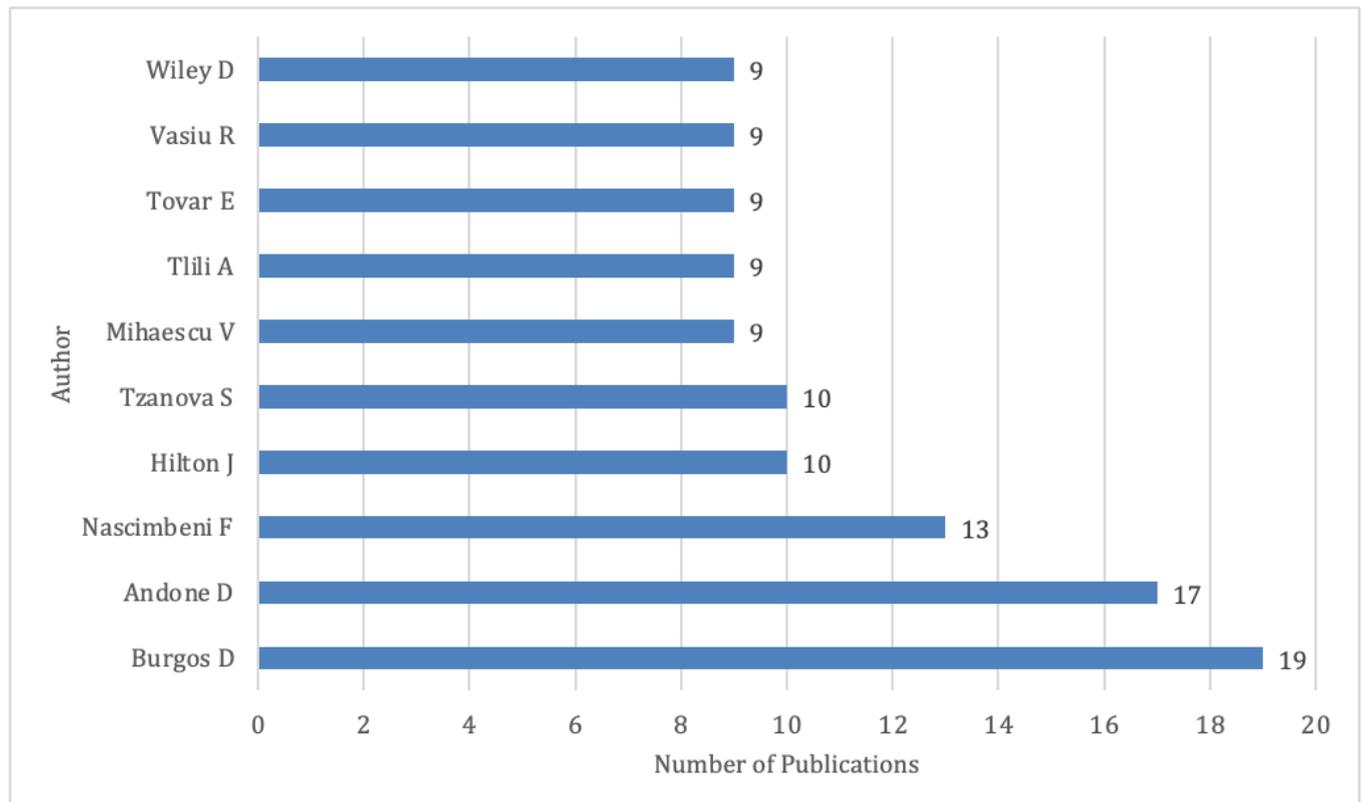
The *International Review of Research in Open and Distributed Learning* was the most prolific in publishing on this topic, with 95 (7.8%) of the total publications. This was followed by the journals *Open Praxis* which published 34 (2.8%) of the total publications, *Distance Education* which published 18 (1.5%) of the total publications, *Sustainability* which published 16 (1.3%) of the total publications, and the *Journal of Interactive Media in Education* which published 15 (1.2%) of the total publications. The *INTED2020*, *ETR&D*, and *Frontiers in Education* each published 12 (1%) of the total publications. The *Turkish Online Journal of Distance Education* published 11 (0.9%) of the total publications, and *ICERI2018* published 10 (0.8%) of the total publications.

A total of 612 different journals, including conference proceedings, published articles on this topic from 2002 to 2022. The distribution of publication of articles mostly adheres to Bradford's Law, that most research results on a given subject are published in a small number of journals, with 34 journals representing the top 33% of articles published on the topic. Though 34 is more than a few core journals, the following 33% of articles published on the topic come from 180 journals, and then the last 33% from 398 journals, showing exponentially diminishing returns as exemplified by Bradford's Law. Of the 612 journals that published articles on this topic from 2002 to 2022, there were 18 Library and Information Science (LIS) journals that published 41 of the total publications. Of the journals that published on this topic, LIS journals represent 2.9% of the total journals. Of the publications on this topic, LIS journals had 3.2% of the total published articles. No LIS journals were in part of the core journals identified in this study (see Appendix A: Figure 1).

Of the 1,212 articles published on this topic from 2002 to 2022, there were 2,824 authors. The most prolific author was D. Burgos, a Professor in the field of Education and Computer Science, with 19 publications (1.6%). D. Andone, a Professor and Director in the field of Education, authored 17 publications (1.4%). F. Nascimbeni, an Assistant Professor in the field of Technology and Education, authored 13 publications (1.1%). J. Hilton, a Professor in the field of Religion and Education, authored 10 publications (0.8%). S. Tzanova, a Professor in the field of Engineering and Education, authored 10 publications (0.8%). V. Mihaescu, a Professor in the field of Education and Computer Science, authored nine publications (0.7%). A. Tlili, an Assistant Professor in the field of Education and Computer Science, authored nine publications (0.7%). E. Tovar, a Professor in the field of Education and Computer Science, authored nine publications (0.7%). R. VasIU, a Professor and Director in the field of Education and Computer Science, authored nine publications (0.7%). D. Wiley, a Chief Academic Officer and Professor in the field of Education, authored nine publications (0.7%) (see Figure 3).

**Figure 3**

*Authors with the Highest Number of Publications about OER and Higher Education*



*Notes: The top 20 of 2,824 authors that published the most on this topic and the number of publications, n=1212 total publications.*

Of the top 10 authors, all are currently or formerly Professors and all are working in the field of Education or Computer Science. Those that are working in the field of Computer Science are affiliated with Engineering or Information Technology Departments. Of the 2,824 authors, 2,417 authors only published one article on this topic in the allotted time period. This number of authors publishing only one article supports the principle of Lotka's Law: that most authors only publish once on a given subject. In this sample, 85.6% of authors only published once on this topic from 2002 to 2022. As far as this research could ascertain, none of the core authors are or were librarians (see Appendix A: Table 1).

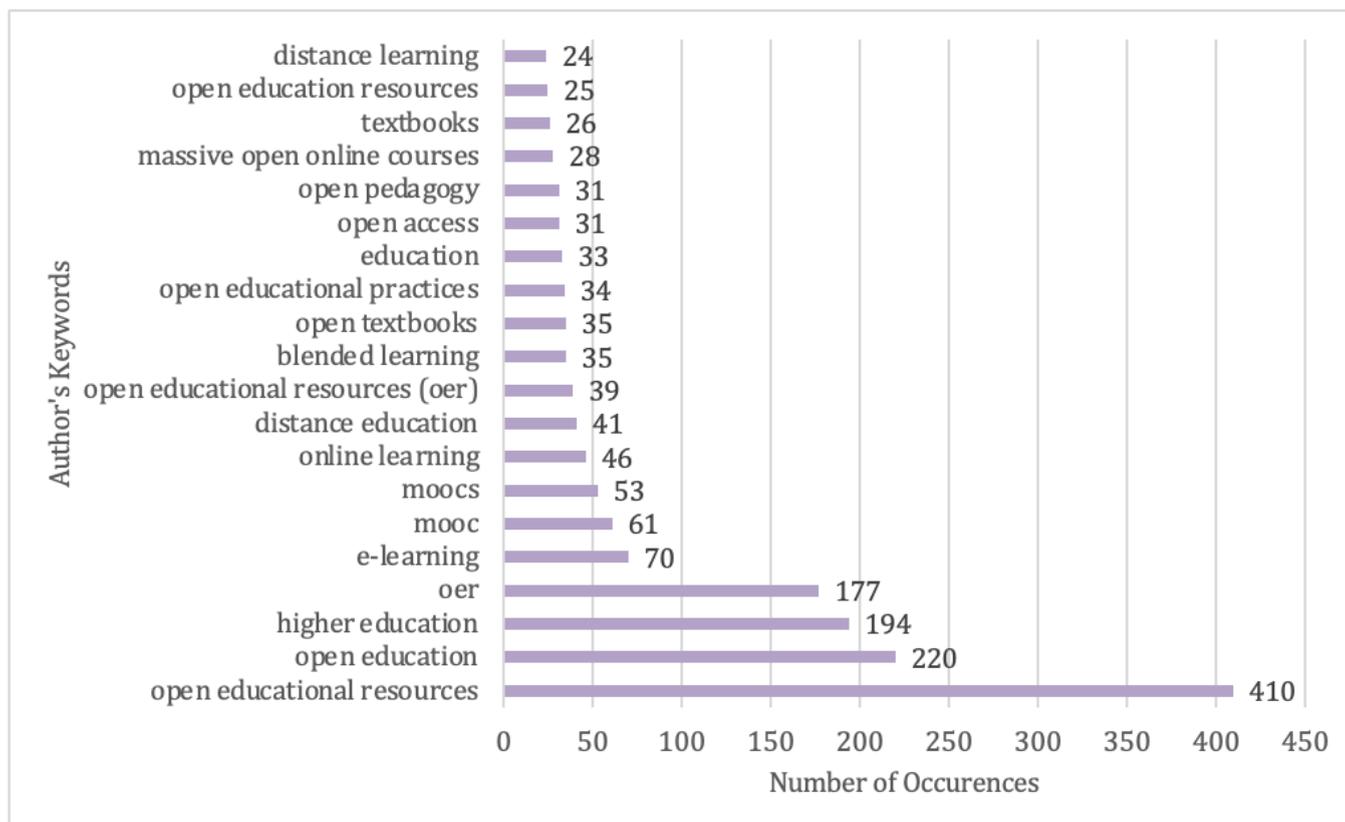
### ***Keywords and Topics of Research in Publications about OER and Higher Education from 2002 to 2022***

The WOS Core Collection indexes articles with Author's keywords and KeywordPlus keywords. Both types of keywords were analyzed for the sample. The articles collected in this sample have 2,807 different Author's keywords. The top 20 most frequent Author's keywords are *open educational resources, open education, higher education, oer, e-learning, mooc, moocs, online learning, distance education, open educational resources (oer), blended learning, open textbooks, open educational*

*practices, education, open access, open pedagogy, massive open online courses, textbooks, open educational resources, and distance learning* (see Figure 4).

**Figure 4**

*Most Frequent Author's Keywords*



Note: The top twenty most frequently used keywords and usage,  $n=2807$  total Author's keywords

The articles collected in this sample are indexed under 547 different KeywordPlus keywords. The top 20 most frequent KeywordPlus keywords of articles on this topic were *adoption, oer, education, students, university, impact, perceptions, quality, higher-education, open educational resources, resources, technology, design, performance, outcomes, student, teachers, model, knowledge, and moocs* (see Appendix B: Figure 1).

This study also observed the productivity of research on this topic related to open textbooks. There were 33 Author's keywords related to open textbooks used 110 times, making up 1.2% of the total Author's keywords and 1.9% of the total Author's keyword usage. The most frequently used Author's keyword related to open textbooks was *open textbooks* which was used 35 times, and was number 14 in the top 20 most frequent Author's keywords for the sample (see Appendix B: Figure 2). There were 6 KeywordPlus keywords related to open textbooks used 25 times, making up 1.1% of the KeywordPlus Keywords and 1.8% of total KeywordPlus keyword usage (see Appendix B: Figure 3).

This study observed the productivity of research on this topic in the field of library and information science. There were 28 Author's keywords related to libraries or librarianship that were

used 61 times, making up only 1% of the total keywords and equalling about 1% of the total Author's keyword usage. The most frequently used Author's keyword related to libraries was *academic libraries* which was used 19 times (see Appendix B: Figure 4). There were six KeywordPlus keywords related to libraries or librarianship used nine times, making up 1% of the KeywordPlus keywords and 0.7% of the total usage of KeywordPlus keywords. The most frequently used KeywordPlus keyword related to libraries was *library* which was used three times (see Appendix B: Figure 5). WOS attaches at least one subject category to each record. In an analysis of the most frequently used WOS subject categories attached to the articles in this sample, the category of *Information Science and Library Science* was the 4th most frequent subject category for articles. The *Information Science and Library Science* subject category was used 102 times, making up 5.7% of total usage (see Appendix B: Figure 6).

### ***Most Highly Cited Articles about OER and Higher Education from 2002 to 2022***

The most highly cited scholarly article about this topic published between 2002 and 2022 was "Shift to digital perspectives on Hilton (2016) from the perspective of practice" by Hodges (2021) which was cited 278 times. The most highly cited article reflects on the second most highly cited article, "Open educational resources and college textbook choices: a review of research on efficacy and perceptions" by Hilton (2016). Hilton (2016) was cited 176 times. Both highly cited articles were published in the journal *Educational Technology Research and Development*. Of the top 20 most highly cited articles about this topic, five articles have keywords related to open textbooks. The keywords are Author's keywords and include *textbooks*, *open textbooks*, and *electronic textbooks*. Of both the Author's keywords and the KeywordPlus keywords for the top 20 articles, none of them are keywords related to libraries. Of the journals the top 20 most highly cited articles are published in, none are explicitly Library and Information Science journals. The top 20 articles are all categorized in the *Education and Educational Research* WOS subject category except one. Two of the articles have an additional category for *Computer Science*.

## **Discussion**

The data gathered in this study offer insight into scholarly literature published about OER and higher education. This study was limited to articles collected from the WOS Core Collection database with access provided by the University of Southern Mississippi. The articles collected were limited to studies published in academic journals from 2002-2022. It was assumed that WOS has properly indexed articles so articles relevant to the topic could be found and that the keywords and advanced search option retrieved the most accurate and pertinent results. This study examined a total of 1,212 articles about OER and higher education published by 2,824 authors in 612 journals. The data indicates an increase in publications about this topic over time which is congruent with the findings of Mishra et al. (2022) and Zancanaro et al. (2015) that research on this topic is productive. Although there was a slight decrease in the number of publications per year in the last three years, which could be attributed to the COVID-19 pandemic, this research found that 75% of articles on this topic were published in the last six years and that the rate of publications per year has been above the average since 2014, which is similar to findings by Mishra et al. and Zancanaro et al. that there was a rate of increase around 2012-2013. The data

gathered in this study, and in Mishra et al. and Zancanaro et al., indicate that OER are an enduring and vital area of research.

The core journals that published on OER and higher education were *International Review of Research in Open and Distributed Learning (IRRODL)*, *Open Praxis*, *Distance Education*, *Sustainability*, *Journal of Interactive Media in Education*, *14th International Technology Education and Development Conference (INTED2020)*, *Educational Technology Research and Development (ETR&D)*, *Frontiers in Education*, *Turkish Online Journal of Distance Education*, and *11th International Conference of Education Research and Innovation (ICERI2018)*. *IRRODL* was the most prolific journal, with 95 total publications, and was the journal in which seven of the most highly cited publications were published. This could be due to the topic of the journal being specific to OER, as well as the work by the Open Education Group to encourage rigorous research about OER adoption and publication in journals like *IRRODL* (Open Education Group, 2023). The fields represented by the core journals are all Education and Computer Science. Only 2.9% of the journals of the sampled articles were LIS-specific, and only published 41 of the 1,212 articles. However, academic librarianship overlaps with the field of Education, both as a general discipline and in terms of how articles and journals are indexed. Many academic librarians may publish their research in Education journals in addition to LIS-specific journals because of the overlap with Education or educational research. For example, research that investigates students as the patrons of academic libraries, course-based instruction of academic librarians, or implementing library initiatives as part of the university programs could all be considered educational research.

The most frequently used keywords for articles on this topic, both Author's keywords and KeywordPlus, were iterations of the term *open educational resources* like *OER*, *open education*, and *open education resources*. *Open educational resources* was the most frequently used Author's keyword and was used 50% more than the next most frequent Author's keyword, *open education*. Mishra et al. (2022) found open textbooks to be a declining research area of OER. However, this research found that *open textbooks* was in the top 20 most frequently used Author's keywords, and keywords related to open textbooks made up 1.9% of the total keyword usage. Keywords related to open textbooks were also used in five of the most highly cited articles identified in this study. Research about open textbooks and OER could be declining. But a specific topic like open textbooks in the top 20 keywords with many broad topics, like open education and learning, could mean that it is a niche aspect of the OER research that authors might continue to publish about, though not with exceptional productivity. In addition, it is possible open textbooks may not be differentiated from OER in research studies. Or, as McGowan (2019) found, many institutions do not want to sponsor OER as permanently-funded resources or open textbooks as library resources, which could mean less incentive to publish open textbooks as a subtopic of OER and higher education. Perhaps case studies on open textbooks are less appealing to journals and the home institutions of researchers, whereas topics like OEP and Open Pedagogy that include the creation or use of open textbooks are trending topics.

About 1% of both types of keywords used in the sample of articles were related to libraries, but none were present in the top 20 most frequently used keywords or as keywords for the most highly cited articles. This indicates lower research productivity on OER and higher education in the LIS field. For

example, academic librarians may implement OER initiatives in their libraries but not publish about them. As Smith and Lee (2017) suggest, academic librarians may be unable to add OER initiatives or research to their workloads. It could also be related to the fact that the core authors publishing about OER and higher education are working as professors in Education and Computer Science. The prevalence in the field of Computer Science could be due to how Information Technology overlaps with Library Science and how many OER materials require online accessibility and functionality. The prevalence of core authors in Education could be due to rising textbook costs and tuition as hot-button issues and the encouragement for faculty in Education to implement and experiment with educational initiatives in their research. In addition, there may be more librarians as authors of articles on this topic than this research was able to ascertain. The WOS database assigns at least one subject category to indexed articles. This research found that *Information Science and Library Science* was the 4th most frequently used subject category for articles published on this topic, following two Education subject categories and *Computer Science*. This suggests that there is less library-specific research because of the multidisciplinary nature of academic librarianship, which overlaps with both Education and Computer Science. For example, because the academic library is a logical place to host OER texts and academic librarians can be instrumental in teaching faculty how to utilize OER, research into these roles can easily be considered part of the broader subject of Education as well as Library Science. And Library Science, as an Information Science, can fall under the broad umbrella of Computer Science. More research could be conducted into where academic librarians publish their research, whether in LIS, Education, or Computer Science journals, or journals in their subject speciality. The frequent use of Education and Computer Science subject categories could also represent how libraries are just one vehicle for implementing OER at any academic institution and thus could be a smaller area of research in OER and higher education. More research on publications about OER from academic librarians could shed light on the prevalence of the Education and Computer Science subject categories. It is also important to acknowledge that different types of academic librarians may not have the privilege or be encouraged to publish like librarians with faculty status at well-funded research universities. And as McGowan (2019) found, institutional Teaching and Learning Centers (TLCs) often evenly share sponsorship of OER initiatives. Further investigation could be conducted into whether TLCs are publishing about their OER initiatives.

## Conclusion

Open Educational Resources are crucial to creating an equitable environment in higher education. Research on OER has been steadily increasing since 2002, and this data indicates that research has increased significantly in the last six years. This research identified the core authors, core journals, and research topics in the scholarly literature about OER and higher education. The data in this study support that most productivity in research on this topic is in the field of Education followed by Computer Science, though this research did find a presence of LIS scholarship on the topic. Continued research into open textbooks and academic libraries could support more OER initiatives that could help ease the financial burden of college students and it's clear that libraries are a vital research for students seeking affordable school texts. Gathering scholarly publications about OER and higher education could

be a valuable resource for librarians or educators in implementing OER initiatives or providing OER at their institutions.

The results of this research provide a glimpse into the publication data of OER and higher education and the LIS field. Future modifications to this research could involve searching Scopus or LIS-focused databases for articles not indexed in WOS or performing a content analysis, in addition to bibliometric, on the gathered body of scholarly literature. Further modifications to this methodology could provide more opportunities for analyzing the productivity of OER research conducted by academic librarians and the types of journals academic librarians publish in. More bibliometric studies about OER should be encouraged as more years can be added to the publication limitations. Future studies could focus on the COVID-19 pandemic and its effect on OER research and initiatives. As considered by Tlili et al. (2021), future studies would benefit from more quantitative analysis of OER initiatives, specifically those facilitated in academic institutions. In addition, future studies would benefit from identifying the purposes of research studies on OER and if evaluations of OER programs and initiatives present a gap in OER research.

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## **Conflict of Interest Statement**

The author has no conflicts of interest to declare and no financial interest to report.

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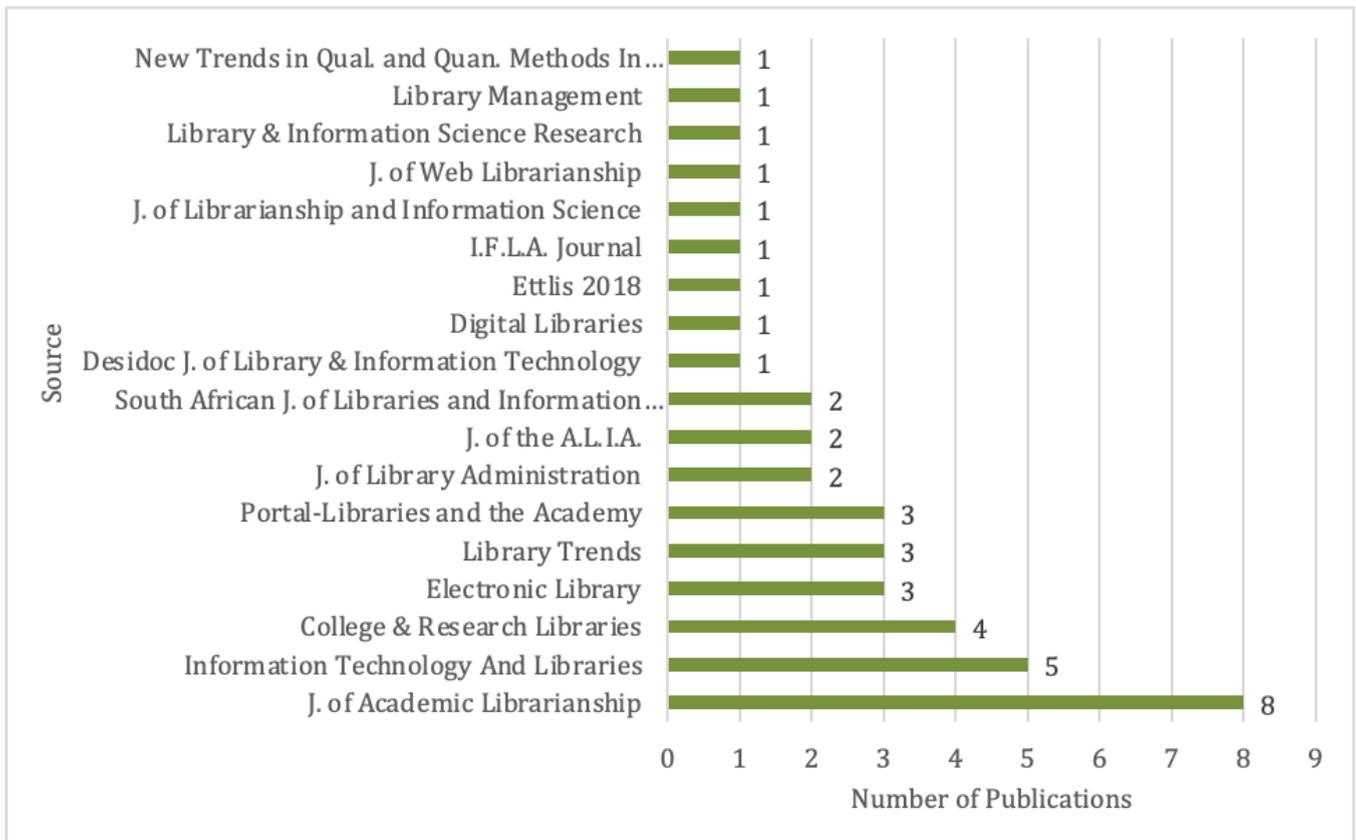
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**Appendix**

**Appendix A. Core Journals and Core Authors**

**Figure 1.**

*Productivity of Publication about OER and Higher Education in LIS Journals*



*Note: The number of publications from 2002 to 2002 in LIS-specific journals of the total 612 journals, n=41 articles*

**Table 1**

*Occupation and Research Area of Top 20 Most Prolific Authors*

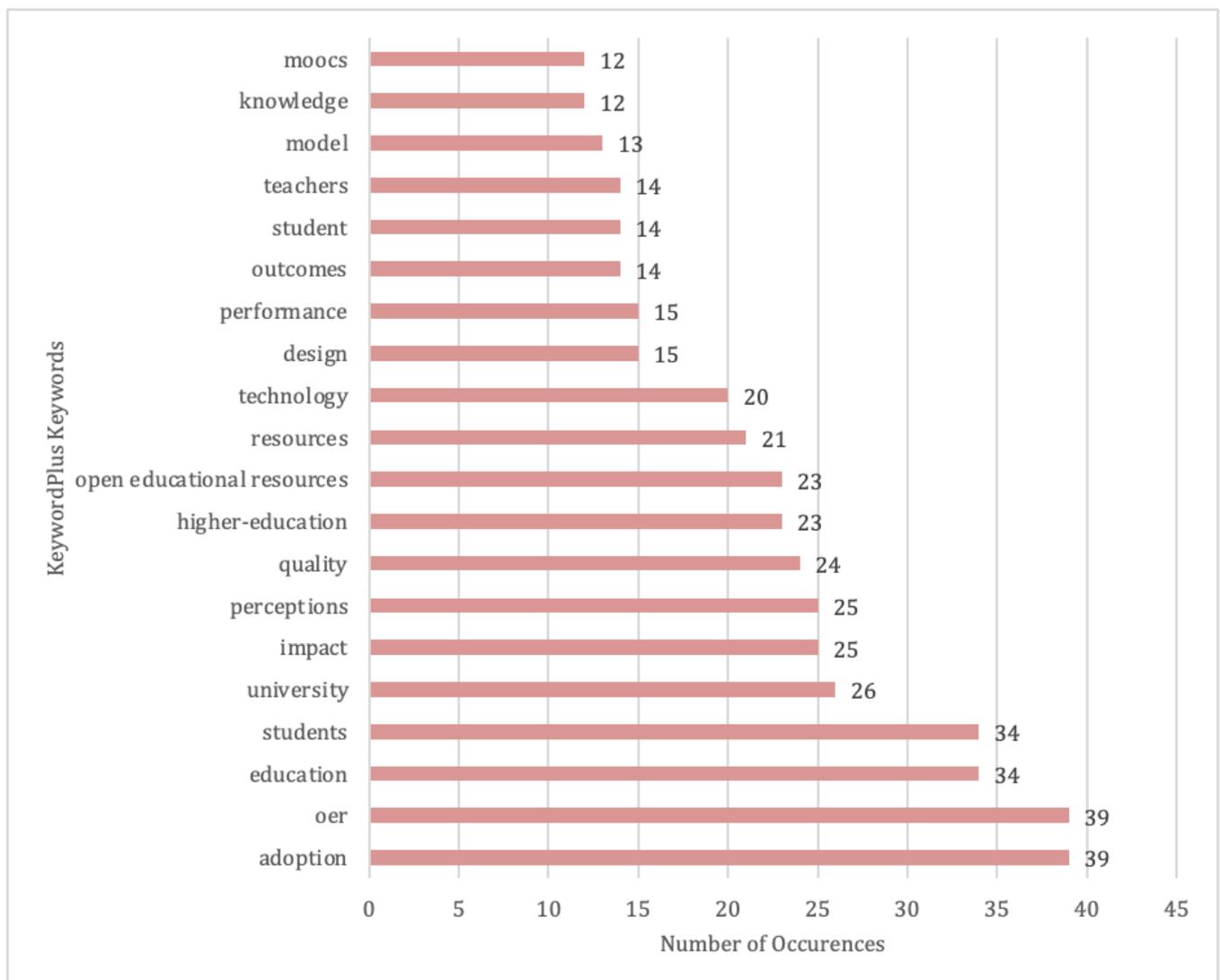
Authors	Articles	Occupation	Area of Focus
Burgos D	19	Professor, Vice-chancellor	Education, Computer Science
Andone D	17	Professor, Director	Education
Nascimbeni F	13	Assistant Professor	Education
Hilton J	10	Professor	Education, Religion
Tzanova S	10	Professor	Education Engineering
Mihaescu V	9	Professor	Education, Computer Science
Tlili A	9	Assistant Professor	Education, Computer Science

Tovar E	9	Professor	Education, Computer Science
Vasiu R	9	Professor, Director	Education, Computer Science
Wiley D	9	Chief Academic Officer, Professor	Education

Note: The top 20 authors, number of articles they published on this topic, their occupation extracted from their ORCID iD and their area of research focus from their Web of Science Researcher Profile.

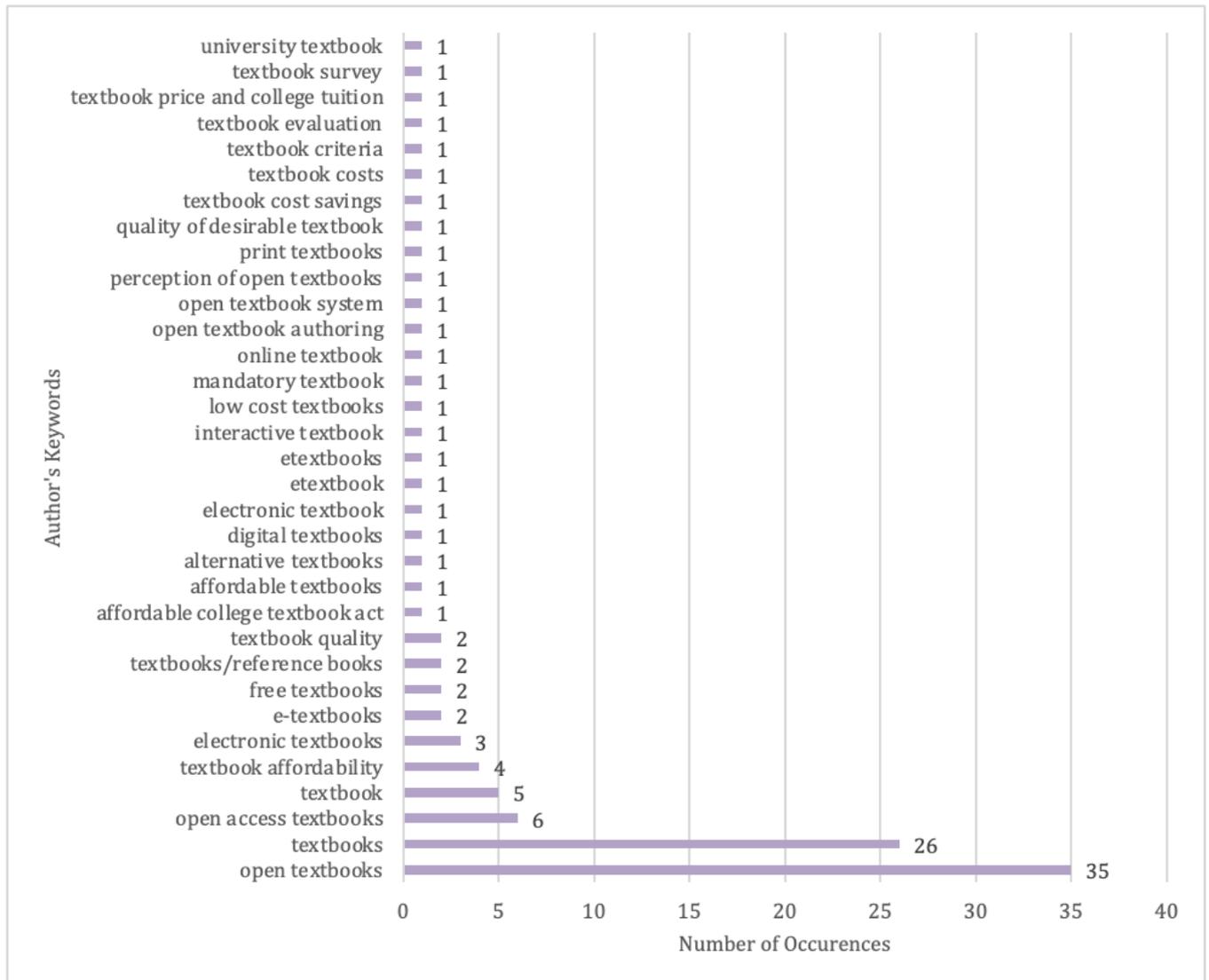
## Appendix B. Keywords and Research Topics

**Figure 1.**  
Most Frequent KeywordPlus Keywords



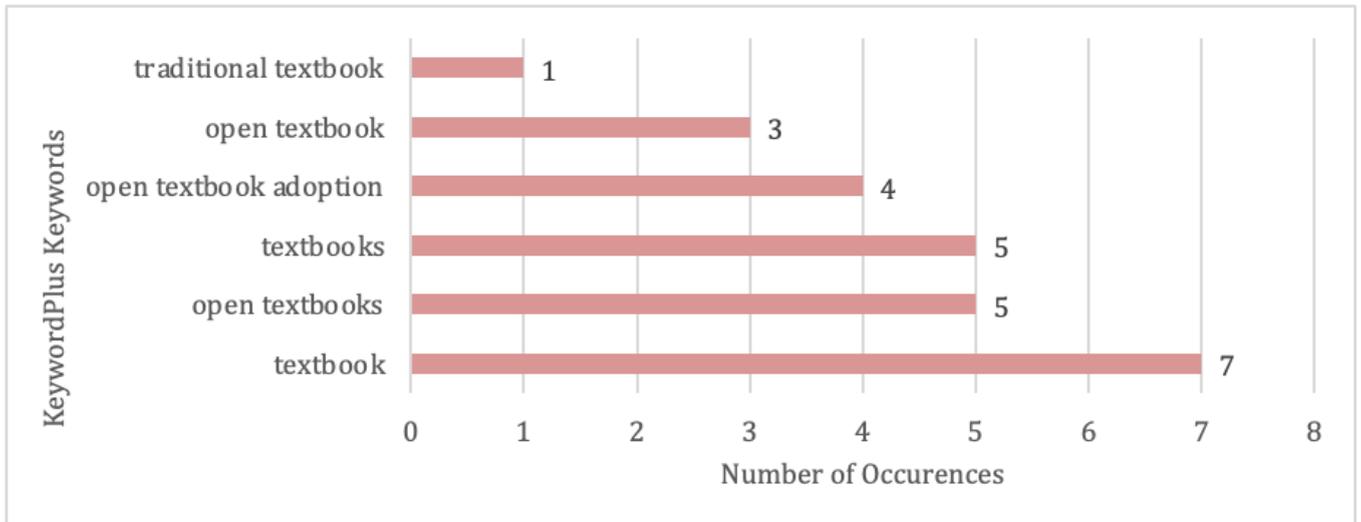
Note: The top twenty most frequently used Keyword Plus keywords and usage, n=547 total Keyword Plus keywords

**Figure 2.**  
Usage of Open-Textbook-Related Author's Keywords



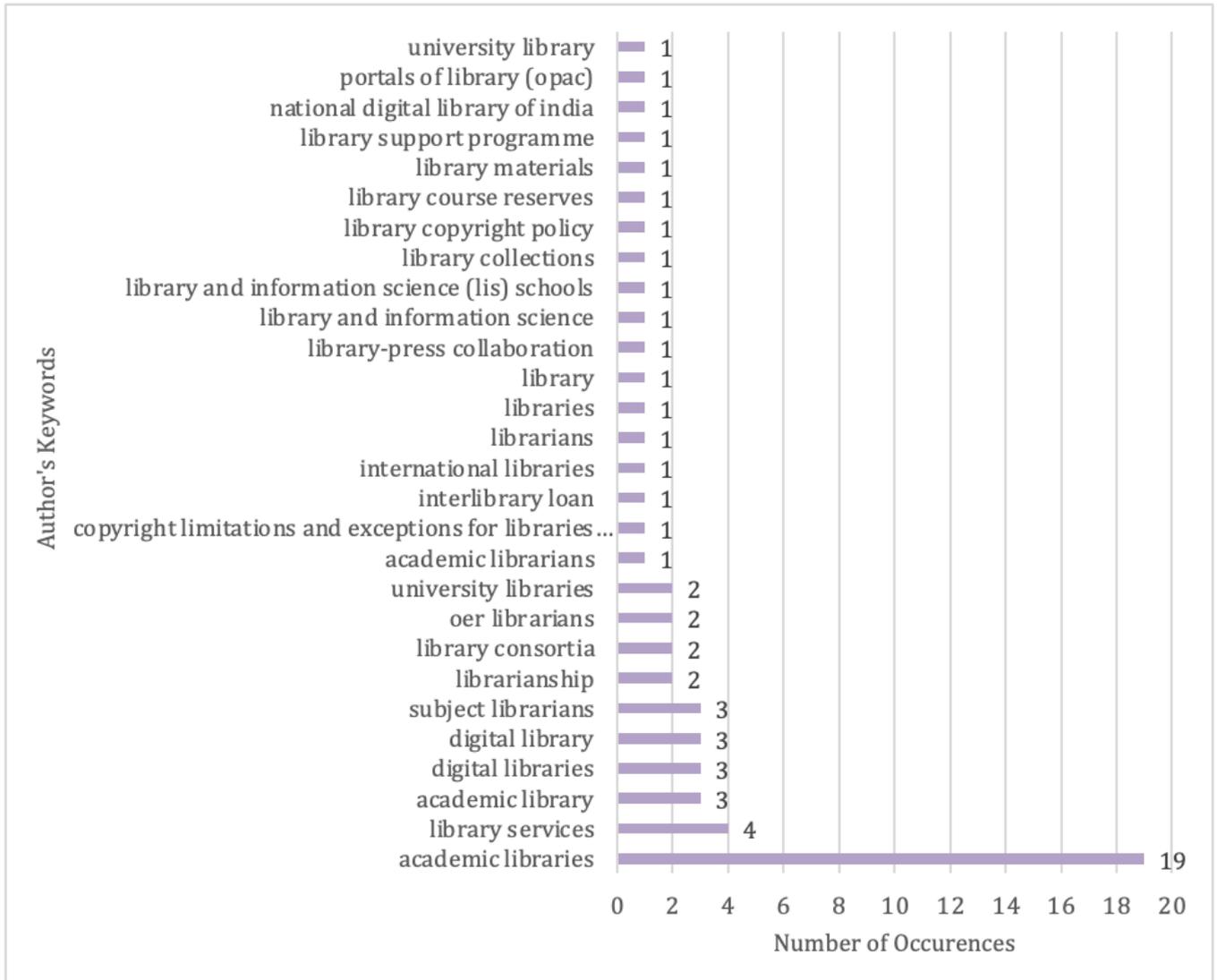
Note: The Author's keywords extracted from the sample about open textbooks and how often they were used, n= 2807 total Author's keywords.

**Figure 3.**  
*Usage of Open-Textbook-Related KeywordPlus Keywords*



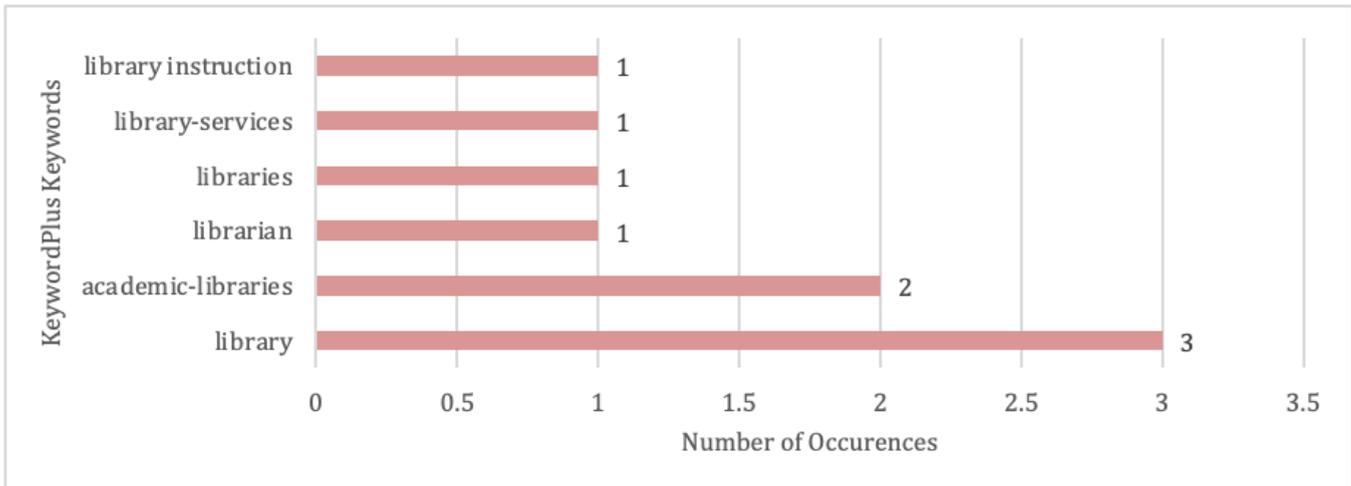
*Note: The Keyword Plus keywords extracted from the sample about open textbooks and how often they were used, n=547 total KeywordPlus keywords.*

**Figure 4.**  
Usage of Library-Related Author's Keywords



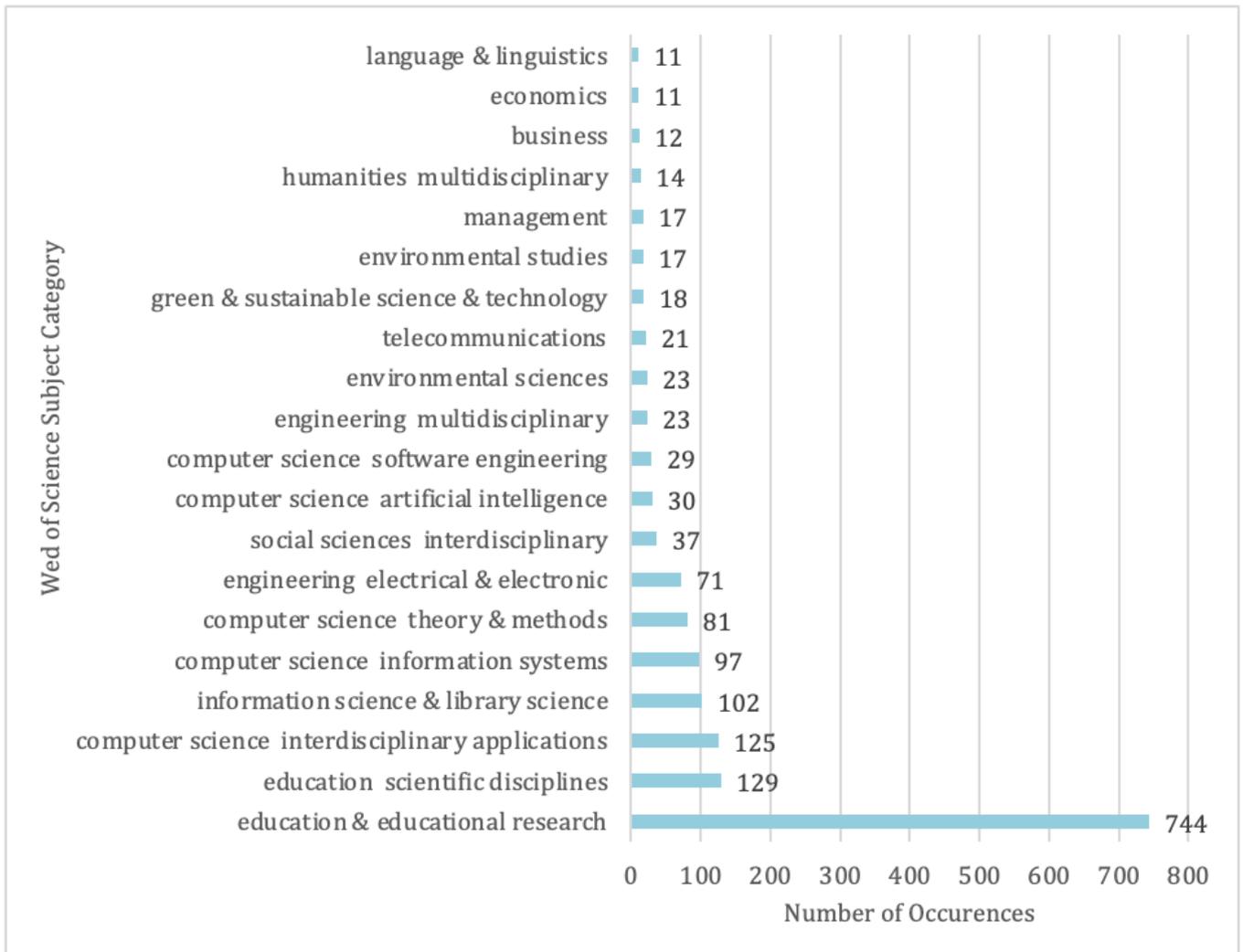
Note: The Author's keywords about libraries extracted from the sample, and how often they were used, n=2807 total Author's keywords.

**Figure 5.**  
*Usage of Library-Related KeywordPlus Keywords*



*Note: The KeywordPlus keywords about libraries extracted from the sample and how often they were used, n=547 total KeywordPlus keywords.*

**Figure 6.**  
*Most Frequently Used Web of Science Subject Categories.*



*Note: The top 20 most frequently used Web of Science subject categories and how often they were used in articles in the sample, n=93 total subject categories.*

## Open Peer Review

Remler, N. (2023, April). [A Bibliometric Study of Research on Open Educational Resources and Higher Education, by R. Chandler]. *Journal of Open Educational Resources in Higher Education*, 2(1), 37-41. doi: 10.13001/joerhe.v2i1.7877

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**Reviewer:** Nancy Remler

**Recommendation:** Revisions Required  
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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

This manuscript's topic is definitely related to the purpose of JOERHE. In fact, an examination of the research will be helpful in encouraging further research in the use of OER. While the topic is appropriate, I find that it misses a few opportunities, which I elaborate on in the other sections of this form. If you choose to take up some of those opportunities, the article will more strongly demonstrate its importance in this body of knowledge of OER.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article takes the customary organization of a research article. For the most part, its content is logical. In other sections of this form, I point to strengths related to organization. At the same time, I found myself asking a few questions:

1. There seems to be a logical gap in the opening paragraphs. They lead with a point that OER reduce costs and enhance equity. The next sentences follow with a "therefore" statement that you conducted your bibliometric study. Isn't your study about more than cost and equity? Please take another look at the opening of the lit review, which reads like a suitable lead for the article. Would you consider weaving this content into your introduction?

2. If you decide to revisit your opening, you might also consider another question I found myself asking: What was your research question? And how did this bibliometric study stand to answer that research question?
3. Were there any limitations to your study? If so, what were they?
4. It seems that your study focused on journal articles and not books. Am I correct? If so, should you mention that in this manuscript and explain why?

## Methodology, Approach, Conclusions

***The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?***

The methodology is specifically explained, which results in a clear, logical conceptual framework for this study.

To me the most compelling segment of your findings was the section on the most highly cited articles about OER. That paragraph points to the content of articles, not key words, authors or topics. Because I am interested not only on OER's impact on the cost of education but also impact on learning, impact on faculty development and impact on faculty advancement, this was the information I was most interested to find.

The observation above leads me to ask more questions: I wonder why you didn't examine the patterns/trends in the purposes of the body of research. Your opening points to cost and equity for students, but the keywords you found identify a broader range of research purposes: OER's impact on learning, its role in distance learning, its influence on developing pedagogies. Were there any assessments/ evaluations of OER and their rigor? If not, have you identified a gap in the research?

Your discussion observes that publications in OER have decreased in the past few years and it follows through with possible reasons for that decline. I appreciated the logic there and I think it points to a need for further study.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The writing style is appropriate for an academic journal; no egregious stylistic issues hindered my reading. Neither did I notice any issues with references.

Within the body of your article, the graphs and charts are logical, appropriate illustrations of your findings. While I appreciate the additional charts and tables included in the appendix, I notice that you have eight pages of them and wonder if you need so many. If you choose to keep them, I agree that an appendix is an appropriate place to present them.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

I point to this matter under the methods/conclusions section above. I do think this article is applicable to the study of OER, and it will inform others' knowledge of it and encourage others to conduct future research. My main recommendation here is that you identify as many literature gaps as you can to point readers more directly to research needs.

## What are the stronger points/qualities of the article?

The lit review gives an appropriate outline of the research on OER and its varied angles. A strong aspect of the lit review is the last section in which it identifies clear gaps in the bibliometric research. It also states clearly the purpose of this study and how it bears significance to the growing body of knowledge in OER.

This article also taught me something new. I had not been aware of Bradford's Law or Lotka's Law (maybe I learned about them in grad school and forgot). Your article inspired me to dig a little deeper into those concepts, and I enjoyed my side trip to learn more about them.

I also appreciate the purpose of your research because it will springboard others to conduct studies of their own; your investigation will make others' research more efficient.

What are the weaker points/qualities of the article? How could they be strengthened?

See the questions I asked under the methodology/conclusions section as those questions are applicable here.

While your discussion examines some patterns in your data and draws some reasonable conclusions about those patterns, I wonder if you might explore a little more. For instance, why are so many authors in the field of computer science? Is there something about the cost of textbooks in that field that necessitates significant cost reduction? Is there a need for more diversity in that field which OER can facilitate?

You also notice that the field of education (I take that to mean teacher education) is another discipline highly represented in publications. Is there something about that field that warrants much research? Is the cost of becoming a teacher such that a reduction in textbook costs is especially necessary? Is there a connection between development of OER and an effort to mitigate the teacher shortage?

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

### Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

### Overall Evaluation

1- Weak Accept

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## Open Peer Review

Smith, B. (2023, May). [A Bibliometric Study of Research on Open Educational Resources and Higher Education, by R. Chandler]. *Journal of Open Educational Resources in Higher Education*, 2(1), 42-45. doi: 10.13001/joerhe.v2i1.7877

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**Reviewer:** Brenda Smith

**Recommendation:** Accept Submission

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

The topic is directly related to open education and builds on the bibliometric research methodology of three previous studies but fills a gap due to its focus on academic libraries/librarianship and OER. Given that the article title and the purpose of the article includes academic libraries, a bit more about that would be beneficial - even how highly/lowly placed that the academic library content was related to the others.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article is logically organized and adheres to traditional structures (i.e., literature review, methods, results, discussion, etc.). One suggestion is to put a statement about where the academic libraries fit within each section (as applicable) - even if that number is low because it relates to the title and the study's explicit purpose and the article title.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate*

*balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

Given the nature of the study, it is clear that the author is familiar with previous work on the subject – both other bibliometric studies on OER and general open education literature. I did not notice any missing recent or seminal works on the subject. I noted that the advanced search string used did not include the acronym OER or the alternate term of “open education resources,” which surprised me., but I don't think would really impact overall results. I also noticed that all three previous related studies used Scopus to gather data, but this study did not. It would be useful to briefly explain the reason(s) for this choice, given that the other three all used this tool. In the results section (page 8, second paragraph), it talks about the 18 LIS journals, were any of them in the list of 34 core journals? That wasn't clear to me (but I suspect they probably weren't on that list). On page 13, the first paragraph, it talks about how academic librarianship overlaps with the field of Education – in what way? As a general discipline? Or, for the purposes of indexing? It also mentions that many academic librarians/research in academic libraries may be published in Education journals. How could you parse that out a bit? Overall, the methodology, approach, and conclusions were sound.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The article was clear and well-written. There were a couple of awkward sentences or slightly unclear connections. For example, on page 13, it talks about how Mishra et al found open textbooks to be a declining research area of OER, but that this research found that it was in the top 20 most frequently used Author's keywords and in the most highly cited articles. Using a “however” or something to separate Mishra's findings and this study would help clarify the difference. For references, there needs to be some copy editing to correct some of the citations related to sentence case titles, including volume/issue information, etc. So, while the article is well written, it would benefit from some very minor copyediting.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

The article provided an interesting glimpse into the publication data about LIS and OER, so yes, it contributes knowledge into the field. I was surprised that LIS literature did not figure more prominently in the results. I had assumed that given how librarians were so prominently seen and talked about in the field of open education, that it would translate into the literature, too. Well, that bubble burst! On the other hand, librarians are often more busy doing the work than publishing about it. And, citation metrics are

only one measure of impact. Many librarians use the literature to inform their own practice, but do not then write/publish themselves, which may (supposition here) belie actual impact. But that's beyond the scope of bibliometrics studies, and just an interesting aside. I found the article enjoyable to read, and I learned quite a bit.

What are the stronger points/qualities of the article?

It was well-written and clearly articulates trends in the literature. It also shows its connections to previous studies. Given that there are similar findings in these studies, it provides further support to the findings and illustrates the major publication trends in the field.

What are the weaker points/qualities of the article? How could they be strengthened?

The article was well written, so isn't much that could be strengthened. The questions that I had are identified above – e.g., explaining why Scopus not used and expanding on the discussion about how many academic librarians/research in academic libraries may be published in Education journals. Is it possible to look at that more closely? If not in this article, as a general option for future research? Something to consider is adding separate sections or adding a statement in existing section about how academic libraries/librarians research relates/does not relate, given the title of the article and the focus of the study as per the methodology section – just to tie it all together.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Highly Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

3- Strong Accept

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# Reimagining Leadership in Open Education

## *Networking to Promote Social Justice and Systemic Change*

Karen R. Cangialosi<sup>1</sup>

Carlos C. Goller<sup>2</sup>

Kim Grewe<sup>3</sup>

Tiffany Tang<sup>4</sup>

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Keywords: Open education, Social justice, Institutional change, Student experience, Cross-institutional collaboration

### ***Abstract***

Challenging traditional notions of leadership and leveraging non-hierarchical learning structures, the Regional Leaders of Open Education Network (RLOE) was created to bring together leaders from a broad diversity of institutions in the U.S. and Canada to build strategic plans for open education (OE) that especially support underserved and underrepresented students including (but not limited to) BIPOC students, students with disabilities, food-insecure students, remote rural students, foster-care students, students impacted by incarceration, LGBTQIA students, student parents, and first-generation college students. All members of the network, including an advisory team, collaborators, student mentors and cohort participants were engaged in a multi-directional learning program over two years (2021-2022) that included a variety of synchronous and asynchronous online engagement opportunities, as well as the

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opportunity to attend an in-person summit. Analyses of surveys and reports completed by network participants indicated that RLOE was successful in building community and providing vital networking opportunities that supported them to design and implement open education strategic plans that included initiatives in professional development, forming partnerships, integrating DEI principles as well as other goals and accomplishments. Cohort participants indicated significant gains in 1) developing and leveraging their leadership skills to serve marginalized and underrepresented students, 2) understanding how OE practices can empower all students, especially marginalized students, and 3) how Open Educational Resources (OER) can be used to specifically support underrepresented and underserved groups. In addition, 90% of cohort participants indicated that the RLOE Network helped them to center principles of DEI into their open educational work.

## Introduction

While there is a substantial degree of work being accomplished in open education (OE), for the most part, this work is disconnected, under-resourced, and under-recognized. The lack of connection and communication among open education practitioners, often working in complete isolation with little to no institutional support, has led to challenges in capacity building, long-term sustainability and the broader reach of Open Education (Morgan et al., 2021; Rolfe, 2012; Watters, 2018). It has also resulted in a highly uneven distribution of the creation, development, and integration of Open Educational Resources (OER) and Open Educational Practices (OEP) across the large number of higher education institutions in North America and throughout the rest of the world. Furthermore, the dearth of diversity amongst open education leaders has resulted in huge limitations, not only on the development and distribution of OEP and OER, but on the evolution of ideas and the progress towards the promises of Open Education (Robertson, 2020).

To work towards addressing these challenges, we transformed the Regional Leaders of Open Education (RLOE), a project of Open Education Global (OE Global) and the Community College Consortium for OER (CCCOER), into a network during its second phase from 2021-2022. We designed the RLOE network to bring together Open Education leaders from across broad institutional and regional boundaries to assist leaders and incipient leaders in building strategic plans for open education that especially support underserved and underrepresented students. As an extremely important part of RLOE's intentional design, we began with a confrontation of the very notion of "leadership." Our reimagination of leadership began with the simple but profound words of Dolores Huerta, "A leader is a person that does the work," from Huerta et al. (2016). But who has the opportunity to do the work? Essential to our reimagination of leadership, we relied heavily on the idea of 'leading from the middle.' "Unlike top-down leadership, Leadership from the Middle is not a function of the position someone holds. It is instead a function of showing someone his or her best self, and creating a favorable environment in which they can be that self" (Gottlieb, 2012).

By framing our work with social justice and equity at the forefront, we sought to break down hierarchical learning models and broaden the impact of open education to leverage it to address the enormous systemic problems that inequity and racism bring to our students. As systemic problems need

an immense variety of actors in every corner to combat them, we felt that our leaders should come from a wide variety of higher education institutions (from two-year community and technical colleges to Research Intensive (R1) Universities in a variety of institutional roles and with a variety of areas of influence – from academic vice presidents to adjunct faculty). So that many of our incipient leaders, like the students we wished to serve, were also people with lived experiences of being underserved and underrepresented, we worked to recruit participants especially from Hispanic-Serving Institutions (HSI), Minority Serving Institutions (MSI), Historically Black Colleges and Universities (HBCU) and from institutions with lesser economic resources. We also built our advisory team with an intentional focus on diversity and inclusivity.

We drew inspiration from natural ecosystems, where complexity, high biodiversity, and interconnectedness are required for a sustainable and resilient ecological system. We worked to co-create an environment where RLOE could become a diverse human network centering the perspectives of and shifting power to marginalized communities. To do this, it was important for us to clearly articulate, promote, and most importantly embody these values in all areas of the work of the RLOE network: Access and Equity; Student Agency and the Rights of Learners; Community and Collaboration; Care and Generosity; and, Social Justice, Diversity, Inclusion, Anti-Racism. Our aspiration was for RLOE participant leaders to not only create strategic plans, but to shape a new, resilient, vibrant, sustainable vision for the future of open education.

We believe that, while there are still several areas for growth and improvement, the many successes and positive outcomes of the Regional Leaders of Open Education (RLOE) network over the past years means that it could serve as a model that could be modified and customized for the development of other open education networks globally.

## Literature Review

It is critical to emphasize that RLOE is a network as opposed to an organization. Whereas organizations are typically more top-down, providing information, training, conferences, and other opportunities to members, networks are more relational. A network's priority is connecting and distilling the collective experience and shared expertise of the network members (Tener, 2013). Instead of the organization providing all the services, network members themselves identify and contribute/participate in creating activities and/or sharing information, with the organization, in this case Open Education Global, providing the support and infrastructure to enable this. Members help create the benefits/value with the support of the organization so there is a focus on give and receive (Tener, 2013). In these ways, networking can strongly support the creation and ongoing implementation of open education initiatives through building the leadership and relationships that are necessary for the long-term sustainability of OER and Open Educational Practices (OEP).

The effectiveness of networks in promoting leadership development and amplifying the voices of non-traditional leaders in various fields, such as open education and social justice movements, has been demonstrated (Harris, Azorín, & Jones, 2021). Non-traditional leadership is a form of leadership that challenges the dominant norms and practices of leadership in a given context. It is a leadership that

recognizes and values the diversity and potential of all people, especially those who have been historically marginalized or underrepresented. It is a leadership that fosters collaboration, inclusion, and empowerment among various stakeholders, rather than competition, hierarchy, and control. It is a leadership that adapts to the changing needs and demands of the environment, rather than adhering to rigid and outdated models. It is a leadership that seeks to create positive and lasting change in the world, rather than maintaining the status quo. For optimal utilization of networks in non-traditional leadership development, Brown and Flood (2020) recommended that school leaders prioritize relationship-building and seek diverse perspectives and experiences. Concurrently, Nicholson et al. (2016) contended that teacher leadership should be independent of formal authority and hierarchies, which allows for recognizing and amplifying non-traditional leaders' voices.

Networks can help bridge the gap between the open education movement and social justice aspects of access to and representation in higher education by providing a platform for collaboration and resource sharing, offering a space for marginalized voices to be heard, and advocating for policies that promote educational equity. Research indicates that networks can support the implementation of OEP as an equitable approach, which is essential for fostering social justice in education (Bali, Cronin & Jhangiani, 2020; Lambert, 2018; Corral, 2015). Open Educational Practices (OEP) include the replacement of commercial textbooks with OER as well as the use of Open Pedagogy. While OER can provide access, open pedagogy entails teaching practices that engage students in knowledge creation and sharing, often through the incorporation of open licences on student-created materials. This approach has the potential to advance social justice by empowering students to partake in knowledge creation and dissemination, challenging dominant narratives and power structures. See for example this excerpt from Matthew Moore, a student in an open pedagogy class:

The autonomy and authority fostered in the students, and the fact that this project actively sought and utilized student perspectives, was empowering. Engaged with this digital pedagogy, given backstage passes to the world of academic anthologies, we curated works that seemed urgent for a new generation of students. In this way, it was our own critique of the traditional and reiterated canon that has been burnt into the retinas of undergrad English majors anywhere. Within that space we included untold histories, suppressed narratives, and stories that didn't make the cut. In a small yet surprisingly diverse university with students from all different cultural and ethnic backgrounds and who encounter literature in their own nuanced ways, the inclusion of these pieces was vital (Moore 2020, p. 67).

Nonetheless, Lambert (2018) noted that social justice principles can occasionally be obscured within textual details or technological debates, and the potential benefits of open approaches may not always be realized due to insufficient holistic thinking and collaboration among communities pursuing open practices (Corral, 2015). Bali, Cronin, and Jhangiani (2020) discovered that while some forms of OEP can support social justice, others do not. Katz and Van Allen (2022) determined that educators often lack awareness of how to implement OER and OEP equitably. However, the similarities between the open movement and social justice movements imply potential for closer collaboration between these movements.

Lastly, networks can be employed to build capacity and establish sustainability in the open education movement in various ways. For instance, a study by Hodgkinson-Williams and Trotter (2018)

analyzed the effectiveness of the Open Educational Resources Africa Network (OER Africa) in promoting the use of OER in African higher education institutions. The study reported that OER Africa effectively increased awareness and adoption of OER and supported capacity building through training and mentoring activities. Another study by Beaven and Hauck (2014) evaluated the efficacy of the Language Open Resources Online (LORO) network, which facilitates sharing and collaboration on language teaching resources. The study demonstrated that LORO effectively promoted collaboration and resource sharing among language teachers, leading to the development of new resources and innovative teaching approaches. In his examination of various open models, de Langen (2018) found that regardless of the organization's primary focus—be it material sharing, collaboration, or training—community building is a crucial element for success. Jhangiani and Coolidge (2018) have also found that inter-institutional collaboration is key to the sustainability of Open Education including the adoption of both OER and OEP. Further, Diaz Eaton et al. (2022) extensively articulate the ways that collaboration hubs, networking and community building are essential to the sustainability and incorporation of both OER and OEP in STEM, as well as provide important opportunities to address and promote social justice. Thus, networks play a significant role in fostering capacity building and ensuring the sustainability of the open education movement.

## Methods

### *Participants*

The RLOE Network was composed of a diverse (56% non-white) leadership team (n = 15: 1 Director, 1 Coordinator, 4 Advisory Board members and 9 Collaborators), cohort participants across three workshops and an in-person summer summit (n = 112), and student mentors (n = 10). Network participants were affiliated with 83 institutions/organizations across the United States and Canada, where cohort members represented 69 of the 83 institutions with representation in the network. Institutions included 2-year and 4-year institutions, MSIs, HSIs, HBCUs, Tribal Colleges and Indigenous Institutions, and ranging from small to large enrollment sizes. These participants represented a large variety of roles in higher education (e.g., librarians, instructional technologists, instructional designers, high and mid-level academic administrators, full-time, tenure track and adjunct faculty, and other support staff).

### *Program Description*

The construction of the RLOE network was intended to center the perspectives of and shift power to the marginalized. As such, we worked to create conditions to support the voices of those not usually considered leaders to shape a new vision for open. Our approach, which utilized networking, non-hierarchical learning models, consensus building, and shared problem solving, differed from other approaches that usually rely more on one-way content delivery and individual professional development and training.

During a two-year period, we facilitated three 3-week interactive online workshops and an in-person summer summit. The workshops took place in Fall 2021 (cohort 1), Winter 2022 (cohort 2) and Spring 2022 (cohort 3). Each three-week workshop consisted of 12 hours of synchronous sessions on Zoom and an expectation of 12 hours of asynchronous discussion participation (via OEG Connect) and web annotation of readings (via Hypothes.is) that centered around 7 key learning areas. The seven learning areas were:

1. Orientation to the RLOE Framework and Strategic Plan Goals
2. Using Open to Cultivate Leadership
3. Increasing Student Access and Success Using OER
4. Beyond Access: Using Open Educational Practices (OEP) to Empower Students
5. The Spirit of Open: OER Stewardship and the CARE Framework
6. Sustaining Open
7. Implementing Your Plan: After This Workshop

The workshops were facilitated by the advisory team and collaborators, but a multi-directional exchange of information and opportunity for voices to be heard was nurtured by the team. Cohort participant leaders, the advisory team, the collaborators, and the student mentors all had ample opportunity to contribute their ideas, experiences, resources, expertise, and suggestions. Importantly, student mentor voices were intentionally included to inform RLOE members about student needs and include their ideas and voices as drivers for change. During the workshops, cohort participants were supported to draft open education strategic plans for their institutions that aligned with their campus missions to support underserved and underrepresented students. All plans were shared in a Google folder that was open to all leaders, advisors, students, and participants so that anyone in the RLOE network at any time could read, learn from, make suggestions, and comment on the work of others.

After workshops were completed, cohort participants were supported throughout the rest of the two-year program to continue to refine their OE strategic plans and to begin to implement OE initiatives. We provided this ongoing support through 1) individual matching of cohort participants with a collaborator/advisor who checked in once or twice a month and scheduled meetings to provide advice or answer questions; 2) monthly interactive Zoom help sessions (which we called “un-webinars”); and 3) continuing asynchronous discussions with RLOE Network members through the OEG Connect online platform. All materials were shared openly on the RLOE.org website.

### ***Data Collection***

Three key areas of the RLOE network’s ability for leadership development were assessed:

- Serving marginalized students
- Promoting the centering of social justice in Open Education
- Networking, community and capacity building

To assess these three areas, we collected and analyzed three types of data:

1. Feedback provided by cohort participants from surveys
2. A review of 45 final reports that were submitted by the participating institutions, each summarizing their OE efforts from 2021-2022
3. Selected quotes from participants in a variety of RLOE activities and events

## Surveys

Feedback data was collected from Cohort members throughout the implementation of RLOE Network activities. Surveys were used at the conclusion of the RLOE workshops and the in-person summit to understand participants' experiences, inform future programming, and understand the focus for open education plans and OE implementation (see Appendices A and B). Finally, at the conclusion of the grant funding cycle, a follow-up survey was sent to all RLOE members (Cohort participants, students, and RLOE leadership team members) to understand attitudes toward the program as well as outcomes and impacts of participating in the program. Paired t-tests (a method used to test whether the mean differences between measurement observations is different from zero) were used to examine statistical significance in reported learning gains, and Cohen's D, a standardized effect size for measuring the difference between group means, was used to estimate the strength of magnitude for learning gains. Cohen's D expresses the differences between two means in standard deviation units, where larger values for Cohen's D indicate stronger differences. Additionally, the frequency and percentage of respondents reporting benefits or impacts as a result of participating in the RLOE Network are also used to understand cohort members' experiences. The appendix also includes a treemap figure of participants' comments to "What was the most useful aspect of the RLOE program?" (see Appendix C).

## Qualitative Report Review

Cohort members were asked to report on their open education efforts. From a review of reports submitted by 45 RLOE institutions, Open Education initiative themes were identified, coded and used to determine the extent of accomplishment within each area. Thematic coding was used to categorize focal intentions of institutional OE plans across information provided for goals, activities and accomplishments. The percentage of institutions that included information related to coded themes across reported goals, activities, and plans was calculated to illustrate the range and types of accomplishments and implementation efforts that participants reported for their institutions within the first year of participating in and completing the RLOE workshops.

## Participant Quotes

Selective quotes were harvested from RLOE un-webinars, conference presentations, and evaluation surveys. Quotes are utilized throughout the paper to support quantitative findings using the words of our RLOE Network participants.

## Results

Our analysis of the features and accomplishments of the RLOE network are organized into the three key network assessment areas:

- Serving marginalized students
- Promoting the centering of social justice in Open Education
- Networking, community and capacity building

### ***Leadership Development: Serving Marginalized Students***

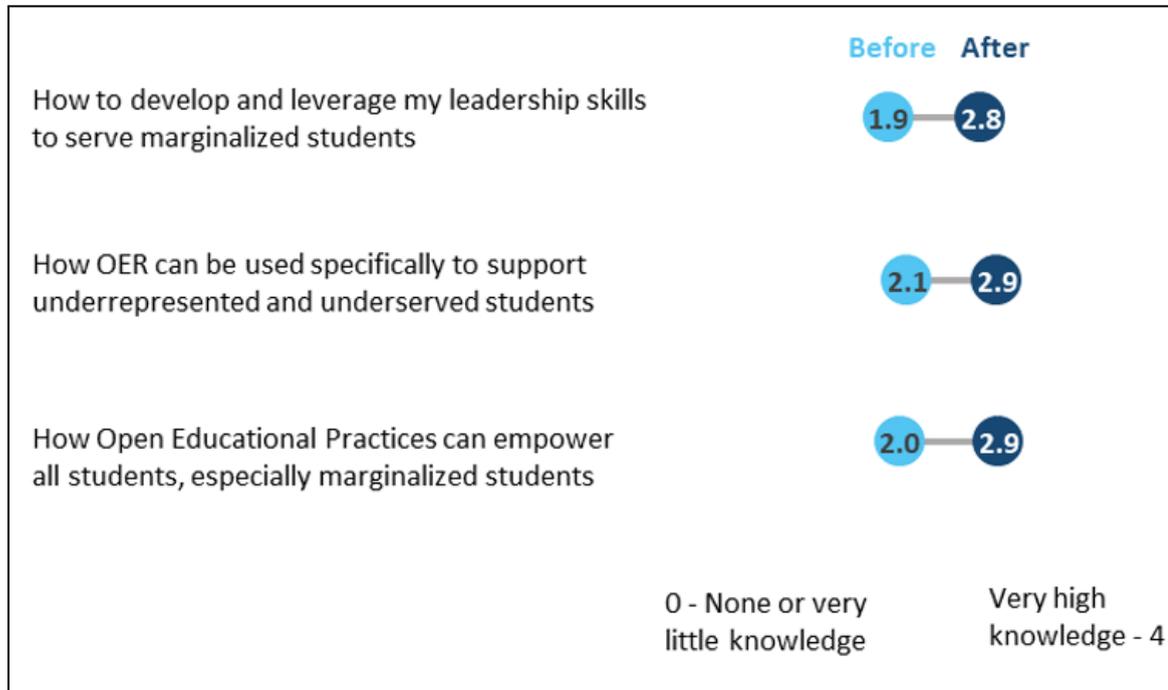
A major focus of the RLOE Network for 2021-2022, was to encourage participants to identify their spheres of influence and support them to create impactful open education initiatives in their institutions that particularly addressed the needs of underserved students. After participating in the RLOE workshops, cohort participants indicated significant gains in developing and leveraging their leadership skills to serve marginalized and underrepresented students ( $MT1 = 1.88$  ( $SDT1 = 0.85$ ) to  $MT2 = 2.77$  ( $SDT2 = 0.76$ );  $t_{64} = 9.47$ ,  $p < .001$ , Cohen's  $D = 1.36$ ) (see Figure 1). Additionally, 59% of cohort members reported on the follow-up survey that the “RLOE Network encouraged them and/or built their confidence to ‘lead from the middle.’” i.e., to use their agency to advance open education initiatives at their institution. The following quotes from RLOE cohort members are provided to illustrate the impact that the RLOE Network had for building agency and for supporting cohort participants to “lead from the middle:”

Meeting and discussing theoretical and practical ideas with like-minded colleagues helped me conceptualize how I could be a leader in OER. Hearing the students discuss their experiences and ideas motivated me to make it happen. (Cohort Member A).

RLOE will definitely have an impact on my future work. I am continually thinking about what being a servant leader in open education means, and I think that the ideas of social justice that I developed as part of my RLOE work feeds that internal conversation. (Cohort Member B).

## Figure 1

*Mean gains in knowledge level across all cohort participants prior to participating in the RLOE workshops compared to after participating in the workshops*



## *Centering Social Justice in Open Education*

Across workshop post surveys, 98% of cohort members agreed OE practices are a mechanism for positive change in inclusive education. Figure 1 also indicates reported gains in participants understanding for 1) how OE practices can empower all students, especially marginalized students (MT1 = 1.98 (SDT1 = 0.89) to MT2 = 2.94 (SDT2 = 0.72);  $t_{64} = 9.78$ ,  $p < .001$ , Cohen's  $D = 1.44$ ), and 2) how OER can be used to specifically support underrepresented and underserved groups (MT1 = 2.06 (SDT1 = 0.94) to MT2 = 2.92 (SDT2 = 0.71);  $t_{64} = 8.18$   $p < .001$ , Cohen's  $D = 1.20$ ).

In addition, 93% of cohort participants indicated on the follow-up survey that RLOE provided opportunities to engage in dialogue about the advancement of social justice in their OE work, and 90% indicated the RLOE Network helped them to center principles of diversity, equity, and inclusion into their open educational work. The following excerpts from cohort participants demonstrate the stronger favorable attitude of cohort participants to include discussions of social justice, equity, diversity, and inclusion across all RLOE Network activities.

Several RLOE participants mentioned coming into the RLOE network in order to learn more about how to promote OER as a way to save money for students, but that they ended up learning so much more about the social justice implications leading to higher student success as a result of remixing OER to be more representative. This is highlighted in the following quote from a cohort participant:

... the motivation for OER as a cost saving measure was why I ended up attending RLOE, but what I took also from RLOE was thinking about the representation aspect of OER. And so I really appreciated [the realization] that students could finally see incorporated into their courses things like authors who come from different racial, ethnic minority, immigration, sexuality status; lots of different representation for their social identities in the course to reflect the material that they're reading and say, "hey, I'm even a little bit more engaged in this because I see representation of myself in these authors that I chose." (Cohort Member C)

### ***Networking, Community and Capacity Building***

Our survey results showed that the RLOE program was successful in building community and providing vital networking opportunities for capacity building. Follow-up data showed that 85% of cohort members indicated that RLOE helped generate new ideas for OE at their institutions and 76% indicated that RLOE provided easy-to-find resources/tools for OE. In addition, thematic coding of open-ended feedback provided on post-workshop surveys where participants were asked to indicate the most useful aspects of RLOE demonstrates the strong value of the RLOE Network across major networking themes. Prevalent themes across cohort members' open-ended responses included idea sharing (23%), including student perspectives (20%), providing resources (17%), support for OE plan development (12%), and ongoing support of network members (10%), as well as connecting them to larger networks outside of RLOE (6%). The following quotes are provided to demonstrate the impact of networking for cohort members:

...For me, it was more than just building relationships. It was humanizing the work. It was getting to listen and exploring strategies. I would say that [the RLOE network] is an ongoing connection. When you make connections with people and resources, it's a little different than being at a conference, 'cause in the conference, you get a few minutes at the end to ask questions and stuff, but because [RLOE] is already humanized, you already feel comfortable. I have no problem reaching out to anybody in this community and saying, "Hey, I got a question," or posing a question or saying, "Do you have a few minutes? I wanna go over this with you." I think that is tremendously important. And it's given me so much confidence to keep going because this is slow work sometimes, having change in big or small organizations. (Cohort Member D).

You can hear the information from different viewpoints, from a student point of view, from a collaborator point of view, and you get live feedback immediately from the community itself. (Cohort Member E).

The strategic plan developed through these three weeks will provide a baseline for taking the next steps. Short and long-term goals will not only help me in enhancing my institute's OER practices but also next steps for me at the individual level. (Cohort Member F).

After RLOE, there is no turning back or turning a blind eye to the future of open education. I will continue to use the resources I learned about, continue to call on the network of professionals I was able to meet and continue to champion open education. (Cohort Member G).

An example of networking and capacity building is also evidenced through a collaboration that developed across several of the participating Hispanic Serving Institutions (HSI). This collaboration of HSIs led to the development of an initiative to secure national funds for the implementation and development of OER for use in multiple states. The RLOE HSI collaborative also examined best practices for finding commonalities as well as institution-specific goals centering cost-effective ways to develop culturally relevant materials.

A major accomplishment of the RLOE Network was the energized focus and commitment to creating OE plans across institutions. Of the sixty-one institutions with participants who fully participated in the RLOE Network program workshops, 43 (70.5%) provided updates to their OE implementation efforts, and an additional 2 institutions with participants who participated in an in-person summer summit provided information about their OE implementation efforts. RLOE participants reported many goals, activities and accomplishments as a result of their open education strategic planning and beginning stages of implementation (see Appendix D).

Most cohort participants (93%) indicated that participating in the RLOE Network will influence their future work. Feedback data emphasized the strengths of the program in supporting individuals to lead from the middle, integrating DEI as a core value within the planning and implementation efforts of OE, and sustaining a network that builds capacity and allows for sharing of ideas for numerous OE initiatives.

## Discussion

The RLOE Network was formed to leverage Open Education as a means to achieve social justice in higher education. As Diaz Eaton et al. (2022) assert, content alone is not sufficient to move education forward towards equity, but it is necessary to create diverse communities that center accessibility, equity, pedagogy, and inclusivity.

Most open education development work (OER adoption, OER creation, open pedagogy) across the U.S. and Canada, is at the individual professional development level (see for example the SPARC Open Education Leadership Program and the Open Education in Practice Hub). Also, while these programs may include aspects of social justice, this is usually not a primary focus. This disjointed approach often results in short term, unsustainable gains where individuals working in isolation and with little support can easily give up their attempts to transform their teaching or their departmental practices such as textbook adoption. From an analysis of four key open education organizations, de Langen (2018) found that community building and collaboration is essential for the sustainability of open education. RLOE was successful in using a non-hierarchical networking approach to empower incipient leaders, and support capacity building and sustainability of open education initiatives at the institutional level. By building a community network that humanizes practices, RLOE laid the foundation for transforming systems in a sustainable way. (See Figure 1 and quotes in the results). Maintaining contact and connections across various constituents of RLOE through the stages of development and implementation allowed for ongoing collaboration. In addition to the intra-RLOE methods of collaboration and network

building, sustainability was enhanced through ongoing external partnerships with organizations that promote open practices and provide further networking (i.e OE Global, MI Virtual, CCCOER).

Our emphasis on leading from the middle and valuing the exchange of ideas across all members of the network resulted in positive outcomes towards supporting Open Education initiatives addressing underserved and underrepresented student populations. The necessity of using a distributive model of expertise as opposed to using one (or a few) star experts was emphasized by FemTechNet in their development of a Distributed Open Online Course (DOOC) (FemTechNet, 2013). A networked approach is important not only for increasing the circulation of ideas and resources, but for addressing inequities in the ability to contribute ideas and resources – to have a voice that counts. Recognizing that faculty and staff with their own lived experiences as marginalized individuals have especially potent vantage points for understanding the needs of marginalized students, the RLOE network leveraged this expertise and wisdom to support participants to create open education strategic plans with the principles of diversity, equity, and inclusion at the center. The unplanned emergence of the RLOE HSI collaborative further illustrates the power of networking to amplify voices that are not always heard.

Critical to the RLOE leadership development model was the incorporation of student voices throughout the program by using a ‘students as mentors to faculty/staff’ approach. Many organizations attempt to include student voices (for example, via student panels), but these often fall short, especially with marginalized communities. Our deep integration and amplification of the perspective of marginalized students inspired and assisted RLOE participants to create and implement open education plans that focused on social justice and more precisely targeted the needs of underrepresented and underserved students. These diverse student leaders/mentors were utilized consistently to inform the work of RLOE at various program implementation stages and to talk about their personal lived experiences. At the RLOE Summit, our student mentors served as keynote speakers and discussion facilitators. RLOE student mentors provided their perspectives throughout every stage of the program. For example, when one of the students expressed his disdain for materials where he could not see himself reflected, this impacted participants and helped inspire them to keep the student perspective centered as they forged their institutional open education plans.

A key aspect of the RLOE program was the emphasis on increasing cultural representation in OER, and on open pedagogical strategies that can bring greater social justice into higher education. While lowering costs for students by increasing the rates of adoption of OER is important for addressing economic injustices, cost savings alone are not sufficient to tackle the more deeply entrenched disparities experienced by marginalized students (Tillinghast, 2020; Cannell, Macintyre, & Hewitt, 2015). On a pathway towards systemic change, RLOE cohort participants created institutional initiatives (see Table 1) to introduce and support pedagogical approaches which provide agency for marginalized students to speak for themselves, and/or to use or develop OER which reflects the cultural diversity of their students. For example, the majority of the participating institutions created professional development events or programs for faculty/staff that specifically address the incorporation of student voice and social justice in open pedagogy.

Our recommendations for others seeking to form similar networks are:

1. Recruit, empower, and incorporate diverse faculty and staff leaders into every stage of the development of an Open Education network. Sometimes this means stepping aside to let others drive the work. Along with leaders that have open education expertise, include leaders with lived experiences of marginalization and with expertise in the scholarship of social justice, diversity, equity, and inclusion regardless of their open education experience and knowledge.
2. Empower and incorporate underrepresented and marginalized students as leaders and mentors to faculty, staff, and administrators in higher education. Provide them with the ability to be heard and included in policy decisions.
3. Provide abundant synchronous and asynchronous opportunities for participants to have ongoing mutual support and collaboration for a sustained period of time (one year or more) as they develop plans and projects at their institutions.
4. Use an open pedagogical approach in the running of the network which underscores a student/trainee/participant's agency in the processes of learning. Teach open pedagogy by modeling it, and cultivate a nurturing environment as the primary focus.

## Conclusion

The RLOE network embraced human-centered ways of being, learning, and knowing. Centering students and breaking down traditional hierarchical models of leadership allowed all network members, including marginalized members, to see themselves as leaders and enabled the majority of them to create and implement a variety of open education strategies aimed to improve learning outcomes for the underserved and underrepresented students on their campuses. The RLOE network serves as a powerful model for the potential replication, expansion, and democratization of the benefits and leadership of Open Education worldwide.

## Acknowledgements

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## Conflict of Interest Statement

Co-author, R. T. Taylor, served as the external evaluator for the RLOE Network program and continues to protect the confidentiality of survey responses by only sharing aggregated, de-identified data with the leadership team. By maintaining the anonymity and confidentiality of responses, the authors are not aware of any conflict of interest to report.

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## Appendix

### Appendix A: RLOE Leadership Program Cohort Post-Survey

Thank you for taking a moment to complete this survey. Your responses will be used to understand the RLOE Leadership Program and will be used to guide the implementation for future workshops and ongoing support for developing open education strategic plans. Information supplied on the survey will be confidential and only available to Dr. Robin Taylor, external evaluator for the ECMC Foundation funded grant. All results will be reported in the aggregate and no names will be identified in public-facing reports.

\*Consider your knowledge level for each item below. Using a scale of 0 (None or Very little knowledge) to 4 (Very high amount of knowledge), indicate your level of knowledge for each learning area **BEFORE** or **PRIOR** to participating in the RLOE Leadership Program.

	0 - None or Very Little	1 - Little	2 - Some	3 - High	4 - Very High
How to develop and leverage my leadership skills to serve marginalized students					
How OER can be used specifically to support underrepresented and underserved students How Open Educational Practices can empower all students, especially marginalized students					
The issues involved with student data privacy rights and risks					
How to make an open education initiative sustainable					

\*Consider your knowledge level for each item below. Using a scale of 0 (None or very little knowledge) to 4 (Very high amount of knowledge), indicate your level of knowledge for each learning area **NOW** or **AFTER** participating in the RLOE Leadership Program.

	0 - None or Very Little	1 - Little	2 - Some	3 - High	4 - Very High
How to develop and leverage my leadership skills to serve marginalized students					
How OER can be used specifically to support underrepresented and underserved students How Open Educational Practices can empower all students, especially marginalized students					
The issues involved with student data privacy rights and risks					
How to make an open education initiative sustainable					

\* Indicate your level of agreement with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The program enhanced my content knowledge of open education.					
The program advanced my understanding of how to include open education practices within a strategic plan for my institution.					
The program provided the necessary resources to create an open education plan for my institution.					
The program empowered me to engage others at my institution to collaborate in the development of our institution's open education plan.					

The program offered ample opportunities to network with other participants.					
The program introduced me to peers who have provided mentorship and support to understanding open education.					

Comments related to your level of agreement with components of the event?

\* Indicate your level of agreement with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Engaging faculty with open educational resources can promote teaching and scholarship.					
Open educational practices are a mechanism for positive change in inclusive education.					
I am confident I can develop an open education strategic plan that meets the needs of my institution.					
I have administration support for developing and implementing an open education strategic plan.					

Comments related to your level of agreement with components of the event?

\* Indicate your level of agreement with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The readings and materials were adequate and useful to the aims of the RLOE Leadership Program.					

The asynchronous learning opportunities were relevant and supportive for creating an open education plan.					
The synchronous learning opportunities were relevant and supportive for creating an open education plan.					
The organization of the learning environment (facilities, tools, materials, participant groupings, etc.) supported learning.					
The exchange of ideas that took place during the program will influence my work.					
I would encourage others to attend the RLOE Leadership Program.					
The program was useful and practical.					

Comments related to your level of agreement with components of the event?

\* Rate your level of satisfaction with the following components of the RLOE Leadership Program

	Very dissatisfied	Dissatisfied	Neither	Satisfied	Very satisfied
The format of the event.					
Timing of the event over a three-week time period.					
The information provided.					
The organization of the program					
The timing of synchronous learning opportunities.					

Comments related to your level of agreement with components of the event.

Please take a few moments to respond to the following open-ended questions. Your answers will greatly assist the leadership team in how to serve you in future virtual meetings and improve future program offerings.

What new ideas have you gained from participating in the RLOE Leadership Program?

How do you plan to incorporate these ideas into your work going forward?

What do you feel was (were) the most useful aspect(s) of the RLOE Leadership Program? (Please use 2 sentences or more.)

What specific suggestions do you have to improve this RLOE Leadership program?

Additional comments about your experience.

## Appendix B: RLOE Cohort Follow-Up Survey

Thank you for taking a moment to complete this survey. Your responses will be used to understand different ways the RLOE Leadership Program may have impacted cohort participants and will be used to highlight the program for the ECMC Foundation. Findings will be used to help the leadership team modify aspects of the program as well as to use findings to seek additional funding which can support ongoing RLOE activities.

Information supplied on the survey will be confidential and only available to Dr. Robin Taylor, external evaluator for RLOE. All results will be reported in the aggregate and no names will be identified in public-facing reports. Hence, individuals responses will not be shared with the leadership team or others.

\* Indicate each of the ways participating in the RLOE Network has benefited or supported your work.

Check all that apply:

\_\_\_\_\_ No benefits or support.

\_\_\_\_\_ RLOE encouraged me and/or built my confidence to ‘lead from the middle’, i.e., to use my agency to advance open education initiatives at my institution.

\_\_\_\_\_ RLOE provided easy to find resources/tools for open education (OE), including resources related to OE sustainability, stewardship, policies, and professional development.

\_\_\_\_\_ RLOE helped me generate new ideas for open education initiatives at my institution.

\_\_\_\_\_ RLOE helped me center principles of diversity, equity and inclusion into my open education work.

---

RLOE encouraged me to involve students across open education initiatives at my institution.

---

RLOE provided opportunities to engage in dialogue about the advancement of social justice in my open education work.

---

Other (Please specify):

---

Comments related to how RLOE supported or benefited your work?

\* Indicate which of the following statements are true based on your experience participating in the RLOE Network. If a statement is not applicable to you, please leave it blank. **As a result of participating in RLOE:**

Not applicable.

---

My institution has made progress towards shifting structures and paradigms to support open education.

---

I have strengthened my commitment to open education.

---

I have made additional connections within my institution with others who support open education initiatives.

---

I have made additional connections with other RLOE members outside of my institution.

---

I have increased my connections to the broader open education community.

---

Other (Please specify):

---

Comments related to how RLOE supported or benefited your work?

\* Do you feel participating in the RLOE Network will have an impact on your future work?

Yes

---

Not sure

---

\_\_\_\_\_

No

\_\_\_\_\_

Please explain.

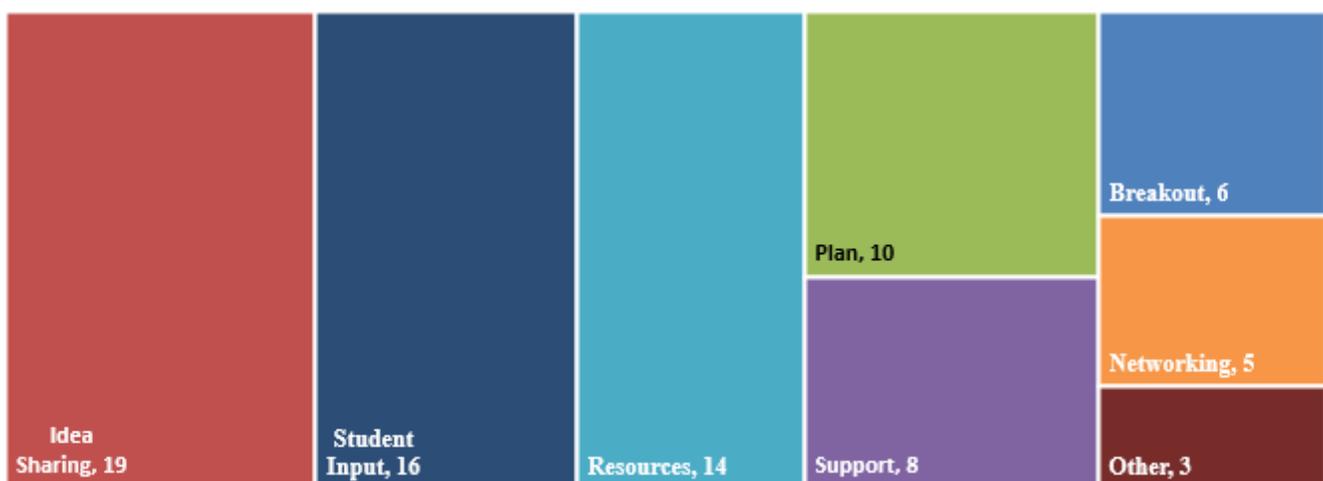
Do you have suggestions for what might make the RLOE Network more effective?

What factor(s) or challenges do you face for implementing open education initiatives at your institution?

What factor(s) at your institution are most supportive for implementing open education initiatives of your open education plan?

Additional comments?

### Appendix C: Treemap of coded responses for “What do you feel was the (were) the most useful aspect(s) of the RLOE Leadership program?”



#### Examples of open-ended comments in participants own words:

- ■ Being able to review and borrow from other strategic plans. Also the huge emphasis on the potential for open to instil greater equity and accessibility in classrooms - powerful reminder.
- ■ ■ ■ Engagement with RLOE team members and community as well as a direct talk from students was really helpful. All the wonderful presentations and discussions helped me realize there are a number of aspects to consider for sustainable OER strategy development.
- ■ ■ ■ One on one mentoring. Hearing about other people's plans. Hearing from students. Seeing examples of others' strategic plan language and discussing the issues. Karen was always very affirming and engaged.
- ■ ■ Meeting others who are working on similar problems, looking at other people's ideas, and thinking in a structured way about planning.

- I appreciate the effort to help us develop an open education strategic plan for our university and providing on-going help to work on this plan over the next year.
- Meeting and discussing theoretical and practical ideas with like-minded colleagues helped me conceptualize how I could be a leader in OER. Hearing the students discuss their experiences and ideas motivated me to make it happen.
- The breakout rooms were where we had guidance and time to work, but it was not enough time. The reading material is excellent and will be using that for more information.
- The networking opportunities were wonderful, as were the connection to resources.
- OER assist marginalized groups. OER supports equity, inclusion, and culture. Students can also produce OER and make it accessible to other students.

## Appendix D: RLOE Network Program OE Implementation

**Table 1**

*Coding frame created from themes generated across institutions of the RLOE Network for Goals, Activities and Accomplishments with counts across institutions (N = 45) with efforts for each category.*

Category	Example criteria for thematic coding of Goals, Activities and Accomplishments of OE Plans	N	%
Professional Development	Includes training, PD, and/or certification of OE/OER for faculty/staff	37	82.22%
Awareness	Includes initiatives to further OER awareness amongst students, faculty, staff, administration (campus)	33	73.33%
Partnerships	Includes efforts to join additional OE networks & professional societies as well as participation in national or regional training programs	33	73.33%
OER Creation /Adoption	Includes efforts to contribute materials to OER repositories; 31 course conversion pushes; swapping commercial texts for open textbooks/materials for courses; and adoption of OER/OEP	31	68.89%
Diversity, Equity, & Inclusion (DEI)	Includes reference to 1) fostering educational equity through access and/or inclusivity; 2) promoting sense of belonging for all students; and/or 3) utilizing OER/OEP as tools for	31	68.89%

	accessibility, diversity, inclusion, or culturally responsive teaching		
Funding	Refers to institutional financial support for OE (e.g., hiring/adding personnel, providing stipends to faculty members, operating budgets) and/or seeking additional funding through grants, etc.	26	57.78%
Student Input	Incorporates student voice into OE planning and implementation (e.g., student focus groups, surveys, panels, and committee representation)	23	51.11%
Faculty Support	Includes specific initiatives to support faculty commitment to OE (e.g., mini-grants, work reduction/release time, creating resources for faculty, etc.)	21	46.67%
Course Adoption	Refers to small and large scale adoption of OER across institutional courses, departments and schools	18	40.00%
Recognition	Initiatives to recognize OE efforts through showcases and/or awards	16	35.56%
Cost Savings	Focused on cost-savings of OE for students	15	33.33%
Course Marking	Includes initiatives that support course registration systems to code courses as OER	15	33.33%
Taskforce	Includes networking and capacity building efforts within an institution to form advocacy groups, support teams, and/or campus alliances which support developing and implementing OE policies	14	31.11%
Metrics	Included efforts to focus on measures of success for OE efforts	12	26.67%
Administrative Support	Specifies collaborating and meeting with institutional leadership to promote OE and OP awareness and advocacy	11	24.44%
OE Pedagogy	Refers to innovative approaches to using OER and OP	11	24.44%
Policy	Includes initiatives to align OE goals within existing programs or plans (e.g., revise/rewrite or forge new policies)	9	20.00%

around Open, and/or working with promotion/tenure committees to recognize open ed work)

ZTC	Focus to include ZTC (Zero Textbook Costs) within institutional courses	8	17.78%
OER Guide	Refers to the creation or adoption of OE guide or framework	7	15.56%

## Open Peer Review

Lachaine, C. (2023, May). [Reimagining Leadership In Open Education: Networking to Promote Social Justice and Systemic Change, by K. Cangialosi, C. Goller, K. Grewe, T. Tang, R. Taylor, D. Tyler, R. Vásquez Ortiz, & E. Zenon]. *Journal of Open Educational Resources in Higher Education*, 2(1), 72–75. doi: 10.13001/joerhe.v2i1.7865

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**Reviewer:** Catherine Lachaine

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, this article is within the scope of the journal. It addressed open education and networking from the perspectives of social justice, leadership, and support for marginalized students. These subjects are of current interest in the open education field.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article proceeds logically and follows the recommended structure for the Articles section of the journal.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound—the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the*

***author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?***

The methodology is accurate, and the authors have used three sets of data, surveys, participant reports, and participant quotes (quantitative and qualitative), to do their analysis. More information about the development of the surveys and the type of questions that were asked of the participants could be useful to better understand the methodology. Also, more information about the content of the report could be useful.

The qualitative reports were coded using the thematic analysis method. Table 1 presents the categories generated from this analysis. The authors present 3 categories of evidence to support the features and accomplishments of the RLOE network, but 19 categories are presented in Table 1. It is unclear if they are directly related. An explanation of how they've grouped those categories to come up with the three main ones could help clarify the method. Therefore, how were the 3 categories of evidence (under Results) generated?

The authors use statistical methods to analyze their survey results. I would suggest the addition of a sentence or two on these processes and why they are reliable and valid.

The article doesn't mention any limitations. Can we generalize the conclusions of the article? Were there any disparities between the experience of US participants and Canadian participants? Things to improve for future cohorts? Lessons learned?

The authors clearly know about the subjects covered in the article and they've referenced relevant literature. But more details about how social justice, in practice, is achieved in the context of the network could benefit the article.

## Writing Style, References

***Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.***

The article reads well, and the references follow the APA citation style. No issues with writing style or references are to be noted.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

This article, with its focus on networking and open education, presents a current topic in open education, where the concept of “open collaboration” is still being defined. As a North American network supported by an international organization (OE Global), I think it is important to share the knowledge and expertise acquired to improve our practical implementation of “open collaboration”.

The focus on marginalized communities is essential to really see the benefits of open education for all.

What are the stronger points/qualities of the article?

One of the qualities of this article is its overall topic, which discusses the benefits of participating in a network of leaders or emerging leaders in open education to promote social justice. Social justice is not something that we achieve without the support of others. The focus on higher education marginalized student communities, in the US and Canada, is also important to address equity issues in higher education systems and directly linked to social justice.

What are the weaker points/qualities of the article? How could they be strengthened?

The article is strong, but one weaker point is that the authors don't provide a lot of examples of initiatives, practices, and strategies to bring social justice into higher education that has been implemented following the participation of leaders in the network. For example, the article concludes with this statement:

“Centering students and breaking down traditional hierarchical models of leadership allowed all network members, including marginalized members, to see themselves as leaders and enabled the majority of them to create and implement a variety of open education strategies aimed to improve learning outcomes for the underserved and underrepresented students on their campuses”.

As a reader, I am interested to learn more about those strategies to inform my practice. It is not always clear how the marginalized voices of students are included in OEP.

The article also mentions:

“By building a community network that humanizes practices, RLOE laid the foundation for transforming systems in a sustainable way”.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

2- Accept

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## Open Peer Review

Martin, J. (2023, May). [Reimagining Leadership In Open Education: Networking to Promote Social Justice and Systemic Change, by K. Cangialosi, C. Goller, K. Grewe, T. Tang, R. Taylor, D. Tyler, R. Vásquez Ortiz, & E. Zenon]. *Journal of Open Educational Resources in Higher Education*, 2(1), 76 –79. doi: 10.13001/joerhe.v2i1.7865

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**Reviewer:** Joyce Martin

**Recommendation:** Accept Submission

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

"Reimagining Leadership in Open Education: Networking to Promote Social Justice and Systemic Change" is perfectly suited for the Journal of Open Educational Resources in Higher Education. As the authors note, leadership, and who has a seat at decision making tables in the open education arena, is a crucial part of the open education conversation. The authors discuss a specific case study, the creation and efficacy of the Regional Leaders of Open Education Network (RLOE) to help a diverse group of leaders build out their institutions' open education plans in a way that supports underserved and underrepresented students.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article structure and sections are clear, and flowed well throughout. In the literature review the authors established the benefits of a "network" as opposed to a top-down organization in developing leadership and used the literature to draw links between open education and social justice movements. These central themes of leadership, centering social justice, and networks/networking are reinforced throughout the article in the results and discussion sections.

## Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The authors collected three types of data they used to discuss the success of the RLOE Network: 1) participant surveys following the RLOE workshops, summit, and program conclusion, 2) thematic coding of the members' open education final reports, and 3) selective quotes from participants. The authors used statistical analysis to analyze the survey data to indicate gains in knowledge in using individual leadership skills and OER to support underrepresented and underserved students. The conclusions drawn by the authors are based in both quantitative and qualitative evidence.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The article seems well researched.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

Yes, the authors discuss the RLOE Network as a model for others to develop new open education networks using an expanded definition of leadership and with a focus on social justice. The authors indicate a lack of diversity in open education leadership and note their network method and expanded definition of a leader could lead to new ideas and yield greater results toward Open Education.

## What are the stronger points/qualities of the article?

I appreciate the forethought and level of assessment built into the RLOE Network activities. The authors put the frequent surveys to good use as they discussed the positive benefits or impacts that RLOE had on the participants. I would be curious to hear more about the action items surrounding open education coming out of the institutions participating in RLOE.

What are the weaker points/qualities of the article? How could they be strengthened?

I found the content of the appendix very valuable, but I did not see where the appendix was referred to in the paper. Perhaps that could be made more clear. I would like to learn more information about the specific knowledge gained by network participants and how that impacted their open education plans.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Highly Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

## Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Highly Sound

## Overall Evaluation

3- Strong Accept

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# OER by Any Other Name

## *Results From A Faculty Listening Tour At A Mid-Sized Research University*

Andrea Schuler<sup>1</sup>

Alyn Gamble<sup>2</sup>

Keywords: Academic Libraries, Higher Education, Listening Tours, Open Educational Resources (OER), Textbooks

### ***Abstract***

The importance of OER in higher education is well-documented, but additional factors are necessary to explore in order to understand the perception, use, and development of these resources. These include scans of academic environments beyond community colleges or large public universities, and the utilization of novel techniques such as listening tours. In this study, a faculty listening tour was conducted at a private, mid-sized research university. Fourteen faculty members from a variety of disciplines participated in the study, with STEM disciplines being slightly more represented. Semi-structured interviews revealed findings related to faculty usage of textbooks, understanding of student financial needs, perceptions of OER, as well as faculty communication preferences. Faculty members were found to be thoughtful in their selection of course materials, albeit limited by time to include or create new resources, and considerate of cost when choosing textbooks. Faculty members were also found to be unable to define inclusive access models and had difficulty understanding the term OER, leading to a change in librarian vocabulary when referring to these resources. This listening tour led to new approaches to outreach and communications regarding OER among faculty, as well as the development of a staff listening tour, to better support campus needs and facilitate the use of more low-and-no-cost materials.

### **Introduction**

The Tisch Library Open Educational Resources (OER) Steering Committee was formed in 2020, with the goal of more strategically identifying needs and increasing support for the use of open educational resources in the School of Arts & Sciences and the School of Engineering at Tufts University. Our committee broadly interprets its scope to include not only materials that meet the strict

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doi:10.13001/joerhe.v2i1.7849 [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

definition of OER – “learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others” (UNESCO, n.d.) – but also any materials that students can access at no cost, including library-licensed articles and ebooks available to the Tufts community, and material freely available online to all.

An early goal for the Steering Committee was to better understand the landscape of OER/no-cost course material use and awareness on campus, looking at both local data and trends in the literature that we felt could be applicable to our context at Tufts. While we had some data from a biennial Tisch Library survey about faculty’s use of alternatives to costly textbooks, we lacked in-depth qualitative information about how faculty select and use course materials, and their awareness and perceptions of OER. More broadly, much of the existing literature about OER is produced by community colleges or large public universities, which sets it apart from Tufts’ context as a private, mid-size, “student-centered research university” (Tufts University, n.d.). The Tufts student body is generally perceived to be wealthy (Aisch, Buchanan, Cox, & Quealy, 2017), which anecdotally has led to assumptions that there is not a problem with textbook affordability on campus, further setting our context apart from those often addressed in the literature. We identified a faculty listening tour, based on the model of a project at Temple University (Bell & Johnson, 2019), as an effective way to make connections with faculty and learn more about their use of course materials in a Tufts-specific context. This would allow us to plan services and outreach supporting the use of OER to better meet faculty and students’ needs and reduce costs to students.

## Literature Review

The impact of OER in higher education is well-documented, but listening tours have been infrequently presented as research strategies for these initiatives. While the impact of OER in community colleges, public universities, and smaller schools is relatively well documented, there have been fewer initiatives discussed that focus on mid-sized institutions like Tufts University. This may be due to a misperception of student need at more expensive schools, though findings show that textbook costs affect students at more expensive schools just as they do at smaller ones (Murphy & Rose, 2018). Thus, OER, as well as provision of textbooks on library reserve, can have a positive impact on student outcomes at mid-sized universities (Gumb & Miceli, 2020; Murphy & Rose, 2018; Schlak & Johnston, 2018).

Listening tours in general are not well documented in higher education, though this research method can provide in-depth understanding of general insight into participant attitudes (Davidson, Jefferson, & Shuherk, 2009; Emmelhainz & Dorner, 2022; Marfurt et al., 2000). In academic libraries, listening tour findings can be utilized to improve outreach and collection development (Emmelhainz & Dorner, 2022). Four known listening tours about OER conducted by libraries served as the basis for our project (Bell & Johnson, 2019; Rodriguez, 2019; Taliaferro, Randolph, & Ramey, 2019; Wertzberger, 2019). In these tours, faculty members participated in discussion of their knowledge and experience with OER. At least four additional libraries promoted OER usage through faculty grant programs, a technique

we have also incorporated in our research (Gumb & Miceli, 2020; Hollister & Patton, 2021; McBride, 2019; Scronce & Arnhem, 2019). More investigation is needed on the impact of these latter incentive programs on the adoption of OER (Hollister & Patton, 2021).

Findings in the OER listening tours as well as from the grant programs were generally similar across organizations. Listening tours identified institutional support as essential for long-term sustainability of OER projects (Bell & Johnson, 2019; Rodriguez, 2019). Listening tours and grant programs alike found that the use of OER had a positive impact on student learning and engagement, but time to create or evaluate OER limited their potential (McBride, 2019; Scronce & Arnhem, 2019; Wertzberger, 2019). The quality of OER was also a limiting factor for adoption (Scronce & Arnhem, 2019).

Unique findings also exist in the reported research. One listening tour found a “fear factor” among junior faculty for adopting OER that was also identified in our research (Taliaferro, Randolph, & Ramey, 2019, p. 4). This may be related to a general unease among faculty about the tenuous nature of academic employment (Davidson, Jefferson, & Shuherk, 2009). Another OER listening tour revealed that faculty were directly negotiating vendor contracts rather than having the bookstore do this (Rodriguez, 2019). One of the OER grant programs found that students react positively to use of non-traditional materials (e.g., videos), and that OER adds flexibility to use such materials in a course (Scronce & Arnhem, 2019). OER allows faculty to customize materials based on students' learning experiences and needs (McBride, 2019). This can be especially helpful in subjects where textbooks lack diverse perspectives (Taliaferro, Randolph, & Ramey, 2019).

Listening tours themselves have implications beyond their own findings. They were found to be a way of “planting OER seeds” among faculty members, introducing faculty to the concepts of OER, and encouraging faculty adoption of these resources (Rodriguez, 2019, p.9). Listening tours also change the traditional telling model of librarianship in a positive way; listening is a change of perspective that leads to learning about others, rather than presenting what we already know (Bell & Johnson, 2019). These research opportunities for “deep listening” allow librarians to gain in-depth understanding of faculty perspectives about OER that would otherwise be unavailable (Rodriguez, 2019).

## Methods

### *Study Design*

Our study looked at three broad research questions:

1. How do faculty in the Schools of Arts & Sciences and Engineering at Tufts select and use course materials?
2. What is the general knowledge and perception of OER among faculty?
3. How do faculty interact with library services around course materials?

To answer these questions, the study used semi-structured interviews with faculty members, which allowed our study team to ask the same major questions in each interview but alter the sequence and ask for additional information or follow-ups as needed (Leonard, 2003). We prepared an interview script (see Appendix A) with questions based on similar listening tour projects conducted at Temple University (Bell & Johnson, 2019) and William & Mary (Taliaferro, Randolph, & Ramey, 2019), with additional questions added to address issues specific to our local context – for example, how to reach faculty members around our OER Award.

We put together a study team of five librarians to conduct the interviews, comprised of three members of the OER Steering Committee and two colleagues with related interests and expertise. The study was approved as exempt by the Tufts University Institutional Review Board (IRB).

Interviews were 45-60 minutes long and were held over Zoom in November 2021. Each interview was assigned two members of the study team, one to conduct the interview and one to take notes. We chose not to record the interviews because we felt we could accurately take notes for interviews of this length, and that not recording may lead to a greater level of comfort for the interview subjects (Rutakumwa et. al, 2020). In instances where the discipline of a faculty member aligned with the disciplinary responsibility of a liaison librarian on the study team, that librarian was assigned to that interview if possible.

### ***Study Population and Recruitment***

The potential study population included faculty members who were teaching at least one course in the School of Arts & Sciences or the School of Engineering (the two schools at Tufts that Tisch Library directly supports) in the Fall 2021 semester. In Fall 2021, there were 707 paid faculty in Arts & Sciences and 210 in Engineering (Tufts University, 2021), though a smaller subset of the total numbers would have been teaching classes. We aimed to interview approximately two to three faculty members from six different departments, up to 16 faculty members total. While this sample size was quite small relative to the overall population, we felt that it was a realistic number based on the amount of time the study team could devote to conducting and analyzing interviews, and one that would still allow us to speak with faculty from a range of experiences and disciplines - ideally two departments each from STEM, social sciences, and arts and humanities disciplines.

Recruitment emails were sent directly to individual faculty members in late October and early November. The email invitation contained a brief description of the study and a link to sign up for one of many pre-determined interview time slots. Faculty members were offered a \$25 gift card to a local restaurant in appreciation of their time. Five rounds of recruitment emails (approximately 70 individual invitations) were sent until approximately the target number of subjects had signed up. Initially we planned to schedule a mix of individual and small group interviews, however it ultimately was logistically easier to schedule individual interviews. One department chair did help us schedule a group interview for their department.

Faculty members who received recruitment emails were identified using a mix of methods, including specific faculty members identified by liaison librarians as having used OER or being interested in OER; faculty members of specific high-enrollment courses identified by liaisons; and

faculty members randomly chosen from departments identified as being a priority to speak to or to balance departmental representation. For two departments, we asked the department chair for suggestions of specific faculty members to invite.

## *Analysis*

After all interviews were completed, we coded responses in an Excel spreadsheet by key ideas. This was a relatively informal process with the goal of identifying themes and commonalities that would help us determine next steps for services and outreach.

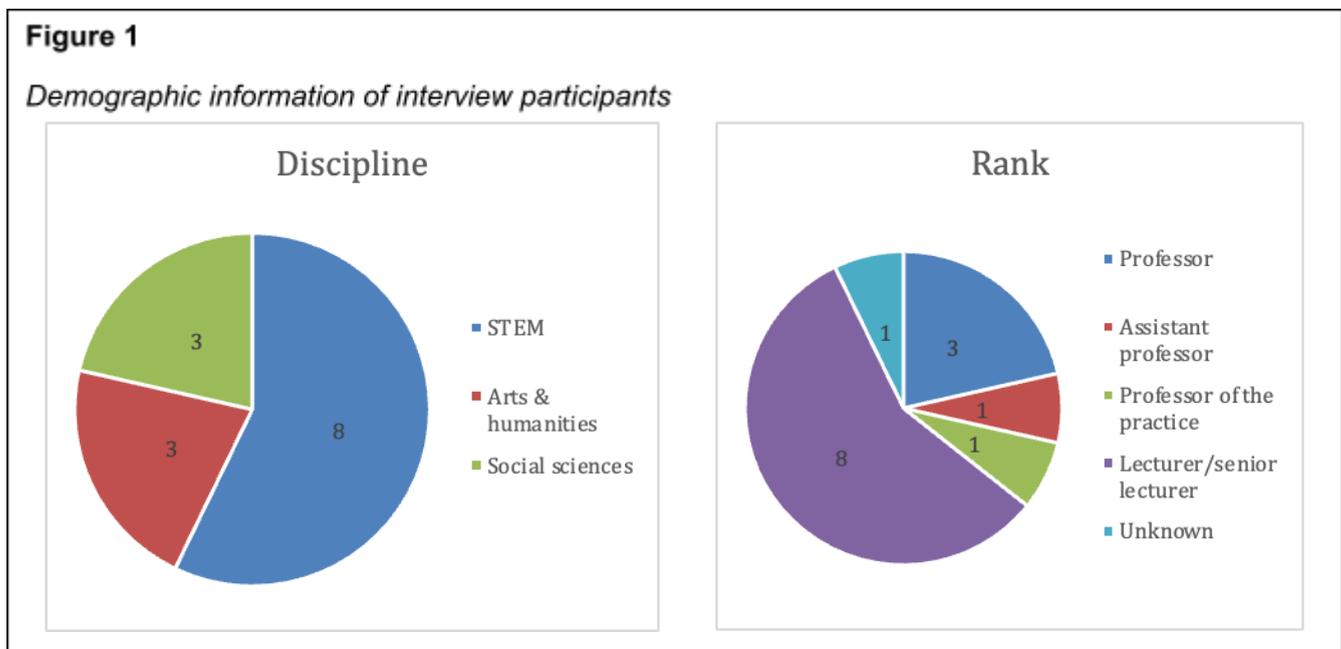
## Results

### *Demographics*

We conducted 11 individual interviews and one focus group of three faculty members, for a total of 12 interviews with 14 faculty members (see Figure 1).

Faculty from STEM, arts and humanities, and social science disciplines were all represented, with the majority (57%) of interviewees from STEM disciplines. No faculty member from the School of Engineering accepted our invitation to be interviewed, which we suspect is simply an issue of chance given our fairly informal recruiting methods, and not an indication of general disinterest in the topic at the School of Engineering.

All faculty ranks except for associate professor were represented in our interview population, with the majority (57%) being at the rank of lecturer or senior lecturer.



## ***Textbook Usage***

Faculty were asked to tell us about the textbooks that they use in their courses. Our interview population described textbook usage for 30 courses. Two-thirds of the courses used a textbook, while the others used readings (including articles, videos, monographs, and podcasts) in place of a main course text. Many faculty members also noted that they supplement their main course textbook(s) with additional readings. Eighty-five percent of the textbooks assigned were selected by the faculty member, including one authored by the faculty member. Three textbooks were inherited from a previous instructor.

Faculty primarily learn about textbooks and readings for use in their classes through direct messaging from publishers, open web searches, conferences, their own research, and peers.

Faculty put a priority on textbooks that present information at a student level (n=5) and with up-to-date information (n=3). Other important qualities cited include information from diverse voices and perspectives; and information that is high-quality, foundational, readable, and interdisciplinary.

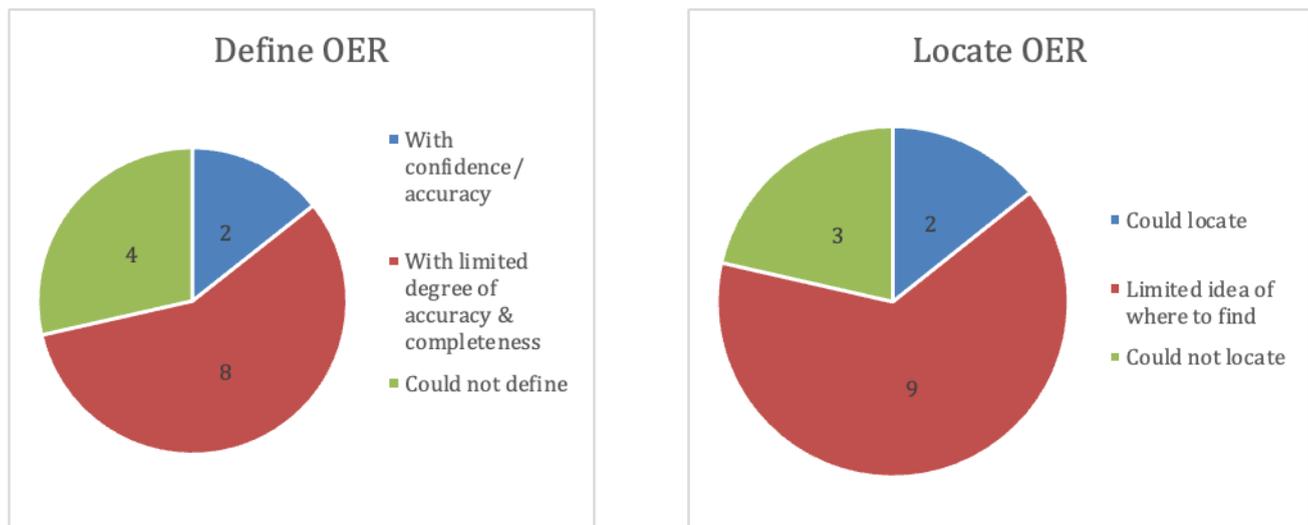
Faculty who did not use a textbook in a particular course were asked why they chose not to. The most common response was the lack of appropriate options (n=5), including a lack of textbooks available that covered the specific topics they wanted, at the level they wanted, or with up-to-date information. Several faculty members (n=3) cited the importance of their students being able to read scientific literature as why they assigned articles as class readings rather than a textbook, while others (n=2) prioritized the opportunity to incorporate a range of voices and perspectives through readings by multiple authors, rather than the single voice of a textbook author. Cost was specifically identified by two faculty members as a reason they did not use a textbook.

All faculty cited textbook costs as being a concern to some degree and were generally aware of what their course materials cost, with half identifying it as a large or main concern in selecting materials for their courses. Faculty who assigned texts identified several methods for reducing costs to students, including placing books on reserve in the library and making readings or ebooks available through the learning management system (LMS); choosing an older edition or providing page numbers in the syllabus for an older edition alongside the current edition; and using department funds to purchase books for students.

No faculty member could successfully define the inclusive access model of access to textbooks. Many thought it referred to freely available course materials.

## ***OER Awareness and Usage***

Faculty members were asked if they could describe what an OER is, and if they knew where to find OER (see Figure 2). A majority of faculty members could describe OER with a limited degree of accuracy and completion. Similarly, the largest portion of faculty members had a limited idea of where to locate OER.

**Figure 2***Levels of OER awareness*

Two faculty members had knowingly used portions from openly-available books in their courses. A majority of faculty members used library-licensed material or freely-available (but not openly-licensed) articles, videos, podcasts, and similar materials in their courses.

Of faculty who identified a barrier to using OER, time was the most frequently mentioned (n=5). Other barriers include a need for specific types of material that are not openly available; a lack of alternative to their specific text; a lack of ancillary materials; concerns about openly available resources being too general or not high quality; and copyright concerns.

No faculty members interviewed had knowingly created OER, though one contributed to an online open access resource and multiple created free course materials for their classes but did not share them openly. One faculty member later formally published course material originally written to be freely given to students.

Time was also identified as one of the primary barriers to creating OER, along with concern from two faculty members at the lecturer level that if their course materials are shared openly, their teaching roles could be replaceable.

### ***OER Awards***

At the time of our study, Tisch Library was in its third semester of offering an “OER Awards” program that provided financial support for faculty creating or adopting open course materials. We asked faculty members if they were aware that the library offered these grants. Most faculty members were either unaware or uncertain.

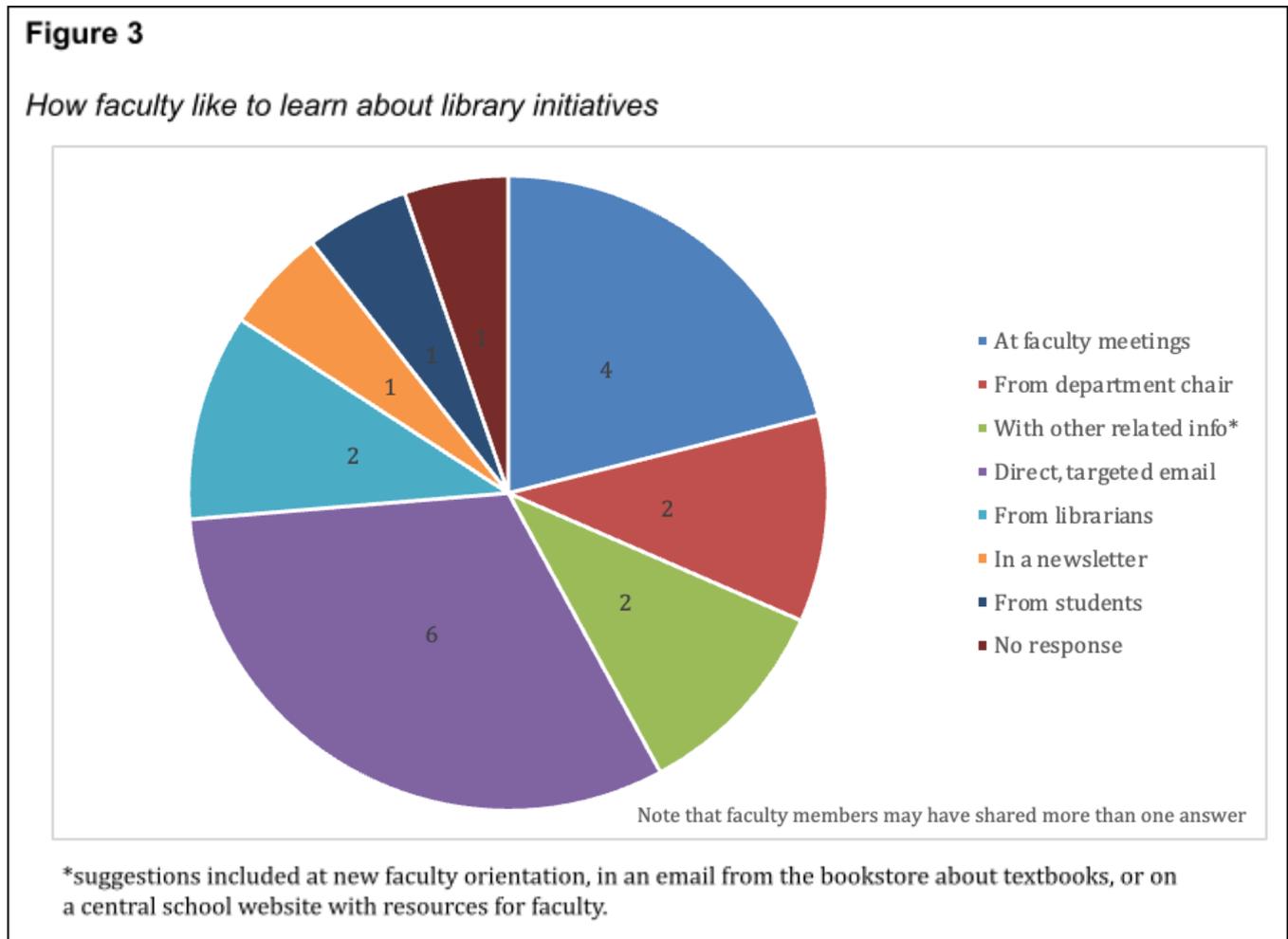
We also asked if the amounts for the award were appropriate or not. At the time, the awards were

available at three levels ranging from \$700-\$2000. Generally, faculty were unsure, expressing that it depended heavily on the amount of time needed for a particular project. One faculty member, who was in the later stage of their career, responded that they are not interested in money at this point in their career.

### *Library Services and Communication*

Faculty were asked several questions related to library services and course materials. When asked how they liked to hear about library initiatives such as the OER Awards program, the most frequent answer was email (n=6), though this represented only about 30% of responses (see Figure 3).

Some faculty members also shared ways they did not want to be contacted. Four expressed that email is overwhelming and not a good way to communicate about library initiatives, and one identified newsletters as not being useful.



Faculty members were asked what the library could offer that would assist in the preparation and delivery of course materials, and specifically about their use of course reserves in the library. Most faculty members (n=10) placed course materials on reserve, though several noted some confusion and clumsiness with the process, particularly related to the tool within Canvas, Tufts' learning management

system (LMS), used to add materials to reserve. Three faculty members who did not use reserves expressed confusion about how the service worked or if it was offered.

The most frequent responses to how the library could assist with course materials were around help finding materials, in particular a service to find a textbook or to create a “digital course pack” to replace a textbook, and a central website to find open course materials. Library instruction was also frequently mentioned.

Other supports mentioned include serving as a central place for students to go for help affording course materials; help making sure students understand library services; having the LMS retain reserves information from semester to semester; learning more about digital humanities tools; and facilitating a get-together for faculty in related fields to share syllabi, resources, and similar materials.

### ***Limitations***

Our sample size was small, and while it was inclusive of broad disciplines and nearly all faculty ranks, the distribution of disciplines and ranks was uneven. STEM disciplines and faculty at the lecturer and senior lecturer rank were heavily represented in the faculty we interviewed, and we were not able to speak to any faculty members in the School of Engineering. Additionally, we used a mix-methods approach to identifying faculty to invite, and only spoke to faculty members who opted into participating in our study, and that group may not be representative of all faculty. For example, those who opted into our study may have a greater awareness of OER or greater interest in addressing student difficulties in accessing course materials. While we would have preferred to have a larger sample, our participant number was similar to other OER listening tours.

## **Discussion**

### ***OER Awareness***

In general, there was low awareness and understanding of OER among our faculty population. Most faculty had a sense of what OER is, but not a specific understanding of what the term means or how to find OER. There was confusion between open resources and library-licensed resources, which are free to students but not open, and we found the major concern for faculty we spoke to is cost, not openness. There was also a low awareness of the Tisch OER Award, with 70% of faculty unaware or unsure about the existence of the award.

### ***Textbook Usage***

Faculty are choosing their course material thoughtfully and are taking into account a variety of considerations as they select materials, including what their students need to learn from a course, what knowledge they are coming in with, and whose voices are being incorporated into a class. As a result, many faculty members are not just using textbooks, but are using a mix of materials including articles, book chapters, videos, and podcasts, and some are not using textbooks at all. Some newer faculty or faculty teaching larger classes are using a book they inherited from a previous instructor and do not have the time to explore choosing a different text.

Faculty are considering what background knowledge the students are coming into the course with and what types of materials would best build upon that background. As one faculty member described, *“the [textbook] is important for students, especially for those who don’t have a background in [subject]. It contains hyperlinks they can click on when they want more context, definitions of terminology, etc...”* Another noted that when they have not used a textbook, only supplemental readings, they have found that technical jargon is difficult for students to understand, and that a textbook more effectively distills down major themes.

They are also considering what students need to leave the class with to support them in future courses and in their career. For example, one faculty member explained how they assign articles as course readings rather than a textbook, since it is *“a really important skill for students to be able read and understand scientific literature and build a skill they’ll need as they go on in their career.”* Another noted that they do use a textbook, but do not require that students purchase it (*“Whether they buy the textbook or not should be based on how much they intend to use it after the course”*).

Several faculty members also placed a priority on taking into consideration who the author of the material is and including a diversity of sources in their course. As one explained, *“not using a textbook gives the opportunity to not have to pick one voice for the whole semester, and lets you teach students how to evaluate different voices.”*

The cost of the materials is a concern for most faculty and they do take this into consideration when choosing texts to assign. Most have alternative ways of getting students the books, including placing books on reserve at the library, using older editions, or having their department purchase them.

Generally, most faculty using textbooks had found one that works for them but also expressed difficulty in finding a perfect text that meets all their needs (*“If I really wanted to teach this class well, I would assign 10 different textbooks and chapters from each but that’s not feasible for students”*), which suggests the flexibility of combining multiple sources of OER may be attractive to some faculty.

## ***Barriers to OER***

The biggest barrier cited to using OER or alternate course materials is time. Faculty have invested a lot in setting up courses using their current materials, and do not have the time to explore other options and modify their courses to incorporate new texts. Only one faculty member specifically mentioned quality of materials as a concern about using OER, but there was a general concern among faculty about finding alternative texts that covered the right material at the right level (*“Finding things aimed at introductory students that aren’t so watered down but also aren’t so advanced is tricky. There’s a middle ground where textbooks tend to live”*). Other concerns were a lack of ancillaries (including images, videos, question banks) and a lack of open material available for a particular discipline. There was also a low level of awareness about where to find OER, with 85% of faculty having no idea or limited idea where to find open material.

While multiple faculty members were using material for their courses that they had created (and thus had no cost to students), none of the faculty members that we spoke to had made those available to use as an OER, again identifying time as a primary barrier. Additionally, a significant barrier cited by two faculty members at the lecturer level was the possible threat to their employment if their course materials were openly available and thus could be taught by anyone, making them replaceable.

Together, these barriers suggest that we should keep in mind that OER are not necessarily a good solution for all courses, all disciplines, or all faculty members, and ensure that our messaging discusses OER as one option among a variety of choices for course materials.

### ***Library Services and Communication***

While several faculty members were very engaged with the library and used a variety of services, there was some confusion expressed by many faculty members about various non-OER services offered by the library, including reserves, library instruction, library subscriptions (particularly newspapers and popular magazines), knowing what could be used in class copyright-wise, and a general feeling that they should know more about what the library offers. This suggests a need to better reach lecturers, and new faculty in particular, with information about library services.

When asked how they would like to hear about library initiatives, many faculty members noted being overwhelmed by the sheer amount of communication they are experiencing from everywhere (“*This is a trick question*”) and how difficult it is for any one thing to jump out at them. While six faculty members identified targeted emails as a good way of communicating, nearly as many (n=4) specifically identified email as being a poor and likely-to-be-overlooked way of communicating, highlighting the difficulty in raising awareness of library initiatives among faculty. When taken together, responses that suggested sharing information in places where faculty are already primed to pay attention, such as faculty meetings or communications from their department chairs, made up the biggest percentage of responses, suggesting a future focus for messaging around OER.

## **Conclusion**

While our sample size was small, and not evenly distributed across faculty discipline and rank, we heard several consistent themes across our interview participants. A significant finding was the low level of awareness of the term “OER.” Because of this, we have stopped using the term OER as the primary way we discuss alternative course materials, and instead use more literal terms like “no/low-cost course materials” or “affordable course materials”. In the semester following the listening tour, we rebranded the Tisch OER Awards as the Tisch Affordable Course Materials Awards (Tisch Library, n.d.).

The interviews also led to the establishment of a syllabus affordability review service, where liaisons will support faculty as they identify no-cost course material (including OER, library-licensed materials, and material available on the open web) to use in their courses to replace costly textbooks. This is a service that in practice, if not in name, had already been available for any faculty member who knew to ask for it, but findings from the study showed a need to formalize the practice as a named service and better advertise it to our community.

In response to faculty needs around course materials and communication, we now seek to plan outreach around OER and the Affordable Course Materials Award by leveraging spaces where faculty already are, such as faculty meetings, department meetings, and emails already going out about course materials, and to focus on aspects of OER/affordable course materials that speak to concerns faculty

raised, such as cost, inclusion of diverse perspectives, and opportunities to bring together a variety of course materials tailored to a particular class.

Overall, we found the listening tour model to be successful for both information gathering and as a form of outreach and marketing. We found the semi-structured interview model to be effective and observed that the faculty members we spoke with appreciated the gift cards we provided. Because the overall structure of the tour is already set up, we could easily run further studies in the future if we need additional data or want to observe trends and changes over time. While the sample size in this study was small, the consistency of major themes across the interviews suggests that focusing on a larger sample size may not be necessary for our purposes. However, were we to do the tour again, we would focus on recruiting a more even distribution of faculty across ranks and disciplines and ensuring that we are able to speak to faculty members from the School of Engineering. We found the one group interview that we did to be particularly illuminating, as faculty members could share their individual perspectives but also respond to and build upon those shared by their colleagues, so in future studies we may also work to schedule more small group interviews despite the additional logistical complications of scheduling multiple participants at once.

Going forward, we plan to undertake additional listening tour style studies focused on different populations, including staff engaged in diversity, equity, inclusion, and justice (DEIJ) work on campus, and undergraduate students.

Together, the findings from this study have resulted in significant changes in how we talk about and communicate about OER. We hope that the changes made from this study, and from future studies, will help us to better meet the needs of our faculty and students and facilitate the use of more no-cost course materials at Tufts.

## **Acknowledgements**

Thank you to the listening tour project team – Nicole Bookout, Alyn Gamble, Martha Kelehan, Anna Kijas, and Andrea Schuler – and to the faculty members who shared their experience and expertise with us.

Tisch Library provided funding for the gift cards offered to faculty members who participated in the interviews.

## **Conflict of Interest Statement**

The authors have no conflicts of interest to disclose.

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## Appendix

### Appendix A. Listening tour questions

1. **Tell us about the textbooks that you use in your courses.**
  - a. **If they say they do not use a textbook...**
    - i. Why have you chosen not to use a textbook?
    - ii. What do you use as an alternative?
    - iii. When you select course materials, do you decide first on your course content and learning goals and then look for course materials to support the content and goals, or do you choose course materials first and then build the structure of your course and its content around them?
    - iv. How did you find or develop the alternatives you use? (For example, through colleagues, at a conference, with the support of Tisch Library, etc.)
    - v. How do you deliver these alternate materials to students? (For example, via Box/Google Drive, via Canvas, through a website, email, etc.)
  - b. **If yes... [After hearing about the textbook(s) in use]**
    - i. When you select your textbook, do you decide first on your course content and learning goals and then look for a textbook to support the content and goals, or do you choose a textbook first and then build the structure of your course and its content around it?
    - ii. Are you aware of what the assigned textbook costs? Does this influence your decision in choosing it?
    - iii. What do you like best about your current textbook?
    - iv. What concerns do you have about your textbook?
    - v. How do you find out about the latest textbook offerings in your field?
    - vi. What information, if any, do you provide to your students about textbook affordability on your syllabus, online or in your class?
    - vii. Are you aware of inclusive access models for course textbooks?
    - viii. If yes, are you using them or have you considered using them?
    - ix. Do you routinely put a copy of your textbook on reserve in the library? Why or why not?
    - x. Are you aware of any alternatives to textbooks?
      1. If you know about alternatives, have you sought them out? If yes, how have you sought them out (e.g., by visiting a librarian, exploring online, etc.)?
    - xi. What resources would facilitate you transitioning from a textbook to an alternative source?
      1. If time is an issue, what do you perceive to be the most time-consuming element of the process?
2. **Can you describe what an Open Educational Resource (OER) is?**
  - a. Do you know where to find them? (Can you elaborate?)
  - b. If you have ever used an OER, can you tell us the resource you used and how you used it, e.g., as a primary or supplementary text.

- c. Have you ever considered using an OER, but then decided against it? If so, why did you decide against it?
  - d. Did you know that there are sites where faculty can peer-review open educational resources?
3. **Have you ever created an OER or no-cost course material?**
  - a. If yes, please tell us about it
4. **Are you aware that the Library offers grants to faculty to adopt alternatives to textbooks?**
  - a. If you knew but did not apply, why not?
  - b. The awards are awarded in three tiers at \$700, \$1000, or \$2000. Do you think this is a fair amount or should it be more?
  - c. How do you like to find out information about library initiatives such as the grant program?
5. **What could Tisch Library offer you that could assist in the preparation and/or delivery of course materials?**
6. **What could the Center for the Enhancement of Learning (CELT) offer you that could assist you in the selection of course materials?**
7. **Would you like to make any additional comments about this topic that we haven't yet discussed?**

## Open Peer Review

Pate, J. (2023, April). [OER by Any Other Name, by A. Gamble & A. Schuler]. *Journal of Open Educational Resources in Higher Education*, 2(1), 96–99. doi:10.13001/joerhe.v2i1.7849

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**Reviewer:** Jennifer Pate

**Recommendation:** Accept Submission

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

This article addresses the use of a faculty listening tour at a mid-sized private university. Though the sample size is small, it is an interesting perspective on OER research, especially as the authors relate that the student body is "generally perceived to be wealthy", and some of the lecturer-level faculty participants highlighted concern with using OER making them more replaceable.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article's structure follows a standard research format and is well organized.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The literature review and referenced survey instruments used for formatting their survey instrument are strong. The research was approved to be exempt from the IRB, showing the authors did their due diligence with human subject research. The study was limited by a small participant pool that did not include faculty from the School of Engineering and the majority of participants were lecturer/senior lecturers. The authors note this in their study limitations and also note that faculty were primarily self-selected or recommended for this study, which can skew results. I do wish the authors had addressed why they did not record the interviews and instead only relied on note-taking.

Overall, the article is strong despite the small sample size and limitations. The conclusion and action items, such as renaming the OER program and changing how the library communicates about OER are solid. It would be a great addition to include a link to the Tisch OER Awards/Tisch Affordable Course Material Awards if there is one that is public-facing. Many OER practitioners/librarians love to look at other programs that are highlighted in the literature for comparison to their own programs or to help them create programs.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The writing is strong and the article was clear with little to no jargon. Terms were defined before acronyms were used. This piece is accessible to experienced practitioners and to people new to the field.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

The use of listening tours for qualitative data, as opposed to primarily quantitative surveys, is a fairly unique strategy for OER research. The authors refer to four known listening tours and this article builds on that body of research and shows strong application of the concept as well as actionable changes made based on the data. This article would be a good reference tool for other programs interested in adapting or replicating the study.

## What are the stronger points/qualities of the article?

The authors were clear about the objective and scope as well as the limitations of their study. The article is well-written and is applicable to all levels of OER practitioners who want to learn more about faculty impressions and understanding of OER.

What are the weaker points/qualities of the article? How could they be strengthened?

The article would be stronger if a link to their OER program (now Affordable Course Materials Awards) was linked in the text. In addition, it would be good if the authors could address why they chose not to record the interviews for accuracy.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Highly Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Highly Sound

Overall Evaluation

3- Strong Accept

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## Open Peer Review

Townes, J. (2023, April). [OER by Any Other Name, by A. Gamble & A. Schuler]. *Journal of Open Educational Resources in Higher Education*, 2(1), 100–104.

doi:10.13001/joerhe.v2i1.7849

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**Reviewer:** Jennifer Townes

**Recommendation:** Accept Submission  
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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

This article is securely within the scope of JOERHE. The authors attempt to address a gap in the literature by providing research from an “academic environment beyond community colleges or large public universities.” In addition, the authors present a novel approach – listening tours - that they’ve identified in only four other cases.

The topic is important, as much of the OER literature rehashes the same techniques and information from various points of view. In addition, some of the results could lead to more research and discussion, such as that around inclusive access, that will benefit the profession.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article has a logical flow and is easy to read. It adheres to the recommended structure. However, I did not see where the funding for the interview incentives was shared. This should go in the Acknowledgements, per the JOERHE Submission Preparation Checklist. (If I missed this information somewhere, my apologies).

## Methodology, Approach, Conclusions

***The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?***

The authors set out to answer three research questions and attempt to get “in-depth qualitative” information (2). The study failed to answer the research questions for the School of Engineering, which, as stated, is half the population that the library supports. However, all the research questions were answered for the other school the library supports. For such a textbook-heavy discipline, I’d really love to see the data from a listening tour of Engineering faculty, and I’m curious if there is a known reason why they declined to accept an interview.

There are a few questions about participation that could be addressed:

Compared to the four other listening tour studies mentioned in the literature review, how was the participation at Tufts?

How was the number 16 deemed the most appropriate? The authors write that they came up with 16 to have “two to three faculty members from six different departments”(3) and that it would allow them “to speak with faculty from a range of disciplines and experiences while not being overwhelming in terms of the number of interviews conducted and time required from the study team.”(4) Did the total number of faculty enter into the criteria? Is 16 a representative percentage of faculty?

In the Limitations section, the authors acknowledge that the faculty who responded self-identified, but part of the methodology was to seek out faculty “identified by liaison librarians as having used OER or being interested in OER.”(4) The mixed method approach to recruitment could be addressed as a potential limitation.

These concerns do not, in my opinion, preclude publication of this article in JOERHE.

## Writing Style, References

***Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.***

There were, by and large, no problems with expression or flow. Two instances could use clarification.

Introduction: “More broadly, much of the existing literature about OER is produced by community colleges or large public universities, which sets it apart from Tufts’ context as a private, mid-size,

“student-centered research university” (Tufts University, n.d.), with a student body generally perceived to be wealthy (Aisch, Buchanan, Cox, & Quealy, 2017).” this does not seem to fit within its current paragraph. This gap in the literature could be further explored in the literature review section, or even moved to its own paragraph in the introduction.

OER: “Time was also identified as one of the primary barriers to creating OER, along with concern from two faculty members at the lecturer level that if their course materials are shared openly, their teaching roles could be replaceable.”(6) This can be combined with the third paragraph in this same section (beginning “Of faculty who identified a barrier...”).

## Application:

### **Does the article contribute knowledge or practical examples that will inform/improve others’ practice or education?**

The article absolutely contributes practical examples that will inform and improve others’ practice. Here are just a few:

Changing the language we use to market OER:

“Faculty members were also found to be unable to define inclusive access models and had difficulty understanding the term OER, leading to a change in librarian vocabulary when referring to these resources.” (1)

“...we have stopped using the term OER as the primary way we discuss alternative course materials, and instead use more literal terms like “no/low-cost course materials” or “affordable course materials”. In the semester following the listening tour, we rebranded the Tisch OER Awards as the Tisch Affordable Course Materials Awards.” (11)

Changing the method we use to market OER:

“sharing information in places where faculty are already primed to pay attention, such as faculty meetings or communications from their department chairs, made up the biggest percentage of responses, suggesting a future focus for messaging around OER” (10)

Changing the types of services we offer:

“Together, these barriers suggest that we should keep in mind that OER are not necessarily a good solution for all courses, all disciplines, or all faculty members, and ensure that our messaging discusses OER as one option among a variety of choices for course materials.” (10)

“syllabus affordability review service” (11) I would love to see an article just about this, to be honest

What are the stronger points/qualities of the article?

There are some really fascinating results that could be further explored. Some could even be whole articles on their own.

“...concern from two faculty members at the lecturer level that if their course materials are shared openly, their teaching roles could be replaceable.”(7)

“One faculty member, who was in the later stage of their career, responded that they are not interested in money at this point in their career.”(7)

“No faculty member could successfully define the inclusive access model of access to textbooks. Many thought it referred to freely-available course materials.”(6)

“...that faculty were directly negotiating vendor contracts rather than having the bookstore do this.”(2)

“Faculty primarily learn about textbooks and readings for use in their classes through direct messaging from publishers...”

What are the weaker points/qualities of the article? How could they be strengthened?

The weakest point is the respondent pool. Without knowing what percentage of total faculty 14 people represents, it is hard to imagine that the information is “in-depth.”

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

2- Accept

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# Catalysts of Open Education in Colorado

## *A Qualitative Study of Enabling Forces in OE Momentum*

Maya Hey<sup>1</sup>

Keywords: OE momentum, OE narratives, OE origin stories, Colorado, OE sustainability

### ***Abstract***

What are/were the catalysts that enabled Open Education (OE) momentum in Colorado, and what can be gleaned from its origin stories? Using a mix of qualitative methods this paper maps the forces—both actual and imagined—that enabled OE to flourish across the state. This paper locates patterns specific to Colorado and analyzes the interdependent and interpersonal aspects of the OE movement and philosophy in that state. It arrives at the conclusion that two elements in particular (state-level support and community characteristics) contribute to Colorado’s reputation as an OE leader. Rather than view these as distinct forces, the two themes entwine and synergistically enhance the other. This paper contributes to growing research in the area of second-order OE thriving and sustainability. It makes the case that, while identifying barriers to OE can assist with action-oriented research, identifying the enabling forces can also offer a more nuanced understanding in a particular place: less of the bad is one tactic, more of the good is another.

### **Introduction**

Open Education (OE) can mean many things to many people. It is simultaneously an emerging global movement (Cape Town Open Education Declaration, 2007), a form of academic resistance (Morris and Stommel 2017), a conduit for social justice (Roberts-Crews 2022), and a celebration of collaborative efforts (Mays, 2017); Characteristic of the OE movement is that there seems to be no evident epicenter, with activity dispersed across different types of institutions types of intervention, participants, and geographic regions.

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This paper names some of the forces<sup>1</sup> that enabled OE to gain momentum in Colorado and to better understand how OE shapes and is shaped by the particularities of a place. This momentum warrants attention given that OE remains an option and add-on in its current manifestation rather than the default for most higher education contexts (Spilovoy & Seaman, 2015). This article aims to bring a grounded perspective to sustaining OE efforts, not just promoting it (Otto and Kerres, 2022; Tlili, 2020; de Langen, 2018).

The goal of this study was to map the forces—actual and imagined—that contributed to the origin stories of Colorado’s OE momentum as narrated by members of that community. By identifying the forces that enabled participation in OE proliferation, we can begin to examine themes that could inform second-order engagement (i.e., going beyond individual champions to shift critical mass). Rather than aim for a comprehensive or exhaustive study that isolates causal relations in Colorado, this paper takes seriously the interdependent aspects of OE to argue that it *cannot* be mechanistically approached or reliably reproduced elsewhere.

OE is not a formula to copy-paste elsewhere. But analyzing the origin stories of a particular place can help identify site-specific ways of sustaining local OE efforts. Thus, treating Colorado as a case study may provide methodological or conceptual insights that can be adapted to the particular needs of other areas with high OE activity. As such, this study focuses on the patterns and forces that make up the constellation of relationships within the Colorado OE community.

## Literature Review

Open Education ranges in priorities, practices, and interventions. What counts as OE can vary, with some even noting that “a lack of definitional clarity is a problem for those that consider Open Education as a valid field of endeavour” (Lambert 2018, p.226). Researchers and practitioners of OE have attempted to describe its conceptual configurations using heuristics such as a “constellation of elements” (Farrow 2016, p.11), a typology of practices (Bali, Cronin, and Jhangiani 2020), islands (Weller et al. 2018), and an evolving ecosystem (Allen, Bell, and Billings, 2016). With the promulgation of licensing and use parameters (e.g., Creative Commons certificates, the 5R’s for OER), the first decade of this century saw “growing momentum among higher education institutions to participate in this ‘open’ movement” (Caswell et al., 2008, p.3) with additional mentions of “momentum” in recent literature (Baraniuk, 2010, p.241; Allen, Bell, and Billings, 2016, p.16). Yet, as OE efforts become more nuanced and differentiated, OE will need to balance its divergent interests with the convergent needs of a cohesive community to sustain itself and continue its momentum.

This study focuses on the momentum of Colorado OE writ large, of which OER are but one part. In both conversation and in texts, there seems to be a slippage between OE as a movement or philosophy and open educational resources. They are not synonymous (Cronin and MacLaren 2018), although neologisms like “OER-enabled pedagogy” explicitly connect the two (Wiley and Hilton III 2018;

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<sup>1</sup> The author’s research area is in fermentation, where different forces—environmental, microbial, circumstantial—can catalyze and transform a food into a ferment. This study approaches fermentation in the social sense of the term to analyze the enabling forces of OE.

Tillinghast 2020) and utilize frameworks such as COUP (Hilton III et al. 2016) and COUPE (Tillinghast, Fialkowski & Draper, 2020) to assess efficacy. Not surprisingly, the rise in OER development ushered a surge in OER efficacy studies, with foci on metrics such as student success, faculty adoption, and quantifying cost savings. While these are salient topics and matters of concern for equitable education, they represent one of many agendas in the greater OE research community. Some studies identify semantic and infrastructural barriers to adoption (Mishra 2017), some analyze policy assumptions that limit OE proliferation (McCoy-Simmons 2022), but studies on the narratives enabling OE seem lacking.

Studies that focus on the motivations or origin stories of OE are few, with Anne Gaskell providing a prominent exception in an editorial enumerating barriers and enablers for OE to realize its full potential (2018). Identifying barriers to OE can assist with action-oriented research (i.e., policy), however, identifying the enabling forces can also offer a more nuanced understanding in a particular place: less of the bad is one tactic, more of the good is another.

At the same time, existing OE hubs seem to reflexively analyze how they came to be in an effort to identify what worked and what did not. A study by Morgan et al. (2021) simultaneously provides a self-assessment tool and their own assessment results of British Columbia, which provides the rationale that, almost a decade and \$8 million in funds later, “it is timely to address what success factors contributed to the recent momentum observed at five of the institutions” (para. 2). Their claim begs the question: if British Columbia claims to have notable momentum, what or how could other places (like Colorado) learn from it? In a way, the present study aspired to be a small step towards such a self-assessment by first identifying the forces that cluster around founding narratives. By connecting the foundational past with the present situation, these efforts could inform future directions.

## Methods

Colorado was chosen as the site of study for the combined reasons of happenstance and intrigue. As a researcher and instructor without tenure, I had the opportunity to join an institution in Colorado for a limited-term appointment and gain entrée (or gain the trust and permission to conduct research by a community) as a new in-group member. At the same time, my own entry into the OE community began with the first community-organized, virtually held Open Education Conference in 2020 (informally known as OpenEd20), for which the Colorado Department of Higher Education (CDHE) OER Council was one of the hosts in the four-organization partnership (Swift 2020). Even then, Colorado’s reputation was preceding itself (a notion to which I will return in data analysis) and curiosity over time led to a formal structuring of a research question: what are/were the catalysts that enabled OE momentum in Colorado, and what can be gleaned from its origin stories?

Mapping the forces of OE momentum required an interdisciplinary approach to methods. Following my training as a communications scholar, I employed narrative analysis (Squire, Andrews, & Tamboukou, 2019) and cross-checked origin stories using discourse analysis, “to study how people present themselves, manage their relationships, assign responsibility and blame, create organizations, enact culture, persuade others, [and] make sense of social members’ ongoing interactional practices” (Tracy, 2001, p.734). Discourse analysis also analyzes word choice by examining the “collocations,

patterns of co-occurrence of words in texts” (Fairclough, 2003, p.131). Here, “texts” goes beyond interview transcripts to also include conference recordings, flyers, websites, artifacts, and publications meant for audiences in higher education. Combining these approaches was crucial to take both the imagined and the lived realities of how OE came to be for the people narrating Colorado’s OE origins.

I also conducted interviews to inform a grounded theory approach, a methodology used by other OE scholars (Cronin 2017, Lashley 2019, Chee & Weaver 2022). Grounded theory owes its name to being “grounded” in rigorous, iterative coding, where observations and patterns are incrementally tested as provisional hypotheses. As an inductive and interactive method, this approach allows researchers to see the “emergent connections between the emerging code” (Glaser 1978, p.39). As a constructivist method, grounded theory sees meaning as being constructed through dialogue where “language confers form and meaning on observed realities” (Charmaz 2006, p.47). Thus, grounded theory does not assume there to be a singular interpretation of an event or phenomenon.

### ***Participant Selection***

In prioritizing qualitative data from a particular OE community, this project relied on participants referred to the researcher or who self-identified as part of said community (e.g., “Updated list of OE Ambassadors,” 2019). Recruitment began in Summer 2022 with key informants, who were intentionally sought out by the researcher based on their longstanding (more than five years) OE participation in Colorado and leadership positions. Potential participants were contacted by a recruitment email (see Appendix B), which briefly explained the project scope (see Appendix A), the consent form (e.g., degree of anonymity, see Appendix C), and interview logistics. Snowball sampling led to contacting 25 participants, of which 16 agreed to a recorded interview (see Table 1).

Due to the combined reasons of the OE community being tight-knit and the Colorado community being bound by geographic region, interviewees were given a choice as to how their information would be represented. Participants could indicate on their informed consent forms their degree of anonymity, ranging from fully anonymous to fully named with options to redact identifiers such as institutional affiliation, occupation, or gender (see Appendix C). In the table below, most identifiers have been redacted to honor the anonymity preferences of some participants.

**Table 1***Demographics*

	Contacted	Agreed to Interview
Number of participants	25	16
Number of institutions represented	14	12
Number of roles/perspectives represented	8	7 *

\*Perspectives include: (1) faculty, educator, instructor, (2) librarian, including roles with scholarly communications focus, (3) coordinator or administrator, (4) deans, including associate and assistant roles, (5) medical professional, (6) graduate student, (7) OER Council member, former and current. Some participants held/hold overlapping roles. The figures above also include past and present roles.

Semi-structured interviews took place over Zoom or in person when circumstances allowed. Three overarching questions were sent in advance to prime the conversation (see Appendix D): one to situate the participant in the context of OE in Colorado, one to assess their perceptions about notable OE momentum in Colorado, and one to ideate what would be necessary to continue OE momentum in the future. Interviews were transcribed and coded for common themes. Consistent with grounded theory, data analysis took place in concert with data collection such that they iteratively informed each other. Preliminary interview findings were memoed and discussed with key informants to sense-check their validity. Once patterns were identified,<sup>2</sup> the interviews were coded with attention to context-specific parameters (e.g., type of institution, position of the participant, years active in the OE community). Eight patterns were identified, which were clustered into two meta-themes presented in the next section: state-level support and community characteristics.

<sup>2</sup> Grounded theory tends to see data analysis as it “emerges” from iterative coding, but I use “identify” here as an acknowledgement of my own complicity in choosing when and how many codes were sufficient for drawing conclusions. My thanks to Mélanie Brunet for bringing the work of Victoria Clarke and Virginia Braun (2007) to my attention.

## ***Limitations***

A key limitation is that students were not part of the study, partly because the scope of the project focused on *origin* stories of OE momentum which spanned a period (mid-2010s and onwards) prior to when students would have been enrolled. And while a range of respondents were sought after, they are not representative of Colorado as a whole or the teaching and learning communities at Colorado's institutions for higher education. In fact, the respondents quoted here may be predisposed to *constructing* an origin story in real-time, as the questions were being posed, to fulfill the role of a willing and cooperative OE community member. Even so, this may represent nascent desires about how this community would want to see OE thrive in Colorado, without it being unified or formally structured.

In addition, the small sample size could not be avoided due to the limited number of OE participants who could speak to Colorado's origin stories. While these limitations were deemed appropriate for the scope of this study, it is my express hope that the conclusions drawn here are supplemented with follow-up studies in Colorado or compared to other locales.

## **Results & Discussion**

Two themes resonated prominently with all participants: state-level support and community characteristics. Rather than view them as distinct entities, these two strands entwine and synergistically enhance the other. These themes were selected for discussion due to their practical value in informing and leading future sustainability discussions in (and beyond) Colorado. This section will also discuss some of the challenges that OE efforts currently face.

### ***Theme 1: State-Level Support***

Centering most of the interviews were discussions about state-level support. Colorado legislature Senate Bill 17-258 was signed in May 2017 and established the Open Educational Resources Council. The Council was tasked with assessing the extant practices of OER and making recommendations in six months' time for potential next steps to boost OER (Bill SB17-258). By November 2017, the Council reported back to the state legislature indicating appetite for OER, then state leaders responded by enacting House Bill 18-1331, which created a grant program to support OER development and usage in higher education (Bill HB18-1331). For the three years that the House Bill was active (2018-2021), \$2.425 million were awarded. To continue funding the grant program, Senate Bill 21-215 was signed into effect in May 2021, highlighting that "practices and philosophy [of OER] have expanded to public institutions throughout the state" (Bill SB21-215, p.1) as well as the increase in student savings at "almost four million [US] dollars in textbook costs" (p.2). The latest bill spans five years and provides \$1 million in appropriations for the council. "By the end of this next bill, a decade of OER policy [2017-2026] will have been implemented in Colorado," notes Spencer Ellis, former Director of Educational Innovation at the Colorado Department of Education.

## Key Enabling Force: Collective Action within the State

Tasked with navigating the Colorado Department of Higher Education (CDHE) through these policies, Ellis describes the founding of the council, the grant program, and its subsequent advocacy work as “an amazing case study in civic engagement.” Ellis continues:

[We] brought in these people, asked them to share their expertise, their time, their knowledge, all for free, all in the name of finding out more about open education for Colorado. And what the Bill asked us to do was find out more about what’s the appetite for open education? What would we advise for [what’s] to happen next in Colorado? We know that this movement is taking a foothold, and we’ve seen some other pieces of legislation in other states. What should we do in Colorado? That core group of people, the OER council, was really pivotal in driving things forward. (S. Ellis, personal communication, 14 October 2022).

Many other interviewees echoed their respect for the council members and legislators who took initiative and organized these first years of policy, emphasizing how civic engagement leads to student success and cost savings. These narratives equate the OE efforts with collective action, where intentional uses of power are seen as a means for addressing issues of shared concern.

One member of the Colorado OE scene pointed out that, unlike some other states, Colorado’s appetite for open education is not necessarily a partisan or politicized issue. Especially when the social justice dimension of “open” can easily be reduced to “woke” agendas (e.g., critical race theory), the political climate of some regions can hamper OE flourishing on the basis of progressive connotation. And while Colorado politics can vary by district and institution, its reputation as a “thought leader” in education carries on, notes Jonathan Poritz (personal communication, 14 October 2022). Poritz, a key figure in OE, posits that Colorado has a history of OE advocates being active in national organizations, steering committees, and conference planning (e.g., Open Education Network, Open Education Conference). Even after their tenure, he explains “they continue representing Colorado and speaking and speaking up in organizations, so that Colorado can continue to be a hub and a thought leader” (J. Poritz, personal communication, 14 October 2022).

Some respondents attributed Colorado’s thought-leadership to the state’s size and geographic layout, noting the ease of congregating—both professionally and socially—around the state but still having the breadth and variety of institutions. Carey<sup>3</sup>, a scholarly communications librarian, noted: “for me, Colorado is just the right size, because we’re big enough that we can have all these diverse perspectives from all the institutions. So we’re not small... or so big [it] would be a lot to wrangle” (personal communication, 18 November 2022). When asked to elaborate, they noted how there is a stronger chance of running into someone you know or the likelihood that one can gather critical mass for organizing task forces at an institutional level. Another respondent, Jamie, discussed Colorado’s unique approach to policy, narrating how “there’s a lot of states who are learning from Colorado because of the vast political support. I mean, even having an open education coordinator, that’s just not something that

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<sup>3</sup> All pseudonyms will not list surnames and will use singular they/them/their pronouns.

the majority of states even have considered or can potentially do” (personal communication, 7 November 2022). Jamie noted how Colorado was both “being looked at” by other states (e.g., Utah, Idaho) while also “looking at other states” (e.g., Washington). A similar bidirectional pattern was observed in how people discussed “Colorado’s reputation,” with it both feeding into and benefitting from state-level funding.

### **Key Enabling Force: The Meaning and Value of State-Level Funding**

This intertwined nature of reputation and funding was most pronounced in how interviewees described what the legislative support meant to them at their respective institutions. For many, the policies *validated* OE at the highest level of leadership, with many noting how Governor Jared Polis or Congressman Joe Neguse could speak to OE benefits and mechanisms in better detail than their own provosts or deans. The value of having official support from leaders meant that OE projects could be greenlit without requiring approval from immediate superiors, thereby enabling “bottom-up” or “grassroots” efforts. One participant said receiving funds “makes the intervention that much easier. But it’s also about the clout of this being legislation, rather than just a good idea” (personal communication, 11 November 2022).

For others, the policies were more than symbolic: the policies *committed* financial backing and demonstrated a material investment in higher education. In these instances, OE grants were often leveraged at the institutional level (e.g., with matching or supplementary funds) and necessitated coordination across multiple offices on campus. These funds enabled collaborations—across librarians, instructional designers, graduate students, faculty, and other institutions—that would not have otherwise taken place. Many noted how these collaborations were unprecedented or outside the bounds of conventional research grants at the department level (e.g., libraries allocating grant money to faculty across different departments), which manifested as both a bureaucratic speed bump as well as an opportunity for new interactions. Consider, for instance, how the University of Colorado system (comprising four campuses) decided early on to apply as one entity for the state-level grant program. A librarian involved in one such grant characterizes the application process in terms of deliberation and working together:

[it] required us to [ask] what are we going to emphasize in the application? And, okay, we’re applying for money. How does that money have to be spent? So that requires a lot of collaboration and teamwork, and that just built, just solidified our culture as collaborative. (Jesse, personal communication, 14 November 2022)

State-level policies, then, validated OE as something worth pursuing, committed funds to enabling OE projects, and those projects necessitated and built collaborative cultures in turn.

### ***Theme 2: Community Character(istics)***

Some interviewees reported forming OE communities prior to the establishment of the OER Council, with vested interests in student success and equitable teaching practices, with entryways via open software, open access, and open publishing. A common refrain for faculty who formed these early

groups was the dearth of OER in their respective disciplines or the reality that available resources were either outdated or penned by authors who did not reflect student demographics. Natalia Vergara of the University of Colorado Anschutz medical campus contextualizes her campus' early efforts in relation to the grant, noting how the two reinforced one another:

It wasn't just the grant. It was more like people being willing to move in this direction because we felt that it was the right thing to do. [...] I don't know how much success we would have had convincing educators to do the work of creating OER because that is an extra effort, right? And they don't have to do it, you know, they're doing their job just fine the way they are. And so you're asking them to do more. So that's what I think: that the grant program made a big difference. (N.Vergara, personal communication, 29 November 2022)

Another instructor, Taylor, mentioned a similar synergy between Council funding and the pre-existing concern for student success at their institution:

My colleagues, we already think so much about the students and their experience and barriers that they're facing [...]. Creating a more customized course experience through open educational resources, liberating yourselves from a traditional textbook and instead focusing on: what are my learning objectives? How can I achieve those learning objectives? [Can I do that] by using multiple different resources that we're putting together? *That's* work and so having some grants to fund faculty, even if it's just \$750 has really made that work more palatable, at least for faculty that are already interested in doing it. (Taylor, personal communication, 18 November 2022)

While OE advocates were already coming together to create OER prior to the Council's formation, nascent collaborations between faculty, instructional designers, and librarians were already in play but became strengthened by legislative and financial support.

### **Key Enabling Force: Collaboration Across Differences**

Collaboration across differences was a common theme amongst interviewees, with recurring mention of the variety of expertise required for robust OE momentum. For those serving on the Council, differences were seen as an asset because different stakes or skills kept discussions dynamic and allowed for assumptions to be challenged. Thus, in striving for diverse representation, the Council benefited from having leaders who each stayed responsive to the variable aims of OE, each with their "domain of influence," recounts Taylor (personal communication, 18 November 2022). What could have disintegrated was instead met with—or kept together by—the social cohesion characteristic of a coalition. Notably, members of the first Council (2018-2021) often described the group in terms of its "magnetism," "magic," and "excitement." Brittany Dudek, Director of the Colorado Community College System and former chair of the Council, contextualized the early years as follows:

It was the start of something real. I recognize that there was work in Open happening before this. I want to recognize that. But this formal work, the inception, the beginning of

it, was *exciting*. We met once a month. None of us minded working. No one minded putting in more hours on it. No one minded spending time in all of these meetings, no one. Everyone was thrilled. We worked *really* hard. And we were really excited. It was constant debate, debating and talking, you know... It was really, really exciting. Like that's the only way I can describe it. I would come home from these meetings [and] I would tell people at work what we talked about because it was that exciting, you know? (B. Dudek, personal communication, 9 November 2022)

While this fervor did not inhere to any one person, a handful of names were repeatedly followed with epithets of “the charismatic one,” “the glue,” or being “larger than life,” which shines a positive light on the group’s identity. Poritz, citing sociologist Mark Granovetter, calls this “the strength of weak ties” (personal communication, 14 October 2022). Members who joined the Council with the grant’s renewal in 2021 even referred to previous Council members as “elders,” connoting a lineage and esteem for in-group membership. Belonging to such a group, then, seems to have mobilized Council members *as a group*, while also engaging in a form of leadership that balances professional drive with collective action.

### **Key Enabling Force: A Diffuse OE Community**

It may be that perceptions of Colorado’s momentum in OE comes from the disconnect between having considerable activity in OE (e.g., state-level policy, state-level conferences, Council members of notable influence) and not having a singular person or institution to name at its helm. Dudek explains that the movement in Colorado is diffuse, making it unique compared to other states with OE momentum (personal communication, 9 November 2022). For instance, Affordable Learning Georgia and Open New York State have become synonymous with their respective states, but these operate within institutional systems (University Systems of Georgia and SUNY/CUNY respectively). In contrast, Colorado’s OE activity spans multiple types of institutions. And, unlike initiatives such as OpenStax (Texas) and MERLOT (California), Colorado does not have a unifying or popular program that represents itself. Dudek also notes that Colorado does not have a central figure, naming Tanya Spillovoy (North Dakota), Rajiv Jhangiani (British Columbia), and Jeff Gallant (Georgia) as prominent examples in North America. So while Colorado has a sizable group of people furthering OE activity, no one person emerges as *the* face of Colorado OE. In fact, the very nature of dispensing funds across the state means that OE pursuits remain dispersed as well.

Having a diffuse OE movement seems to manifest in two ways. First, since momentum is not predicated on any one school, initiative, or person, OE can persist despite turnover in faculty, staff, and administrators. Carey noted how their new provost “came around to Open” in part because OE leaders brought it to their attention soon after they started their post (personal communication, 18 November 2022). Jesse discussed the continuity of OE on their campus as a direct result of the recent renewal of state legislature (personal communication, 14 November 2022). In this sense, one could argue that the CDHE serves as the throughline for OE in Colorado, who mobilized additional means of generating activity like the Colorado OER Conference and the CDHE’s ambassadorship programs. The Ambassadors Program, initially intended for outreach, boasts over 120 members in their roster who

represent more than 33 institutions (Colorado Open Education Ambassadors Program, n.d.). By offering new and ongoing training sessions, the program allows for ambassadors to become allies while also fulfilling skills-building and capacity building goals. Many interviewees commented on the willingness of CDHE and the Council to connect like-minded people across institutions.

A diffuse OE movement also entails a loose network of like-minded individuals who, because of the looseness, tend to cultivate an invitational ethos. Many interviewees characterized the OE community as a warm welcome—by no means unique to Colorado—as experienced through proximal ties to OE leaders. Some explained the proximity of OE leaders in terms of platforms like Twitter, while others meant a literal proximity of “seeing at least one familiar face” at events. Faculty and staff equally lauded how conferences were characterized by “strong programming,” which was complemented by the perception that one could “easily ask for introductions” partly because the event would be organized in “a non-hierarchical” manner. Consider how Leslie Reynolds of University of Colorado Boulder narrates the OE community, both within her institution and to the wider OE community:

They are incredible, right? And the group that we work with [...] is incredible at sharing knowledge, and when you go to the State Conference, and OER Day and everyone... everyone is in everything! Just the desire to work together and help share knowledge, help people make things happen... I mean, *that's* really the value of Open Ed, right? It's sharing knowledge and lighting other candles as we go along. And that's important because I feel like the open education community is kind of how I'd like the world to work: full of compassion and care, and helping everyone to succeed. (L. Reynolds, personal communication, 22 November 2022)

Here, Reynolds describes OE collaboration as a model for “how [she]’d like the world to work,” conveying both accolades and aspirations for OE and beyond. Reynolds’ metaphor refers to the idiom that “a candle loses nothing by lighting another candle” and aptly captures the spread and warmth of the OE ethos.

Again, the welcoming nature of OE communities could be said about the broader OE community, but the relative density of OE activity in Colorado may enhance its effects. Opportunities to meet (and catch up with) like-minded people happen regularly with international, national, and local events, which become common reference points within the local community. Over a third of the respondents named Rajiv Jhangiani’s keynote at the Colorado Learning and Teaching with Technology (COLTT) Conference of 2018 as a pivotal moment for connecting OER to a greater set of OE practices (e.g., pedagogy).<sup>4</sup> One interviewee even admitted to stealing the recording of the keynote to share with their faculty resource center, “for people to view and get exposed to that” (Riley, personal communication, 14 November 2022). It may be that as people join the OE movement in Colorado (in its diffuseness) they start to notice OE momentum on the basis of gradually learning about the variety of OE events, be they

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<sup>4</sup> Here is an instance of discrepancies between real and imagined narratives: at least three mentions of Jhangiani’s keynote were described as taking place in 2017, before Bill HB18-1331. In these instances, the keynote was thought to fuel OE momentum and leverage key players to galvanize OE efforts such as the Bill, even though fact-checking confirmed that the keynote was delivered *after* the Bill was signed into effect. Such memories demonstrate the tremendous effects (and affects) the event generated within the Colorado OE community at that time.

formal ones (e.g., recurring conferences, due dates for grant proposals) or ad hoc ones (e.g., committee meetings at an institutional or departmental level). Regardless of timeline or scale, it appears that recurring events keep bringing people together to renew the *sense* of cohesion and reinforce community ties.

Perceptions of OE momentum in Colorado remain diffuse, but its interconnectivity is renewed with events, special interest groups, and local committees who repeatedly convene to enact a form of coalition. However, the dynamicity of diffuse or cohesive ties is only meaningful insofar as like-minded individuals gather together, and there is no guarantee that gatherings can sustain themselves. The following section focuses on some of the challenges that Colorado participants discussed, although the issues discussed go beyond the state.

### ***Challenging the Narrative: Challenges for the Greater OE Movement/Philosophy***

By no means does this sample reflect a universal experience with OE, nor do I mean to suggest that OE in Colorado is a *fait accompli*, a thing already done, decided upon, or accepted as such. In fact, one could argue that there is a danger in framing OE awareness as having achieved some meaningful threshold because to presume momentum risks relegating outreach and advocacy efforts to the proverbial backburner. Or, it may usher in a form of flimsy support: on paper only, or, to quote some participants, for “one-offs only” (Taylor, personal communication, 18 November, 2022), or institutions choosing “to keep a little bit going, [just] to say they’re doing it” (Riley, personal communication, 14 November 2022). Meg Brown-Sica, long-time OE advocate and Assistant Dean for Scholarly Communications and Collections at the Colorado State University libraries, voices a different perspective:

I personally don't think we have great momentum. I mean, I think that we've definitely done more than was there, you know, I think we've made it in terms of people knowing what [OE] is. I think with the small grants that we've given, if nothing else, it really made people realize, “oh, *this* is what this is; this is a thing.” And we've tried to put grants out there, at many institutions in Colorado primarily for that reason. [...] But I don't feel that we're anywhere near where we should be. (M. Brown-Sica, personal communication, 8 November 2022)

While awareness is a key aspect of a growing movement, it may not affect change or directly lead to action. Or, as others have noted, while awareness is a good thing to strive for, and Colorado reports “awareness” at least in numbers (Bill SB21-215, p.1), it may be that most faculty equate open education with a free textbook.

### **Key Challenge: Who Could Be, Should Be, or Is Actually Doing OE Work?**

Upon elaboration, Brown-Sica’s insights point to a coordination problem, and a mismatch between who is expected to do this work (in theory), who is tasked with leading OE efforts (in practice), and how this work is sustained, or not, by resources (both human and capital) as well as infrastructure (over time, across institutional turnover). An example of this mismatch is epitomized in Brown-Sica’s

aside: “You know, it’s funny, somebody said to me, ‘you librarians, you’re so pushy on OER. Why don't you let faculty lead?’ and I’m like, hey, I will get out of the way if faculty are leading this, but I haven't seen that so far. And I’ll do my best until that happens” (personal communication, 8 November 2022). Brown-Sica’s comments gesture to perennial problems that have haunted OE proliferation: faculty are simultaneously the best positioned to instantiate OE and afforded the least latitude to making it happen (see Annand & Jensen 2017; Todorinova & Wilkinson 2020; McKinney & Coolidge 2021), which acutely places pressure on people whose positions limit their ability to affect lasting change.

Most interlocutors admit that OE efforts fall on top of existing workloads, making it difficult to persuade new OE enthusiasts, sustain existing OE advocates, and recognize leading OE champions in formal terms. Against this backdrop, a tension between who *can* do the work versus who *ought to* complicates matters further, as captured in this response from an educator who sits on their university’s committee for OE:

...don't get me wrong. I love my librarians! They are working with me on [OE] and that's great. But you have the wrong players when you have only the librarians [...] like, where's the value from your faculty though? So I think for me, there needs to be more faculty *actually* involved in some of these conversations [...] because the questions are different. And the concerns that I'm posing to them are different. (Robin, personal communication, 16 November 2022)

Another educator, Taylor, discusses the difficulty in finessing the rhetoric for OE messaging to faculty, even suggesting that OE could benefit from a dedicated marketing strategy since individuals “can continue with word of mouth” but the value of Open will always be eclipsed by conventional publishers who can easily out-advertise with their exorbitant marketing budgets (personal communication, 18 November 2022). Taylor also laments how OE messaging needs to continue debunking myths in conventional education before fine-tuning the value propositions associated with OE. Consistent with Rolfe (2012), for example:

...it’s kind of complicated to explain the different licenses and legally, technically what you can do. And I think a lot of people just violate copyright law all the time and don’t even realize they’re doing anything wrong. So when you’re trying to introduce Open [Education] like, “Hey, you can share this for free and you’re not violating copyright law,” people are like “I never care about copyright law.” (Taylor, personal communication, November 18 2022)

Other perspectives echoed this desire to change the narrative and rhetoric surrounding OE, especially noting how the current talking points have not been enough to persuade individuals to OE.

### **Key Challenge: Is OE a Movement or a Philosophy to Sustain?**

Extending Taylor’s concerns about marketing OE against conventional publishers, Doug Strauss of Aims Community College expressed concern about the sustainability of OE because the convenience of having conventional resources is too enticing, especially when faculty are overloaded (personal

communication, 11 November 2022). He couples sustaining OE with a pivot to other Open practices (e.g., open pedagogy and co-creating textbooks versus conventional homework banks) to reinforce the backbone of an OE *movement*:

I think all of us blips [on the radar] can become something bigger. And I think that's what my experience of the whole Open Education movement is. [...] There's other people all over the world who are doing things and how much of a groundswell can we make? And that's not to say that this is just about competing with the big publishing companies. But it's our philosophy behind this movement; it certainly comes from the right place, at least in my humble opinion. (D. Strauss, personal communication, 11 November 2022)

Another instructor at University of Colorado Denver, Alex, also spoke of how viewing OE *as a philosophy* helped them connect OER with open pedagogy. In reference to the idiom “sage on a stage,” which connotes a unidirectional teaching style, they see the enmeshment between OE and open pedagogy as follows:

I have since embraced [...] that philosophical aspect of letting go some to maybe share the stage with your students, to co-create materials, or to co-adopt material, and to give them some power and thinking about what they want to learn about. (Alex, personal communication, 16 December 2022)

Subsequent analysis of interview transcripts suggest that mentions of “philosophy” collocate with phrases that frame OE as “a good idea,” “the right thing to do,” and “consistent with my values.” Mentions of OE as a “movement” use phrases such as “convert,” “convince,” “rhetoric,” “messaging,” and “advocacy.” Of course, philosophies and movements cannot be neatly cleaved and, often, the success of a movement lies with the cogence of the philosophy behind it. But the two paradigms seem different enough in at least phrasings and priorities. In the quotations above, for instance, the difference between people who gather for OE because they believe it's a social movement *against* publishers (leveraging OER) versus a movement *for* co-creating knowledge (leveraging open pedagogy) point to differences in priorities, actionable interventions, and talking points—which may point to two different sustainability strategies.

The challenge of sustaining OE momentum can also be explained by scale. Dustin Fife, a founding OER Council member, uses the analogy of a recycling program to illustrate the tension between scales of intervention, explicitly drawing attention to the discrepancies between aspirational OER messaging and the realities of structural inadequacies in higher education:

[O]pen educational resources are a lot like recycling. Recycling is really good. And we should do it individually. And it's ethical to do, and we should try to build businesses for it. But we're lying to ourselves if we think we're saving the world through our individual recycling since most waste comes from corporations; most pollutants come from corporations. So it doesn't mean we shouldn't do Open Educational Resources. We can make individual differences and change individual lives. But still[...]. We just aren't

making the structural changes that we sometimes think we are. (D. Fife, personal communication, 7 November 2022)

Much like the environmental movement's mantra to recycle, efforts to mitigate waste end up being the burden at an individual scale of action. Or worse, an eco-conscious philosophy may see recycling as an ethical thing to believe in, but it may not lead to meaningful action. Whereas some participants pointed out who can or ought to be doing the work of OE, Fife looks to scale (see also Donella Meadows' systems theory or Anthony Giddens' structuration theory for more). In Fife's analogy, individual OE efforts (i.e., OER projects) remain insufficient for fundamental change, for the simple reason that piecemeal efforts do not address structural problems. "Stop! Unfunded! Mandates!" he chants at the end of the interview.

Colorado has a funded mandate, at least until 2026, but most participants observe the need to change structures well before the current round of legislative support expires. Many respondents pressed upon the need to revise tenure and promotion guidelines, a task which can only be completed *by* faculty *for* other faculty. Others are creating positions that explicitly and deliberately center OE in their titles and duties. As others in OE research have argued, a more robust understanding of individual and collective values will be key to sustaining the OE movement (MacKinnon et al., 2016), whether that be financially (Wiley 2007), internationally (Bozkurt et al. 2018), or ideologically (Kenrick, 2009). So while the founding narrative of OE in Colorado celebrates legislative and collective action, its future rests in the paradigmatic shift towards identifying and attenuating structural bottlenecks such as faculty loads, political structures, and clear messaging that would enable its momentum to continue.

## Conclusion

More than a handful of years into strategically building out OE capacity, Colorado seems to find itself in a balance between the solid structures of state-level "top-down" support (often leveraged by provosts, chancellors, and deans) and the variability of OE efforts (with instructors, libraries, and departments) from the "bottom-up." The origin stories of Colorado's OE momentum build atop this balance, with current conversations moving from first-order awareness and use towards deeper commitments to infrastructure and sustainability. Structural supports at the state level have formalized OE efforts in Colorado and have helped to coalesce a diffuse group. Their influence seems to have synergistically advanced OE in general and in Colorado specifically.

It is worth repeating: OE tactics cannot be copy-pasted elsewhere, and it would be a mistake to take the Colorado case as *the* emblem of OE origins or its futures. However, the focus on Colorado can show how certain origins connect with certain futures: the OE community in Colorado looks diffuse because it has not had a single leader at its helm but rather a structural (legislative, financial) system undergirding its myriad projects for almost a decade. Over that time, the variety of peoples, projects, and purposes keep OE functioning in this diffuse manner, while still contributing to OE momentum locally and broadly. This may help explain why Colorado's OE efforts looks and functions the way it does, not in any way that can be used elsewhere as an OE playbook, but as one example of an OE community trying to identify and address the perceived challenges ahead: sustaining itself beyond funding mandates.

## **Acknowledgements**

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## **Conflict of Interest Statement**

The author declares no conflict of interest.

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## *Appendices*

### **Appendix A. Project Description**

Project Description: Who or what are the catalysts that made Colorado a hub for Open Education? Open Education (OE) is both a movement and a philosophy that aims to grant access to educational opportunities for all. In this study, I intend to examine the various forces that helped Colorado emerge as a leader in OE practices and initiatives. Using a mix of qualitative methods (e.g. interviews, narrative analysis), the goal of this project is to map the forces—both actual and imagined—that contributed to Colorado’s origin stories in OE. Interviews will be coded for key players, place-based ethos, policies, promises, tools, platforms, protests, advocacy efforts, and other themes as they emerge. Rather than aim for an exhaustive study that isolates causal relations, this project attempts to identify the interdependent relationships between institutions, state/province priorities, and OE communities of faculty and staff. This research will produce a thematic map of what may have helped OE communities flourish in the past, thus informing future hubs. A secondary outcome of this research will be to develop a shareable protocol for other researchers who may be interested in studying other OE hubs.

### **Appendix B. Recruitment Letter**

Dear [PARTICIPANT]

My name is Maya Hey and I am a researcher from Colorado State University studying Open Education as both a movement and a philosophy. As part of the 2021-2022 cohort of the Open Education Fellowship, I am conducting a research study on the origin stories of how Colorado became a hub for Open Education (OE). A brief description of the project is at the bottom of this email; and I am the Principal Investigator for it.

As someone immersed in the OE landscape of Colorado, I’m wondering if you’d be open to speaking with me.

I would be asking questions such as: how did you come to working in OE in Colorado; is it an OE hub; and, if so, what makes you say so? Participation—including informed consent forms and interview—will take approximately 55 minutes in total, over Zoom. Your participation in this research is voluntary, though I cannot offer remuneration for your time. You will be able to anonymize your personal identifiers to the extent that you wish, and, if you decide to participate in the study, you may withdraw without penalty. If you still have questions, I would be more than happy to clarify any of these procedural aspects of the study.

To indicate your willingness to participate and to continue with scheduling an interview, please respond to this message with a few potential times/dates for an interview. (Any time before [DATE] would be ideal.) One week prior to our interview, I will send you the informed consent form and Zoom link.

If you have any questions about the research, please contact me here or by phone: [PHONE NUMBER].  
If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at:  
RICRO\_IRB[at]mail.colostate.edu; 970-491-1553.

I look forward to hearing from you as time allows.

Sincerely,  
Maya

### **Appendix C. Phrasing on Informed Consent Form For Participants to Choose Degrees of Anonymity.**

#### WHO WILL SEE THE INFORMATION THAT I GIVE?

This study will gather information in the form of an audio recording. Only I (the PI) will have access to this recording. In fact, the first question of the interview will be: “Do I have your permission to record this conversation?” after which I will only proceed if you answered yes on the recording. Depending on how you select your **degree of anonymity** below, I will transcribe the audio recording and, where needed, use gender-neutral pseudonyms or redact information per your request. Please note that excerpts from this transcript may be used in one or more of the following formats: conference presentation, social media post, manuscript for a peer-reviewed journal article.

\_\_ (*please initial*) I understand that excerpts from my interview may be used for conference presentations,  
social media posts, and/or manuscripts for peer-reviewed journal articles.

**Degree of anonymity:** You will be given the option to choose how your information will be presented in the above formats. **Select ONE** of the following options by initialing next to it.

\_\_ (*option one*) Anonymous in full.  
No personal identifiers including name, gender, occupation, or institutional affiliation.  
No reference will be made in written or oral materials that could link you to this study.

\_\_ (*option two*) Occupation only.  
No name, gender, or institutional affiliation. Gender-neutral pseudonyms may be used.  
No reference will be made in written or oral materials that could link you to this study.

\_\_ (option three) Selective information disclosed.

I feel comfortable sharing:

(please initial one or more potential identifiers)

\_\_ my name

\_\_ my gender, with the pronouns \_\_\_\_\_

\_\_ my occupation

\_\_ my institutional affiliation

\_\_ other category: \_\_\_\_\_

For the first two options, I will assign a code to your data so that the only place your name will appear in our records is on the consent form and in our data spreadsheet which links you to your code. Only I will have access to the link between your name, your code, and your data.

Depending on where our conversations take us, you may find that you'd like to amend the choice you selected above. This can be done if you notify me in writing before December 1st, 2022. After that date, I will make every effort to make the changes, but I cannot guarantee it.

\_\_ (please initial) I understand that I can change my selection until December 31st, 2022.

## Appendix D. Interview Questions

**Biographical and Context Question:** How did you come to working in Open Education (OE)? What was your motivation to pursue this work in Colorado?

**Opinion Question:** To what extent do you think Colorado has notable momentum in OE? Or, what is unique about OE in Colorado?

**Future Question:** Looking ahead, how would you want momentum to gather/continue in Colorado? Or, what would be necessary for this reality to happen?

## Open Peer Review

Brunet, M. (2023, March). [Catalysts of Open Education in Colorado: A qualitative study of enabling forces in OE momentum, by M. Hey]. *Journal of Open Educational Resources in Higher Education*, 2(1), 128–131. doi:10.13001/joerhe.v2i1.7651

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**Reviewer:** Mélanie Brunet

**Recommendation:** Accept Submission

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, this article fits within the scope of the journal and is squarely focused on open education. I think it is a valuable contribution to the OE literature by presenting the results of a qualitative/narrative analysis of interviews with key players in the Colorado OE movement. It differs from most articles on OE by going beyond identifying barriers to focus on enabling forces, which are just as important.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

Yes, the article proceeds logically and adheres to the structure recommended by the journal. My only critical observation regarding the organization is the “Challenging the Narrative” section. While it obviously needs to be there to provide the “more nuanced understanding in a particular place” mentioned in the abstract and introduction, it is a bit jarring after reading the positive narrative of OE advocates in Colorado and feels somewhat out of place. I would suggest adding a sentence or two at end of the previous section to ease the transition. Also, it may be worth stating more clearly in the introduction that these challenges will also be discussed.

## Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The narrative analysis of interviews with OE advocates in Colorado appears sound and the author is careful to point out the limits of this approach and the sample. I particularly appreciated that the author specified that the forces that were mapped from this origin story can be actual or imagined, something that is not mentioned enough when relying on the recollections of interviewees. Based on this approach, the conclusions are supported.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The application of APA was not consistent for in-text citations. Otherwise, I did not notice significant problems with expression or flow. Please see my comments in the article itself.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

Keeping in mind the author's warning that "OE is not a formula to copy-paste elsewhere", I would argue that it is the method, i.e. the use of narrative analysis, that is the major contribution. In this case, it made it possible to get to the factors that contributed positively to OE in Colorado. The OE literature tends to focus more on quantitative approaches and barriers, so this article stands out in that regard.

## What are the stronger points/qualities of the article?

The use of narrative analysis to find out what OE advocates in Colorado believe are the factors that contributed to OE taking hold in that state. It does not pretend to be a template for others to follow but goes a long way to show that even the presence of certain elements may not be enough. They need to align in a particular way.

What are the weaker points/qualities of the article? How could they be strengthened?

As I pointed out under “Organization”, the challenges and barriers discussed by the interviewees appear a bit out of place. I think it is because the article was set up mostly to focus on forces. More clearly indicating in the introduction that these will also be discussed would help, as well as adding a sentence or two before that section to ease the transition.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Highly Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Highly Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Highly Sound

Overall Evaluation

3- Strong Accept

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## Open Peer Review

Lowe, M. (2023, March). [Catalysts of Open Education in Colorado: A qualitative study of enabling forces in OE momentum, by M. Hey]. *Journal of Open Educational Resources in Higher Education*, 2(1), 132–135. doi:10.13001/joerhe.v2i1.7651

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**Reviewer:** Dr. Megan Lowe

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, the article lies within the scope of the journal, as its primary focus is the OE movement and its momentum in HE in Colorado.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

Overall, the article does proceed logically. I do wish the Context, Research Design, and Methods section had used subheadings for a little more breaking up between those sections.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

Methodology and Approach are present in the article. However, I wish the author had provided more detail on the development of their sample. Yes, they indicate the primary inclusion criteria, but the rest of the recruitment process - that is to say, identifying the main informants - seems rather vague.

I wish that the author had elaborated more how they developed the two overarching themes. Were other themes considered? Were there themes that emerged but were not fleshed-out well?

The conclusion feels very thin, however, compared to the rest of the article. I feel like, given the density of results and discussion, that the conclusion should be expanded more.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The writing style is fine. It is appropriately professional without being overbearingly formal or painfully full of jargon. It flows well.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

Certainly. While it is taking a retrospective look at OE in Colorado, the themes - state-level support and community characteristics - indicate the importance and significance of those two components to how OE takes root and thrives. In states where OE might not yet be flourishing, and even at institutions where OE policy and practice are still taking shape, having those two contexts can be crucial to leveraging resources, seeking support, and developing strategies.

## What are the stronger points/qualities of the article?

This article does a great job of creating a coherent narrative of the emergence and development of OE in Colorado. Understanding the origins of the movement within that state can be helpful to the practitioners there for understanding why the movement looks the way it does and why policy there may appear the way it does. This can be beneficial in terms of understanding where challenges and barriers still lie and why they remain. This creates fertile ground for addressing those challenges and barriers moving forward.

The article is also well-written and flows well. It includes good direct quotations from the participants, representing their lived experiences with the movement. While they aren't real-time - and the author makes a well-placed statement about how this piece may result in the -construction- of an origin story in real-time rather than simply documenting or reconstructing that origin.

What are the weaker points/qualities of the article? How could they be strengthened?

While I can appreciate conciseness and brevity, I feel like there are sections - like the Literature Review and Conclusion - that would benefit from expansion. Too few words can be as problematic as too many, but in a different way. I think it's important to show one's readers things, rather than just telling them, and one should not make the mistake of assuming that one's readers will make connections in the same way that the author does. I feel like the author could also emphasize how their research can help not just Colorado but also other states/entities in terms of OE. The author does, in fact, state in their introduction that "OE is not a formula to copy-paste elsewhere," and I totally agree with that. However, it does help to understand how the author envisions such a case study, in essence, providing context and insight to others - to answer that important question of "why should others care?" How does the author intend for other practitioners to use what the author has found?

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

1- Weak Accept

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# Assessing the Impact of a Collaborative OER & Affordable Resources Committee

## *Instructors' Awareness of Course Material Options*

Abbey K. Elder<sup>1</sup>

Md Imtiazul Alam<sup>2</sup>

Keywords: Faculty Engagement, Textbook Affordability, OER Awareness, Program Assessment

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### ***Abstract***

This case study shares observations from a 2022 survey of 197 instructors at Iowa State University, a public research university in the United States. The survey sought to explore instructor awareness of three major affordable course material initiatives supported by the university's Open & Affordable Education Committee (OAEC): Open Educational Resources (OER), Course Reserves, and Immediate Access. Results from the survey found that despite significant cross-promotion and collaboration between the three programs represented on the OAEC, the awareness and uptake of each program varied greatly, as did instructors' understanding of the differences between each material type. This paper shares the results of that survey, as well as improvements which have been made to the OAEC's programming and promotion efforts in the year since.

### **Introduction**

Covering the cost of course materials has been a longstanding concern for college students. The average cost of textbooks and supplies for a full-time undergraduate student at a four-year public institution in the US was estimated to be \$1,240 in the 2020-2021 academic year (Arnett, 2022). This cost can be a significant financial burden for students and may prevent them from accessing the resources they need to succeed academically. To address this issue, academic libraries and other units working across the higher education sector have developed programs and initiatives to support the

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creation and use of free and low-cost course materials, such as open educational resources (OER), library-licensed materials, and course packs, among others.

## ***Background***

Iowa State University's Open & Affordable Education Committee (OAEC) began in 2017 with the purpose of exploring, assessing, and supporting the use of OER and other affordable course materials across the university (Iowa State University, 2023). The committee is not a board which actively manages affordable course material programs. Instead, it serves as a space where several program leads and campus stakeholders can come together to discuss effective strategies for supporting the use of OER and other affordable course materials while prioritizing the needs of instructors and students. The committee includes the Open Education program's lead, the Course Materials manager for the ISU Book Store, the Iowa State Student Government Association's Director of Affordability, and other campus partners, including faculty, librarians, and instructional designers.

The OAEC collaborates on the promotion of three major course material initiatives: Open Education, Course Reserves, and Immediate Access. The Open Education program supports the use of OER, teaching and learning materials that are openly licensed, allowing for them to be used, revised, and shared by users freely (UNESCO, 2019). The Course Reserves program supports the use of library-licensed resources, such as e-books and journal articles, which can be accessed by students at no additional cost through the institution's library (Iowa State University Library, 2023). Finally, the Immediate Access program is a university-branded inclusive access initiative which supports the use of reduced cost course materials available electronically through textbook publishers' infrastructure (Iowa State University Book Store, 2023). While other affordable course material options are recommended by the committee (e.g., low-cost course packets, used books, and free online materials like blogs or websites), these three course material types are the ones which Iowa State University supports through substantial programming.

Staff supporting the OAEC's programs coordinate one-on-one with instructors to help them locate, evaluate, and adopt appropriate materials for their courses. Course material adoption data for these programs in 2021-2022 is added here for context, along with average student savings per course, when available. In the 2021-2022 academic year, 46 courses reported using OER, serving 9,395 students, including ISU's required 1-credit information literacy course, Library 160, which supported 5,065 students. We measure OER savings with the recommended \$116 average savings per course, as proposed by Wiley (2018) and later endorsed by Zaback (2022). Since we do not count Library 160 toward our cost saving numbers—its book has been provided freely by the library for many years—the cost savings for students taking all other courses using OER was roughly half a million dollars in 2021-2022. Iowa State University's Course Reserves served 450 classes and 11,275 students in 2021-2022. Finally, the ISU Book Store saw 105,849 total enrollments in courses using the Immediate Access program in 2021-2022, with just under two million dollars in reported savings to students. This indicates that students enrolled in courses using Immediate Access materials had an average \$18 in savings per course.

The OAEC's members have collaborated across our programs even prior to this study. For example, in order to provide accurate communications about our programs, the OAEC's members have leveraged the use of a shared slide set which we use when presenting about various affordable course material options across campus. Additionally, the committee collaborates on the collection and reporting of OER adoption data. Each semester, ISU Book Store staff collect OER adoptions in a spreadsheet shared with the OAEC. When faculty report OER adoptions to the library instead of through official means, these are also added to that shared spreadsheet and Book Store staff are notified so they can add the OER to their course materials portal for students. New and emerging collaborations since this survey was conducted are described in the Discussion section of this paper.

This study aimed to assess the impact of Iowa State University's Open & Affordable Education Committee (OAEC) by exploring faculty members' awareness of various affordable course materials that the committee promotes. Data was collected through a survey designed to find the answers to the following research questions:

1. What is the faculty's awareness of our various course material initiatives?
2. What barriers are stopping faculty from adopting affordable course materials?
3. What strategies are faculty members employing to make their courses more available?

The findings from this survey provide insights into the impact of Iowa State University's various affordable course material initiatives and the cross-promotional work of the OAEC.

## Literature Review

### *Motivations for Course Material Adoption*

While support for affordable course materials has been growing in recent years, faculty members' adoption of these materials is critical to realize their benefits; however, many faculty members still rely on expensive, commercial textbooks for their teaching (Wimberley et al., 2020). How faculty members perceive affordable course materials plays a critical role in their adoption and integration into the classroom. This is further complicated by a lack of understanding regarding what OER are and how they differ from other affordable course material programs (Santiago & Arthur, 2021). A study of 1,843 faculty and 916 administrators from colleges and universities across the United States by Seaman & Seaman (2022) found that although 43% of administrators surveyed were aware of an OER initiative on their campus, only 27% of faculty were aware of their institution's initiatives.

Furthermore, even when faculty are aware of the options available to them, there are different motivations among faculty members that lead them to create or adopt new course materials. For OER, research has identified altruistic, commercial, and transformational incentives that motivate faculty to integrate them into courses (Slater, 2011). Jhangiani et al. (2016) found that faculty perceptions of OER were influenced by a number of factors, including their perceptions of the quality of OER, their confidence in their ability to find and use OER, and the value they place on open access and sharing. In a more recent study by Spilovoy et al. (2020), faculty awareness and use of OER showed a significant

increase. Nevertheless, those faculty members who had not used OER were less likely to perceive OER positively than those who had. Because of this hesitancy and other considerations, like a lack of time to research other course material options, commercial textbooks are still the default course materials in use across the higher education sector (McBride & Abramovich, 2022).

### ***Benefits and Challenges of Affordable Course Material Options***

In contrast to traditional textbooks, OER allow instructors to reduce or even eliminate students' course material expenses (Hendricks et al., 2017; Read et al., 2020). Students who enroll in courses using OER save money and their educational outcomes do not change statistically significantly (Chiorescu, 2017). Hence, OER help in decreasing students' spending without compromising learning. However, locating appropriate OER for a given field is not always easy, either due to availability or other discoverability issues (Perifanou & Economides, 2022). To support the growing use of OER while finding ways to support students across the curriculum, some colleges have implemented a multi-pronged approach to supporting the use of affordable course material options.

One of the longest-standing programs for helping students access course materials freely is course reserves, a service that many academic libraries provide to help students access textbooks, articles, and other materials available through their library's collections (Dotson & Olivera, 2020). These library-licensed materials may include print textbooks and DVDs as well as electronic materials such as journal articles and e-books. While course reserves serve as useful affordability measures for student success, the budgets of many academic libraries cannot account for the full range of materials adopted on their campus, particularly as many textbook publishers limit the number and format of textbooks which academic libraries can purchase (Courtney & Ziskina, 2023). Despite the setbacks that libraries have faced when trying to advocate for more robust course reserves, these services are a longstanding and impactful program for providing free access to course materials.

Inclusive access programs have grown in popularity and use across the United States over the past 10 years (Seaman & Seaman, 2022). These programs help lower the cost of course materials by providing students with electronic access to course materials on the first day of class, typically at a reduced cost (Cuillier, 2018). However, publishers who manage inclusive access programs for their materials have come under fire for opaque billing methods, the unethical collection of student data, and uncapped price increases, among other concerns (Vitez, 2020). Many institutions have sought to follow best practices when setting up contracts with publishers for inclusive access by providing more price transparency and allowing students to opt-in rather than requiring them to opt-out of purchasing these materials (Vitez, 2020). Nonetheless, when there are no free materials available for faculty, taking a step toward something more affordable can be a positive change, and the robust marketing for inclusive access programs from campus stores and publishers alike have made this model a popular one.

## **Methods**

In early 2022, the Open & Affordable Education Committee (OAEC) conducted a survey to assess the reach and impact of its affordable course material programs. The survey, composed of a mix of 12 qualitative and quantitative questions, was based on San Mateo County Community College's (SMCCC) Faculty Open Education Week OER Awareness Survey Instrument, available under a Creative

Commons Attribution 4.0 license (Maloney et al., 2021). To assess the impact of Iowa State's collaborative committee structure, we adapted the SMCCC survey to include additional questions about our Course Reserves and Immediate Access programs. To ensure that the results would be comparable across the various program types, the question on the original survey about barriers to utilizing OER was adapted to ensure that the same or similar questions could be asked for each of the corresponding affordable course material programs being assessed.

Because this study was conducted to collect data which we used to improve internal programming, it did not undergo IRB review. However, we are planning to seek out IRB review for future studies in order to collect more in-depth data on faculty perceptions and engagement with our programs.

## ***Participants***

The survey was disseminated online via Qualtrics. All faculty (n=1,749) at Iowa State University were invited to participate in an email that included a description of the survey, its length, and its purpose. Two weeks after the initial email, a reminder email was sent to the same list of faculty. This was necessary because the survey was entirely anonymous and we could not verify which faculty members had already completed the survey. One month after the survey's initial dissemination, 226 participants had opened it, with 197 (11.3% of all faculty) completing at least 90% of the survey's questions.

## **Results**

### ***Background On Course Materials Adoption***

The survey opened with a few general questions about faculty members' adoption of course materials to develop a baseline understanding of how course material decisions are made across campus. Question 1 asked "Who has the PRIMARY role in selecting educational resources for use in the courses you teach?" Out of 197 participants, an overwhelming majority (86%, n=170) shared that they are personally responsible for selecting materials in their own courses. Every other category had a low response rate, with 4% of participants (n=8) sharing that a faculty committee selects the materials for their courses; 5% (n=10) sharing that department coordinators are responsible for selecting materials, and the final 5% (n=9) choosing "Other." Among the participants who selected this option, most (n=5) shared that multiple of these categories might be true, depending on the courses they are teaching.

Question 2 asked participants to rank factors that may impact their course material selection, from 1 (most important) to 9 (least important). We assessed this question via the mean rank applied to the factor being assessed. Most of the participants selected "cover the subjects I wish to teach" as their highest priority for materials (mean rank of 1.8), followed by "content is relevant to curriculum and learning outcomes," (mean rank of 2.4). Cost of materials was ranked as the third most important category, with a mean rank of 3.9. The fourth highest rated factor that faculty use when selecting course materials was "content that is current with up-to-date information" (mean rank of 4.2), followed by "ease of access" (mean rank of 5), and "content that is proven to improve student learning outcomes" (mean rank of 5.9). Finally, rounding out the bottom rankings were "content that works with the Canvas

LMS” (mean rank of 6.9), “content that is used by other course section faculty” (mean rank of 7.4), and “materials that are customizable” (mean rank of 7.6).

### ***Experience With Affordable Course Materials***

To get a better understanding of the scope of practices that faculty employ, the survey asked about participants’ experience using affordable course materials. First, the faculty were asked whether they had replaced commercial materials in one or more of their courses with a no-cost textbook, reader, lab manual, and/or homework system. The responses were surprisingly balanced, with 46.7% of participants (n=92) indicating that they had adopted no-cost course materials and 53.3% (n=105) indicating that they had not.

Next, the participants were asked about the strategies they used to lower costs for their students. The most popular option of those provided was creating one’s own course materials (n=144, 73.1%). Using course materials available through the library was the second most common practice, with 62.9% of participants (n=124) stating that they had implemented one or more of the following strategies: used library database articles to support instruction (n=85); used library subscribed ebooks to support instruction (n=58); or used library subscribed film databases to support instruction (n=22). Following these, the next most common practice was using online videos to support instruction (n=118, 59.9%).

The final four strategies were each used by less than 50% of participants. 39.1% (n=77) indicated that they had researched alternatives to a costly textbook, whether they were able to locate an appropriate alternative or not. 36.6% (n=72) created a low-cost reader or course pack for their class. 32% (n=63) used Immediate Access materials to lower costs for students. 20.3% of participants (n=40) indicated that they had used open educational resources (OER) in a course instead of a traditional for-cost textbook. Finally, 10.7% of participants (n=21) lowered course material costs through other means.

Answers to Other category included using low-cost traditional books (n=4), creating new OER rather than using existing ones (n=3), supplementing for-cost materials with free online content, including OER (n=3), using ebooks, streaming videos, and other materials available through library subscriptions (n=3), reducing course or lab fees (n=2), eliminating course materials altogether (n=2), using department-developed materials (n=1), assigning materials that are considered “grey literature” which are free to access (n=1), providing free PDFs of course materials in the course LMS (n=1), and bringing in guest speakers to supplement static course materials (n=1).

The next set of questions asked faculty about their awareness of the affordable course material options supported by the OAEC’s programming.

### ***Faculty Awareness of Open Educational Resources***

The first of course material types to be covered was OER. Nearly half of the faculty surveyed (45%, n=90) had no or very little information about OER, with 28.4% of the participants (n=56) reporting that they were not aware of OER at all and 17.3% (n=34) stating that they had heard of OER but did not know much about them. The next most common response was in the second highest awareness category, with 22.8% of participants (n=45) stating that they understand what OER are and how they are used, but they have not adopted OER in any of their courses. 18.8% of participants (n=37)

had some awareness of OER but did not know how to use them. Finally, 12.7% (n=25) were very aware of OER and had used them in one or more of their courses.

### *Faculty Awareness of Course Reserves*

Faculty awareness of Course Reserves was much more positive overall. In contrast with faculty awareness of OER, nearly one-third of the total participants (29.9%, n=59) indicated that they had used Course Reserves in the past. Furthermore, 19.8% (n=39) were aware of Course Reserves and how the service works but had not used it.

The last three categories were relatively similar in proportion in this section, with 17.3% (n=34) of participants stating that they are unaware of Course Reserves and 17.8% (n=35) knowing about Course Reserves but unsure what they are. Finally, 15.2% of participants (n=30) reported that they are somewhat aware of Course Reserves but unsure how to request materials on reserve for their class. The results suggest that while a majority of faculty members are aware of Course Reserves as an option, a lack of knowledge surrounding the service inhibits its widespread use.

### *Faculty Awareness of Immediate Access*

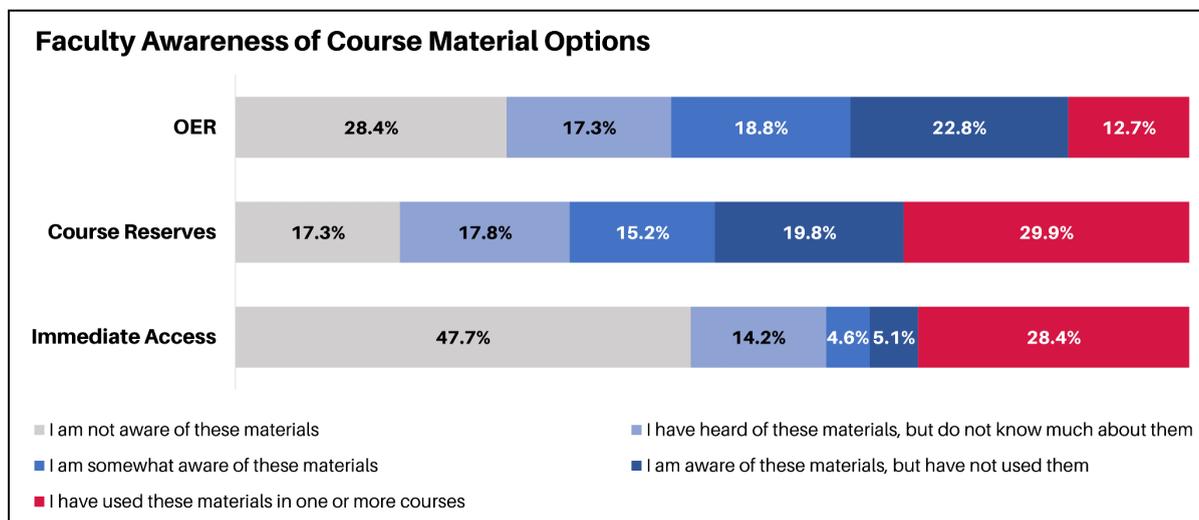
Finally, we explored faculty members' awareness of Iowa State University's Immediate Access (IA) program. Although the IA program has been in place at Iowa State University for ten years, IA is a relatively new business model, so it is not surprising that nearly half of the participants (47.7%, n=94) reported that they were not aware of the university's IA program.

Among those who were aware of IA, 28.4% (n=56) reported using IA in one or more courses, while 14.2% (n=28) shared that they had heard about IA but did not know much about it. Finally, 5.1% (n=10) reported that they knew about the IA program and how it works but had not used it in any of their courses and another 4.6% of the participants (n=9) stated that they were somewhat familiar with IA but unsure how to adopt the materials.

Responses about awareness for each course material option are pulled together in Figure 1 below.

**Figure 1**

*Faculty Survey Responses on Awareness of Course Material Options*

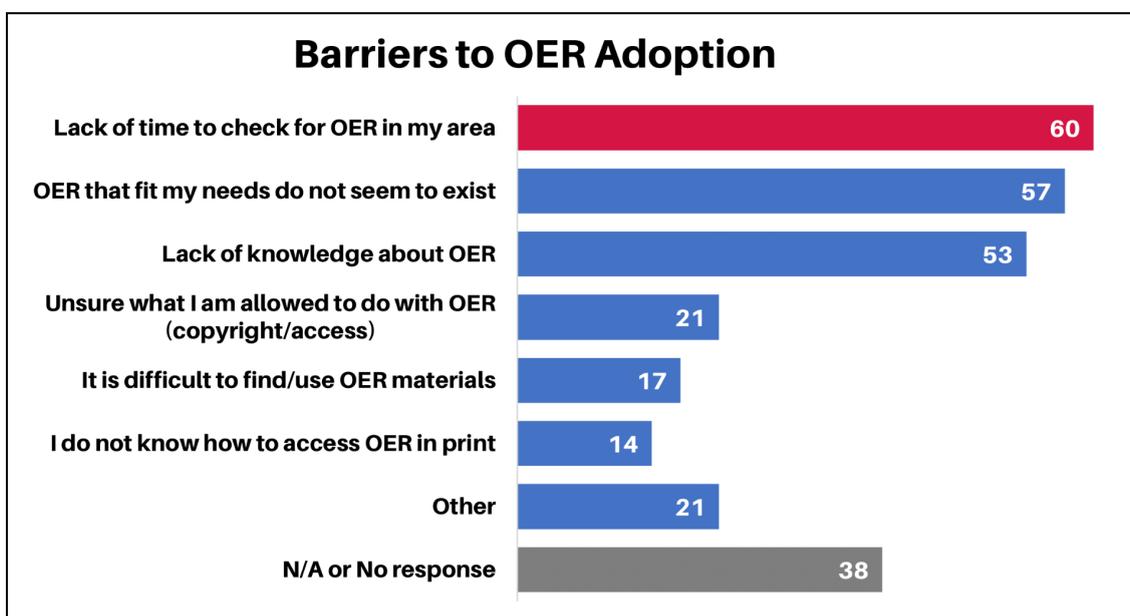


## *Barriers to Open Educational Resources*

The survey also asked about barriers to the use of these affordable course material options. For OER, the most common reported barrier was a lack of time to locate or adopt OER, with 30.5% of participants (n=60) selecting this option (Figure 2). Additionally, 28.9% of the participants (n=57) reported a lack of suitable OER available in their area and 26.9% (n=53) reported a lack of knowledge about what OER are, indicating a need for increased awareness and education about how to locate and assess OER.

**Figure 2**

*Faculty Survey Responses on Barriers to Open Educational Resources*



Other potential barriers to the use of OER were rated lower, with only 10.7% of participants (n=21) stating that they were uncertain about how OER can be used due to copyright, 8.6% (n=17) having difficulty finding or using OER, 7.1% (n=14) being unsure how to access OER in print, and 10.7% (n=21) having other barriers to the use of OER.

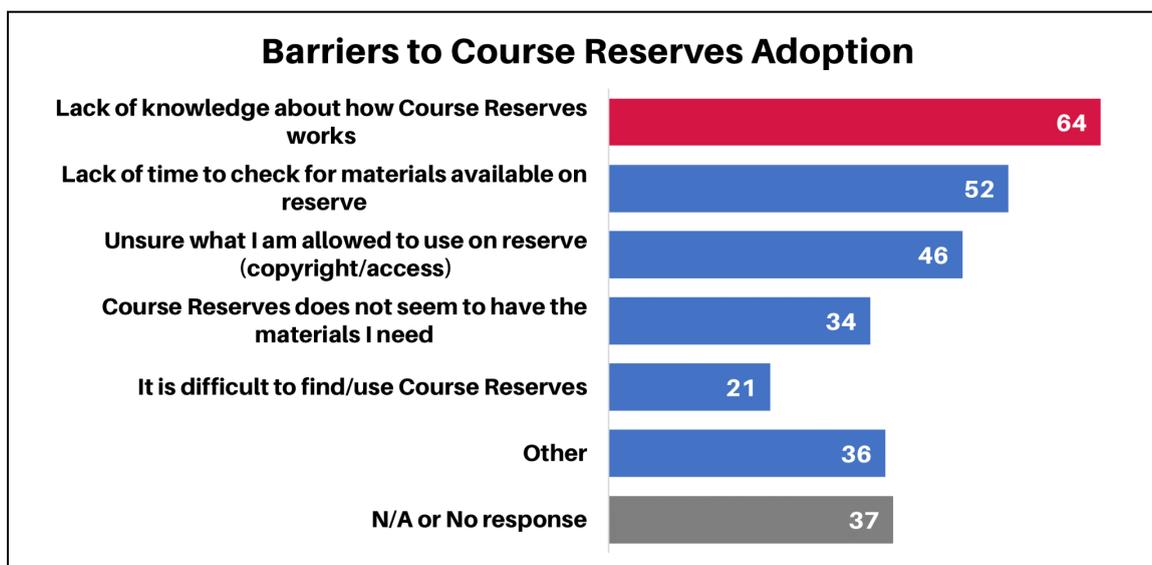
Among the responses to the Other category were faculty who are occupied with other responsibilities, such as heavy teaching and research loads and/or a lack of incentives to adopt or create OER. One participant reported, “The university does not offer incentive for faculty to spend time doing these tasks.” This is a particularly concerning response because Iowa State University offers funding for faculty to develop and implement OER in their courses through its annual mini-grant program, and encourages faculty to adopt OER through other administrative initiatives. The support we have developed should address many of the concerns levied by participants; however, since 28% of participants (n=55) reported being unfamiliar with OER, it is possible that these participants are unaware of the Open Education program in place as well, or that they are interested in other support structures to incentivize OER implementation.

## ***Barriers to Course Reserves***

In contrast to the responses about OER, only 26.4% (n=52) of participants shared that they did not have enough time to check for available materials through Course Reserves (Figure 3). A larger barrier for this program was faculty members' general understanding of how Course Reserves works, with 32.5% of participants (n=64) citing this lack of understanding as a barrier. There were also concerns regarding copyright and access restrictions with Course Reserves, with 23.4% of participants (n=46) unsure what materials they could use on reserve.

**Figure 3**

*Faculty Survey Responses on Barriers to Course Reserve*



The last two barriers included under Course Reserves were less commonly selected, with only 17.3% of participants (n=34) stating that Course Reserves does not have access to the materials they need and 10.7% (n=21) stating that it is difficult to find or use materials through Course Reserves. Finally, 18.3% (n=36) reported other barriers to using Course Reserves. Responses to the Other category included notes that some faculty did not encounter any barriers with Course Reserves (8.1%, n=16) that students don't use materials on reserve (2%, n=4), that faculty already have all the materials they need through other means (4.1%, n=8), that Course Reserves does not provide the type of material the instructor needs (3%, n=6), and, in rare cases, that the faculty member has a negative perceptions of Course Reserves due to personal or departmental history (1%, n=2).

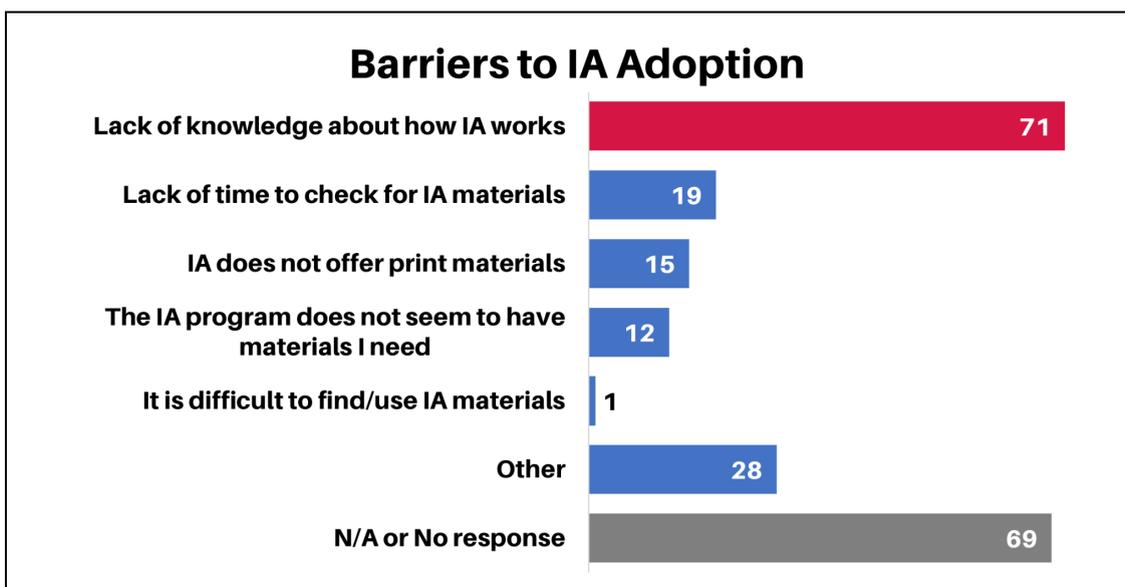
## ***Barriers to Immediate Access***

Next, we asked faculty whether they have faced several barriers when trying to engage with the Immediate Access program at Iowa State University. Nearly half of the participants (36%, n=71) reported a lack of knowledge about how IA works. The survey revealed that 9.6% of participants (n=19) did not have enough time to check for materials available through the IA program, while 6.1% (n=12) reported they could not find what they needed as IA. This might be because these instructors assign

content that is not typically provided by textbook publishers, such as journal articles, poetry books, or modern literature published by small presses. This is further highlighted by the 7.6% of participants (n=15) who identified a lack of print options for IA materials as a deterrent to their use. Finally, 1 participant shared that it is difficult to find or use IA materials, and 14.2% (n=28) of participants cited other barriers to the use of IA, such as concerns about student data and privacy concerns.

**Figure 4**

*Faculty Survey Responses on Barriers to Immediate Access*



Responses to the Other category included statements that some faculty encountered no barriers (4.6%, n=9), that they were unaware of the option to begin with (3%, n=6), that faculty did not need the IA program due to the availability of lower cost or free materials elsewhere (1.5%, n=3), that the specific courseware faculty use is not compatible with the Immediate Access program (1%, n=2), and that the faculty member has encountered procedural issues with submitting course material decisions (2%, n=4).

## Discussion

The outcomes of the OAEC's affordable course materials survey were not wholly unexpected. We knew that our programs were lacking in engagement and that there were likely some faculty unaware of the full scope of our programs. Nonetheless, the exact makeup of the responses we received were enlightening, with the differences in the distribution between our three course material programs being particularly interesting. There was a surprisingly high awareness of OER among the participants, with 22.8% of participants indicating that they are aware of OER but have not personally adopted them. However, there was a disconnect between this relatively high awareness and the actual adoption of OER in courses. In contrast, the Immediate Access program had much lower awareness, with 47.7% of participants completely unaware of the IA program; however, those who knew about IA were more likely to have adopted it in one or more of their courses. Finally, Course Reserves was shown to have a

high level of awareness from faculty, but comments around the service indicated that there was a lack of clarity surrounding its use.

### ***Misconceptions About OER Limit The Accuracy Of Our Data***

Throughout our survey, participants indicated that they lacked a strong understanding of what OER are and how they differ from other free online course materials. This confusion could lead to the collection of incomplete or incorrect adoption data for OER, as faculty may not be certain whether the materials they are using in their course “count” as OER. While it may not matter from a cost-savings perspective whether a faculty member is using free copyrighted online materials, library-licensed materials, or OER in their courses, understanding the differences between these materials is important for our institution’s programming to succeed.

A lack of awareness about OER as a course material option was not the only barrier noted in our survey. We also observed a lack of awareness of the Open Education program at Iowa State University itself. Some participants indicated barriers locating or adopting OER, and noted an interest in further incentives or support to locate materials from campus support services. Since our Open Education program already offers this support, these responses may indicate a gap in the promotion of our Open Education services, including introductory OER workshops, consultation services, and support guides, among other programming. It is important to note that even requesting or participating in these support services can be time-consuming for faculty, and so making access to these services visible is only the first step: stressing that these services are simple and easy to coordinate should also be a priority moving forward.

### ***Immediate Access Is Used But Not Well-Known***

For Iowa State University’s Immediate Access program, the largest barrier to adoption was awareness, with 47.7% of the survey’s participants unaware of this program. However, those who were aware of the program were likely to have adopted IA materials into their courses. This makes sense, as the IA program is backed by textbook publishers, and there are marketing professionals who liaise with faculty members to support this program, in addition to the ISU Book Store staff. For faculty who have been approached about this service, they have likely been directly offered support in adopting IA materials, making the choice an easier one for faculty than similar changes to their course which might require more coordination with other campus offices. These results indicate that continued discussions about the use cases for IA, including its opportunities and limitations, could help more faculty feel secure in their decision to adopt or not adopt IA in their courses.

### ***Course Reserves Is Known But Not Utilized Fully***

Finally, there were a substantial number of faculty members who expressed a limited understanding of how our Course Reserves program works. These results indicate that faculty may be aware of Course Reserves, but lacking critical information on its use. Faculty may not know how to request materials or they may not be aware that electronic materials such as streaming videos and

e-books can be made available on reserve. As the responses to question 4 indicate, many instructors are using library-licensed materials in their courses through databases, PDF downloads, and other means; however, these faculty members may not be aware that they can coordinate access to these materials through Course Reserves to ensure continued access and accessibility. Compared to the other programs on this list, Course Reserves had the fewest participants who were completely unaware of its existence. This is likely due to the long history of reserves as a core academic library service. Luckily, the lack of specific knowledge around this service can be remedied through additional outreach efforts, some of which have already begun.

### *Next Steps*

The main takeaway of this survey was that our cross-promotional efforts through the OAEC are lacking and that further coordination emphasizing the benefits of OER and Course Reserves is necessary to balance the unequal support which our institution's Immediate Access program receives through commercial partners. Continuing to coordinate our course material programs' efforts through the OAEC can be fruitful, but this work should be handled thoughtfully, with the feedback and support from all our partners and with the needs of students and faculty in mind.

In the year following this survey's implementation, members of the OAEC have collaborated on promotional efforts to share one another's work across campus. The most basic of these improvements was the implementation of a panel on affordable course material options which we hosted in the fall semester of 2022, with representatives from the library and Book Store discussing the impact of OER, Course Reserves, and Immediate Access across campus. Following this panel, members of the OAEC also presented collaboratively at several department meetings. What makes this different from past presentations is that, in addition to leveraging our shared slide set, members from across different units were invited to present at these meetings together, even when only one group was invited. Notably, the ISU Book Store invited librarians to share information about OER support services when talking about copyright for course materials and course material adoption reporting for faculty.

In addition to these more explicit outreach efforts, the OAEC's members have also put more effort into referrals. One example of this is a new workflow coordinated between the Center for Excellence in Learning & Teaching (CELT) and the library's Digital Press unit for helping faculty undergoing course redesign consider whether adopting or creating OER might be of interest. The other is a more general referral process, wherein the ISU Book Store's Digital Resource Specialist, will refer faculty to the library when approached with questions about course materials that have clear OER alternatives or which are difficult to locate and adopt traditionally. In the latter case, this led to an out-of-print textbook, *Basic Engineering Data Collection and Analysis*, getting republished as an OER thanks to the work of ISU Book Store staff who recognized that the authors could partner with the Digital Press to publish their work openly and reach a broader audience.

Looking to the future, the OAEC will continue to collaborate in new ways that leverage the benefits of each of our programs while supporting the preferences of faculty and students. As we develop new workflows into our programs, it will be a priority to continue to assess the impact of these

collaborations to ensure that efforts are not wasted by any of our team members. Therefore, a follow-up survey is planned which will implement an adapted version of this study's questionnaire to get a deeper understanding of faculty members' awareness of and engagement with our programs. Looking back on our experience running this survey, we would recommend that other institutions with similar collaborative committees consider implementing assessments like this for their own work, as it can help detect weaknesses within programs and opportunities for more targeted engagement with faculty.

### ***Limitations***

The results of our assessment were useful for understanding the reach of the OAEC's work; however, there were clear limitations to our survey's design which could be improved for future assessments. First, as this was an initial exploration of our committee's reach, the survey was not as tightly designed as it could have been. No demographic questions were included in the survey to delineate between responses from full professors, assistant professors, teaching professors, and adjunct instructors. Similarly, no questions were asked about the department each faculty member belonged to. In revisiting this survey, we would want to add demographic questions to get a clearer picture of each faculty member's awareness of and engagement with our committee's programming, while also clarifying the language used across other questions.

In addition to getting more demographic data, in revisiting this survey, we would want to clear up the language used throughout the questionnaire to avoid duplicate or inaccurate data. One thing we noted while reviewing the results was a discrepancy between the number of faculty who shared that they have adopted OER. In response to question 4, "Have you done any of the following to provide no- or low-cost materials for your courses?" 40 participants (20%) replied that they had used OER in place of traditional commercial texts, with an additional 3 participants sharing in the Other category that they had personally developed OER for their courses. In contrast, the responses to question 9, "How aware are you of OER?" only had 25 participants selecting the option that indicated they had adopted OER into one or more of their courses. This is likely due to an issue with the questionnaire, as question 9 asks for both awareness *and* adoption. Some participants may have felt that they did not know much about OER, even if they have adopted OER. In its next iteration, we will make changes to the awareness question so that it focuses on understanding, with a separate question about the adoption of each course material type.

### **Conclusion**

While this survey was only a preliminary review of the OAEC's efforts to cross-promote various affordability initiatives across Iowa State University, it was useful for identifying areas where we could do better. Highlighting support for faculty adopting OER and demystifying the Course Reserves process were two major outcomes of this survey, while general awareness campaigns and cross-promotion with the ISU Book Store helped raise general awareness of the Immediate Access program for faculty. Perhaps the best takeaway from this survey was that a general awareness campaign and collaboration does not benefit our programs equally: instead, we found the most rewards came when our team members highlighted the unique benefits of each of our programs, and referred faculty to one another, when appropriate.

## Acknowledgements

The lead author of this paper would like to thank Imtiajul Alam, their co-author, for his support for the ISU Open Education program this year, which made it possible for us to find the time to complete this case study.

## Conflict of Interest Statement

The authors declare no conflicts of interest.

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## Open Peer Review

Nelson, E. (2023, May). [Accessing the Impact of a Collaborative OER & Affordable Resources Committee, by A. Elder & M. Imtiajul Alam]. *Journal of Open Educational Resources in Higher Education*, 2(1), 152–155. doi: 10.13001/joerhe.v2i1.7875

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**Reviewer:** Elizabeth Nelson

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes - the article discusses balancing outreach for OER, course reserves, and a campus-specific inclusive access program, with an eye specifically toward assessing what isn't working on their campus and leading to lower engagement from faculty. This is an important topic as more inclusive access programs (along with open-washed programs coming directly from publishers) start appearing on all of our campuses to supplement, compete with, or potentially derail open education initiatives. It's important to be aware that our faculty aren't aware of the differences between these programs, just as they aren't always aware of how course reserves work - not in the same way that a librarian would be, at least - and might make assumptions or ignore things that could lead to them choosing more expensive or inaccessible materials for their students than necessary.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

Yes, the article proceeds logically. My only concern in this area is that the discussion feels a little vague - I'm not sure exactly what the authors are intending to draw out there. I think there is good information in the discussion section as is - it's more that how it's presented leaves me making assumptions about what the authors want me to understand, instead of feeling that I clearly understand what they wanted me to get (as I did throughout the rest of the paper).

## Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

No concerns here that I found, especially since the conclusions being drawn only pertain to the faculty at this institution. (However, I think it would be reasonable to include some discussion at the end of the article about how the findings here might serve as a reminder to other librarians working with open education on the importance of clear and consistent outreach to faculty and the benefits/challenges of partnering with other initiatives on campus to do this. This information isn't lacking, but right now I think it's just implied - if you wanted to make it more explicit, I think it would be reasonable to do so.)

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

I couldn't help but catch a few small copy-editing things - mostly just extra spaces - as I went through. But overall, I appreciate the writing style here! It's clear and concise, but still gives enough detail to be easy to follow. I left comments throughout on some sections that felt unclear to me, where I wasn't sure if I was getting the message I was supposed to be getting, or where I wanted more details.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

I would definitely say so! I think this article will help others anticipate obstacles to large-scale course material outreach and plan how to address these in their own contexts.

## What are the stronger points/qualities of the article?

Love the writing style - concise, clear, and easy to follow, but still interesting to read! The data analysis is laid out nicely as well. I also think it's incredibly valuable for us to share assessments that reveal

problems to be addressed - as I mentioned above, it helps others think about their own strategies, but it's also a good reminder for all of us to assess, adapt, and share what we're learning for everyone's benefit.

What are the weaker points/qualities of the article? How could they be strengthened?

The discussion feels a little disorganized or unclear, compared to the rest of the article. As noted above, I left specific comments throughout the article for a few other places where the phrasing confused me or raised questions. Overall, though, I didn't notice any major issues!

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

## Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Highly Sound

## Overall Evaluation

2- Accept

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## Open Peer Review

Schultz, T. (2023, May). [Accessing the Impact of a Collaborative OER & Affordable Resources Committee, by A. Elder & M. Imtiajul Alam]. *Journal of Open Educational Resources in Higher Education*, 2(1), 156–159. doi: 10.13001/joerhe.v2i1.7875

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**Reviewer:** Teresa Schultz

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, the article is definitely in scope of JOERHE and would be of interest to readers.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

For the most part. I do suggest that the authors consider breaking out the background of their institution from the lit review and either putting it with the intro or creating a new background section. I would also advise them to hold off from evaluating their results until the Discussion section - at some points, it gets confusing as they refer to results they haven't discussed yet. I think the flow would go better if they presented just the results in their entirety and then discuss them in Discussion.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the*

*author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The methodology makes sense, and I was happy they included the survey instrument. I do have some questions I would like them to clarify, however, such as whether they received IRB approval for the survey, how many faculty received the survey (would help showing what percent responded), and to define what they mean by "teaching faculty" (i.e. who does it include/not include?)

I also would like to see them present more results from their survey, or at least better explain why they did not include all questions. It also seems like some of these questions that were not included could provide interesting results when compared to questions they did include. For instance, I'm interested in knowing how faculty responded to the question about who chooses their course material in comparison to if they use IA/OER/Course reserves. Does admin decision making play a role in their use of IA? Likewise, I think they could do more comparison of the variables they did report on - for instance, how many people were unaware of all three options (IA/OER/CR) vs. those who were only unaware of OER and those only unaware of IA, etc. Is there a lot of overlap, or are we looking at potentially somewhat distinct groups?

I was also a little confused about just which responses were included in the results. There's a mention of 197 that completed at least 90% of the survey, which I assumed meant the results were focusing on those 197, but then I noted that one of the questions had 199 responses.

I do wonder if some of their conclusions are actually supported by the evidence. They claim "This discrepancy seems to point toward a gap in our promotion of OER services such as consultations and instructional design support, which could ease instructors' adoption of OER" but I can see other reasons than a gap in promotion for this, such as the time needed to convert to OER and the upper hand that many publishers have in accessing faculty/admin about IA and in making it so easy to implement.

For Figures 2-4, I was unclear if these were multiple choice questions, i.e. respondents could select multiple options. If so, it would good to make that clearer in the captions, and I'm also not sure if that means you should use a different graph style - the one you used seems to imply 100%, but maybe that's me.

Finally, I think this article is treading a delicate ground, which I respect. There are many in the Open Ed world who look pretty negatively on the IA push from publishers (I admit I'm one of them), but I also can understand wanting to maintain good working relationships. But I'm wondering if the authors are skirting around some legitimate questions about the benefits/negatives of doing cross-promotional work. Is it the library's place to try and promote the product of a for-profit company? Especially when the data seems to show IA is doing a lot better in terms of awareness than the library-backed initiatives? When the authors discuss what they changed in response to the journal, they mention doing presentations at faculty meetings and targeted referrals - but I'm left unclear as to what role the library played in this vs. the bookstore and publisher reps. Were the bookstore/publisher reps including the library when they contacted faculty? If so, that sounds great and would be worth knowing. Or was this rather a library-led initiative that more just provided free marketing help to for-profit companies? That I have a bigger concern about. The anecdote about the bookstore helping to identify a book that could be made open is nice, but as a one-off story, it doesn't really show much about how those who support IA are really trying to promote

the other services as well. The authors do seem to address this concern in the Conclusion when they write "Perhaps the best takeaway from this survey was that a general awareness campaign and collaboration does not benefit our programs equally: instead, we found the most rewards came when our team members highlighted the unique benefits of each of our programs, and referred faculty to one another, as needed. " but this also comes from a bit of out of nowhere and doesn't seem to match what they wrote in the Discussion.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

Writing style is pretty good overall. There are some grammar issues, but nothing major.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

I think the article could do a little more to connect this research project to the broader field. First, in the Discussion, compare your findings to those from some of the articles you cite in your Lit Review. Also, as a study of one institution, this can't be more broadly applicable, but it could be nice to have a section (maybe address in the conclusion) with how a similar study could be conducted at other institutions/advice you have for doing so.

## What are the stronger points/qualities of the article?

Overall I think the topic is a good one, and the study presents interesting results. It's also well written. It's definitely a promising article.

## What are the weaker points/qualities of the article? How could they be strengthened?

I would like to see some more clarification throughout, more data, and a bit deeper look at this idea of cross-promotion of IA/CR/OER and its positives/negatives.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Highly Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

0- Neutral

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# Open Educational Resources

## *Collaboration between Community College Librarians and Faculty*

Amy Smith<sup>1</sup>

Jamie L. Workman<sup>2</sup>

Taralynn Hartsell<sup>3</sup>

D. Laverne Hill<sup>4</sup>

Keywords: Open Educational Resources, Librarian, Community College

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### ***Abstract***

Open educational resources (OER) provide college students with course materials on the first day of class, ensuring an equitable learning experience for all. Faculty are the driving force behind OER but need more support to understand, locate, and evaluate resources. Faculty and librarian collaboration can bridge together ideas and resources to benefit students. The researchers used a qualitative case study to understand how faculty and librarians collaborated at a community college to adopt OER. The primary researcher interviewed librarians and faculty to understand their experiences of working together to promote and adopt OER at their campus. The researchers analyzed data from the participants which revealed seven primary themes consisting of communication, student benefits, faculty hesitations, departmental and administrative decisions, librarian partnerships, and campus repository building. Findings revealed how the collaborative efforts of librarians and faculty helped move OER initiatives forward.

### **Introduction**

The idea of Open Educational Resources (OER) was formed in the mid-1990s, with the Massachusetts Institute of Technology (MIT) launching the first Open Courseware Initiative (OCW) in 2001. MIT's launch led to the continued interest and work toward new initiatives to create and promote OER. The idea and movement of OER also led to the creation of Creative Commons (CC) in 2001. For the purpose of this study, we use United Nations Educational, Scientific and Cultural Organization

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(UNESCO)'s definition of OER: "learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others" (UNESCO, n.d., para. 1). They also serve as an avenue to ease college students' financial burden of not having to purchase textbooks and by providing an equitable education to everyone (Luo et al., 2020).

Librarians can promote and assist in carrying out OER initiatives on campus, but faculty are the driving force behind overall change. When librarians learn more about carrying out an OER initiative on campus, they can better understand what is working and how to make the startup process easier for others looking to drive initiatives on their campuses. This study was conducted to better understand the practices and strategies used by librarians and faculty to advance the knowledge and integration of OER on community college campuses.

## Literature Review

Individual state and college initiatives have provided incentives for faculty adoption of OER, but usage remains minimal (Katz, 2019). Librarians have become the voice at colleges for driving and sustaining OER (Braddlee & VanScoy, 2019). Numerous publications have investigated student, faculty, and librarian perceptions of OER; minimal studies focus on how and what librarians can do to support faculty efforts to adopt OER. The studies that do highlight four-year institutions and not community colleges. Luo et al (2020) indicated that faculty were concerned with the time-consuming task of finding quality resources as well as the need for the implementation of OER to be sustainable by receiving institutional support after the initial funding ran out. They further noted the importance of collaboration between university librarians, instructional designers, and e-learning staff to identify available resources, and to determine best practices for accessibility. Walsh (2020) documented how a large urban community college worked to make textbooks more affordable through OERs. The case study focused more on an institutional level than personal (e.g., how librarians themselves worked with faculty members). Thus, the need to explore how librarians individually support faculty members on community college campuses still exists.

### *Community Colleges*

Community colleges provide access to higher education for almost half of the college students in the United States (Braddlee & VanScoy, 2019). Low tuition rates and open-door admission policies allow for an equal opportunity to obtain a degree (Doran, 2023). Additional college costs are often not considered, posing an overwhelming barrier to students. These barriers can include textbooks, food, and housing expenses (Veletsianos, 2021). Community colleges serve high populations of first-time and financially disadvantaged students, so affordability must be addressed (Braddlee & VanScoy, 2019). The American Association of Community Colleges Fast Facts (2020) demographic data indicated 55% of the enrolled students were minorities, and 45% were white. Twenty-nine percent of those are first-generation college students, 15% are single parents, 9% are non-U.S. citizens, 5% are veterans, and 20% are disabled. In 2017-2018, 92% of students relied on federal financial aid to attend college.

## ***Faculty Impact***

Several researchers have studied faculty perceptions to determine why they do not use OER, before and after the COVID-19 pandemic (Scott & Shelley, 2023). Faculty knowledge and understanding of OER impacted overall perception (Walsh, 2020). Walsh (2020) concluded faculty knowledge of OER, implementation, and efficacy of resources presented challenges with selection and adoption. The 2022 Bay View Analytics survey revealed OER awareness among faculty was up 7% over the previous year to 57% (Seaman & Seaman, 2022). Walsh (2020) indicated several concerns faculty expressed regarding OER. First, faculty are skeptical of free resources considered high quality. Second, the perceptions other colleagues may have of them for implementing OER is a concern. The time investment in exploring new resources, integrating them into the curriculum, and authoring or creating new resources are other issues (Scott & Shelley, 2023).

## ***The Librarian's Role***

Mwinyimbegu (2018) discussed the librarians' critical roles in identifying high quality OER materials, managing OER, and raising awareness of OER among faculty and students (Gerber, 2022). Due to changing academic environments after COVID, the growing online student population has driven more librarians to assist faculty more with "...information creation and dissemination via OER and other scholarly publication services" (Runyon & Steffy, 2021, p. 361). The success of OER integration can be dependent on the collaborative efforts between the librarians and department faculty (Luo et al., 2020). Selecting and creating ancillary materials is a growing concern, as is the need for institutional repositories. Librarians are equipped with unique skillsets to support and help faculty transition to free or low-cost resources; however, librarians are often left out of discussions regarding curriculum and resources. Library advocacy, training, and collaboration are highlighted throughout the literature to bring about awareness and assistance to faculty (Braddlee & VanScoy, 2019; Pate, 2021).

Mwinyimbegu (2018) and Braddlee & VanScoy (2019) have concluded that academic libraries should promote and raise awareness of OER and work closely with faculty to better understand and support their curriculum needs. OER opens opportunities for institutions to align goals that decrease students' spending and increase student completion rates (Katz, 2019; Pate, 2021). Librarians have been called upon to support and champion OER by advocating and promoting faculty resources (Braddlee & VanScoy, 2019). Mwinyimbegu (2018) and Pate (2021) identified several ways for libraries to promote OER access and usage, including information literacy training, the university website, face-to-face sessions, an institutional repository, an OER portal, student government associations, or a learning management system.

## ***Librarian and Faculty Collaborations***

The primary concern is creating an equal and accessible educational environment for all students (Luo et al., 2020). The cost of textbooks has increased astronomically in recent years (Braddlee & VanScoy, 2019; Griffiths et al., 2022). With 92% of community college students relying on some form of financial assistance, costs must be lowered to help students achieve success (American Association of

Community Colleges Fast Facts, 2020). The literature demonstrates most students found OER accessible, cost-effective, up-to-date, and user-friendly (Lin, 2019; Ocean et al., 2019). OER provides low-income and disadvantaged students a means to the same learning opportunities beginning on the first day of class (Okamoto, 2013).

Faculty and administrative knowledge, support, and understanding are essential in moving the OER initiative forward (Braddlee & VanScoy, 2019; Pate, 2021). While many faculty may agree that OER is a great cost saver and benefit for students, Pate (2021) stated, “it is incumbent upon us to curate and promote course materials that are accessible and affordable for all our students” (p. 73). However, the primary drawbacks affecting faculty adoption are knowledge, time, and resource efficacy (Hilton, 2020; Luo et al., 2020). Faculty have to time manage multiple responsibilities such as teaching, advising, serving in different capacities, all the while pursuing professional development and scholarship. With these multiple responsibilities, revising curriculum with additional resources such as OERs can be cumbersome. Katz (2019) believed that librarians could assist faculty regarding these issues by garnering administrative support and educating faculty about the benefits and resources available. Librarians must work with the administration to create policies and initiatives to encourage faculty adoption of free or low-cost resources (Katz, 2019; Walsh, 2020). Literature supports the need for more communication at colleges and increased collaboration between faculty and librarians to increase knowledge, locate and evaluate resources, and promote OER usage on a broader scale (Braddlee & VanScoy, 2019; Mwinymbegu, 2018). Another concern for ensuring OER initiatives is sustainability of the system used. Essmiller et al. (2020) found that the Performance Improvement/HPT model used at their institution had practical applications for managing OERs materials and garnered support from the academic community. Letriz (2022) spoke of how a small private university used an open-source program called Pressbooks for its OER initiatives. The platform enabled the university’s library staff to maintain the sources with relative ease and affordability. Thus, support from all members on campuses is important.

Faculty are the driving force behind OER adoption, and librarians help promote and support the transition. This study provides insight into how librarians and faculty collaborate at a community college to incorporate OER into their course curriculum. Research data regarding OER adoption is primarily survey-driven and answers what works and what is needed. This qualitative study opens a dialog with faculty and librarians to understand the inner workings of how and why OER were adopted at a community college in the Southeast. The following research question guided the study: What strategies and practices are faculty and librarians at a community college in the Southeast using to enhance collaboration to move OER initiatives forward?

## Methods

The researchers used a qualitative, single-case case study design to understand the inner workings of how one community college's librarians and faculty collaborated to promote and adopt OER. The site was chosen because librarians and faculty actively collaborated on OER. At the time the research was conducted, it was the only community college in the state’s system where this collaboration

occurred. Librarians had worked with faculty by identifying and aiding in the creation of OER. The librarians created LibGuides to assist faculty in linking specific course resources for the students.

The researchers sought to gain insight into librarians' strategies and approaches to assist faculty in locating, evaluating, editing, and adopting no cost or low-cost resources to replace expensive textbooks. The researchers studied faculty working with a librarian or other colleagues to adopt OER to understand their experiences. The researchers used interviews, course syllabi, and website resources to gain insight into the processes and practices of the faculty and librarians for collaboration.

The researchers used categorical aggregation and direct interpretation to analyze the case study data (Stake, 1995). The data included interviews with the five participants. Data analysis began immediately after the first interview (Maxwell, 2013). The researchers used Otter.ai to transcribe audio recordings and organize notes as each interview was completed. Maxwell (2013) recommended first reading over all documents associated with the interview and then listening to the audio recording while writing memos to identify potential themes.

The researchers reviewed both the transcribed text and audio recordings and created a critical analysis of thoughts into a narrative. The researchers continued to review the data while taking notes and identifying codes. The researchers used a combination of open coding, axial coding, and clustering to manually code the data and determine common themes.

The researchers used purposeful and availability sampling techniques to identify participants. Participants consisted of one librarian, three full-time faculty, and an adjunct instructor who served in a dual role at the college as a librarian. The researchers selected librarian participants based on their knowledge and work with faculty on OER. The researcher chose faculty participants based on their collaborative work with librarians or faculty colleagues to promote, locate, and implement OER.

## Results

A comprehensive analysis of the interview responses unveiled three categories of themes within the results: communication, faculty hesitations, and collaboration. The participants expressed these themes in the interviews by explaining how the adoption of OER occurred.

### *Communication*

Communication between faculty, librarians, and community college administrators was a critical factor in learning about and understanding the benefits of OER. The data indicated faculty and librarians who worked together successfully implemented OER in their courses. Student success was a top priority of the faculty and librarians interviewed, and the primary reason for adopting OER. Initial reactions from the participants included being surprised that textbooks would be available for free, being excited to find new resources for students, loving the idea of free access to materials, and the satisfaction of providing equity and accessibility for all students.

## ***Faculty Hesitancies***

Faculty hesitancies consistent throughout the data were time and availability of discipline-specific content. Faculty often found the idea of changing textbooks and having to learn something else on top of their teaching loads to be daunting tasks. Joseph, an economics instructor, shared, "I would dare say that most faculty don't like the idea of changing textbooks... it's going to be a lot of work for the faculty member." Pamela, the institution's head librarian, shared that many instructors would be thinking, "you're going to make me learn something else?" She further commented:

*I think if we eliminate the concern over learning something new if I try to do as much for the faculty member as I can to encourage them to use this product because what they're dealing with are students who don't have the money to buy the book.*

Susan, an English faculty member, stated that she had "grand intentions" to rework assignments and materials throughout the semester, then found herself "treading water" to get through the current classes. The "time crunch" of one semester and less than two weeks to prepare for another semester proved challenging for any significant course changes or transitions. Susan also stated that electronic resources were more challenging to navigate saying:

*I still wanted the print copy. The resources are not as user-friendly to skim through and look at the readings. Finding new material to introduce to students was a bit challenging. Getting lost in the digital format as opposed to having highlights and annotations to teach from the print copy.*

Kimberlee, a full-time biology faculty member and department chair, expressed her concern for discipline-specific content. She stated:

*I wasn't sure. I didn't know if they would have offerings in my discipline...I knew English faculty and History faculty that were using some open resources...I looked at OpenStax primarily because those are peer-reviewed. They happened to have books in anatomy and physiology, which was, I think, the first textbook I transitioned to.*

Kimberlee also stated, "I believe it's part of my job to create materials, but there is a limit to what I have to do and what I have time to do..." She continued to suggest that administration offer incentives like a course release, supplement, or fellowship to faculty to faculty working to transition and create materials. Kimberlee slowly transitioned all her classes, one at a time, over several semesters, but commented "labs are a little trickier." She stated that there were some OER resources for labs, but she preferred to create her own. Some lab simulations were available online, but "they cost \$60 to \$75 for the students, and they're really bad...tech support is bad." She added that the labs were not meeting her objectives, and better labs could be created for students at home with free resources.

## ***Collaboration***

Librarians served a valuable role in assisting faculty, through collaboration, to adopt OER. Librarian presentations and faculty outreach were essential lines of communication to open the

communication channels on campus about OER. Librarians have been vital in helping instructors identify resources; instructors are the guides to tell them if the materials meet the subject matter taught. Librarians created password protected LibGuides to house instructors OER course materials. Partnerships with other faculty who teach similar courses are also crucial in validating resources and how well they are working for students. Pamela and William, both librarians, spoke about the curation of resources. Pamela stated:

*I reached out to the instructors I felt would be the most open to the idea first. Instead of making them think they had to learn something new, I create a password-protected guide for instructors and break it down by chapters, instructor resources, lecture slides, as well as test banks and solution manuals when available. Once instructors realize most of what they need is right there, they are more open to using OER. I think if we eliminate the concern over learning something new and gathering content for the faculty member, I can encourage them to use this product.*

William added that as a librarian, using OER in the classroom successfully assisted in the transition and adoption of OER for teaching purposes in other departments. William offered this scenario with a department that he worked with and how this relationship expanded to other colleges:

*After numerous bits of talking and presentations, the sociology department also made the switch. The sociology instructor was able to collaborate with another faculty member at another college in the system and, through talks, decided the switch was a good idea.*

When faculty were asked what librarians could do to assist them in moving initiatives forward, the primary responses were: librarian persistence, inclusion at campus events, and creating a campus OER repository. Faculty participants stressed the importance of faculty getting to know the campus librarians and understanding their roles. All participants acknowledged it was important for librarians to be persistent about educating all faculty, recommending they send out information about resources and speak at campus events about OER. When librarians were asked the same question, they mentioned that being part of campus meetings involving curriculum, textbooks, and student retention was vital. Meetings and faculty professional development sessions provide librarians with a platform to get the word out about OER and showcase how it could benefit students.

Building a repository of OER resources was also a suggestion made by faculty, stating that a campus repository would provide a central location of course-specific OER for easy access. Susan recommended "building a repository of resources for courses using OER so students and faculty can easily access resources." Pamela stated it would be ideal for working collaboratively with the librarians around the state to "establish a repository of course-specific OER resources." She spoke about the limited number of staff in community college libraries and its effects on time for working one-on-one with faculty, "four campuses and four librarians, makes the task harder." Kimberlee said, "...it would be great if there were kind of a....group of faculties who are using OER and can start a database of their resources and what they use." Pamela mentioned the same idea, adding that "we all teach the same general education and developmental courses across the state. A collaborative project with a collection

of developmental textbooks and basic resources would provide faculty with materials they could quickly implement and tweak without reinventing the wheel at each school.”

## Discussion

A common theme throughout the literature addressed the affordability issues of community college students (Doran, 2023). Braddlee and VanScoy (2019) discussed how community colleges traditionally served many first-time and socio-economic disadvantaged students. Research conducted by the American Association of Community Colleges Fast Facts (2020) indicated that 92% of students enrolled between 2017 and 2018 relied on federal financial aid to attend college. The data collected showed that affordability was still a top concern amongst faculty and students, indicating that first-generation students receiving Pell grants expressed fears about the cost of textbooks, especially since Pell grants do not always cover all costs. Dual enrollment students expressed cost concerns because financial aid was not an option, and they were already paying out of pocket for the course. Faculty agreed that OER would eliminate the extra burden of cost for these students. Pate (2021) mentioned that OER initiatives at The University of North Alabama helped faculty members develop OER courses for students through a Provost Stipend. OER courses could alleviate the cost concerns. He further stated the goal of the program was to “leverage as much library funding to purchase resources and tools that can reduce total textbook costs for students” (p. 73). Data provided detailed accounts about how OER eliminated the barriers mentioned in the literature. Faculty expressed how OER helped eliminate accessibility and cost barriers, resulting in students having all the materials needed on day one and not having to wait for financial aid resources. Data gathered from Kimberlee described her students as "turning into the haves and have nots" and how OER frees them from deciding between feeding their kids or purchasing a textbook. These specific thoughts echoed the findings of Braddlee and VanScoy (2019), Crozier (2018), and Scott and Shelley (2023) who connected the significant increase in college textbooks directly affecting students having to choose between a text they may or may not use and other needs.

Faculty participants were asked about actions and decisions that led to the adoption of OER. Departmental or administrative decisions impacted all participants (Walsh, 2020). All the faculty participants indicated that departmental decisions ultimately dictated the timing and adoption of resources. Hess et al. (2016) suggested that faculty were the driving force behind OER adoption and implementation. The data fully supported that faculty drove change, but it also highlighted the obstacles faced by faculty regarding departmental decisions. Faculty members indicated that although they may have been fully on board with the idea of OER, the decision of what textbook to use in the course was made by a committee with no intention of changing from the current textbook. Adjuncts had little leverage in the textbook decision process. Kimberlee, as department chair, was able to slowly make changes in her department and hand down the new content to other instructors for use. Martin et al. (2017) collected data indicating that faculty were willing to adopt OER but needed more training, direction, and support from institutions. The data from this study showed that even when faculty were eager and ready to transition to OER, more training, guidance, and support were needed at the administration level to impact and implement change. Participants mentioned that curriculum changes,

departmental retirements, and advocating for OER use both on and off campus opened the door for OER implementation. Still, it took more administrative push before faculty started getting on board.

For decades, librarians have advocated for free and open resources (Young, 2016). Librarians have been called upon to support and champion OER by advocating and promoting faculty resources (Braddlee & VanScoy, 2019; Pate, 2021). Katz's (2019) research indicated that librarians needed to garner administrative support and educate faculty about available benefits and resources. The data from this study widely supported the importance of librarian partnerships for moving OER initiatives forward on campus. The impact of librarian outreach showed early in the data when participants shared how they learned about OER (Pate, 2021). Two of the four faculty members interviewed learned about OER through faculty professional development meetings. Crozier (2018) emphasized the importance of librarians building relationships with the different departments on campus and sharing quality and relevant resources in their instruction area with faculty. Two librarians spoke about their relationships with faculty on campus. Both indicated that they began promoting OER to those with whom they had already established a rapport. For example, whenever there was any campus event, one-on-one discussions about OER could take place with faculty. Any opportunity to visit with faculty was taken to remind them of OER resources available for them as well as their students. Furthermore, librarians can greatly assist in the development of OER repositories as indicated by Letriz (2022). Designing a system to sustain materials at the library is important to allow access (Essmiller et al., 2020).

Walsh (2020) found it was critical to encourage faculty who have OER experience to advocate and promote adoption. Both found that faculty advocates proved to be just as crucial as librarians in getting the word out about OER. Three of the five participants interviewed initially found out about OER from other faculty. All the participants agreed that working with a librarian or other faculty member to identify resources helped get them started. One participant, advocating as both a librarian and adjunct instructor, shared how he sparked enough interest in the department that they decided to collaborate further with a colleague at one of the other colleges to make the switch. As a department chair, one participant shared resources and content she created with others in her department and constantly collaborated with other faculty to determine what resources and labs worked best for the student population. The faculty and librarians also agreed that sharing resources prevented others from reinventing the wheel. As seen in the data, faculty were huge influencers on other faculty adopting OER and should also make a point to share and advocate.

Susan recommended "building a repository of resources for courses using OER so students and faculty can easily access resources." Pamela stated it would be ideal for working collaboratively with the librarians around the state to "establish a repository of course-specific OER resources." She spoke about the limited number of staff in community college libraries and its effects on time for working one-on-one with faculty, "four campuses and four librarians, makes the task harder." Kimberlee said, "...it would be great if there were...a group of faculty who are using OER and can start a database of their resources and what they use." Pamela mentioned the same idea, adding that we all teach the same general education and developmental courses across the state. A collaborative project with a collection of developmental textbooks and basic resources would provide faculty with materials they could quickly implement without reinventing the wheel at each school.

Mwinyimbegu (2018) discussed the librarians' critical role in identifying high-quality OER materials, managing OER, and raising awareness of OER among faculty and students. Borchard and Magnuson (2017) said librarians often saw the barriers faculty face as an opportunity to create a partnership. The data collected specifically from the librarians in this study highlighted the critical roles in assisting faculty. Both librarians were able to relieve the hesitations of faculty and help make OER a reality for their courses. The librarians asked the faculty to submit their course syllabus. They were then able to search for and identify peer-reviewed resources for the faculty member to review. The librarians were able to help identify OER-specific resources and link faculty to library subscription content to broaden the resources. Mitchell and Chu (2014) discussed how libraries already have many resources available to faculty, including subscription content, eBooks, institutional archives, and special collections. All the participants spoke about faculty as content experts and the librarians being key in locating and supporting the content. Bliss et al. (2013) wrote about the importance of faculty identifying and evaluating resources to determine if the content met their curriculum needs. After the faculty members reviewed the resources, they let the librarian know what chapters and information best fit their curriculum needs. The librarian would then create a course specific LibGuide for the faculty member to integrate into their course. The librarian would also make a separate password-protected guide for the faculty member that included ancillary materials to support the student resources. One participant felt it was important for the librarians to help create resources as much as possible, to remove that barrier from the faculty. Participants in the study who actively collaborated with a librarian on OER praised them for their assistance in identifying and creating easy access links for them and their students. They further indicated that the collaboration efforts were instrumental in making the switch to OER successful in class. Today's role of the librarian as an information collector and disseminator is evident (Runyon & Shelley, 2021).

A support system needs to be in place to reinforce the innovation-decision for sustainability (Essmiller, 2020; Gerber, 2022; Walsh, 2020). Faculty and librarian adopters could continue to teach others and help maintain current and future collections of OER (Pate, 2021). Mwinyimbegu (2018) wrote about how academic libraries should promote and raise awareness of OER and how to work closely with faculty to better understand and support their curriculum needs through OER. The participants of the study echoed the same sentiment. When interviewing faculty, they all felt that it was important for librarians to continue educating faculty about OER, stating the importance of librarians understanding what may be holding faculty back from adopting OER. Librarians interviewed also agreed that awareness and support are vital in reaching faculty. Within the literature, several researchers expressed the importance of librarians. Braddlee and VanScoy (2019) and Mwinyimbegu (2018) agreed that library advocacy, workshops, faculty liaisons skills, and focus groups brought about awareness and assistance to faculty. They also said librarians were equipped with unique skillsets to support and help faculty transition to free or low-cost resources; however, they were often left out of discussions regarding curriculum and resources. Data collected from both librarians support the findings in the literature, noting they were often left out of meetings and discussions, including student success and retention discussions as well as textbook selections. They felt they should be invited to campus meetings involving curriculum and textbooks since these meetings were critical to introducing faculty and administrators to OER resources.

Faculty and librarian support and encouragement are crucial in maintaining and moving initiatives forward at community colleges. Data collected from faculty and librarians supported the need for librarians to further educate faculty and administration on their roles and skills related to OER. Braddlee and VanScoy (2019) provided detailed examples of roles that librarians filled with supporting faculty, which included: adoption, advocacy, curation, preservation, repositories, content development, description, cataloging, metadata, discovery, funding, information literacy, licensing and copyright assistance, policy development, professional development, publishing, recognition, and team members. Braddlee and VanScoy (2019) and Mwinymbegu (2018) agreed on the importance of librarians' roles in supporting faculty adoption of OER and promoting and curating resources. Borchard and Magnuson (2017) agreed that librarians work hand in hand with faculty to identify gaps and help faculty locate quality OER. Data collected showed faculty participants valued the work librarians were doing on campus to help support OER initiatives. They said networking with librarians and faculty helped lessen the workload and better navigate resources. Katz (2019) further stated that librarians must work with the administration to create policies and initiatives to encourage faculty adoption of free or low-cost resources. The library website at the college reflected the collaborative efforts of librarians and administration to create OER adoption policies. The website included all necessary forms and procedures for faculty to submit and receive OER adoption approval from the administration.

Identifying curriculum needs is the first step for libraries to build sustainable OER collections (ACRL, 2018). Mwinymbegu (2018) identified several ways for libraries to promote OER access and usage, including information literacy training, the university website, face-to-face sessions, an institutional repository, an OER portal, or a learning management system. The librarians at JSCC have started the process of building an OER repository. This is evident on the library website, where the librarians have created course specific LibGuides for faculty they have worked with to adopt OER. Additional guides have also been designed to introduce faculty and students to library resources and databases to support the curriculum. Colson et al. (2017) wrote about how selecting and creating ancillary materials was a growing concern, as was the need for institutional repositories. One participant who worked exclusively with other faculty in adopting and creating her resources, suggested the need for librarians to help with the publishing side of OER. The bridge between librarians and these faculty members could enhance the library website and resources available to others in those departments. Mwinymbegu's (2018) faculty survey suggested that librarians could play roles in OER collection creation and management. The data showed that all participants agreed that a course specific OER repository would help faculty and students access resources. The head librarian agreed, but further addressed the need for the community colleges in the state to create a collaborative repository since all community colleges in the state were teaching the same developmental and general education curriculum. One large repository would make the resources available to everyone, eliminating duplication of the same resources. Faculty could quickly adapt resources to fit their needs or update them and republish them for others.

The collaborative relationships between librarians and faculty have proven essential and necessary to help move OER initiatives forward (Gerber, 2022). Faculty and librarians must share their OER experiences to help educate other faculty and librarians who have not yet decided to take the

plunge. Continuing to share knowledge, resources, and collaboration can lead to higher rates of adoption of OER. The existing literature with this study's support provides working examples, ideas, and solutions for faculty and librarians interested in campus OER initiatives.

## Conclusion

Many factors play in the implementation of OERs. Community college students are often first-generation or lower-income students who face an overwhelming cost burden when they choose to attend college (Doran, 2023). OER initiatives are just one way community colleges can drive change and eliminate the burden of textbook costs for their students. Faculty and librarians are needed to initiate and sustain effective use of OERs (Gerber, 2022). Librarians in the study saw themselves as the primary advocates for OER on campus. They felt the best way to assist faculty with OER was to educate them and then create a guide of potential resources and ancillary materials supporting the curriculum outlined in their course syllabi. The faculty in the study praised the work the campus librarians had done to promote OER on campus and create course guides for specific classes. All faculty agreed that students were their main priority and the driving force behind adopting OER. The faculty members interviewed however, addressed the issue of time and quality content for their discipline. With a bit of research and assistance, resources were quickly located, but faculty felt that time would have been less of a barrier with administration support. Overall, the collaborative efforts of librarians and faculty have helped move OER initiatives further at this college.

## *Implications for Practice*

The adoption of OER at community colleges can significantly impact students. The data gathered from this study showed how collaboration between librarians and faculty could impact OER adoption, benefiting faculty, librarians, and students. The themes found throughout the results section dig deeper into how knowledge and collaboration could ease common barriers faced by faculty such as faculty knowledge of OER, time, and library staffing.

Being the primary adopters of OER, faculty must possess a basic understanding of OER functionality and licensing. Understanding the benefits and barriers allows faculty to decide whether the transition would work for their course. One of the first steps a faculty member could take when considering OER is to reach out to their campus librarian. Department chairs could go a step further by inviting campus librarians to a division. Administrative incentives for faculty could provide much-needed time for integrating OER. Participants suggested a one-semester course release would free up work hours to transition a course fully. Other suggestions were monetary incentives, campus recognition, or counting toward tenure for those at universities.

Librarians are vital in raising awareness about OER on community college campuses. Specific course content is not always easy to locate, but librarians can quickly assist faculty in searching, organizing, and adapting resources to fit their course curriculum. As OER adoption increases on campus, creating a repository is vital for housing course-specific resources and making resources accessible to

faculty and students. Items could include OER textbooks adopted or adapted for a specific course on campus, electronic presentations, activities, labs, test banks, answer keys, and more. A campus repository would provide a central place for all faculty teaching the same course to use or adapt resources to meet their teaching needs.

Common barriers associated with OER adoption were decreased when faculty collaborated with librarians and other colleagues in their discipline. Faculty looking to transition courses from a traditional text to OER should check to see if there is anyone on their campus heading up OER initiatives. If not, the librarian can offer support and assistance with getting started. The key is collaboration. Faculty who have successfully integrated OER into courses should become advocates on campus. Talking with other faculty can promote the benefits of OER (including student success) and encourage others wanting to transition to OER.

### ***Implications for Future Research***

Future research should extend this study to more community college campuses across the state or southeast. Since beginning this study, other colleges have started implementing campus OER initiatives. Understanding and comparing strategies and practices that enhance collaboration and drive OER adoption on each campus is essential. A more comprehensive understanding of policies and procedures for adoption at each campus can help unify campus practices. The research could also include interviews with the administration to determine their perception and support of OER on campus. Additional research could also be conducted to understand why faculty may choose or not choose to collaborate with librarians when working to implement OER in a course. Faculty focus groups could provide further insight into what faculty need or want from librarians during the implementation process. Finally, more research is needed on creating and managing campus OER repositories. Identifying the process and procedures colleges and universities have in place for faculty is important to ensure resources are current and made available for others in the same discipline areas. Administration, faculty, and librarians could be interviewed and surveyed to determine what resources are required and were housed to examine effective OER management.

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There are no conflicts of interest.

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<https://doi.org/10.1080/1941126X.2016.1200924>

## Open Peer Review

Schneider, J. (2023, February). [Open Educational Resources: Collaboration between Community College Librarians and Faculty, by T. Hartsell, D. L. Hill, A. Smith, & J. Workman]. *Journal of Open Educational Resources in Higher Education*, 2(1), 176–179.  
doi:10.13001/joerhe.v2i1.7723

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**Reviewer:** Jennifer Schneider

**Recommendation:** Accept Submission  
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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, absolutely. The article addresses ways in which faculty and librarian collaborations can help accelerate the use of open educational resources in a community college context and, perhaps, more broadly. Better understanding the variety of ways open educational resources can be supported and more fully adopted in community college and other college classrooms is a high priority. While its widely understood that expanded use and integration of open educational resources remove barriers for students, less attention is given to the barriers that often limit faculty adoption of open educational resources. Expanded understanding of the various types of partnerships, supports, and collaborations that might remove barriers to the use of open educational resources is a critical component of more wide-spread use and adoption.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

Yes, the article is well-organized and proceeds logically. The article adheres to a common and generally accepted structure for studies of this nature.

## Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The article employs sound reasoning and adopts an adequate balance between description and critical analysis.

It would be helpful to clarify how OER is defined for purposes of this case study.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The article flows well, with ideas presented in clear and logical ways. The literature review might be strengthened with additional synthesis. There are several points, especially in the Literature Review, where additional clarity at the sentence level regarding subject references would be valuable. Additionally, it would be helpful to review all sentences for more up-to-date citations and associated support. There are several points, including in the Literature Review and Methods sections where phrases (for example, "limited resources") might be more fully defined and developed.

Copy editing will help address clarity and some noted grammatical errors and typos.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

This article summarizes the results of a qualitative, single-use case study that can inform and improve others' practice, especially as it relates to the development of additional partnerships and collaborations between faculty and librarians in similar ways. The article also includes a variety of implications for both practice and future research that both expand knowledge and offer practical suggestions that can inform and hopefully improve others practices surrounding the adoption of OER.

### What are the stronger points/qualities of the article?

The article addresses a timely and critically important topic - that of how to promote, nurture, and sustain faculty-librarian collaborations that can increase the adoption of OER in community college classrooms. Beyond the value of the topic itself, the article provides an example of a model that might serve as a basis for study and experimentation at other campuses.

### What are the weaker points/qualities of the article? How could they be strengthened?

The article's Introduction section might be expanded. A few examples and points that might benefit from further detail follow.

There are a variety of definitions of OER. It might be beneficial for readers to review several definitions.

Similarly, the article references individual state and college initiatives that have provided incentives for faculty adoption of OER, but doesn't include any illustrative examples and/or details regarding the structure and/or relative success such initiatives.

While it might be true that comparatively fewer studies focus on the work of librarians to support faculty adoption of OER, the article might more fully summarize and highlights examples of this work and related studies in the literature review. This would be helpful as a compare and contrast analysis with the current study.

As noted, the importance of addressing costs at the community college level cannot be overstated. It would be interesting to see more current data on demographics in the years since COVID-19 first impacted enrollments. The current points highlighted in the Community Section section of the Literature Review are, perhaps, even further compounded now.

Similarly, it would be helpful to include citations to more recent studies throughout the Lit Review. Many of the cited studies are more than five years old.

Additional detail regarding the specific nature of the collaborations that were reviewed and studied would be beneficial, especially for readers interested in developing similar types of collaborations in their own campus communities.

### Peer Review Ranking: Scope

***Does the topic discuss an element related to open education, open data, open access, or other open topics?***

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

2- Accept

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## Open Peer Review

Vollman, B. (2023, April). [Open Educational Resources: Collaboration between Community College Librarians and Faculty, by T. Hartsell, D. L. Hill, A. Smith, & J. Workman]. *Journal of Open Educational Resources in Higher Education*, 2(1), 180–184.

doi:10.13001/joerhe.v2i1.7723

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**Reviewer:** Brenda Vollman

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

***Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?***

Yes, absolutely. This paper explores an element of the Open Education movement, the integral role of Librarians in this endeavor. It is important for the reason just mentioned, as well as the fact that it is a study in the community college setting, which frequently serves underfunded and underserved student populations.

### Organization

***Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?***

In terms of overall structure, yes, but there are elements within each section that could be better situated. Example: I am not sure these sentences belong in the Methods section "Many community college libraries work with minimal staff and resources. The research provides insight into how to best work with limited resources and move state and local OER initiatives forward for other community colleges in the state. "

In qualitative studies, we often use the heading "Findings" rather than Results, so that you can then organize what you found (your themes) as these emerged from your qualitative data.

There are many points in the Discussion that would be better presented in the Literature review .

## Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

Case studies are useful for understanding motives and perceptions. Appropriate for the subject under study. But I have unanswered questions about the methods, identified later in this review.

I would also say that the sample is purposeful and available, not snowball. It is a case study (community college OER using available subjects) I do indicate that the methodology is not appropriate without further information being provide, illustrated in some of the questions I ask under "weaker points".

I think the presentation of the data "interview quotes" are interspersed with analysis in a way that confounds conclusion with evidence. I am not sure how much is inference from the researcher and what was actually said by the subjects.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

Flow and grammar needs editing. There is a lack of clarity at times (Example: "The researchers studied faculty working with a librarian or other colleagues to adopt OER to understand their experiences throughout the process and the librarians' roles to best assist the faculty. "

and, as a social science researcher, the way the data are discussed needs some work: (Examples: "The results from the interviews directly contributed to the themes." Would be better stated as, themes emerged from the interviews. )

I also think, while there is a great deal of meat on the bone, it is obscured in the presentation and organization of ideas in each section.

Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

It could, but needs reworking so that the data is distinguished from the analysis.

What are the stronger points/qualities of the article?

This article earnestly works towards supporting the use of OER. There is a lot of qualitative data that has wonderful potential.

What are the weaker points/qualities of the article? How could they be strengthened?

I would need these questions answered more directly in the methods sections: Questions:

Did librarians facilitate the creation of OER?

How was the data analyzed?

Were these faculty for different disciplines?

Were interviews recorded then transcribed?

What does "successful implementation look like? "The data indicated faculty and librarians who worked together successfully implemented OER in their courses. "

While themes emerge from the interviews, it is never clear what processes may have been employed, or software used, to uncover/discover the themes in this case study.

The results section needs re-organizing. Instead of identifying in a paragraph each "theme". I would suggest clustering the theme, then providing the supportive data (quotes), linked by analysis.

This data point links themes interview subject, not theme, which makes it very difficult to experience the weight of the theme. This examples moves from "concern over discipline specific content, but also references time and offering incentives, which obscures the content concern.

Analysis of other units of observation (websites and syllabi) should be presented in the Findings section as well - not in the discussion.

Kimberlee, a full-time faculty member and department chair, expressed her concern for discipline-specific content. She stated:

I wasn't sure. I didn't know if they would have offerings in my discipline...I knew English faculty and History faculty that were using some open resources...I looked at OpenStax primarily because those are peer-reviewed. They happened to have books in anatomy and physiology, which was, I think, the first textbook I transitioned to.

Kimberlee also stated, "I believe it's part of my job to create materials, but there is a limit to what I have to do and what I have time to do..." She continued to suggest administration offer incentives like a course release, supplement, or fellowship to faculty to faculty working to transition and create materials. Kimberlee slowly transitioned all her classes, one at a time, over several semesters, but commented that "labs are a little trickier." She stated that there were some OER resources for labs, but she preferred to create her own. Some lab simulations were available online, but "they cost \$60 to \$75 for the students,

### Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Relevant

### Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Not Clear

### Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

### Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Not Appropriate

## Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Not Sound

## Overall Evaluation

1- Weak Accept

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# The Creation of an OER to Restore and Maintain a Writers' Community at a Regional Public College

Christopher Iverson<sup>1</sup>

Dan Ehrenfeld<sup>2</sup>

Keywords: Community, Writing, Open Educational Resources, WAC/WID, Public College

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## *Abstract*

This article explores the creation of *Processes*, an open educational resource (OER) created by the Writing in the Disciplines (WID) committee at Farmingdale State College (FSC). After COVID-19 shut down in-person activities on campus for one year and made in-person activities more difficult thereafter, the WID committee faced a challenge: how do we re-establish the connections made before 2020?

*Processes* was originally conceived as a way to promote writing on campus. But as the project took shape, stakeholders from across the university emerged and participated, including faculty, students, and the college president. This article posits that open educational resources can serve as community-building/re-building projects that bring those from disparate disciplines, ranks, and institutional locations together. Drawing upon Etienne Wenger's (1999) research on "modes of belonging," it considers the ways that cross-disciplinary OER contribute to the maintenance of community connections within institutions. *Processes* is a home-grown effort, but as an open educational resource it is accessible to many; students, faculty, and administrators at Farmingdale State College and beyond can use it for their own purposes. Sharing their experiences editing this collection, the authors encourage the development of similar projects.

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doi:10.13001/joerhe.v2i1.7863 [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

## Introduction

Much of our work went virtual in 2020. At Farmingdale State College, a regional public college that is part of the State University of New York (SUNY) system, this lack of face-to-face community placed unfamiliar strains on all stakeholders, from first-year students to faculty, to administrators, to the college president. Where we once would have come together to hold writing workshops and talks while sharing the traditional academic lunch of wraps, pasta salad, and cookies on paper plates, we found ourselves fiddling with our cameras and asking if we could be heard, sometimes to no response. Sometimes, only little black rectangles seemed to be listening.

We know we are not unique. Beth McMurtrie (2022) from *The Chronicle of Higher Education* collects faculty, student, and administrator perspectives about the effects of COVID-19 on student (and even faculty) engagement with coursework, and the reports are bleak. Students are tired. Faculty are tired.

In an institution where our roles differ as much as our areas of expertise, the pandemic that has kept us apart has also been our most obvious commonality. Students who have no choice but to attend college remotely lose interest when they cannot relate to their peers. Faculty invested in those students' educations lose hope when that investment does not appear reciprocal. Administrators attempting to keep institutions running despite ubiquitous threats to public health lose direction when they do not understand the struggles happening in our strained and virtual educational arenas. In short, COVID-19 has made community building and maintenance difficult in academia.

However, the pandemic is not our only commonality. We all write. Whether we call writing an act, a technology, a chore, a skill, or an art, we all do it. Writing is the medium in which students, faculty, and administrators traffic, and it serves as the proof of study, the arena for the ideas that come from that study, and the primary mode of communication for those facilitating that study. Faculty and administrators write to communicate their work and keep track of it. For students, writing is the work. We all need writing differently, and we all approach writing in ways that help us do what we need with it.

Due to our interest in the material, social, and personal idiosyncrasies that shape writing processes, an interest necessary for writing instructors and scholars in a diverse institution, we wanted to create an open educational resource (OER) that would explore the complexities of writing. To some extent, we hoped that this collection might help to demystify writing processes across various disciplines and locations. The Farmingdale State College Writing in the Disciplines (WID) committee circulated a call for reflections about writing experiences on our campus. Titled *Processes*, the collection would compile contributions from faculty across departments, as well as administrators, students, and even the college president. Each contribution would contain two parts: (1) an excerpt from a published or unpublished article written by the contributor, and (2) a personal reflection about the contributor's experience writing that original text. By sharing both their "product" and their "process," each contributor would offer readers a peek behind the curtain of the notoriously obscure world of academic discourse. Faculty could gain insight into real-world writing processes, including writing processes in disciplines other than their own, and they could enjoy a reminder of what it is like to write as a student,

possibly unsure of how to write in a discipline. Students could learn that even seasoned writers second guess their writing ability, struggle to meet deadlines, and write multiple drafts before their work is ready to be read. Administrators could have the opportunity to share the kinds of writing that others in the academy seldom see, such as proposals or other communications to public officials (as with the contribution from our college president), and they might learn or be reminded of the kinds of writing they facilitate as higher education administrators by reading the contributions of students and faculty. For all audiences, the collection would offer insight into trial-and-error strategies, frustrations, and triumphs that might expand our understanding of writing in the disciplines.

The OER, published in March 2023, presents a diverse collection of experiences. It opens with a reflection from the Farmingdale State College president, Dr. John Nader, about his relationship with writing throughout his career, spanning his time as a college student, a faculty member, and a high-level administrator. Next is a section of the book dedicated to undergraduate and graduate writing in the field of nursing, one of Farmingdale's premier areas of study. This section begins with a reflection from Dr. Nancy Maggio on how she has used writing to teach students about their responsibilities as new nurses as well as how their work is perceived. The remainder of the book collects excerpts from faculty and students from across disciplines to highlight not only the differences between their processes but also the shared struggles, ones many of us think we either go through alone or create for ourselves. Because a strict focus on published pieces would in turn create a strict focus on the *products* of writing, we found ourselves more concerned with the *processes* writers in different disciplines and at different points in their careers employ. Therefore, we encouraged submissions that included published and unpublished writing. We also wanted to draw attention to different genres of academic and professional writing. Ultimately, an engineering student contributed a critical reflection on a novel while some in the sciences submitted excerpts from articles in biology or health sciences. A professor of landscape architecture and urban design contributed a reflection on gendered language, and a professor of English contributed an annotated conference proposal to provide a glimpse of the behind-the-scenes writing that many academics do regularly.

As the editors of *Processes* and members of the Farmingdale WID Committee, we wrote this article to reflect about our experiences developing this OER. In the remainder of this article, we focus on both the pedagogical goals that guided the project at its inception and the community-building benefits that we observed as the project took shape. First, we draw upon the work of composition studies scholars such as Anne Beaufort (2008), David Bartholomae (1988), Patricia Bizzell (1986), Lynn Z. Bloom (2003), and James Berlin (1988) to discuss theoretical frameworks that informed the project's pedagogical goals. Then, we then draw upon Etienne Wenger's (1999) research on "modes of belonging" to consider our community building goals. In particular, we consider the ways that cross-disciplinary OER contribute to the cultivation and maintenance of community connections within institutions. Next, we turn to scholars such as Chae and Jenkins (2015), Levy and Tila (2022), McBride and Abramovich (2022), and Petrides et al. (2010), among others, to situate this project within the broader context of OER publishing. Namely, we argue that OER can serve important community-building functions for those involved in their publication and dissemination. Lastly, we discuss the results of the project. We demonstrate that the project has fostered early signs of imagination, alignment, and engagement, the three "modes of belonging" highlighted in Wenger's work.

## Literature Review

In writing classes, we often encourage students to test the waters of academia's "discourse communities." Anne Beaufort (2008) defines a discourse community as "a social group that communicates at least in part via written texts and shares common goals, values, and writing standards, a specialized vocabulary, and specialized genres" (p. 179). Using metaphors related to acting and performance, David Bartholomae (1988) elaborates upon this concept, considering the ways that a student writer "dramatizes" their experience within discourse (p. 625). As he explains, students entering college are outsiders who engage in a "necessary and enabling fiction" (p. 625) of imagining insider status, using language that enables them to "write and sound, finally, also like someone else" (p. 630). Patricia Bizzell (1986) considers this issue from a different angle. Using a spatial metaphor of "distance," she describes her students as outsiders to the academic community who must "master its language-using practices" (p. 297). In her work, there is no artifice of "dramatizing" a discourse. Instead, the act of playing the game is itself a process of socialization. Student writers affirm the power of academic discourse communities—including their ways of writing, thinking, and knowing—by becoming invested in these communities and engaging in very real psychological and social negotiations of self and reality.

Too often, however, students and faculty think about writing as a monolithic skill that one can either learn or not. Writing classrooms, despite advances in composition theory, often reinforce the idea of a singular writing process, a series of stages or sequence of assignments that leads to a polished piece of writing. With this project, we wanted to create a pedagogical resource that would help students explore the complexity of writers' processes. As Lynn Z. Bloom (2003) argues, writing is not one specific process; it is socially constructed, mediated, and shaped (p. 35).

Bloom's 2003 observation is not without theoretical backing. In 1988, James Berlin explicated the then-established approach to writing and rhetoric that he called "social-epistemic rhetoric." This approach stood in opposition to current-traditional rhetoric, which relied on teaching standard forms and *correcting* student writing (p. 480) and "expressionist" approaches to rhetoric, which assumed that opportunities for self-expression would result in the cultivation of a student's individual voice (p. 484). Social-epistemic rhetoric, as Berlin defined it, represented the "notion of rhetoric as a political act involving a dialectical interaction engaging the material, the social, and the individual writer, with language as the agency of mediation" (p. 488). In other words, social-epistemic rhetoric acknowledges the rules, tools, disciplines, and individual idiosyncrasies that shape the ways we approach writing; these processes are not shaped by some objective standard alone, nor are they formed individually. Rather, they arise in response to personal *and* social conditions.

The challenge of classroom pedagogy, of course, is that we cannot mimic the dynamics of authentic discourse communities. It is impossible to prepare students to participate in the varied discourse communities that they might encounter throughout their lives. While some instructors prioritize the explicit teaching of "meta-knowledge" (Gee, 2001, p. 542) about these communities, others argue that this kind of learning produces "stilted, unconvincing performances" (Schryer, 2001, p. 36) rather than truly authentic socialization. Real socialization happens, they argue, when learners acquire skills in "natural, meaningful, and functional settings" (Gee, 2001, p. 542).

We believed that an OER focused on writing in various disciplines and institutional locations might offer students a powerful combination of “meta-knowledge” about discourse communities and an experiential “feel for the game.” The vast array of professions awaiting Farmingdale State College graduates presents a challenge in teaching technical and professional writing, as a focus on genre would inevitably leave some genres, and therefore disciplines, out. On the one hand, we felt that this collection could offer students and their instructors knowledge about the habits of these discourse communities, some of which—especially in our section on writing in the field of nursing—would be provided by the students who have completed these programs themselves. Students would benefit from not only the perspectives of their instructors but also their peers, who are burgeoning writers in their respective fields. Since students contributed to the collection, their experiences would be incorporated into the curriculum. Because first-year writing courses often require (or should require) reflective writing, we also felt that *Processes* might prove useful for modeling reflection. Finally, *Processes* exposes students to varied examples of form, exposition, persuasion, and rhetorical appeals, all of which are key elements of expository writing courses. In short, we believed that personal accounts of writers’ experiences in various disciplines and institutional settings might offer students something like a vicarious experience of disciplinary socialization. By representing the experiences of writers from a range of disciplines and at various stages in their careers, the collection would provide a backstage look at these communities and their practices, potentially opening space for reflection about the inherently idiosyncratic nature of writing processes, even those that, to some extent, hew to the expectations of their fields. Ultimately, we felt that *Processes* could serve as a reader for a writing course, or parts of it could supplement course-specific materials precisely because it is free to use and distribute. It is a potential teaching tool for technical and professional writing courses, first-year writing courses, and advanced expository writing courses.

For instructors and administrators, some of whom have spent decades immersing themselves in disciplines, the opportunity to reflect about the writing processes of other members of the campus community might expand their field of vision in productive ways. We felt that the collection could offer instructors an opportunity to learn more about how their students use writing, even if that knowledge might complicate their understanding of their students’ idiosyncratic writing processes. Looking into the writing of their students (for a purpose other than a grade) might allow faculty an opportunity to consider the strengths students bring to their classes, or the ones they learn over time, even after the end of a single semester. In addition, *Processes* packages student writing alongside that of faculty and administrators, presenting student writing *as writing to be studied* rather than as an exemplary or cautionary sample. We also felt that instructors could gain insight into the writing processes of their own peers—other faculty—who write and teach in disciplines and discourse communities other than their own. Lastly, we felt that administrators could benefit from the collection. For them, the collection would be an opportunity to explain their writing while learning about the writing that takes place in the programs over which they preside.

In addition to these goals for students, instructors, and administrators, we felt that *Processes* could help to re-invigorate some of the campus connections that had been weakened during the COVID-19 pandemic. As members of the Writing in the Disciplines (WID) committee, we have always been aware that Farmingdale is a community of writers. Across disciplines, offices, and ranks, we write

for varied purposes. We develop habits of citation and intertextuality that make our work meaningful within discourse communities. We attend to matters of audience, style, stance, and identity. We struggle through stages of drafting and revision. This community, however, is often an invisible community. Despite being engaged in parallel undertakings, we often remain unaware of the ways that our own practices connect us to others across campus. This was doubly true during the COVID-19 pandemic, when remote work made cross-disciplinary dialogue even less common than usual.

To develop a project that would bring members of this invisible community into alignment with one another, we grounded our work in a theoretical framework developed by Etienne Wenger. In Wenger's *Communities of Practice* (1999), he discusses three distinct but interrelated modes of belonging within institutions and workplaces: *engagement*, *imagination*, and *alignment*. The first mode, *engagement*, is familiar to anyone who participates in an academic field. Contributing to a "common enterprise" through practices of "sustained intensity and relations of mutuality" (p. 184), we form communities of practice rooted in shared histories, trajectories, and artifacts. From the beginning, we knew that we wanted *Processes* to be a cross-disciplinary collection. By collecting reflections about the writing practices of faculty, students, and administrators, we hoped to offer readers an overarching view of communities defined by intense engagement and disciplinary insularity.

Wenger's second mode of belonging, *imagination*, offers us the possibility of extending our identities beyond the narrow confines of our communities of practice. As Wenger writes, imagination helps us articulate "a trajectory that connects what we are doing to an extended identity, seeing ourselves in new ways" (p. 185). It requires us to embrace "incongruity and serendipity" (p. 186) and to demonstrate "the willingness, freedom, and energy to expose ourselves to the exotic, move around, try new identities, and explore new relations" (p. 185). We designed *Processes* to engage our campus community in this kind of imaginative endeavor. Firstly, the project asks contributors to denaturalize the habits that characterize their own communities of practice. As Wenger writes, imagination helps individuals and communities "move back and look at [their] engagement through the eyes of an outsider" (p. 185). In doing so, they make space to "conceive of new developments, explore alternatives, and envision possible futures" (p. 178). In addition, the project asks contributors to imagine themselves as members of a community of writers. In contrast to interdisciplinary projects that strive to mingle distinct disciplinary approaches, cross-disciplinary projects such as *Processes* have the potential to call into being a community that cuts across disciplines and hierarchies in novel ways, creating alignment between people invested in the advancement of a "common enterprise." Recognizing the common enterprise of writing—a commonality that seems obvious but is rarely acknowledged on our campus—shifts focus away from disciplinary specialization and institutional hierarchy, the two organizing principles of the academy.

The third mode of belonging, *alignment*, necessitates that we "coordinat[e] our energy and activities in order to fit within broader structures and contribute to broader enterprises" (p. 174). As Wenger writes, this process can "rally the energies of unlikely bedfellows" (p. 182). To illustrate the point, he considers the environmental movement, which over the years has articulated "motivations, beliefs, and passions" that have brought seemingly unaligned people—"a positivist biologist" and a "new-age worshiper of the planet" (p. 182)—into alignment with one another. When we conceived of

*Processes*, our hope was that strange bedfellows from across campus would begin to align themselves with one another.

In sum, we saw the development of *Processes* as an opportunity to foster the modes of belonging outlined by Wenger—engagement, imagination, and alignment. We hoped that the project would engage our campus community in habits that might persist beyond the end of the project, paving the way for a thriving community of writers.

## Discussion

### *Why An OER?*

We are not the first to put together a collection such as this, and we hope not to be the last. In 2005, Mary Segall and Robert Smart published *Direct from the Disciplines: Writing Across the Curriculum*, a collection of writing from faculty across the curriculum at Quinnipiac University. *Direct from the Disciplines* compiles these texts to show that the Writing Across the Curriculum initiative at Quinnipiac worked thanks to the efforts of diverse faculty. But the aim goes further than that. Segall and Smart explain that the book not only gives credit where it is due, but it does so by giving voice to diverse disciplines in the same place (p. 3). Too often, disciplinary boundaries keep people and their ideas apart. Unexamined disciplinary assumptions often complicate conversations between colleagues. But the development of Writing Across the Curriculum (WAC) at Quinnipiac University, Kathleen McCourt (2005) writes, brought with it a sense of community in part because it focused on writing among faculty in an institution historically focused on preparing students for careers in health sciences, business, and communications (p. 153). In short, the WAC program at Quinnipiac brought diverse faculty together to focus on a subject not traditionally associated with the majors that the university offers.

Similarly, Belinda Kremer and Richard McNabb's *Collide: Styles, Structures, and Ideas in Disciplinary Writing*, published in 2007, collects discipline-specific reflections from C.W. Post faculty (now Long Island University Post) from disciplines such as English, Spanish and Foreign Languages, Political Science, Film Studies, and Chemistry (among others). Kremer and McNabb (2007) open their introduction with an anecdote about a student who brings their anthropology paper to the Post Writing Center out of frustration that the techniques learned in first-year writing did not transfer well to anthropology (p. XI). This represents a collision between disciplines—composition studies and anthropology—and the book focuses on the concept of collision (literal or figurative) from the perspectives of the many disciplines housed at Post. For example, Nicholas Ramer (2007), professor of chemistry, writes about the collision of  $\beta$ -Poly (vinylidene fluoride) and infrared light (p. 47), and Lori McNeil (2007) writes of the vastly differing representations of motherhood and childcare in three popular magazines marketed towards women and three feminist academic journals, which creates a collision of expectations imposed on women (p. 109). Each chapter is accompanied by a critical reflection on the exigencies, methodologies, and conclusions of their work, a feature that we emulate in *Processes*.

*Collide* was the initial inspiration for *Processes*, and *Direct from the Disciplines* showed us that we could contribute to a tradition of university faculty coming together under the common inquiry of writing. Of course, we took up the task in the 2020s, and we wanted to do so in a way that was appropriate for our time, when more students than ever seek out higher education, many amidst financial hardships that could prohibit them from buying a traditionally published collection of academic essays, for a class or otherwise (McDermott, 2020, p. 2). We wanted to make this resource free to all.

To our knowledge, a collection such as ours has not been compiled in over ten years, and there have been changes to writing processes in that time, such as the nature and tone of online discourse, especially in response to the COVID-19 pandemic, and the social justice perspectives that became mainstream in the early 21st century. Similarly, as the academy strives for interdisciplinarity, academic writers could do well by “checking in” with one another.

Though *Collide* and *Direct from the Disciplines* are over 10 years old, they still serve their purposes today, inspiring scholars to reach across disciplinary lines to learn from each other about writing, an activity that serves disciplines differently but serves them nonetheless. WAC and WID have a history of doing this; for example, the WAC Clearinghouse has provided a central location for open-access texts specifically discussing WAC/WID/Writing Studies for academics across majors since 1997, proving that the topic of writing has the potential to bring readers together; or at least to get academics on the same web page. We write this article in hopes that other institutions might support the creation of OER, in part because projects such as these strengthen campus communities.

But why not just hold a party or celebration of scholarship? This would allow us all to get together and perhaps appreciate each other’s work. Or why not a writing award for undergraduates, which would allow us to honor the work of our students? The question of medium is always there, and we took time especially to decide how we wanted to circulate this work. Ultimately, we decided to publish an OER, which would require us to collaborate rather than simply get together. And we would have a physical reminder of the work we did, which would circulate more widely than an award announcement or pictures of an event. We were inspired by *Direct from the Disciplines* and *Collide*, and we hoped to inspire others as well.

Our hope to inspire broadly helped inform our answer to the question of medium. OER are alternatives to costly textbooks. But there are benefits to the use of OER that extend beyond the financial benefits for students and institutions. Boyoung Chae and Mark Jenkins (2015) conducted a study within the Washington Community and Technical College system (WA CTC) and discovered several non-financial benefits of OER for faculty. Namely, faculty find they have more freedom to design curricula when they are not tethered to a commercial textbook (p. 5). This could result from faculty using parts of multiple OER to compile the materials for their classes without asking their students to pay out of pocket for multiple textbooks to weave into a syllabus. Or it could result from the sheer volume of OER available, on several topics, which can be used at the instructor’s discretion. Chae and Jenkins also note that faculty feel a greater sense of collaboration with their colleagues when they have the freedom to choose from multiple sources to supplement class activities (p. 5). When faculty can get creative, they tend to seek out opportunities to collaborate.

Furthermore, in a 2013 study, Chae and Jenkins surveyed 780 faculty from the WA CTC system. They found that 82% of their respondents had heard of OER before the study, and 90% of those faculty knew key words associated with OER and their usage. Also, they found that the majority (67%) of those who had heard about OER had searched for one in their discipline. However, only 60% of those faculty had been successful in finding one, at least one that they felt comfortable using in the classroom. These numbers, in turn, support Chae and Jenkins's 2015 report, which names discomfort or distrust of the quality of OER, lack of institutional support, and difficulty finding and reviewing materials as barriers to the adoption of OER more universally (p. 5).

The positives, we think, cancel out many of the risks or negatives Chae and Jenkins consider, at least in our experience. Because it was published under a Creative Commons Attribution-Noncommercial-ShareAlike 4.0 International License, *Processes* can be used as free course material, and this can apply rather broadly, since the book includes contributions from across the disciplines represented among the Farmingdale State College community. Given the freedom to excerpt course materials from OER (without the financial commitment to use the entire book), we are confident that faculty from across the disciplines can use *Processes* alongside other course texts. As noted above, Chae and Jenkins (2015) specifically point to an important affordance of OER: they can be used piecemeal and for free (p. 5). This allows faculty from outside strictly writing-focused courses to use parts of the book to supplement and inform their own course-specific writing instruction. And faculty can do this easily; they can take as much as they need without having to secure permissions or put the onus of purchasing costly materials for one or two lessons onto students (McDermott, 2020, p. 2).

In addition to their financial benefits, OER initiatives can help build communities and collaborative partnerships. Lisa Petrides, Cynthia Jimes, Clare Middleton-Dezner, and Holly Howell (2010) demonstrate that participation in an OER training network can support “enhanced teacher collaboration and curriculum development activities as well as information sharing about resources, practices, and teaching challenges” (p. 5). Rory McGreal (2019) echoes this conclusion. Surveying stakeholders at 13 institutions about their experiences implementing OER, he found that the primary benefit for faculty was “the sharing of resources (both internal and external) and collaborations” (p. 142). In some cases, this led to collaboration between faculty and librarians for the first time. Similarly, Mark McBride and Sam Abramovich (2022) have studied the ways that OER can contribute to “boundary crossing,” an experience defined by identification of difference, cooperative interaction, reflection that changes perspectives, and collaboration and co-development that transform a community (p. 2). According to their research, OER can serve as “boundary objects” that make these practices possible. Citing the work of Nick Fox, they write, “The objects enable these communities or individuals, which are at times separated by their own perspectives, to establish continuity or working relationships around an idea or an innovative practice” (p. 7). An example of this can be found in the research of Bryan McGeary, Christopher Guder and Ashwini Ganeshan (2021), who write about the ways that partnerships between librarians, faculty, and students can increase student engagement and redistribute the labor of OER authorship.

In this brief discussion, we have considered a few of the community-building benefits of OER. These are benefits that Martin Weller, Rebecca Pitt, Robert Farrow, and Patrick McAndrew (2015)

would refer to as “indirect impacts” (p. 360). While the direct benefits of OER are those related to cost and access, Weller et al. argue for the value of indirect impacts that can be felt “at one or two degrees removed” (p. 360). The implementation of OER can foster beneficial connections between faculty and students, faculty and colleagues across campus communities, and between faculty around the world. In addition, collaboration via the web can lead to innovation in the creation of OER beyond local contexts. Research into the community-building benefits of OER, however, has not yet considered the indirect benefit that we consider in this article—namely, the fact that creating an OER is a “common enterprise” that can bring diverse members of a campus community into greater alignment with one another, paving the way for the emergence of a formerly unrecognized campus community.

The editors of *Processes* consider the book a gift to the FSC community. Because of its Creative Commons license, faculty can use the book piecemeal and for free in their classes. This can also be said for an e-book or home-grown course pack. But e-books often fall under copyright, and while they are free to use piecemeal, permissions must be sought in order to use larger portions of the text, let alone to alter the text to fit the needs of a particular course. Home-grown course packs avoid these pitfalls, but they do not often carry with them the legitimacy of a book published by a publishing house. For *Processes*, we worked with Milne Open Textbooks, a publishing house affiliated with SUNY Geneseo. This partnership allowed us access to copyeditors, designers for the cover and internal layout, and another set of eyes to make sure the project had the legitimacy of a traditional edited collection while remaining free to use, alter, and distribute. This partnership adds to the perceived legitimacy of the text, as printed copies are available from the publisher for a nominal fee, either through SUNY Geneseo or Amazon.

So, while *Processes* is a gift for faculty looking for writing and reflection from different disciplines, it is also a gift for students. It provides students with a platform to discuss their writing for an audience of their peers and professors through publication. *Processes* can also send the message to students that faculty care. Levy and Tila (2022) argue that “[a]dvances in technology and cultural shifts towards a more open sharing of information afford college instructors additional methods to establish a powerful teacher-student connection” (p. 199). In our case, post-COVID-19 and in a school whose population skews working-class, such a connection is vital. When the authors of a free text come from the very school where students study, the potential for connection is heightened. Students can see the names of other Farmingdale students as well as professors they know or have heard of, and those familiar names can tell them something about writing in their own disciplines. Seeing *Processes* as a course text or supplement to a course text shows students that their school cares for their education and their finances, but it also communicates that staff, administrators, faculty, and peers at FSC care enough to create something.

Indeed, the institutional support that we have received contributed to the success of this project. *Processes* is a homegrown effort to expose ourselves to our colleagues’ and students’ writing. To further this goal, the college president has lent support to the project in the form of a contribution about writing across his long and varied academic career. While we hope folks from other campuses will take up *Processes* for the purposes of teaching and/or research, we take pride and comfort in knowing that our

institution has supported the creation of a document that promises to help build community among faculty, staff, students, and administrators.

### *Creating Community*

While experiential learning and community-engaged scholarship promise to bridge gaps between the university and the surrounding community, Writing Across the Curriculum and Writing in the Disciplines (WAC/WID) programs already have a rich tradition of building communities on campus. Over thirty years before COVID-19, Susan McLeod (1987) noted that the point of WAC programs is to create a community of learners in the classroom, much like the disciplinary communities academics form in their departments (p. 20). At the turn of the century, she expanded this community-building potential to include faculty across the curricula by pointing out that WAC/WID programs can “braid” their concerns with those of the university at large (1997, p. 72). In other words, WAC/WID stands a better chance of gaining institutional staying power when we work collaboratively with other departments and offices, inviting scholars and academic professionals to build a community of higher education stakeholders with overlapping concerns.

*Processes* reflects this “braiding” process. The project began when the chair of the English and Humanities Department passed a copy of *Collide* along to the WID Committee, which inspired us to develop a similar project. Members of the WID committee contributed their work and solicited manuscripts from their colleagues and students, while the Dean of the School of Arts and Sciences and the President of the College enthusiastically contributed their own writing. As contributors shared their work, we began to see hints of the modes of belonging described by Wenger. Reflecting about their private experiences of pre-writing, drafting, and revision, contributors joined one another to publicly explore their identities as writers.

We see hints of Wenger’s mode of alignment in the way that *Processes* aligned instructors, students, and administrators with a community of writers beyond the classroom. The collection proudly includes insightful and compelling contributions from undergraduate students across majors who take writing seriously and discuss it critically. This was an opportunity for them to experience submission deadlines, double-blind peer review, and writing for a purpose rather than for a grade. All contributors had the same interactions with the editors of *Processes*, regardless of their status on campus. Faculty, staff, administrators, and students alike were kept abreast of the publication process, including when and how to submit, how to address reviewers’ concerns, and the licensing of the book that the editors chose and why. Some students had questions about the process as we went along, as they had not published before. We took time to respond to all contributors, including students, so they would feel comfortable and included at every stage of publishing this book.

By engaging people from varied departments, offices, and ranks, the project encouraged strangers to realign themselves in relation to one another. Faculty had relied on the WID committee for years before *Processes* to review writing-intensive syllabi and present on topics such as plagiarism, best practices for presenting writing assignments, and the value of writing after graduation. But that was a one-way relationship; faculty came to WID for approval or to learn something. Students were invited to participate in workshops, but the themes were not always obviously useful to them, and faculty tended to

make up the majority of the audience for these workshops. In short, the relationship was always based on what WID had to offer. When the CFP for *Processes* was distributed across FSC's campus, it came from a trusted presence on campus. At the same time, it represented an opportunity for WID to listen and learn something. Faculty, staff, administrators, and students all contributed. And while the introduction to the book came from the WID committee, the chapters came from the entire campus; all were included.

Pre-publication, the WID committee hosted a luncheon to promote *Processes* on campus and give contributors the chance to present their work. Five contributors, including the college President, the Dean of the School of Arts and Sciences, one professor, and two undergraduate students spoke about their fields and the processes they have developed over the courses of their writing careers. The accounts were as varied as their fields, as varied as the stages of the speakers' careers, and each speaker shared some of their experiences writing professionally and personally. The audience, traditionally made up of faculty at WID events, included undergraduate students and faculty not affiliated with WID. Students wanted to see their peers speak, and faculty wanted to hear from the students they encouraged to contribute. Those not slated to speak were simply excited to get together with their peers, a luxury during the previous two years.

At this luncheon, we saw instructors, students, and administrators begin to articulate their identities as members of a community of writers, a phenomenon that reflected Wenger's concept of imagination. In contrast to an academic system rife with hierarchy, we listened as faculty and students spoke with passion about the topic of writing. Students, both as presenters on the stage and as invested members of the audience, spoke with authority about writing. By experiencing the publication process themselves—seeing how reviewers responded to their drafts (as opposed to professors) and working towards an unmovable deadline for publication—students *earned* their authority and shared what they learned with their peers and professors. Students in the audience were emboldened by their peers. They had the attention of their professors, deans, and the college president. As a faculty member, and as the host of the event, Chris was heartened by the enthusiasm in the room, and he was more than happy to sit back and let the audience carry a lively discussion during the Q and A after the talks were over. In short, the conference ended with many faculty members' wildest dreams coming true: a democratic dialogue broke out, animated by genuine interest.

Though we did not collect data about this event, we believe that it contributed to changing the ways that faculty, students, administrators, and staff imagine their relationships with one another. As Wenger (1999) writes, practices of imagination can help people connect their practices to an "extended identity" (p. 185). By raising the visibility of writing on campus and drawing parallels between the writing practices that we all engage in, we believe that we encouraged participants to imagine themselves as a community of writers and align themselves with one another in pursuit of a "common enterprise." Post-publication, we held an event to mark the release of *Processes*, and we witnessed a similar scene as the pre-publication event; students, faculty, and administrators gathered to hear the president and associate dean speak, and Chris delivered a history of WID at FSC, a story of a home-grown effort that formed and took shape in response to the needs of the FSC community, much like *Processes* itself.

Despite the hierarchies that often keep us apart, we believe that we have seen the first signs of these modes of belonging. In time, we believe that this nascent community of writers may come to demonstrate habits of sustained engagement, as defined by Wenger. We hope that future research substantiates this belief.

## Conclusion

At a moment when we found ourselves facing a lack of community connection, we decided to make an OER that would help us foster *engagement*, *imagination*, and *alignment* within our campus community. Ultimately, our hope is that this project contributes to the development of a meaningful community of writers on our campus. By hosting workshops and talks for all faculty and helping instructors use writing wisely in their courses, WID at Farmingdale has shown that writing spans disciplines and that our peers in Health Sciences, Business, and Automotive Technology (the list goes on) have common interests that align them with one another. *Processes* works to further this alignment. By encouraging faculty, students, administrators, and staff to recognize—in an admittedly modest way—their connections with one another across disciplines, ranks, and institutional locations, we have taken a first step toward creating a “common enterprise” on our campus. While this project did not catalyze the establishment of a fully-formed community of writers, the modest but promising results that it has yielded serve to demonstrate the power of Wenger’s insights about modes of belonging. Rather than establishing a community of writers through institutional mandate, we worked to foster engagement, imagination, and alignment through the completion of a shared project. In doing so, we prioritized relationships over institutional structures, an approach that we believe affirms Wenger’s emphasis on joint attention and aligned practices. As Wenger (1999) writes, “the process of alignment bridges time and space to form broader enterprises so that participants can become connected through the coordination of their energies, actions, and practices” (p. 179). As we take steps to foster a community of writers on our campus, Wenger’s modes of belonging will continue to serve as a theoretical framework for community-building.

This is the part where we could point to holes in our own research or suggest ways others can take it further. However, we have a different aim with *Processes*. We hope that our colleagues at other institutions will read our work, use it in classes or faculty training, or simply read it to learn more about writing. But we also hope to inspire others in academia to do similar work on their own campuses. In *Processes*, we present a snapshot of writing on our campus, limited only by self-selection and the disciplines represented in the Farmingdale community. Any community enterprise that attempts to make overarching claims will do so myopically. But when more and more members of the larger WAC/WID community speak or write, we all benefit from a less and less myopic viewpoint. A similar text from an institution focused on, say, the arts will bring with it different but equally valuable perspectives, all of which contribute to the larger snapshot of writing in American colleges and universities.

For those considering doing similar work on their campuses, we cannot recommend it enough. Offering Farmingdale’s writers opportunities to imagine themselves as a community, and fostering spaces in which we can bring this nascent community into alignment through “common enterprise,” suggests possibilities for genuine cross-disciplinarity. The colleagues that we see daily in the hallway on

the way to class, the students that we see when we get there, and the administrators who fit students into those classes all rely on written genres and tools that differ greatly, and our minute concerns differ just as much. Still, we all work to get that lesson plan written, that essay drafted, and those students on the roster. We all write to make Farmingdale State College work.

In March 2023, we published *Processes* through SUNY Geneseo's Milne Open Textbooks publishing house. We all wrote to make it work. We hope that making this project public and readily available will inspire others to do the same. We are interested to learn.

### **Conflict of Interest Statement**

The authors have no conflicts of interest to declare.

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## Open Peer Review

Hare, S. (2023, April). [The Creation of an OER to Restore and Maintain a Writers' Community at a Regional Public College, by D. Ehrenfeld & C. Iverson]. *Journal of Open Educational Resources in Higher Education*, 2(1), 201–204. doi:10.13001/joerhe.v2i1.7863

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**Reviewer:** Sarah Hare

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, the article describes the creation process for an OER. The focus on using OER creation to build community and subvert hierarchies is novel and important.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article proceeds logically. The introduction and literature review provide adequate context and help readers understand the purpose and scope of the project. The synthesis in both sections is strong and compelling. I found myself interested in learning more about writing processes and pedagogy.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The framework that the authors utilize is effective. The way that they have connected to their project to Wegner's modes of belonging are strong and well-articulated.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

I made minor suggestions about word choice. Overall, the writing is clear, succinct, compelling, and interesting.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

I think that this is weakest area of the article, particularly an article in a journal about Open Educational Resources (OER). As a reader, I find the project interesting and important, but I don't fully understand why an OER (in contrast to just a free PDF, for example) was important to the project and I don't have enough context to try to implement a similar project at my institution. How did licensing and permissions matter to the project? One way that the authors could answer this question is discuss how they envision others might go beyond re-use and enact some of the other 5 permissions. In this same vein, how did authors feel about their work being openly licensed? How did you educate them about that component and how did it impact (or not impact) general conversations about OER on the campus?

The processes inherent in this project are also unclear to me as a reader. A core assertion is that the OER helped build community on this campus, but a lot of the discussion is about celebration after the resource was compiled and published. Were there other community-building activities that happened during the development of the OER? It's okay if not—perhaps just be explicit? Answering this question might lead to addressing some of the other questions that the article prompts: who compiled the collection (the WAC committee?), who edited it, how did you solicit submissions, think about scope, etc.?

What are the stronger points/qualities of the article?

The article is well-written and the literature review and introduction are thorough and compelling.

What are the weaker points/qualities of the article? How could they be strengthened?

An emphasis or exploration of OER as an important component of the project is missing. There is also a lack of details about process. While I don't think readers expect a step-by-step process or all of the details, I think that this would be a stronger practice article with some general lessons learned and insight into the creation of the OER. See the above questions.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Not Appropriate

## Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

## Overall Evaluation

2- Accept

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## Open Peer Review

Lowe, L. (2023, April). [The Creation of an OER to Restore and Maintain a Writers' Community at a Regional Public College, by D. Ehrenfeld & C. Iverson]. *Journal of Open Educational Resources in Higher Education*, 2(1), 205–208. doi:10.13001/joerhe.v2i1.7863

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**Reviewer:** Louise Lowe

**Recommendation:** Resubmit for Review  
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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

The overall topic has high value as it connects a campus community, open access, shared experiences through a common practice (writing).

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

No, the article does not proceed logically. The literature review is disjointed and does not fully connect the purpose as intended.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

It is not clear that there is a methods section or how Wenger's modes of belonging were applied or emerged. Bloom's theoretical framework may introduce another important concept.

It is not clear that there is a methods section or how Wenger's modes of belonging were applied or emerged. Bloom's theoretical framework may introduce another important concept. There are many conclusions made that are not supported by evidence from the project (examples) or literature.

We do not know how many people participated and if they were surveyed?

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

It was difficult to establish a timeline of events. Did anything like the Process exist before COVID on your campus? Was the OER created to continue an existing writing initiative? Was the Process created to "reconnect" due to COVID? When and why was the committee formed? What was the purpose of the committee?

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

There is strong potential.

What are the stronger points/qualities of the article?

The overall concept and the project is interesting and worth reflection.

What are the weaker points/qualities of the article? How could they be strengthened?

Too much storytelling. Perhaps too many threads or too much emphasis on COVID

Include more definitions to improve clarity or focus on one or two areas.

Relate modes of belonging and Bloom's framework to the actual project

Quotes and examples from participants would make this clearer and provide additional credibility to the benefits of using OER. Moreover, this would have been an opportunity to demonstrate how the modes of belonging were applied or examples of how the themes

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Not Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Not Sound

## Overall Evaluation

1- Weak Accept

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# Fostering Student Agency Through Ungrading

## *Project- and Portfolio-Based Methods and Case Studies*

Tiffani Tijerina<sup>1</sup>

Keywords: Ungrading, Project-Based, Portfolio-Based, Agency, Open Pedagogy

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### ***Abstract***

Students in service writing courses, particularly those enrolled in non-writing majors, often struggle with low confidence in their writing ability, resulting in a desire to “just get through” the class with a passing grade. Furthermore, instructors of such courses often struggle with a balance between what students actually need to learn in order to be successful in their careers and the level at which they want students to be proficient in writing practices—and students struggle with the same notions. Using a pedagogy called “ungrading,” students are released from their fear of “bad grades” caused by the feeling of being at the mercy of their instructor—this release fosters empowered students who can focus on their actual learning and improvement in writing. Using case studies from my TCOM 2010: Technical Writing and TCOM 3030: Instructional Design courses at Kennesaw State University, this innovative practice article introduces two methods for implementing ungrading in *any* class, including resources from my classes and considerations for implementing these methods in other fields.

### **Introduction**

The idea that students need to be graded in order to determine success levels is deeply ingrained in our culture of teaching and learning. Yet, we see an increasing focus on social justice and agency in the classroom—so many of the innovative practices we cross paths with are designed to create more equitable access and experience for all students. In fact, as Sarah Lambert (2018) outlines, the very practice of open education is rooted in social justice agendas that emphasize equitable access to course materials. So, if open education has such strong roots in social justice, why do so many instructors continue to use, as Jesse Stommel (2020) puts it, “a hierarchical system [of grading] that pits teachers against students and encourages competition by ranking students against one another”? In my

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doi:10.13001/joerhe.v2i1.7847 [CC-BY 4.0](#)

professional opinion, most instructors continue to grade simply because it is *what they have always done*. However, as Stommel (2020) explains, “[a]gency, dialogue, self-actualization, and social justice are not possible (or, at least, unlikely)” in such a system.

*Ungrading* is a pedagogical response to the oppressive nature of ranked grading. In Susan Blum’s (2020) edited book *Ungrading: Why Rating Students Undermines Learning (and What to Do Instead)*, the general consensus among the authors is that the purpose of ungrading is “to create positive atmospheres devoid of fear and threat and focused on learning.” In addition, ungrading is strongly complementary to open education and open pedagogy. As Heather Miceli (2022) situated in her presentation at the Open Education Conference, ungrading and open pedagogy are complementary pedagogies of care that are powerful individually but even more so when implemented together. Furthermore, Tannis Morgan (2016) cited Paquette’s 1979 work that defined foundational values of open pedagogy as autonomy and interdependence, freedom and responsibility, and democracy and participation. As readers will discover through this article and their own implementation, ungrading *is* open pedagogy by these standards.

My first introduction to ungrading was unconventional. Rather than learning of this innovative practice at an academic conference, I believe I first read the word “ungrading” on Twitter. In all honesty, I don’t remember what the Tweets said, but I am fairly certain they were written by Heather Miceli, whose Tweets on open pedagogy were my first introduction to that as well. When the idea entered my radar, I started attending conference presentations and reading academic blog posts on ungrading just to learn a little more—what interested me most about it was the idea that students are essentially freed from their fear of failure, enabling them to focus on learning. I wondered if that freedom would positively impact non-major students’ attitudes toward required writing classes. As you’ll read in this article, my experience was that yes, it does positively impact non-major students’ attitudes toward required writing classes.

So, what exactly is ungrading? It sounds a bit like we just *don’t grade*, right? But here’s the thing: in the vast majority of formal higher education institutions, we have to assign grades—at least at the end of the semester. Yet, ungrading *is* happening in those institutions and in increasing numbers. No, ungrading is not just *not grading*—at least not in most cases. Ungrading is about *deconstructing* the culture of grades in higher education. It is about minimizing the power dynamic that grades create between students and instructors. Consider this: it’s common for us as instructors to tell students that they are in control of their own grades—that as long as they apply themselves and do the work, they will get the grade they “earned.” Consider whether that is *really* true, though. In my own experience, it’s not—and that’s because we create an idea in our minds of what an “A” grade looks like, and whether the student worked hard for it or not, we are ultimately the ones who decide if their work looks like what we think an “A” should be. So, to extend this idea, ungrading is about *empowering* students to take control and ownership of their own learning. It’s about self-assessment, self-reflection, and overall improvement rather than an arbitrary idea of what “good” writing is.

I specifically interrogate the idea of what “good” writing is in my courses. In the following section, I will detail two methods I use in the two classes I currently teach, TCOM 2010: Technical

Writing and TCOM 3030: Instructional Design. If you don't teach a writing course, don't write this article off just yet—I will also explore how these methods might work in other subjects by reflecting on an actual conversation I recently had. No conflict of interest exists for my use of ungrading or my writing this article.

## Two Methods and Case Studies

My experience with ungrading started with my ENGL 2311: Technical Writing course at Texas Tech University (TTU), where I teach part-time as a graduate student. I first tried it in Summer 2022 and then ultimately continued with the methods there and at Kennesaw State University (KSU), where I began teaching full-time in Fall 2022. As I was implementing ungrading in my TCOM 2010: Technical Writing class at KSU, I decided to also find a way to do the same in my TCOM 3030: Instructional Design course—because *why not*, right? While I do continue to ungrade in my class at TTU, I will focus on the courses at KSU for this article—primarily because my KSU classes use open educational resources and my TTU course does not (at least, not exclusively—due to a departmental textbook mandate).

In this section, I will share the two ways I ungrade in my classes at KSU. Because I teach at an institution that does require me to submit final grades, my approach stems from Jesse Stommel's (2020) method of self-evaluation and self-assessment. In both of the following cases, my students ultimately assign themselves a final grade based on their reflection of their own learning and improvement in the class. However, the process to that improvement looks a little different for each student. For each of the following methods, I'll provide a brief background of the course and my teaching history with it, followed by a description of the activities and assignments in the course and how they are "assessed."

### ***Method/Case 1: Portfolio-Based Ungrading***

The TCOM 2010: Technical Writing course at KSU is a service course that serves students in all majors but with a vast majority of computer science, engineering, construction management, and, more recently, psychology students. The course itself has specific curriculum requirements with some degrees of freedom as to how those requirements are met. The primary requirements of the course are that all sections are required to use the open textbook developed by faculty in our department (myself included), [Open Technical Communication](#) (2020), and that specific genres of writing are taught and asked of students.

KSU's TCOM 2010 course has four curricular genre requirements: students must write a cover letter and resume, a proposal, a report, and a set of instructions. *How* instructors make those assignments happen in their courses is, more or less, up to them—except for the required open textbook. So, given that I am a primary author on the required open textbook for the course, I have had a lot of freedom in how I teach my course. I make use of the resources provided by my department; many of them were created by or in collaboration with me. I have personally re-designed my TCOM 2010 course countless times in the collective 4-5 years of my teaching the course there. I have a tendency to want to redesign my courses any time I learn of a new-to-me pedagogy that feels like it will work better than what I'm

already doing—and that is how ungrading made its way into my pedagogy. In previous iterations of the course, I’ve actually tried to use a project-based approach (before I discovered ungrading), and if I had been able to make that work, this article would likely have had just the one method of project-based ungrading (in the next section).

Because the required genres in TCOM 2010 have such drastically different contexts of use, project-based has just never worked for my class. So, when I was developing my ungrading approach to the class, I wanted to find a way for the students to *learn from* and *apply* the feedback I was providing them so that they could improve their skills. To incentivize that level of engagement with feedback, I decided to use a portfolio-based approach. The syllabus for this course can be found in Appendix A, but the activities and assignments in my portfolio-based ungrading TCOM 2010 class look like this:

**Weekly Activities:** In most weeks/modules (I teach asynchronously online, but this would apply for any modality of class), I have application and/or discussion activities. In previous iterations of the class, I would have some kind of completion requirement and likely a compulsory peer response. These activities quickly became “babysitting” assignments that I was often not even reading before assigning participation points. For that reason, I made all weekly activities *optional* in the ungrading iteration of my course. They do not get graded—I don’t even always look at them (depends on my workload that week). You may be wondering, “But Tiffani, how do you know they actually complete them?” Well, I don’t, and *that’s okay*. Remember, ungrading is about empowering students to take ownership of their learning. They should decide for themselves if they need the application activity or not—because they know better than anyone how their learning is going.

**Major Assignments.** We have four major required assignments throughout the semester, and these are the big genre requirements for the course. One important thing I do with these assignments is, where possible, *I give them choices*. Students must complete their cover letter and resume in the traditional way because our class is often their only opportunity to learn such an important document. However, when we do our proposals, students have the opportunity to choose whether to do a short, written proposal or a recorded presented proposal. Similarly, they have the same choice for their instructions assignment—they can do written instructions or a tutorial video. Finally, they have a required group project where they conduct research and write a report. The choices they have on some of their assignments are important because they give students the opportunity to choose the type of communication that is going to be most beneficial to them in their career paths; and because it’s not getting a letter grade, they don’t need to worry about choosing the “easier” option for a better grade. Unlike the weekly activities, however, these major assignments *do* get thorough feedback from me—then when we get to the end of the semester, students revise those assignments and combine them into a final portfolio.

**Final Portfolio.** At the end of the semester (really, I hope that they work on it over the course of the semester), students will take all of the feedback they received and learn from that feedback, revising their documents accordingly to create *better* technical communication. As part of these portfolios, students explain for each assignment what changes they made and why those changes make it better technical writing—but because students are still in control of their own learning, they *don’t* have to make

all the changes I recommend in my feedback. I just expect them to explain why they chose not to—they are the writers, after all.

**Progress Report & Reflection.** Finally, the final assignment in the class, and arguably the most important one, is their progress report and reflection. In this short writing assignment, students are looking at the course objectives and their progress in meeting them, their actual performance and improvement in writing and communication, and how the stuff they learned is applicable beyond the class. This assignment is important because they are really reflecting on the whole semester as a learning experience and where they stand as writers now. But of course, we still have to give a grade, right? We're still teaching at an institution that requires final grades. So as part of this reflection, *students advocate for their own deserved grade*. They choose their own grade based on their own reflection on their performance in the class and improvement as writers, and then they explain to me why that is the grade they deserve. As compared in conversations with my KSU colleague Stephen Bartlett, this grade justification process is similar to the way we don't just walk up to the boss and say "give me a \$5,000 raise." They can't just come to me and say "give me an A." They have to give a rationale for their grade. This is also good practice for the workplace when it does come time for them to advocate for a higher salary.

Of course, because there is always the chance that a student will take advantage of this set up, I do still reserve the right to change the grades students advocate for. However, honestly, I've only had to do that for a handful of students—and most of them were actually adjusted upward because they were being *too modest* in their requested grade. This phenomenon is something Stommel (2020) observed in practice as well.

### ***Method/Case 2: Project-Based Ungrading***

The TCOM 3030: Instructional Design course is an upper-level elective in the Technical Communication and/or Interactive Design majors at KSU. I will sometimes see students from other majors who are minoring in either subject, but the vast majority of students in the class are majors in my department. This course is typically offered in Spring and Fall semesters with one course section each—at the moment, I am the only person in the department teaching TCOM 3030. Similar to TCOM 2010, I have revised the way I teach this course several times—though probably not as heavily as I have in the other course. Between 2018-2020, I taught the course 2-3 times in a hybrid modality (one class a week with half the course content delivered asynchronously online), and I developed that course using a combination of readings I found on the internet and the structure of a somewhat disorganised version of the course previously taught by another faculty member. To be honest, those first few versions of the course were still somewhat disorganised and felt like the course was still "finding itself," so to speak.

When I returned to KSU to teach full-time in 2022, I (once again) re-designed the TCOM 3030 course, this time armed with two solid open textbooks that I found through EdTech Books, [Design for Learning](#) (2021) and [Foundations of Learning and Instructional Design Technology](#) (2018), as well as more teaching experience and training. For the last two semesters, I've taught the course asynchronously online, so it needed to be re-designed anyway (from its original hybrid format). It seemed only logical to

attempt an ungrading approach since I was already planning it for my TCOM 2010 class. However, this time a portfolio approach didn't make as much sense. For an instructional design class, the most logical big assignment is to have students develop instruction—in my course's case, a short online training module. So, instead of using the portfolio-based approach from TCOM 2010, TCOM 3030 uses a project-based approach. At the beginning of the semester, students decide on a topic for their course projects (which I call “microlearning objects”), and then throughout the semester they meet specific milestones where I provide feedback. The syllabus for this course can be found in Appendix B, but the assignments and activities in TCOM 3030 look something like this:

**Weekly Discussions.** Similar to TCOM 2010's weekly activities, TCOM 3030 has weekly discussion prompts for students to consider as they work through the course content. These discussions are treated the same way as the weekly activities in the other class—they are optional, and they are not graded. I *do* try to read them all, but students don't hear from me about them. The discussions are purely for the students' own application.

**Three Major Project Milestones.** Throughout the semester, students are working on one big project—a short online training called a microlearning object—while applying the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) process model of instructional design. In line with the content we cover throughout the semester, students are expected to meet project milestones. With all three of these milestones, I provide thorough feedback for them to learn from and use to improve their final projects (and their instructional design skills).

*Milestone 1.* As we approach the first milestone in the course, we will have covered the Analysis and Design phases of ADDIE, so that is about where I expect them to be in their projects as well. So, for Milestone 1, students submit a low-fidelity training design, prototype, or storyboard of their project. They have freedom to submit this milestone in whatever format is going to be most useful to them, and then I give feedback as best I can, making students aware that the more thorough their work is, the better feedback I can give. Most students submit Milestone 1 as a hand-written set of notes and mind-mapping or an outline of their project developed in Microsoft PowerPoint or Google Slides.

*Milestone 2.* When students get to Milestone 2, we've spent several weeks on the Development phase of ADDIE, including things like content development, technology tools, and document design. So, for Milestone 2, students submit a new prototype, this time in the authoring tool of their choice (I typically recommend [Genial.ly](https://www.genial.ly/) as a free tool, and students generally like it), with as much of their instructional content included as possible. At this point, I'm looking for instructional text, videos, and structure, though it varies from project to project.

*Milestone 3.* As we approach the end of the semester, students submit Milestone 3, in which they should have a mostly-complete prototype of their project, including assessment/engagement activities. At this point in the semester, we have covered all course content, including the Implementation and Evaluation phases of ADDIE, so they are armed with all of the knowledge and tools needed to finish the project.

**Microlearning Object with Presentation.** At the end of the semester, students submit their final project. Ideally, they will have used my feedback throughout the semester to keep improving on their work as they go. With their submission, I also ask them to submit a short presentation where they describe the project and their design process to me, their classmates, and any other audiences they might share it with (such as job recruiters).

**Progress Report and Reflection.** Finally, TCOM 3030 students also submit a progress report and reflection with the same guidelines given to TCOM 2010.

## Observed Benefits and Considerations

Using these ungrading methods in my classes has produced interesting observations and transformations in my classroom. First, students are very apprehensive of the idea of ungrading at the beginning of the semester. The idea scares them a little bit because it's new and different and because they've never seen an instructor relinquish their power like that before—they almost see it as too good to be true. However, as we continue through the semester and students have the chance to see that I really do want them to take control of their own learning, they kind of settle into the idea.

One thing I've seen from ungrading is that the work students produce is so much more meaningful. Because students are freed from their fear of failure, they are able to focus on making their assignments work for them. So, I generally see a very diverse range of final products, and it's incredibly rewarding to see students investing so much into their assignments. I also see in their reflections that students really take pride in their hard work and improvement—so when they reflect on it at the end of the semester, they do it with an energy that I can actually feel as I'm reading it. And believe it or not, I actually *do* see a lot of them completing the optional activities each week.

I also see my own workload *slightly* decrease, but the time I spend working is also more meaningful. Instead of spending hours reviewing minor activities and giving feedback and participation points that don't actually do anything to improve their learning anyway, I'm focusing on giving meaningful feedback on the bigger assignments so that they can improve on all the smaller topics from within their bigger projects. And because I am giving personal, meaningful feedback, students actually communicate with me. I teach asynchronously online from across the country for one institution and out of town for the other; I never used to get any students emailing me to ask questions or requesting meetings to touch base. But I do now because they want to talk through their improvements and feedback so that they can get the most out of the class.

## Implementation in Other Fields

I was recently talking with my husband, who has a degree in Mathematics, about how I ungrade and the positive impact I've seen in my classes from it. As a firmly logic-focused person with interests heavily influenced by STEM (Science, Technology, Engineering, and Mathematics) fields, he was sceptical that ungrading could be applied to fields in which there *is* a right and wrong answer. And I do

recognize how one might not see ungrading as a viable option for those classes—it's not for everyone. It really does require an open mindset about instruction and assessment, and it really does require the instructor to look beyond right and wrong answers to focus on general improvement and understanding of the concepts.

Recall from my earlier discussion that ungrading is about *self-assessment*, *self-reflection*, and *improvement*. So, how might one allow students to “self-assess” work that has a right or wrong answer? It's more about looking at the bigger picture than that micro-level work. One way you might apply portfolio-based ungrading to, for example, a Mathematics class, would be to provide detailed feedback on where students went wrong in their work (assuming you require them to show their work). Then you could give students the opportunity to learn from that feedback by giving them either the same or alternative problems that assess the same concepts *with the correct answers to those problems*. Students would then complete, self-assess, and submit at the end of the semester in a “portfolio” of sorts. By giving them the answers, you afford students the ability to check their own work—and if they are having trouble getting to that correct answer, they can come to you for additional support. At the end of the semester, even if students don't end it with the correct answers for every problem, you would give them the opportunity to reflect and self-assess for a final grade based on their overall improvement, similar to my technical communication and instructional design students.

As you can see, it's very possible to apply ungrading to *any* subject—it just might require a bit of creative thinking and brainstorming. So, I leave you with this challenge: how might ungrading work in *your* classes? I'd love to hear your ideas!

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## *Appendix*

### **Appendix A. TCOM 2010: Technical Writing Syllabus (Spring 2023, 16-Week)**

[Access the syllabus for TCOM 2010: Technical Writing](#)

### **Appendix B. TCOM 3030: Instructional Design Syllabus (Spring 2023, 16-Week)**

[Access the syllabus for TCOM 3030: Instructional Design](#)

### **Appendix C. TCOM 2010: Technical Writing Syllabus (Summer 2023, 4-Week)**

As we should in higher education, I am constantly learning from each semester and revising my courses based on that learning. In Summer, I taught two 4-week technical writing courses, so my teaching needed some changes to be more manageable for such a short course, both for my own time management as well as for my students. For the sake of space in this article, I don't outline those changes, but I am providing the syllabus for this revised version of the course. I was very happy with how the Summer courses went, so I ultimately decided to implement a version of this Summer syllabus for my Fall courses.

[Access the newly revised syllabus for TCOM 2010: Technical Writing \(Summer 4-Week\)](#)

## Open Peer Review

Shannon, D. (2023, May). [Fostering Student Agency through Ungrading, by T. Tijerina]. *Journal of Open Educational Resources in Higher Education*, 2(1), 219–221. doi:10.13001/joerhe.v2i1.7847

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**Reviewer:** Denis Shannon

**Recommendation:** Accept Submission  
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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

I think this piece fits the scope for JOERHE. The piece discusses the concept of upgrading, which is an additional way to increase equity in higher education. The inclusion of the syllabi for the courses the author mentions in the article is great, and makes it easier for others to adapt the methods discussed in the piece into their own courses.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

Yes, the column proceeds logically. It was easy to follow and flowed well.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The conclusions the author makes appear to be sound: changing the way assignments are graded (or not graded) has changed the way students engage with their assignments. The article focuses on two cases, and doesn't jump to any conclusions that are not supported by what the author experienced in their courses.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

I don't think there are any issues with expression or flow. The tone of the piece is less formal than would be expected in most journal articles, but for the Innovative Practices section of the Journal, which I understand this piece is planned to appear in, I think the tone is appropriate and will encourage others to try and adapt the materials to their courses.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

Yes, it does.

## What are the stronger points/qualities of the article?

The article is straightforward, clear, and provides plenty of material for people who may be interested in adapting what they have learned to their own courses.

## What are the weaker points/qualities of the article? How could they be strengthened?

The article focuses on two case studies with no formal control, so it is not as authoritative as a study that used a more robust scientific approach, but I don't think that is an issue for the Innovative Practices section of JOERHE.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*Are the conclusions sound and factually accurate? Does the column contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

2- Accept

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# OER Discovery

## *Ensuring that OER Rise to the Top*

Beth Burnett<sup>1</sup>

Nikki Cannon-Rech<sup>2</sup>

Rebecca Hunnicutt<sup>3</sup>

Jeffrey Mortimore<sup>4</sup>

Keywords: Discoverability, Metadata Standards, Cataloging, Description, Institutional Repositories

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### ***Abstract***

This paper discusses the challenges of ensuring discoverability of Open Educational Resources (OER) in the absence of clear standards for sharing them. Despite the efforts of librarians and instructors to create a wealth of OER, discoverability remains limited and often relegated to a list of links on a LibGuide. The authors address this challenge by highlighting technical and descriptive barriers to OER discoverability, then they describe the development of a hybrid metadata standard for OER and its deployment through the institutional repository. Although provisional, this approach ensures that OER records can be adapted to future metadata standards and exported to third-party indexes. This paper underscores the importance of developing an effective metadata standard for OER to ensure discoverability for learners and educators.

### **Introduction**

Open Educational Resources (OER) have the potential to transform education by making learning resources freely available to all. To this end, librarians and instructors are collaborating to create a wealth of OER. However, the absence of clear standards and practices for sharing OER makes it difficult for librarians to invest time and effort in making OER discoverable, both locally and globally. Moreover, in many instances, librarians tasked with OER work serve in reference or instructional roles, while technical services librarians are not always considered or invited to participate in institutional OER initiatives. Without active collaboration among public and technical services librarians to develop standards-based metadata to make these resources discoverable through institutional repositories,

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doi:10.13001/joerhe.v2i1.7879 [CC-BY 4.0](#)

catalogs, discovery layers, and other third-party indexes, OER is often limited to a siloed list of links on a LibGuide.

In this paper, the authors address the challenge of OER discoverability in the context of recent institutional and statewide OER initiatives. Specifically, we highlight current technical and descriptive barriers to OER discoverability, then we describe the Georgia Southern University Libraries' current approach to these challenges. We discuss the Libraries' decision to develop a hybrid metadata standard for OER, loosely based on the Institute of Electrical and Electronics Engineers' Learning Object Metadata (IEEE-LOM) standard for describing learning objects and their attributes, and how we deployed it through the institutional repository. Published in 2002, IEEE-LOM provides "a conceptual data schema that defines the structure of a metadata instance for a learning object." For this standard, a learning object is defined as "any entity—digital or non-digital—that may be used for learning, education or training," and a metadata instance for a learning object "describes relevant characteristics of the learning object to which it applies."

Although provisional, our approach ensures that Georgia Southern's growing collection of OER records can be adapted to any number of emerging metadata standards and exported to whichever third-party indexes gain popularity over time. Ultimately, this paper demonstrates that developing an effective metadata standard for OER is crucial for ensuring the discoverability and accessibility of these resources for learners and educators alike.

## Literature Review

While the recent literature on OER cataloging and description indicates general consensus that standards-based record metadata is central to OER discovery, currently no shared standard exists. The attributes that make OER desirable for enriching learners' experiences also make defining a set of standards challenging, and established standards like MARC 21 and Dublin Core are limited in their ability to describe specific attributes of many OER. Butcher (2015), Nahhas et al. (2018), and Herrera-Cubides et al. (2021) concur that, despite increasing interest, OER metadata consistently suffers from openness, availability, reuse, and enrichment problems. According to Sobotka, Wheeler, and White (2019), the lack of standards raises the risk that unique OER will have multiple and inconsistent bibliographic records, further exacerbating discovery.

Recently, SPARC tackled this issue with the formation of the OER Discovery Working Group. The purpose of this group was to "catalyze a conversation among leaders and practitioners concerned with how to make OER more discoverable, to support the community in developing best practices, and outline potential next steps for how metadata standards could contribute to sustainable discovery infrastructure" (2020). The primary output of this group was the *OER Metadata Rosetta Stone* (2021), which "uses core terms from multiple metadata vocabularies to meet the specific context and requirements for application to OER." Still, many questions remain about how to develop and implement the *Rosetta Stone's* recommendations (Adams, 2022; Ruen et al., 2022; Boland, 2022).

To address these challenges, librarians at Georgia Southern have adopted a provisional approach based on an unpublished 2020 paper by Bobby Bothmann. Following an extensive meta-analysis of available metadata schemes for OER, Bothmann advises institutions not to wait for a perfect scheme but instead adopt the most complete and patron-friendly scheme they can find with the best chance of crosswalking records later on—if and when the OER community coalesces around a third-party repository or a scheme. Based on his meta-analysis, Bothmann recommends “only the OER Commons scheme, which is closely based on the IEEE-LOM, ticks off most of the boxes for desired metadata elements that would meet most user needs.” Bothmann further recommends that “the IEEE-LOM should be promoted as the scheme of choice for all future OER metadata endeavors, not only because of the richness of the details it allows for in the description of OER, but also because it is built upon existing standards that are currently in use for material discovery.”

Based on current trends and Bothmann’s advice, the authors developed the following hybrid standard, loosely based on the IEEE-LOM standard, and deployed the standard within Georgia Southern’s institutional repository.

## Methods

Georgia Southern subscribes to bepress Digital Commons for its institutional repository, Digital Commons@Georgia Southern (<https://digitalcommons.georgiasouthern.edu>). Digital Commons is where the Libraries collect, archive, and disseminate the intellectual and creative output of the University’s faculty, staff, students, and community partners. In addition to a small number of OER, some of the materials collected in the repository include campus publications, faculty and student research, theses and dissertations, datasets, and special collections. The repository also hosts 20 journals as well as materials from over 30 conferences and events.

Based on current trends and Bothmann’s advice, the authors decided that Digital Commons was preferable to the catalog for making locally-generated OER discoverable, at least initially. Since Digital Commons is based on Dublin Core and the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), the platform offers greater flexibility compared to the catalog for customizing records, crosswalking those records from one standard to another, and externalizing them. The authors decided that, if a MARC 21 standard for OER were eventually to emerge, we would rather deploy our preferred standard through the repository, then crosswalk these records to the catalog rather than from the catalog to the repository. Also, because Digital Commons content is crawled and indexed by major search engines, using our preferred standard would make our OER quickly discoverable by a wider audience.

To create our hybrid metadata standard, the Digital Scholarship Librarian (DSL) familiarized themselves with the relevant metadata standards at the statewide, national, and international levels, including the most common elements required or recommended for describing digital content in general as well as those specific to OER. For statewide standards, the DSL first analyzed metadata records appearing in Affordable Learning Georgia’s (ALG) Digital Commons repository (<https://oer.galileo.usg.edu>). This was to ensure that we included the same or similar elements used by

ALG in our records. The DSL then analyzed metadata guidelines for the Digital Library of Georgia (DLG) as well as the Georgia Knowledge Repository (GKR) to develop an awareness of recommended metadata for digital artifacts in Georgia's other statewide repositories.

For OER-specific national and international guidelines, the DSL leaned heavily on Bothmann's recommendations and studied both the OER Commons scheme and the IEEE-LOM to compile a list of metadata elements. After starting this analysis, the DSL learned about the *OER Metadata Rosetta Stone*, which further informed their understanding of elements to consider for crosswalking OER metadata to MARC 21. Also, the DSL reviewed MARC 21 and RDA formats for industry-wide cataloging standards. Taking these guidelines into account, the DSL was prepared to develop a hybrid standard and OER collection prototype in Digital Commons.

For this prototype, the DSL created a parent collection on a Digital Commons demo site for all OER, then a child collection for each subject area. The DSL organized the OER collection this way on the basis that a subject hierarchy provides a familiar browsing experience and aligns well with other library classification systems that group related items together. Georgia Southern supports numerous locally-generated chemistry OER, so the DSL developed this collection first. To do so, the DSL set up a "book gallery" series which generates a landing page of book cover images adjacent to title, author, and abstract information for each resource. The book gallery format provides a user experience similar to scrolling down a page of search results in the library catalog (See Figure 1).

**Figure 1***Chemistry OER Collection Homepage*

Home > OER > OER-CHEMISTRY

# CHEMISTRY OER

[Follow](#)

[Switch View to Grid](#) [View Slideshow](#)

**ReMentURS (REmote MENToring of Undergraduate Research Students)**

*Shainaz Landge, Elizabeth Sargent, Abid Shaikh, and Nikki Cannon-Rech*

A professional development workshop series that provides rigorous research training to new, incoming students who are interested in joining a research group.

**Comprehensive General Chemistry**

*Beulah Narendrapurapu, Debanjana Ghosh, Arpita Saha, and Leah Williams*

This LibGuides-based open textbook with MathML was adapted from OpenStax Chemistry 2nd Edition. Each chapter contains a set of downloadable end-of-chapter problems.

**Contents:** Matter and Measurements -- Atoms, Molecules and Ions -- Composition of Substances and Solutions -- Stoichiometry of Chemical Reactions -- Thermochemistry -- Gases -- Chemical Bonding and Molecular Geometry -- Liquids, Solids, and Modern Materials -- Solutions and Colligative Properties -- Kinetics -- Chemical Equilibria and Applications -- Thermodynamics -- Electrochemistry -- Appendices

With the series prepared, the DSL finalized the metadata structure for our Chemistry OER records (see Table 1). The following metadata map provides a simple crosswalk between our Digital Commons elements and MARC, including the definition of each element and MARC fields for consideration when creating catalog records. Several of these elements are self-explanatory, including Title, Authors, Subjects, and Keywords. These are basic elements that we use as searchable access points in Digital Commons and they fit neatly with the MARC 245, 1XX, 7XX, and 6XX fields.

**Table 1***Crosswalk of Digital Commons Elements and MARC*

<b>Digital Commons Elements</b>	<b>Definition</b>	<b>MARC Options</b>
Title, Authors, Subjects, Keywords	Searchable access points describing the resource	245, 1XX, 7XX, 6XX
Course Title & Number	Course information as varying forms of the title	787, 580, 246
Description	Abstract or summary	520
Creative Commons License	Restrictions on access & use	506 & 540
Publication Date & Publisher	Publication & distribution information	264
Source	Related resource from which the OER is derived	500
Comments	Information about the grant/funding source	536
Material Type	Physical & digital file description	300, 347, 516
Format	File format (text, video, image)	Leader/06, 336, 337, 338
Upload File	URL where the resource is located	856

In addition, we included several OER-specific elements with recommended mapping to relevant MARC fields. The Course Title and Course Number element in Digital Commons may either be crosswalked to any number of 246 fields as varying forms of the title, or to the 787 field for Other Relationship Entry with a corresponding 580 field with a justifying note. This allows flexibility to include the *OER Metadata Rosetta Stone's* optional Alternate Title element depending on the specific metadata available on any given OER. This is an important consideration for OER that are created for use locally for a specific course versus those intended for wider use that may not include a course title on the resource itself. The Description element, or abstract, can be crosswalked to a MARC 520 summary field.

For the Creative Commons License element, we split this into two MARC fields: the 506 and the 540 fields. The 506 field notes restrictions on access. In this case, the materials are open access, which is useful to note. Also, the 540 field indicated in the *OER Metadata Rosetta Stone* includes terms governing the use of materials after access is provided. The Publication Date and Publisher elements describe publication and distribution information, which are separate fields in the Digital Commons record; however, we combined these into the 264 field in MARC. For the Source element, which is either a related resource or a resource from which the OER is derived, we used a 500 general note. We placed names and links to any associated grants in the Comments element in Digital Commons and into one or more 536 fields in MARC.

For Material Type, we adopted the OER Commons (2019) list and descriptions and mapped this information to the 300 field for the physical description and extent of the material, the 347 field for digital file characteristics, and the 516 field for a note about the computer file type. Format is defined in the OER Commons metadata template as the media type of the item, which we configured in the Digital Commons record template as either text, video, or image. This corresponds to the Leader/06 and the 366 fields, which describe the type of content. Regarding the 337 and 338 fields for RDA cataloging: although we do not require similar elements in Digital Commons, our metadata map includes a reminder to include the media type or device required to use the OER as well as the carrier type or format of storage. Finally, the URL to the record in Digital Commons maps easily to the 856 field. We recommend that the URL to the institutional repository record be used in the catalog record so that the repository can gather usage data for the resource regardless of where or how the copy of record is hosted.

To help with creating records, the Digital Commons platform supports adding customized instructions to the metadata forms used to create records on the back end. To facilitate creating quality records that we can crosswalk to other standards in the future, the DSL adopted this feature to include definitions and recommendations from the metadata map in Table 1. These instructions help guide repository staff when gathering and recording metadata, and they can be shared with the cataloging staff to help transpose collection elements into the appropriate MARC fields. Appendix A provides a table with the Digital Commons metadata field, input type, and instructional text included in Digital Commons. Currently, not all elements have instructional text, and some elements may be re-titled in future versions of the standard.

In addition to developing the prototype collection and provisional metadata standard, the authors also developed the necessary tools and workflows to implement the collection. Working together, the DSL and OER Librarian (OERL) developed eligibility criteria for OER to be included in the collection as well as an online form for the OERL to submit resources for inclusion. Currently, the scope of the collection is limited to resources created or adapted by faculty at Georgia Southern. Eligibility is based on the recommendation of the OERL who works directly with faculty and is therefore best able to select resources for inclusion.

Responses to the online form become tickets and are automatically forwarded to a LibAnswers ticketing queue to be retrieved by the repository staff. After the resource is added to the repository collection, the ticket is transferred to the cataloging staff to create a bibliographic record for the resource

in MARC format and added to the catalog. As part of this process, the cataloging staff add the record to a bibliographic collection for OER that is searchable in the catalog. An electronic “portfolio” is added to the record, then the bibliographic collection is added to the portfolio. This ties the MARC and holdings records to the bibliographic collection. The final step is adding the catalog permalink to the repository record. This last step ties the catalog and repository records to each other, making the OER fully discoverable through Digital Commons and the library catalog.

## Results

With the provisional metadata standard and workflows completed, the authors published the prototype OER collection during summer 2023 (<https://digitalcommons.georgiasouthern.edu/oer>). At the time of this writing, the collection includes four records in three subject areas: chemistry, education, and history. Currently, the OERL is identifying OER developed or adapted by Georgia Southern faculty that are good candidates for the collection and will submit these suggestions via the online form to the institutional repository staff for addition to the repository.

The online form provides a reliable method for notifying technical services personnel of the existence of new OER. Required information on the form ensures that minimum metadata about the OER is available to create institutional repository and MARC records, and additional information needed for creating descriptive metadata is pulled from sources outside of the form. For OER published by the University System of Georgia, we found that the best resource for copyright and publisher information is located on OpenALG’s website, not always on the OER itself.

These early submissions have resulted in several revisions to the OER submission form. For example, the initial form allowed for the selection of only one option for fields like “intended audience” and “type of material.” However, some OER are appropriate for multiple audiences, and some include multiple formats like worksheets, problem sets, videos, and images. The initial form did not allow for all features or potential audiences for these OER to be described. As a result, the OERL requested changes to the form to allow more than one option to be chosen for several fields.

Our experience with using the form indicates a need for ongoing revisions, including adding options for the OERL to include comments; removing questions that are available on the OER itself or involve “cataloger’s judgment” (e.g. subjects and additional notes); and re-sequencing the form so that the order of questions aligns with the order of metadata fields in the institutional repository and catalog. These changes support the creation of more complete records. Figure 2 presents an example record in Digital Commons, and Appendix C presents the corresponding bibliographic record in MARC.

## Figure 2

### Example OER Record in Digital Commons



## The Enola Gay Controversy, 1994-1995

[Allison Belzer](#), *Georgia Southern University*  
[Alena Pirok](#), *Georgia Southern University*  
[Caroline Hopkinson](#), *Georgia Southern University*  
[Zach Graham](#)  
[Breanna Lively](#)  
[Eric Thompson](#)  
[Nikki Cannon-Rech](#), *Georgia Southern University*



Download Full Text
Link to Full Text

**Description**

This role-playing game for the classroom focuses on the turmoil surrounding the planned exhibit of the Enola Gay aircraft in 1995 at the National Air and Space Museum. The materials help students engage in debates over who controls history, and the role museums and/or the government should play in shaping culture and identity. Materials include a game book for students, character roles from the period, an Instructor's Manual, and sources to encourage research on World War II and the 1990s culture wars. The LibGuide includes primary and secondary resources for reference.

**Course Title**

World History 2, US: A Comprehensive Survey, Ethics & Values in History, Readings in American History

**Course Number**

HIST 1112, HIST 2110, HIST 3050, HIST 7631

**Creative Commons License**



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**Publication Date**

6-5-2023

**Language**

English

**Format**

Text

**Educational Use**

Curriculum/Instruction

**Audience**

Student

**Publisher**

University System of Georgia

**City**

Athens, Georgia

**Keywords**

Enola Gay (Bomber), World War II

**Disciplines**

History | Political Science | United States History

**Comments**

Supported by an Affordable Learning Georgia grant from the University System of Georgia: <https://alg.manifoldapp.org/projects/enola-gay-controversy-game>

Currently, all record creation in the repository is handled by the DSL, and all cataloging is handled by the Collection Management Librarian (CML). This is to ensure that records are created consistently early in the development of the collection, that the DSL and CML are able to consult with each other about any issues that arise with the provisional metadata standard or workflows, and the DSL and CML are able to develop and test written workflows for their staff in preparation for the transfer of responsibilities. During testing for this project, the DSL developed a workflow to create LibAnswers tickets to transfer to the CML after each OER record is added to the repository. These tickets provide an easy way to track progress on the record as well as a space to ask clarifying questions and provide information about the OER that is not recorded on the institutional repository or MARC record, such as OER submission form responses.

In addition, the CML developed MARC record templates for use during cataloging. Developing a record template for standard metadata quickens the cataloging process by allowing the CML to consistently select the necessary information from the Digital Commons record or the resource itself. Also, as of this writing, the DSL and CML are working together to determine what standardized language, if any, is needed for certain fields like the 506, 536 and 540 for licensing information. Different licenses require different languages, so the CML will create workflows as needed for the different licenses, ensuring consistency.

Next steps for this project are to continue testing and refining this provisional standard and workflows. Then we will begin developing crosswalking tools necessary to externalize records to third-party indexes. The authors will seek feedback from colleagues and faculty on the usability of the records in the repository and the catalog and investigate ways to increase discoverability in those contexts. While this standard remains untested for crosswalking our records to other third-party standards, the authors believe that it is sufficiently flexible and robust such that any resultant records will be amenable to adaptation as standards develop over time. The scope of this project began with analyzing metadata schemes within the OER literature, but as the project evolves, the authors intend to draw upon metadata work in the wider digital collection community and look for methods to scale up the workflow. As the collection grows, the OERL will integrate discovery training into their reference and consultation work with faculty.

## Discussion

Recently, the Institute for the Study of Knowledge Management in Education (ISKME) (2023) proposed five personas required to fully support OER discoverability. These personas include specialists in OER reference, course design, and collections maintenance. In some instances, these personas may reside outside the library; for example in a faculty center for teaching and learning. In other instances, a single librarian may be responsible for supporting multiple or all of these personas. Regardless, fully supporting OER discoverability requires expertise in several domains of professional practice. As mentioned in the introduction, many librarians tasked with OER work serve in public service roles, including reference and instruction. While this is beneficial to local promotion of OER services and

OER development, collaboration with technical services colleagues is imperative for expanding OER discoverability.

Throughout this project, public and technical services librarians collaborated to solve shared challenges of OER discoverability. As of this writing, the authors have increased the discoverability of OER developed at the institution by integrating these resources into the institutional repository and the catalog. By extension, these records have or will become discoverable through OCLC, Google, and other third-party indexes that harvest Digital Commons content, including the Georgia Knowledge Repository (<https://gaknowledge.org>). In the long term, the authors have established a provisional framework for externalizing these records as third-party standards develop and as interest coalesces around third-party OER indexes.

By following Bothmann's advice not to wait for consensus to emerge around a single standard for OER description and cataloging, Georgia Southern has sought to cherry-pick elements from multiple nascent but promising standards, develop explicit rules for crosswalking these elements to MARC, and make progress where we can toward exporting our growing collection of institutionally-developed OER to other third-party indexes. This standard includes elements encompassing what our public and technical services librarians believe is the information patrons need to find relevant OER, both now and in the future. This metadata provides patrons with detailed information about the resource they are viewing. Patrons understand the resource through the provided descriptions and resource contents notes. This information is particularly useful to students and faculty using the material for course work.

Moreover, accurate metadata ensures not only that OER is findable and usable by students and faculty, but also by the five professional personas identified by ISKME as supporting discoverability. Some metadata is particularly useful to OER creators. For example, the 536 and 540 MARC fields provide licensing information that explains how these works can be reused. As such, accurate metadata goes beyond discoverability and use, but it is important for re-use and contributes to the long-term value of these works.

Lastly, for the OERL and other public services librarians at Georgia Southern, making our faculty's OER searchable and discoverable through the institutional repository and the catalog has several advantages. Promoting these works internally to other faculty and externally to other colleagues and institutions is easier, and faculty awareness of OER is increased overall. Also, the University System of Georgia recently mandated that faculty explicitly document activities that support student success, so including these works in the repository and the catalog increases the visibility and caché of their works and makes documenting these activities in annual performance evaluations and promotion and tenure reviews easier. This makes evaluating local and regional OER initiatives easier as well.

## Conclusion

Despite growing interest in OER, discoverability by learners and educators remains an obstacle to access. Improving discoverability begins with confronting technical and descriptive barriers in

metadata. Our process of building on existing OER metadata standards to create record templates, producing a metadata crosswalk between Digital Commons and MARC, and developing an OER ingestion form provides a path forward. Public services librarians already working with OER may benefit from inviting technical services colleagues to adopt similar practices at their own institutions.

OER's potential to transform education indicates a need to invest library expertise across the specialized realms of public and technical services. Ensuring that OER is searchable and discoverable requires that OER be added to digital repositories and library catalogs. By capitalizing on public and technical services expertise through ongoing collaboration, Georgia Southern University has successfully launched an institutional OER collection employing a provisional metadata standard to support discovery in the near-term until the OER community coalesces around a shared standard.

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### **Conflict of Interest Statement**

The authors declare no conflicts of interest regarding the publication of this paper.

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## Appendixes

### Appendix A. Digital Commons Submission Form

*Customized submission form for creating OER metadata in Digital Commons.*

Metadata Field	Input Type	Field Instructions
Title	Single-line text box.	Use for the 245 field on a MARC record.
Authors	Text box.	Include creators and contributors responsible for making the OER. Use for the 1XX, 7XX fields on a MARC record.
Description	A large text box with HTML formatting tools.	The abstract or summary of the resource. Use for the 520 field on a MARC record.
Course Title	Single-line text box.	Use for the 246 field or the 787/580 fields on a MARC record.
Course Number	Single-line text box.	Use for the 246 field or the 787/580 fields on a MARC record.
Creative Commons License	Drop-down to select from a list of options.	Use for both the 506 and 540 fields on a MARC record. This is an open access resource with no restrictions on access (506 field). Restrictions on the right to reproduce are determined by the Creative Commons License (540 field): <a href="https://creativecommons.org/about/cclicenses/">https://creativecommons.org/about/cclicenses/</a>
ISBN	Single-line text box.	When applicable. Use for the 022 field on a MARC record.
Publication Date	Text box.	Use for the 264 field on a MARC record.

Metadata Field	Input Type	Field Instructions
Source	A large text box with HTML formatting tools.	A related resource from which the described resource (OER) is derived. Include a link to the related resource. Use for the 500 field on a MARC record.
Language	Single-line text box.	Enter the language(s) in which the OER is written.
Material Type	Drop-down to select from a list of options. The list includes all material types defined by OER Commons.	Select the type that best fits the definition by OER Commons: <a href="https://help.oercommons.org/support/solutions/articles/42000046908-material-types-">https://help.oercommons.org/support/solutions/articles/42000046908-material-types-</a> . Use for the 300, 347, and 516 fields on a MARC record.
Format	Drop-down to select from a list of options. The list includes Text, Video, or Image.	Use for the Leader/06 and 336 fields on a MARC record to describe the form of communication (text, audio, video, image, etc.). Include fields 337 (device required to view the content) and 338.
Educational Use	Drop-down to select from a list of options. The list includes Curriculum/Instruction, Assessment, Professional Development, and Other.	Defined by OER Commons as the purpose of the material for education.
Audience	Drop-down to select from a list of options. The list includes Student, Faculty, Administrator, Parent, Teacher, and Other.	Use for the 521 field on a MARC record.
Publisher	Single-line text box.	Use for the 264 field on a MARC record.
City	Single-line text box.	Use for the 264 field on a MARC record.
Keywords	Single-line text box.	When cataloging, adapt to Library of

Metadata Field	Input Type	Field Instructions
		Congress Subject Headings. Use for the 6xx fields on a MARC record.
Comments	A large text box with HTML formatting tools.	Information about the grant/funding source. Include a URL to the grant/funding source. Use for the 536 field on a MARC record.
Upload File	Radio button to upload a file or link out externally.	This is the location of the resource. Use for the 856 field on a MARC record. For cataloging, the URL should go to the record in Digital Commons.

## Appendix B. OER Submission Form

The scope of the OER collection is resources adapted and/or created by Georgia Southern (GS) faculty. Eligibility for inclusion is based on the OER Champion's recommendation.

### Required Information

1. Title of the OER:
2. Names of GS faculty who adapted/created the OER:
3. Publication date (*At a minimum, provide the year. Provide the semester or exact date if known.*):
4. URL where the OER is available (*Provide the link to the exact OER that we are adding to the collection*):
5. Description or abstract of the OER:
6. What work is this OER adapted from? Provide a link to the original resource if available. If this OER is a creation, write N/A.
7. What is the subject area for this OER?
  - a. Chemistry
  - b. Biology
  - c. Education
  - d. Engineering
  - e. History
  - f. Mathematics
  - g. Other...

8. What type of material is the OER? Material types are defined by OER Commons here:

<https://help.oercommons.org/support/solutions/articles/42000046908-material-types->

- a. Activity/Lab
  - b. Assessment
  - c. Case Study
  - d. Data Set
  - e. Diagram/Illustration
  - f. Full Course
  - g. Game
  - h. Homework/Assignment
  - i. Interactive
  - j. Lecture
  - k. Lecture Notes
  - l. Lesson
  - m. Lesson Plan
  - n. Module
  - o. Primary Source
  - p. Reading
  - q. Simulation
  - r. Student Guide
  - s. Syllabus
  - t. Teaching/Learning Strategy
  - u. Textbook
  - v. Unit of Study
  - w. Other...
9. What is the educational purpose of this OER?
- a. Curriculum/Instruction
  - b. Assessment
  - c. Professional Development
  - d. Other...
10. Does this OER include ... *(check all that apply)*:
- a. Text/documents
  - b. Video recordings
  - c. Images
  - d. Audio recordings
  - e. Other...

### Optional Information

If this is known; it helps with discovery.

1. Is the OER static or dynamic? Static content is fixed and will not change. Dynamic content has changed or updated since first published.

- a. Static
- b. Dynamic
- c. Both (if both, please email a PDF of the OER as it was first published)
- 2. Course Title
- 3. Course Number
- 4. Who is the audience for this OER?
  - a. Undergraduate Student
  - b. Graduate Student
  - c. Faculty

### Appendix C. OER MARC Record

=LDR 04016nam a2200601 i 4500

=001 on1393224450

=003 OCoLC

=005 20230810023909.0

=006 m\\\\\\\\o\\\\d\\\\\\\\\\\\

=007 cr\\\\\\\\\\\\\\\\

=008 230810s2023\\\\gaur\\\\ob\\\\000\\\\eng\\\\d

=040 \\ \$a GPM \$b eng \$e rda \$c GPM

=035 \\ \$a (OCoLC)1393224450

=041 0\\ \$a eng

=050 \\4 \$a D767.25.H6 \$b B45 2023 (Online)

=049 \\ \$a GPMM

=100 1\\ \$a Belzer, Allison Scardino, \$e author.

=245 14 \$a The Enola Gay controversy, 1945-1995 /\$c Allison Scardino Belzer & Alena Pirok with Zach Graham, Breanna Lively and Eric Thompson.

=250 \\ \$a Version 2.1

=264 \\1 \$a Athens, Ga. :\$b University System of Georgia ;\$c 2023

=300 \\ \$a 1 online resource :\$b illustrations (some color)

=336 \ \ \$a text \$b txt \$2 rdacontent

=337 \ \ \$a computer \$b c \$2 rdamedia

=338 \ \ \$a online resource \$b cr \$2 rdacarrier

=385 \ \ \$a Students \$2 lcdgt

=504 \ \ \$a Includes bibliographic references.

=505 00 \$t Introduction \$g 3 --\$t Basic features of role-playing games \$g 4 --\$t Suggested schedule of classes \$g 6 --\$t Historical background \$g 9 --\$t Timeline \$g 14 --\$t Game mechanics \$g 17 --\$t Available documents \$g 23 --\$t Suggestions for further reading \$g 24

=506 0\ \$a Open access \$f Unrestricted online access \$2star \$5 GAGAL

=520 \ \ \$a This role-playing game for the classroom focuses on the turmoil surrounding the planned exhibit of the Enola Gay aircraft in 1995 at the National Air and Space Museum. The materials help students engage in debates over who controls history, and the role museums and/or the government should play in shaping culture and identity. Materials include a game book for students, character roles from the period, an Instructor's Manual, and sources to encourage research on World War II and the 1990s culture wars. The LibGuide includes primary and secondary resources for reference. - From Digital Commons OER record

=536 \ \ \$a Supported by an Affordable Learning Georgia grant from the University System of Georgia: <https://alg.manifoldapp.org/projects/enola-gay-controversy-game>

=540 \ \ \$a This work is licensed under a Creative Commons Attribution-Noncommercial-ShareAlike 4.0 license that lets others remix, adapt, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms. \$f CC BY NC-SA \$2 cc \$u <https://creativecommons.org/licenses/by-nc-sa/4.0/>

=580 \ \ \$a Created for use in the Department of History, courses HIST 1112, HIST 2110, HIST 3050, and HIST 7631 at Georgia Southern University.

=651 \0 \$a Hiroshima-shi (Japan) \$x History \$y Bombardment, 1945 \$x Study and teaching.

=610 20 \$a Enola Gay (Bomber) \$x Study and teaching.

=650 \0 \$a Historiography \$x Case studies.

=650 \0 \$a Decision making \$x History.

=610 20 \$a National Air and Space Museum \$x Exhibitions.

=610 20 \$a Georgia Southern University \$x Curricula.

=655 \7 \$a Instructional and education works \$2 lcgft

=655 \7 \$a Role-playing games. \$2 lcgft

=700 1\ \$a Pirok, Alena, \$e author

=700 1\ \$a Graham, Zach, \$e author

=700 1\ \$a Lively, Breanna, \$e author

=700 1\ \$a Thompson, Eric, \$e author

=700 1\ \$a Cannon-Rech, Nikki, \$e contributor

=700 1\ \$a Hopkinson, Caroline, \$e contributor

=787 08 \$i Created for use in: \$a Georgia Southern University. Department of History. \$t HIST 1112 - World History II

=787 08 \$i Created for use in: \$a Georgia Southern University. Department of History. \$t HIST 2110 - U.S. A Comprehensive Survey

=787 08 \$i Created for use in: \$a Georgia Southern University. Department of History. \$t HIST 3050 - Ethics and Values in History

=787 08 \$i Created for use in: \$a Georgia Southern University. Department of History. \$t HIST 7631 - Readings in American History

=856 40 \$3 OpenALG \$u

<https://alg.manifoldapp.org/read/shrine20230605-28768-1u91eoc/section/abb1cf53-8e83-481d-96bd-794f324c11be> \$ 70

=856 42 \$3 Digital Commons @ Georgia Southern \$u

<https://digitalcommons.georgiasouthern.edu/oer-history/1/>

=994 \ \$a C0 \$b GPM

## Open Peer Review

Iakovakis, C. (2023, May). [OER Discovery, by B. Burnett, N. Cannon-Rech, R. Hunnicutt & J. Mortimore]. *Journal of Open Educational Resources in Higher Education*, 2(1), 243–247.  
doi:10.13001/joerhe.v2i1.7879

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**Reviewer:** Clarke Iakovakis

**Recommendation:** Resubmit for Review  
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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

This manuscript describes an approach developed by Georgia Southern University to create a hybrid metadata standard in order to enhance discovery of OER and enable them to more readily crosswalk and adapt that standard to other metadata standards moving forward. The issues raised in the article are of critical importance to open education work, and are situated in a very active discussion in the community on sharing metadata across platforms, optimizing for discoverability, novel challenges in description of OER, and more.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

I believe the literature review could be expanded further and go into more depth as to the strengths and shortcomings of existing OER metadata standards, such as the OTL MARC records, MHCC OER MARC, OER Schema, DPLA Profile, etc., as well the role and importance of metadata in discovering OER and the consequences for OER publishers, authors, users, librarians, etc. The problem is referred to in the first paragraph by the sentence "MARC, Dublin Core (2012), and IEEE-LOM (2002), all have some limitations in describing specific attributes of many OER materials," but these limitations are not enumerated. The Methods section refers to this review process and refers to the most common elements between standards and analysis of the MARC21 and RDA formats, so if these standards are introduced

and even cursorily described in the Lit Review, it will better help the reader to understand the thought process in the development of the hybrid standard produced.

There is also a claim made in the lit review that is not fully substantiated: "Short of the community coalescing around a 3rd-party repository or preferred metadata scheme, we are unlikely to see much progress toward a shared standard for OER description and sharing." While this inference is possibly accurate, it would be useful to review any existing literature exploring barriers to shared standards. Perhaps it would be better to move this claim into the Introduction and to use it to further frame the issue and demonstrate the urgency of the problem.

Finally, in the last sentence of the second full paragraph of the Literature Review, it might be helpful to summarize some of "questions remaining" pertaining to the development of OER Metadata Rosetta Stone that were provided in the presentations listed, given that the latter proposes to address OER discovery and inconsistencies in OER metadata is itself referred to as a resource by the authors later in the article.

By expanding the Lit Review in this way, I believe it will provide a deeper and more thorough context for the creation of the custom metadata standard at Georgia Southern, and could in itself be a resource for those trying to chart their own course forward.

A further point that could be explored in more depth is brought out in the conclusion; namely, the value of collaboration between people doing OER work across roles. This is another interesting and critical aspect of the work, and there would be some value in drawing on that literature in the introduction and literature review. As it is currently in the conclusion, it seems somewhat disconnected from some of the other issues introduced in the earlier part of the article, and the highly technical metadata descriptions in the Methods and Discussion.

## Methodology, Approach, Conclusions

***The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?***

As mentioned above, this article appears to be closer to a case study than an original research article. Furthermore, the process described is still under development and in the prototype phase, and the authors have not yet developed crosswalk tools that would provide a further demonstration of the value of their approach.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

This is a clear and well written article. For the most part it is well referenced and the references appear to be well formatted. Also there are some acronyms that are not spelled out or defined the first time they are introduced, including IEEE-LOM, UNESCO, JSON-LD, RDF, RDA.

The Methods section does get into some intricacies of mapping the OER Commons metadata to MARC; while there is value in this, it might be useful to generalize some takeaways from this mapping process in the Discussion section.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

The article without question contributes both knowledge and practical examples that can improve practice and education. It provides a critical perspective on the issues associated with developing custom or hybrid metadata schemas, and an outline of some of the issues with standardized schemas. I do think the process is worth disseminating, though as described above, I'm not certain if it fits within the scope of the Journal as a "quantitative and qualitative research article."

## What are the stronger points/qualities of the article?

As described already, it is well-written, interesting, and a valuable contribution to the growing discussion on the challenges of OER discoverability.

## What are the weaker points/qualities of the article? How could they be strengthened?

I have addressed this in other comments; namely that it is not original research as traditionally defined. I'm also not altogether certain that the title fits the article: in what ways have the authors processes ensured that OER rise to the top? Because the changes are still in prototype and the article does not include any measurements but is rather a description of a process, it is difficult to see how they can assert that their process has fully addressed the challenges they describe.

## Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

## Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

## Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

## Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Not Appropriate

## Peer Review Ranking: Research Assessment

*If this is a research paper, are the conclusions sound? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Not Sound

## Overall Evaluation

-1- Weak Reject



## Open Peer Review

Wu, Y. (2023, May). [OER Discovery, by B. Burnett, N. Cannon-Rech, R. Hunnicutt & J. Mortimore]. *Journal of Open Educational Resources in Higher Education*, 2(1), 248–252. doi:10.13001/joerhe.v2i1.7879

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**Reviewer:** Yang Wu

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Making OER discoverable through improved metadata that can overcome descriptive and technical barriers is a major problem in increasing their use in higher education. By exploring this issue and proposing a solution to it the article and its topic addresses an important element of OER in higher education and is within the scope of JOERHE.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

The article is well organized, proceeds logically and adheres to the structure and section guideline of the journal. One suggestion I have is to have the authors reorganize their article slightly and submit it as an innovative practices article. The article is a case study, and its length is more appropriate to the guidelines of an innovative practices submission. The article is well organized, proceeds logically and adheres to the structure and section guideline of the journal. One suggestion I have is to have the authors reorganize their article slightly and submit it as an innovative practices article. The article is a case study, and its length is more appropriate to the guidelines of an innovative practices submission.

## Methodology, Approach, Conclusions

***The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?***

This article is about an innovative practice relating to OER discoverability rather than a research based writing. It is focused on the development of a hybrid metadata standard for OER, initial efforts to test it in an institutional repository and no data was collected. The short literature review in the article is factually accurate and highlights issues the paper wants to stress, such as difficulties in creating a metadata standard for OER that is applicable to all repositories for such materials. It is not an extensive analysis of the broader literature on OER and discoverability/metadata but does the job. This would be acceptable for an innovative practices article, which places less emphasis on having an extensive literature review, but there are some aspects of the literature review that can be improved. The article claims on page 3 that Adams, Ruen et al. and Boland have raised concerns at the 2022 OpenEd Conference presentation regarding how a metadata standard can be developed to make OER more accessible. The details of their discussions and their relationship to the Georgia Southern University project should be elaborated on.

If this work should be published as a regular article then a larger literature review is needed. Please see my comments in the "What are the weaker points/qualities of the article?" section on what should be added.

## Writing Style, References

***Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.***

Overall, this article is succinct, has good flow and is well written, with little grammatical errors. (There are some spacing issues, and one place where the "OER Metadata Rosetta Stone" title could be italicized etc.) It also adheres to the APA format for references. A suggestion I have with regard to references is for the authors to include in-text citations in the article, stating which page they got specific information from. This would be particularly important for the quotations in the article, from the Bothmann work and the SPARC OER Metadata Rosetta Stone. These works are numbered, and the pages in them that the article got the quotes from should be cited.

## Application:

### **Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

Yes, the hybrid metadata standard developed by Georgia Southern University provides a good, practical example for improving the discoverability of OER. It can inform, inspire and assist other OER practitioners interested in enhancing the discoverability of OER materials. If successfully tested at the Georgia Southern University repository, the hybrid metadata standard can also be applied to other repositories and will improve the larger discoverability for OER materials, benefiting the broader OER community.

### What are the stronger points/qualities of the article?

The stronger qualities of the article are its proposed solution for a metadata standard for OER, which could enhance the discoverability of OER overall. The article is also brief, clear and to the point.

### What are the weaker points/qualities of the article? How could they be strengthened?

There are several aspects of the paper's argument that could be further strengthened:

1. Collaboration between technical, public service and other librarians in the development of the hybrid metadata standard.

On page 2 the article mentions that public and technical services librarians often struggle to collaborate effectively in making OER discoverable. It seems to provide a solution for this, showing how a Digital Scholarship, Research Services, Collections Management, and a Discovery Services Librarian can work together to enhance the discoverability of OER. However, the article does not address issues of collaboration faced during the project and best practices for addressing them. This aspect of the project could be elaborated on.

2. Expand on the literature review (If the writing is to be published as a regular JOERHE article).

The literature on OER and discoverability/metadata is over a decade old, yet the article only quotes a limited number of publications and conference presentations from 2020 on. Greater discussion of works published prior to 2020, particularly relating to developing a common metadata standard on OER would strengthen the article.

3. Making the article more understandable to a non-technical services audience

The article calls for collaboration between technical service, public service and other types of librarians in making OER more discoverable. In this spirit it should perhaps explain in further detail and in less specialist terms how the hybrid metadata standard was created, making it more understandable to non-technical service librarians and OER practitioners. For example, more description of the specifics of the IEEE-LOM metadata scheme and the OER Metadata Rosetta Stone could make the article and its hybrid metadata standard more understandable for a more general OER audience.

### Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Highly Relevant

### Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Very Clear

### Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

### Peer Review Ranking: Research Assessment

*If this is a research paper, is the methodology appropriate?*

Appropriate

### Peer Review Ranking: Research Assessment

*Are the conclusions sound? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

## Overall Evaluation

2- Accept

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# Cultivating Shared Knowledge of OER

## *Building Community Through Professional Development for Librarians*

Joanna Thompson<sup>1</sup>

Joshua Peach<sup>2</sup>

Keywords: Open Educational Resources, Professional Development, Librarian Training, Labor

### ***Abstract***

While open educational resources (OER) programs are often situated in university and college libraries, librarians come to the practice with different levels of exposure and knowledge. At the New York City College of Technology (City Tech) library, we attempted to bridge this gap by offering paid training for all full-time librarians at the college. Our goal for the training was to integrate the philosophy of open education and open educational resources into librarians' everyday work. This article outlines the rationale for our approach to professional development, the program design, participant feedback, and future directions.

### **Introduction**

While open educational resources (OER) programs are often situated in university and college libraries, academic librarians come to the practice with different levels of exposure and knowledge. Most librarians are aware of OER, but many have not used openly licensed materials in their work or received training on adjacent topics like copyright and open licensing. At the New York City College of Technology (City Tech) library, we attempted to bridge this gap by offering paid training for all full-time librarians at the college. Our goal for the training was to integrate the philosophy of open education and open educational resources into librarians' everyday work.

OER initiatives at the City University of New York began as a pilot program in 2014, at several CUNY colleges, including City Tech. Beginning in the academic year 2016-2017, the state of New York invested eight million dollars, split between the City University and State University of New York systems, with an additional renewal of eight million dollars between the two systems annually. “The

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doi:10.13001/joerhe.v2i1.7203 [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

short-term goal of the State funds was to reduce costs for students and accelerate their progress through college, but an important secondary goal was to change the University's culture to create systems and structures that better connect curriculum and pedagogy to student learning outcomes" (CUNY, p.4).

Since 2015, the OER initiative at City Tech has taken the form of a semester-long fellowship program that supports full- and part-time faculty members to convert their courses into Zero Textbook Cost (ZTC) courses, replacing costly commercial textbooks with OER and library resources. Faculty members attend multiple seminars over the course of the Fellowship, learning about OER, alongside other topics such as copyright, Creative Commons licensing, accessibility, and open pedagogy. By the end of the semester, faculty have created a website for their redesigned course, hosted on the OpenLab, an open-source digital platform designed to support teaching and learning at City Tech. Beyond the fellowship, the OER team offers additional programming such as workshops, one-on-one/small group consultations, and further faculty development (environmental scan working groups, returning OER fellows course conversion, and authorship projects).

In the Fall of 2020, we offered a new paid training on OER exclusively for City Tech librarians. Over two weeks, participants engaged in OER topics through readings and asynchronous discussions with their peers. As they explored the open educational landscape, they developed projects around their own work and the academic departments that they liaise with. This culminated in a synchronous session during which participants discussed the material covered in the workshop, shared their projects, and discussed further OER opportunities at City Tech.

As we were designing the training, we were aware that continued state funding for OER programming at CUNY was uncertain. While we do not support "doing more with less," nor passing along time and resource intensive OER programming work to our colleagues, we were thinking about how a basic level of knowledge about open education in the library could continue regardless of external funding. Our hope was that our colleagues would take the knowledge they had gathered in our seminar and disseminate it further through their existing work in the college, including emphasizing the selection and creation of free and open resources over proprietary resources with the academic departments they liaise with and providing guidance to faculty members on the basics of OER.

## Literature Review

### *Current Professional Development Landscape*

We first explore the current professional development opportunities in the OER space, as well as existing literature on professional development in OER. We then look at inequities in professional development in OER and libraries and identify gaps in advocacy by relevant professional organizations. Last, we touch on literature that frame professional development as a method for developing a community of practice.

Professional development literature about OER is focused heavily on librarians and other OER advocates providing professional development opportunities for teaching faculty members. As the number of OER programs in libraries continues to grow, we are seeing more opportunities for and

literature about professional development for OER advocates. Thornton (2021) wrote about the importance of structured professional development about OER to meet academic librarians' knowledge and training needs. Chan and Auster (2005) also describe the importance of a supportive manager and working environment in motivating librarians to take part in professional development opportunities. However, as Comanda et al. (2021) explain, a lack of funds for professional development can be a barrier to access, no matter how motivated a worker might be. There are currently several longer-term programs that teach information professionals about OER, copyright, open licensing, and open pedagogy, including the Creative Commons Certificate program, the SPARC Open Education Leadership program, and the Open Education Network Certificates in Open Educational Practice and OER Librarianship. These programs typically come at a cost to participants, from \$500 to about \$4,000 for programs that range in length from 10 weeks to a full academic year. These costs may not be covered by employers and may be unaffordable for many library workers who are already economically disadvantaged in the field, often due to precarious or part-time employment.

Inequities in access to professional development in the academy are well documented (Comanda et al., 2021; Gelman et al., 2022; Neigel, 2016). Comanda et al. describes a landscape where academic librarians feel they are expected to attend expensive professional development conferences to advance in their career, often tied to requirements for tenure and promotion. Financial support from their home institutions can be meager relative to the size of the college, highly competitive for the limited pot of money offered, and often mired in "unclear, inconsistent, burdensome logistics" (Comanda et al., 2021) such as long and complicated reimbursement processes. Professional organizations within the field offer little support for attendees, often charging high attendance costs even if the librarian is presenting at the conference. Many librarians are making the hard choice to not attend professional development opportunities due to their unaffordability.

Anecdotally, some college library departments are recognizing the need and picking up the slack, providing internal professional development to their librarians and staff. They are paying librarians to design and participate in professional development activities or at the very least providing it at no cost. This manifests as lunchtime talks, webinars, and multi-part workshops. Scull (2021) discusses how a staff development program at Dartmouth College Biomedical Libraries supported the cultivation of a community of practice at their libraries. The inclusion of both librarians and staff in these trainings allowed for the sharing of expertise across job titles and "encouraged social learning as a group" (Scull, 2021). Their professional development model moved away from a one-off approach into a more sustained engagement throughout the library.

## Program Design & Process

The framework for this training was based on the curriculum designed for teaching faculty who participate in the City Tech Open Educational Resources Fellowship, but we tailored the curriculum to meet the unique needs and work of academic librarians. Topics that we retained from the original programming include the basics of OER, copyright, licensing, fair use, and open pedagogy. Our primary goal for the training was for non-OER librarians to learn the basics of OER so that they could use the

language and concepts of OER and open pedagogy in their own practices as a librarian, particularly in their role as liaison to specific academic departments. The syllabus is available in Appendix A.

We designed the training to be primarily asynchronous. We split the curriculum into two sections, with two asynchronous units and one synchronous group session to wrap up. Because it was largely asynchronous, we tried to think carefully about how to engage with our colleagues and build some sense of community and connectedness. In addition to the synchronous discussion session, we maintained regular contact with librarians via email and Google Docs to help them feel more connected to the training and to us.

We expected participants to complete approximately ten hours of work over the course of the training. At the start of the training, we provided a survey asking librarians what they already knew about OER, copyright, and open pedagogy and what they wanted to know about the same topics. The survey helped us understand pre-existing knowledge about OER, as well as identify gaps in knowledge on which we should focus our training.

The first section was an introduction to OER and copyright. In addition to reading introductory texts created by the City Tech OER team, participants answered questions in a shared Google Doc. These questions included whether participants had encountered Creative Commons licenses before, the significance of these licenses for their work and for faculty members with whom they work, and the remixing and adapting that the licenses often allow. The first section was followed by a homework assignment in which participants were asked to identify four to six open resources across the disciplines that they liaise with at the college. They were also asked to share reflections on their search process, including where they found gaps in existing OER, features they appreciated in particular resources, and whether the resources they found were accessible.

The second section of the training focused on instruction and open pedagogy. Librarians read pieces from *Visible Pedagogy* about hybrid courses and creating “intersectional, interventionist” syllabi (Gelles, 2020), as well as an introduction to open pedagogy. Like the first section of the training, librarians reflected on the readings and responded to their colleagues’ contributions. As we will discuss in the final section of this report, we found this mode of discussion to be sufficient but not ideal.

The final project for the training was to create an openly licensed educational object (broadly defined) informed by the training and directly related to the participants’ work. Below was our project prompt:

*Create an openly licensed educational object. It can be an instructional material or assignment, for classroom instruction or that highlights library resources, the audience doesn’t necessarily need to be students. The topic can be related to the discipline(s) you liaise with, your work in the library, your scholarship, or the topics we discussed during the training. Assign a Creative Commons license for your educational object. For example, you might create:*

- *A worksheet*
- *Slides, video, screencast, or other instructional object to enhance a LibGuide*
- *A quiz*

- *A zine*

*We are flexible, so be creative! Create something that will be useful to you and/or the students and faculty with whom you work.*

The training concluded with a two-hour synchronous meeting of all seminar participants via Zoom. This session included information about OER programming at City Tech, a designated time for questions about what had been learned asynchronously and concluded with sharing ideas and first drafts of final projects.

Final projects were initially due a week after the synchronous sessions, a month after the beginning of the training, so that the training would be wrapped up before the end of the semester. However, after several requests for extensions, we changed the deadline to January, after the end of a busy semester. As projects were submitted, we provided feedback to participants via email on accessibility, licensing, and choice of platforms for sharing their projects. After completing their final projects, all participants completed an exit survey to assess their satisfaction with the training.

## **Impact & Assessment: Participant Feedback**

Participants overwhelmingly enjoyed and learned a lot from the training but offered minor suggestions related to platform, number of synchronous sessions, and timeline. Below are the questions and responses taken directly from the exit survey.

*Question: What did you enjoy most about the training?*

- Discussing the readings with colleagues
- Gaining a better understanding of the perspectives of fellow librarians
- Synchronous sessions
- Thinking about what [they] want to develop and reflecting on instructional design materials [they] made this past semester through the OER lens.
- Synchronous meeting; it was nice to actually talk through some of the readings and whatnot with colleagues.
- The readings and the Zoom class
- Our conversation on Zoom. And also felt it was surprisingly easy to communicate in the google docs. I was a little daunted by it at first, but it reminded me of the more enjoyable parts of online coursework.

*Question: What is something that you learned from this training that you will take into your work as a librarian?*

- Reflected on interface design and accessibility
- Inclusive design
- More about copyright and fair use
- Colleagues' approaches to and understanding of OER and open pedagogy
- Urgency of refreshing materials offered to colleagues during this time

- Appreciation for the difficulty of instructional design

*Question: What would you change about the training?*

- A different channel for communication; Slack instead of Google docs
- 2 synchronous sessions [instead of 1]
- Less asynchronous discussion; more synchronous sessions
- Longer sessions; more time for final project
- Wait until spring term
- More time for final project
- More synchronous time with colleagues

A clear theme running through the feedback was a desire for more time to meet with colleagues and share ideas and expertise. In our experiences, the onus has largely been on individual library workers to pursue professional advancement opportunities. Library leaders should be intentional about valuing the strengths and expertise in their libraries and give space and time during working hours for library workers to share knowledge and skills with one another.

## Recommendations

In addition to the suggestions given on the librarian survey, we used our own impressions of the asynchronous discussion and experience in the synchronous sessions to form recommendations for future iterations of our training.

While we found the synchronous session discussions lively and engaging, some of the librarians would have liked more opportunities for conversation with fellow participants outside of the one session that they attended. We support continuing the conversation through optional mini discussion sessions, such as lunch hour chats, or adding additional required synchronous meetings. In acknowledgment of our colleagues' varied schedules, we chose to provide just two dates for participants to take part in the synchronous session in order to accommodate scheduling conflicts and to minimize video conferencing burnout.

We used Google Docs as the platform for the training's asynchronous discussion. Some participants felt this platform stunted the conversation in a way that would not happen with an in-person discussion. Library faculty felt challenged on what to contribute to the conversation in the written document, especially when a colleague had already added a point that they agreed with. Additional challenges to answering discussion prompts in a shared online document included readability and legibility. It was not easy to visually discern responses between participants, requiring them to manipulate the text (changing text color to differentiate their responses) and possibly making their text inaccessible for low-vision or colorblind readers. The document format required participants to scroll through several pages to find the next response or the end of a discussion thread. This lack of organization hindered participants' ability to scan the discussion quickly and, in some cases, may have impeded comprehension and ability to participate. We would recommend the use of another platform in the future that can accommodate "chunking" responses into more digestible sections of text for better

comprehension. In the most recent iteration of the OER Fellowship at City Tech website, we have found using the comment feature on the OpenLab/WordPress platform more useful in preserving a discussion thread.

We also recommend that part-time library faculty be included in a training like this. It provides a professional development opportunity supported by the department, as well as a chance to interact with full-time colleagues and other adjunct librarians. Opportunities for engaging with colleagues can be limited when you only work one or two days a week in a college library, and precariously employed colleagues often cannot afford or do not have the time for professional development that is expected of librarians. Professional development opportunities such as this can help foster community among coworkers and create a more unified workplace.

## Conclusion

We found this training to be a success both for participants and for ourselves as facilitators. We felt that by sharing our knowledge of and experience with OER, open pedagogy, copyright, and accessibility with our colleagues, we contributed to the continued growth of open initiatives at City Tech and to the sustainability of OER programming despite uncertain funding.

Colleges and universities can be very stratified workplaces, and this training was an opportunity to break down some of these hierarchical structures within the library and to challenge ideas about who can learn from whom. In every instructional design decision, we were mindful of our full-time colleagues' expertise while also recognizing the need to not downplay our own knowledge. As part-time librarians, we appreciated the opportunity to get to know our full-time colleagues and share our experience and skills; teaching our peers allowed us to expand and grow within our professional careers. This experience made us feel more connected to our fellow librarians and the work of the wider library. We also concluded that the process of familiarizing ourselves with our colleagues and their work can not only help us understand how to best work together in the library, but it also make us feel less like atomized individuals and more like part of a cohesive whole.

We encourage other libraries to continue to provide opportunities for all library workers to share knowledge with their colleagues, and in the future we would like to expand similar opportunities to all library workers, regardless of title.

## Acknowledgements

We would like to express gratitude to Cailean Cooney, who supported us in designing the OER curriculum and in writing this piece.

## Conflict of Interest Statement

The authors declare that there are no conflicts of interest.

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## *Appendix*

### **Appendix A. Librarian O.E.R. Training Syllabus**

Greetings library colleagues and welcome to our training on Open Educational Resources! To prepare for our synchronous meeting, please complete the readings/discussions and assignments.

#### **Estimated breakdown of your time commitment (10 hours total):**

Readings: 1 hour

Asynchronous Discussion: 2 hours

Assignment 1: 2 hours

Assignment 2: 3 hours

Synchronous Discussion: 2 hours

#### **Introduction**

O.E.R. training participants will become knowledgeable about open educational resources (O.E.R.), principles of open pedagogy, and strategies to create usable and accessible O.E.R.s on the OpenLab. The training will cover copyright, Creative Commons licensing, resources to help locate discipline specific O.E.R.s, and strategies to generate cohesive and engaging course materials.

#### **Learning outcomes**

By the end of the training, participants will be able to:

- Define open educational resources
- Distinguish O.E.R., open access, and free materials
- Understand copyright and Creative Commons licenses
- Understand how accessibility, universal design, and instructional design best practices intersect with O.E.R. and improve access to instructional materials
- Consider open pedagogy concepts in conversation with your teaching philosophy and practices
- Understand and share City Tech O.E.R. programming and resources with the college community

#### **Requirements**

- Complete all assignments by due dates, prior to synchronous meeting
- Participate in group discussions and activities

#### **Homework Assignments**

##### **Due Dates**

MM/DD/YYYY

Fill out Pre-training O.E.R. survey

MM/DD/YYYY

Complete Section 1 reading prompt(s)

MM/DD/YYYY	Respond to colleagues' Section 1 prompts
MM/DD/YYYY	Assignment 1 due
MM/DD/YYYY	Complete Section 2 reading prompt(s)
MM/DD/YYYY	Respond to colleagues' Section 2 prompts
MM/DD/YYYY	First draft of Assignment 2 due
MM/DD/YYYY	Final version of Assignment 2 due

## Reading and Discussion

### Section 0: Pre-training Survey

Please fill out a short survey by MM/DD/YYYY.

- *What do you already know about OER, copyright, and open pedagogy?*
- *What do you want to learn about OER, copyright, and open pedagogy?*

### Section 1: Introduction to O.E.R. at City Tech

As the cost of course materials (and higher education more broadly) increases every year, instructors are turning to alternatives to expensive commercial textbooks. How can we help instructors and students navigate open resources and copyright?

Please complete the following readings below and respond to each of the framing questions in our group discussion doc by MM/DD/YYYY. Reply to two colleagues' responses by MM/DD/YYYY.

1. Read [Introduction to Copyright](#) (Approx. reading time: 7 mins)
  - Context: Before we discuss the meaning of the term “open educational resources,” we need to familiarize ourselves with copyright, a form of protection for creative expressions granted by the law. This is a content heavy reading with a good bit of intellectual property and licensing jargon (hold tight!). But knowing about copyright (for historical grounding and because it is current law) is essential for us to understand why and how educational materials do or don't get shared, and more practically, what is ok to post publicly (openly) and what isn't.
  - Framing question(s): Was this useful for you? Do you think it would be useful for other faculty members with various levels of knowledge?
2. Read [Introduction to Open Educational Resources and the Fellowship](#) and complete the low stakes [quiz](#) to test your knowledge (Approx. completion time: 8-10 mins)
  - Context: This reading builds on the Intro to Copyright reading and talks more about how Creative Commons licensing is the real vehicle for being able to call learning materials “open

educational resources.” It will also attempt to clarify / drill down how these terms, and the concepts underpinning them, will inform your project in a more practical sense. More specifically, it will help participants understand and share City Tech O.E.R. programming and resources with the college community.

- Framing question(s): Was this content useful to you? Do you think it would be useful for other faculty members with various levels of knowledge? Have you encountered Creative Commons licenses before? What is the significance of being permitted to remix (make derivatives / adaptations) by 4 of the 6 types of Creative Commons licenses?

## Assignment 1

Familiarize yourself with some of the resources available to find O.E.R. (Creative Commons licensed learning materials).

**Part 1:** Select 4-6 open course materials, across the departments you liaise with, from the resources listed below, as well as utilizing your own search strategies. Share your resources in our group discussion doc, [using descriptive hyperlinking](#), because we’ll use them for an activity during our synchronous meeting.

Search each of these resources:

- [Open Textbook Library](#)
- [BC Campus OpenEd](#)
- [Teaching Commons](#)
- [MERLOT II](#)

If you want to take a deeper dive into the world of O.E.R. repositories, look at the Community College Consortium O.E.R. [Find O.E.R.](#) page.

Some additional search strategies we often recommend to faculty:

- Google your subject + “O.E.R.” Ex.: “chemistry O.E.R.”
- Filter with Google advanced search & add “edu” after your keywords
- Check resources from professional organizations/associations
- Search Twitter for #BlackLivesMatterSyllabus "O.E.R." + "libguide"

**Part 2:** Share your reflections on this process. After adding your selected resources to our group discussion doc, reflect on the resources you identified and how the search process went for you. Some questions you might address include:

- Did you notice gaps in the existing O.E.R. in your discipline(s)?
- What features did you like or dislike about the resources? Explain.
- Are your selected resources accessible? Why or why not?

- Did you find O.E.R. that might be more useful than traditional course materials in your discipline(s)? Explain.

## Section 2: Rethinking Instruction

As the COVID-19 pandemic took hold in the United States, professors at CUNY had to make a rapid unplanned transition to online learning during the Spring semester. In this moment, while having to respond to emergency situations to provide resources to our constituents, we might reconsider how we approach service and teaching.

Please read the following readings below and respond to each of the framing questions in our group discussion doc by MM/DD/YYYY. Reply to two colleagues' responses by MM/DD/YYYY.

1. Read [Hybrid Courses: the best of both worlds \(or the worst\)?](#) by Jesse Rappaport (Approx. reading time: 2 mins)
  - Context: This is a short piece, part of the Visible Pedagogy series, contributed to by faculty across CUNY. It is meant to get us in a reflective mindset about our instructional practices and ways of engaging with library users through various modalities.
  - Framing question(s): What in this piece resonates with you about course design, regardless of teaching mode (face to face / online / hybrid)?
2. Read [Embracing Radical Inclusivity: Practical Steps for Creating an Intersectional Interventionist Syllabus](#) by Barrie Gelles, posted on [Visible Pedagogy](#) (Approx. reading time: 12 mins)
  - Context: When we are not bound to commercial textbooks, it opens the possibility of rethinking teaching and selection of resources that we otherwise might not have considered or foregrounded (different modalities, points of view, content, etc.).
  - Framing questions: What opportunities do you see in this? What are the possible downsides?
3. Read [Open Pedagogy](#) by Robin DeRosa and Rajiv Jhangiani (Approx. reading time: 20 mins)
  - Context: At the beginning of this article, the authors pose several questions to open up a broader conversation about education, en route to the ideas of Open Pedagogy. How does one synthesize educational theory and personal philosophies into daily practice? Thinking of this, our first two questions are pulled directly from the text.
  - Framing questions: How do you see the roles of the learner and the teacher? What challenges do your students face in their learning environments, and how does your pedagogy address them?
  - As librarians, our interactions with the community at City Tech are often brief and momentary. What are ways that we can activate engagement and participation in the library space?

4. How might you use the concepts introduced in Section 2's readings to inform the creation of an educational object that could be used in your work in the library (instruction, outreach, reference, technical services, collection development, etc.)?
5. Optional: Watch [Introduction to Open Pedagogy with Robin DeRosa and Rajiv Jhangiani \(video\)](#) (Approx. viewing time: 1 hour 7 minutes)
6. Optional: Listen to [Trauma-Informed Pedagogy \(podcast\)](#) by Tea for Teaching
  - What did you learn from the trauma-informed teaching and learning podcast? In what ways did it change (or not!) how you think about your teaching and your students' learning?
  - What are you doing for self-care during this time?

## Assignment 2

Create an openly licensed educational object. It can be an instructional material or assignment, for classroom instruction or that highlights library resources, the audience doesn't necessarily need to be students. The topic can be related to the discipline(s) you liaise with, your work in the library, your scholarship, or the topics we discussed during the training. Assign a [Creative Commons license](#) for your educational object. For example, you might create:

- A worksheet
- Slides, video, screencast, or other instructional object to enhance a LibGuide
- A quiz
- A zine

We are flexible, so be creative! Create something that will be useful to you and/or the students and faculty with whom you work.

Deadline: Email us your instructional object by MM/DD/YYYY. After submitting your object, you will be asked to fill out a short post-training survey:

- *Name (if you would like to remain anonymous, leave this blank):*
- *Did you think the readings were useful to the training? Explain.*
- *What did you enjoy most about the training?*
- *What did you find most challenging, content-wise?*
- *What is something that you learned from this training that you will take into your work as a librarian?*
- *What would you change about the training?*
- *Anything else you'd like to add about the training or OER and open pedagogy at City Tech:*

*"Librarian O.E.R. Training Syllabus" by Joanna Thompson and Joshua Peach, New York City College of Technology, is licensed under CC BY-NC 4.0*

## Open Peer Review

Gwozdz, L. (2023, April). [Cultivating Shared Knowledge of OER, by J. Thompson & J. Peach]. *Journal of Open Educational Resources in Higher Education*, 2(1), 266–268.  
doi:10.13001/joerhe.v2i1.7203

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**Reviewer:** Lindsey Gwozdz

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the column in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

Yes, the piece is in scope for a JOERHE Innovative Practices article.

### Organization

*Does the column proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

Yes, the column proceeds logically and adheres to the guidelines.

### Approach and Conclusions

*Inferences from data should be sound--the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the column factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

There were some areas that would benefit from citations to support claims.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

The writing style was one of the strongest parts of this submission.

## Application:

**Does the column contribute knowledge or practical examples that will inform/improve others' practice or education?**

Yes, the column provides a practical example that could inform/improve others' practice or education.

What are the stronger points/qualities of the column?

Sharing their program materials is extremely helpful for others to reference and build upon/customize.

What are the weaker points/qualities of the column? How could they be strengthened?

I think if you're going to include a literature review, it needs to be strengthened. For me it was the weakest part of the column. The title could also be misleading. If you're going to include the word sustainability, I would expect the literature review to cover that topic as well and to make the connection between training everyone/making OER sustainable. I know that YOU know that training everyone makes this work more sustainable, but I don't think you've explained it enough for the reader! :)

I also found myself going back to the goal listed in your abstract: "Our goal for the training was to integrate the philosophy of open educational resources and its approaches into librarians' everyday work," and I kept looking for examples of how this was done. I think including some concrete examples of how your peers executed this assignment would be super helpful for so many in the field to hear about!

## Peer Review Ranking: Scope

***Does the topic discuss an element related to open education, open data, open access, or other open topics?***

Highly Relevant

### Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the column proceed logically?*

Very Clear

### Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

### Peer Review Ranking: Research Assessment

*Are the conclusions sound and factually accurate? Does the column contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

### Overall Evaluation

2- Accept

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# Combining Open Pedagogy and Undergraduate Qualitative Research

## *PhotoVoice as Method Toward Relational Reflexivity*

Karina Lissette Cespedes<sup>1</sup>

James R. Paradiso<sup>2</sup>

Keywords: Open Pedagogy, Pressbooks, PhotoVoice, Cultural Studies, Relational Reflexivity

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### ***Abstract***

Applying open pedagogical principles within the field of cultural and ethnic studies provides students with the opportunity to engage in reflections that capture the complexities of learning in an era of polarization—with national debates emerging on the role of pedagogy and the impact of environmental and public health uncertainty in the aftermath of how COVID-19 transformed the economic, social, and educational landscape. This article considers what it means to teach and to learn during this epoch and assesses how a student-centered framework prioritizing relationality and relational reflexivity can refocus engagement via a dynamic process by which students are simultaneously empowered to learn and contribute to knowledge production.

### **Introduction**

#### ***Higher Education: A Practical Endeavor***

The academy, entrusted with a mandate to meet the needs of current and future generations, looks vastly different than in the past. Today's campuses readily provide educational experiences that foster dialogue between both students well-accustomed to institutions of higher learning and those who may be historically disconnected from the university's larger cultural and educational context. Over the years, the authors, as first-generation educators, have witnessed the rise of the importance of connecting learning to a larger inquiry into how students can fully access skills that enhance cultural literacy and through which to share ideas beyond the confines of assignments and assessments.

As Paolo Freire persuasively demonstrated, cultural literacy aims to engage active learners in reading the world, not just the words, and provide solutions to real-world needs. Freire noted that a fundamental goal of higher education is advanced literacy and that through engaged literacy, students

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doi:10.13001/joerhe.v2i1.7885 [CC-BY 4.0](#)

can transition from passive consumers to producers of knowledge (Freire and Macdeo, 2005). Thus, the goal of higher education becomes to expose both the student and the pedagogue to the skill sets needed beyond rote tasks. Pedagogically, we shift our emphasis based on the spaces in which we teach and frame our respective pedagogical approaches to consider the kinds of learning environments that need to be created for any specific cohort of students.

The potential of an emerging post-COVID-19 educational reordering moves us to address how relational reflexivity (Cespedes et. al., 2021) can impact and encourage students by providing a lens through which to understand the identification of significant research topics—enhancing notions of local and learning communities (as well as the ebb and flow of reciprocity) alongside active learning bolstered by the organizing principle that students bring a wealth of knowledge into the learning environment. This approach is connected to what Gloria Anzaldúa described as *la facultad*, a second sight, “to see in the surface phenomena the meaning of deeper realities, to see the deep structure below the surface” (Anzaldúa, 2007, pp. 60-61). In this article, we suggest students can learn about relational reflexivity through the creation of openly licensed content using digital tools, such as Pressbooks, and methods, such as PhotoVoice.

### ***The Dilemma***

In 2019, the authors met when Jim was assigned to work with Karina as her instructional designer. Each respectively held over a decade of teaching experience within various fields and disciplines at both large and small state institutions (Karina in cultural studies, ethnic studies, women’s studies, Caribbean, Latinx, and African American studies, and Jim in English composition, language acquisition, and online pedagogy). While working with Karina as she underwent the University of Central Florida’s (UCF) online instructor training: IDL6543, Jim inquired about Karina’s digital assignments, and she shared a pedagogical dilemma—she wanted to know how she might design a project-based assignment not dependent on multiple-choice assessments, as the thought of multiple-choice exams was misaligned with her pedagogical and student learning assessment goals. Therefore, she decided to turn her focus to designing an online version of previously successful project-based assignments that she had developed for in-person instruction. During twelve years of teaching, Karina always favored promoting authentically original student assignments, as depersonalized, rote memorization tests seemed less than ideal for promoting student learning and engagement. Thus, as a possible solution to the “assignment/assessment” problem, Jim mentioned using Pressbooks (an online educational tool), explaining that the software had the potential to turn qualitative student projects into published monographs that would remain with students well beyond the confines of their higher education journey (e.g., professional portfolios, resumes, etc.).

From the onset, our work with Pressbooks facilitated a shared commitment to elevating student voices and enhancing student engagement—with an understanding that by incorporating student projects and student writing (from the greatest to the least inspired), the benefits of reflexive learning outweighed the immediate gratification of rote testing. Moreover, after teaching across multiple institutions and modalities, we found that student reflections best capture the complexities of learning in an era of polarization—with national debates emerging on the role of pedagogy and as the impact of

environmental and public health uncertainty in the aftermath of how COVID-19 transformed the economic, social, and educational landscape.

While the tools by which to execute dynamic open assignments are critical (e.g., Pressbooks), this work also needed to be grounded in a meaningful methodological framework. One particular ‘assignment framework’ that has facilitated open pedagogical practices is incorporating PhotoVoice projects (as an introduction to community-based participation) into the academic course flow. Therefore, to build skill sets within qualitative research that would also empower students to engage with their communities meaningfully, the PhotoVoice research method was applied to the assignment structure. PhotoVoice is a qualitative research method that has been woven into several fields and academic disciplines for its versatility and engagement with the community (Dmello & Kras, 2021; Jehangir et al., 2022). This method was developed by Caroline Wang and Mary Burris with the aim of combining Paolo Freire’s notion of “advanced literacy” with an emphasis on the importance of voice, photography, and documenting community engagement, interests, and needs (Wang and Burris, 1997). In Karina’s courses, students are introduced to PhotoVoice, and the various components of this research method are separated into steps for students to follow as they identify how to 1) interact with a potential participant and 2) understand ethical research practices when engaging in qualitative research that collects non-numerical data to assess and understand topics, concepts, perspectives, and experiences.

## Enhancing Student Engagement Through Relational Reflexivity

Relational reflexivity, as an educational philosophy, deems learning as a product of a robust society. Relational reflexivity is a method of learning in which we invite learners into a dialogic relationship with content material offered within the course. Learning as relational reflexivity means that conceiving something requires understanding its essential elements and locating it in its place and time. Being reflective in learning aims to link what has been learned with how it was learned and determine whether an application can be developed to address newly discovered topics. It reinforces learning as relational and reciprocal—providing connectedness and a sense of place. It gauges student understanding of concepts via how those concepts encourage engagement, and the depth of this understanding can be accessed via the teaching of a qualitative method through which both ‘mastery of content’ and ‘mastery of analysis’ can be determined by the end-product or project. Ultimately, students aim to master “...the relationship between our knowledge and our practice: how we engage, critique and test ideas and theories in practice, and upon what basis we make judgments” (Dyke, 2015, p. 549). A relational approach enables engaging with environmental science topics covered across disciplines via the qualitative analysis of personal experience: 1) doing science, 2) gauging public perspective, and 3) testing existing scientific ideas in practice. The PhotoVoice project on wastewater in Brazil entitled, [Sewage: A Problem of a Developing Country](#), for example, accomplishes these three components and can be replicated across various disciplines.

## Elevating Student Voice Through PhotoVoice Projects in Pressbooks

PhotoVoice is often utilized by social science researchers interested in assessing what is significant to a community. Participants receive an open-ended question from the researcher, allowing the participant to provide images and statements which capture their lived experiences. Once materials from the participant(s) are received, the researcher and participant craft an analysis of the materials provided with the goal of creating an end-product. The end-product brings to light important experiences of the participant and explores the interconnectedness of larger social, scientific, or environmental topics and the experiences of communities. PhotoVoice, as a research method, establishes collaboration between researcher and participant. Faculty within and outside of the social sciences and humanities may find that incorporating PhotoVoice within their courses can assist students in making more extensive connections between key concepts and real-world experiences and applications. The relational reflexivity component of the research method builds a cognitive and social bridge for students to understand better a topic or problem needing a solution.

Pressbooks (put simply) provides a way for students to create renewable artifacts (via project-based learning) and publicly or privately display them as book chapters. This software is extremely versatile and offers a considerable upside for students, as it provides them with the opportunity to share and publish their work in personal and professional settings (if they so choose)—guaranteeing their hard work does not simply get read by the instructor and deposited into a list of projects never to be seen or accessed again outside the confines of the learning management system (LMS). Pressbooks also provides a method of accomplishing an educational context beyond what the renowned Brazilian pedagogue Paulo Freire described as “the banking system of education” (where students passively receive content from their instructors) (Freire and Macdeo, 2005). Instead, it offers a more dynamic learning environment where students actively participate in the creation of new knowledge that can be preserved throughout the life of the course and even integrated into future iterations of the course—as exemplars for the next cohort of students—exercising elements found in the principals of open pedagogy (Baran & AlZoubi, 2020; Seraphin et al., 2019).

Using Pressbooks to help students elevate their work through PhotoVoice provides a useful exemplar for how to teach and to learn “openly” during this unique moment in history and illustrates how a student-centered framework applied through the principles of PhotoVoice allows us to prioritize relationality and relational reflexivity. We focus on reflexivity because it engages a dynamic process by which, as scholars, educators, and learners, we consider pedagogical formation, location, and questions of disidentification within a powerful matrix.

Consider the project mentioned earlier on wastewater in Brazil. During the COVID-19 lockdowns, this student returned to their home country of Brazil and captured the dilemma of sewage and the lived reality of the community in that time and place, which now serves as a first-hand account of their experiences during lockdown. Introducing students to PhotoVoice gives them a solid understanding of how course content can be applied and transformed into self-authored (open) works

that engage deeply with crafting information. And ultimately, students are aware that PhotoVoice is one of many qualitative research methods that bolster the student learning experience, which can be additionally enhanced through open practices.

### ***Pressbooks Open Pedagogy Assignment: From Design to Implementation***

As students embarked on their open research projects Pressbooks, specific guidelines and instructions were provided on creating individual chapters within the platform. It would have been possible to break students into groups to create a chapter, but in order to increase agency and autonomy, the assignment was designed to be completed individually. Education regarding the PhotoVoice research methodology was accomplished through Karina's class lectures and supported by online articles and instructions produced by researchers that masterfully deploy the method. Students also benefited from accessing multiple examples of successful PhotoVoice projects available on the open web as well as those produced by peers who had previously taken Karina's courses. In terms of lessons learned, one valuable takeaway was that supplying videos on how to undertake PhotoVoice research proved extraordinarily helpful to students, and that merely asking students to read about the PhotoVoice research method, or peruse completed projects, was simply not enough for a fully online course environment.

The [Pressbooks Open Pedagogy Assignment Template](#) is an openly-licensed learning module (available in the Canvas Commons) that can be downloaded, edited, and shared per the license terms: [CC BY-NC-SA 4.0.](#)]

## **Discussion**

The introduction of a qualitative research method like PhotoVoice offered students the benefits of enhanced dialogue as well as engaged sociality and conviviality between students as they grew to share their experiences. This assignment also provided students with the added benefit of engaging with the symbiotic process of relational student-centered learning, which sits in direct contrast to multiple-choice exams that tend to make the transmission of a research method or skill set quite difficult to gauge—Yes, multiple-choice may be easier to grade, but it tells very little about what students have learned or how they have applied their learning. How is it, for example, that a cohort of first-year students versus students in their final year organize information and ultimately make meaning of what they encounter? Rote testing may not be a useful method through which to arrive at an answer for this question and may additionally intensify the disconnection between students and the information they encounter in their coursework.

Some pedagogical schools of thought would make a case for reserving research method training for more advanced students. However, Karina has found that if the practical question of “What can be done with all this information?” can be frontloaded via an open pedagogy framework, method, and skillset, then the pitfalls regarding learning outcomes and engagement lessen—particularly for first-generation postsecondary students, like Karina and Jim. The valuable insights pedagogues glean

from qualitative research assignments provide the practitioner with information on where (from the vast sea of content covered online or in-person over the course of a semester) students individually and collectively focused, as well as what they identified as significant in their learning adventure.

When students engage in the act of narration (i.e., the production of knowledge), their learning experience is transformed from passive consumption into active knowledge generation. Thus, once a student-centered learning environment is created, the students can bring all they know and observe about the world to the work they accomplish (via assignments, projects, etc.). Students already hold a wealth of knowledge and are able to activate their autonomy as thinkers when the learning environment is conducive to doing so. Student-centered learning intentionally avoids the regurgitation of content, instead inviting students to share their ideas.

As educators, we engage the pedagogical challenges from our respective vantage points with the understanding that students are situated to learn along a continuum. We turn then to problem-posing education, which allows students to become actors in learning and overcome a residual sense of limitations with the aim that students will see themselves as knowledge producers within a dynamic community. Pressbooks is an exceptional platform for this type of work as it almost naturally establishes a dialogical relation between the teacher and student, who become jointly responsible for the final product. Dialogic participation holds a deep purpose in which sharing stories (creating narratives of what we witness) becomes a means to assist others (Kovach, 2010). Dialogue based on open pedagogical principles allows for thinking exercises that prod problem assessment and solving—promoting active reciprocal acts of teaching and learning. Hence, education can be viewed as the practice of communal engagement: the act of becoming aware of topics and matters deserving of attention, as exemplified in a collection of student stories from Karina’s courses in [\*From the Bottom Up: Student voices on intersections of environment and community\*](#).

## Conclusion

The promise of openly shared, student-generated knowledge resides in its potential to foster relational reflexivity and address complex questions as a community while acknowledging the significance of each student’s unique contributions to a larger conversation. Moreover, providing students with the opportunities to practice the art of transforming their curiosity into a research question while applying an appropriate method (i.e., a framework through which to address their curiosity) develops critical, transferable skills to their personal, academic, and professional lives. Through these open pedagogy projects, students bring their unique questions, personalities, writing styles, and impressive imaginations to edify those with whom they engage now and in the future.

## **Acknowledgements**

Karina would like to thank her dear friend Olokun for their intellectual inspiration. Many thanks to students whose work is featured in this publication, and to Santiago Cortes Cespedes for being a daily reminder of why relational reflexivity within pedagogy is essential. Thank you Roe Bubar and Jera King for sharing a treasure trove of pedagogical stories, and Libby for the years of unwavering support.

James would like to thank his lovely spouse Priscilla and two beautiful children—Alec and Ana Laura—whose unwavering love, support, and understanding motivate him to be the best version of himself, personally and professionally. I love you all very much!

The authors would also like to thank the University of Central Florida's Center for Distributed Learning for continuing to support the work of open education across academic departments, particularly in those that leverage digital learning modalities to enhance student success.

## **Conflict of Interest Statement**

The authors have no conflict of interest to state.

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## Open Peer Review

Vieger, R. (2023, April). [Combining Open Pedagogy and Undergraduate Qualitative Research, by K. Lissette Cespedes & J. Paradiso]. *Journal of Open Educational Resources in Higher Education*, 2(1), 277–280. doi:10.13001/joerhe.v2i1.7885

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**Reviewer:** Rayne Vieger

**Recommendation:** Revisions Required

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### Scope, Objectives, Content

*Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?*

The topic discussed is open pedagogy and open educational practices, so it is within scope, and it's an important one. Many faculty are seeking better, more authentic, and more participatory ways to engage and assess students, so the topic and article is of direct use to them. It also begins to discuss a partnership between an instructional designer and a faculty member on an open pedagogy project, so this could be of interest to librarians and instructional designers seeking to partner together on related work.

### Organization

*Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?*

It follows the specified template for Innovative Practices, including structure and sections. The only section that felt like it could be possibly be placed later was the "PhotoVoice as Research Framework and Learning Tool," as this has some discussion of outcome/results, so it could be placed later. One thing I wondered is if the article would benefit from a more chronological format from project initiation, to process, to outcome, but this is just one possible approach.

### Methodology, Approach, Conclusions

*The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound--the author should not reach unsupported conclusions. Not all*

*papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?*

The paper is rooted in theory and analysis, but I did wonder if there were certain descriptions that could be expanded for those unfamiliar. For example, I was not familiar with PhotoVoice, and had to read up on that before proceeding through the paper. I wonder if even just a couple of sentences could be added about that qualitative research approach, and why a faculty member may consider it beyond the disciplines that typically use it. A definition of relational reflexivity with a reference would benefit the article. The "PhotoVoice as Research Framework and Learning Tool" explains some outcomes and conclusions early on in the article, but I wondered if there could be more added about student perception, impact or efficacy of the approach.

## Writing Style, References

*Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.*

I found the article easy to read overall. I think the only thing I'd suggest is strengthening the transition/connections between sections so that it doesn't feel disjointed, in particular the Higher Ed section transition to Pressbooks section. The citation for Hill-Collins, 2000 is missing in the References list, and the Dyke, M., 2015 citation is not in any parenthetical citation in the article.

## Application:

**Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?**

As mentioned, I wondered if more could be added on the process of the project. I do appreciate that it links out to examples and templates, but explaining practically how this was implemented, especially in an online environment, and especially in a high-enrollment course would be of use, since that is mentioned as part of the course design context early on. I often hear from faculty that they want to engage students in more authentic assessment and use open pedagogy, but the course enrollment is a barrier. Hearing strategies from the author about how to make this sustainable in a 300 person class seems really important here. For example, did students each individually contribute a chapter? Did they work in groups? Did the faculty member act as moderator/editor? What training did they require to get onboarded to the project? Lessons learned? As part of this, I also wondered how the instructional designer supported the project practically, which could be of interest to IDs and librarians interested in this work, but this may not be the author's focus.

What are the stronger points/qualities of the article?

The author clearly has a lot of experience and expertise with the PhotoVoice framework, and seeing the examples of student work is particularly helpful, as are the templates. The article is well researched and reads well.

What are the weaker points/qualities of the article? How could they be strengthened?

Adding more discussion on the process to help guide others beyond the examples and templates would be really useful, so other faculty members can learn more about how they can practically implement something similar. If relevant for this project, more discussion about the role of the instructional designer in the partnership would be useful for other faculty support professionals seeking to partner on open pedagogy projects.

Peer Review Ranking: Scope

*Does the topic discuss an element related to open education, open data, open access, or other open topics?*

Relevant

Peer Review Ranking: Clarity

*Clarity of expression and flow? Does the article proceed logically?*

Clear

Peer Review Ranking: Contribution

*Contribution to Higher Education research and/or practice*

Contributes

Peer Review Ranking: Research Assessment

*Are the conclusions sound and factually accurate? Does the column contribute knowledge or practical examples that will inform/improve others' practice or education?*

Sound

Overall Evaluation

2- Accept

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# OER Review: *OER Matters: A Guide to First Year Success*

Leslie Drost<sup>1</sup>

Keywords: Open Educational Resources, Scholarly Communications, Academic Publishing, Open Access

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Falik, A., Larue, D., Piano, D., Watts, T. & White, J. (2023). Rhetoric matters: A guide to success in first year writing.

<https://www.oercommons.org/courses/rhetoric-matters-a-guide-to-success-in-the-first-year-writing-class>

## Review

New students in higher education may come to their university with the expectation that they are already trained to write academically. Their instructors may also have this expectation, but that is often not the case. The authors of Rhetoric Matters have put together a comprehensive textbook for these students which encompasses the entire research and scholarship process, from reading effectively to sources and research to accurately using multiple citations styles. This textbook is published by the OER Commons, a digital public library and collaboration platform. OER Commons offers “a comprehensive infrastructure for curriculum experts and instructors at all levels to identify high-quality” open educational resources “and collaborate around their adaptation, evaluation, and use to address the needs of teachers and learners” (OER Commons, (n.d)). This book is licensed under Creative Commons as CC-BY-NC-SA 4.0, which means that anyone can copy and redistribute it in any medium or format, including remixing, transforming, and building upon the material with the same license as the original. The materials must be given appropriate credit and may not be used for commercial purposes.

First year writing instructors would benefit from assigning this book as a primary or supplementary resource for their novice students. The depth, breadth, and granularity of this source allows instructors to choose subsections to pinpoint their students’ weaknesses. Instructors in other subjects can also make use of this text for their students who need some extra help in writing for scholarship. The authors have structured the textbook into twelve helpful chapters.

Throughout the book, the authors include practice exercises, scenarios, outside readings, videos, and samples so that students can absorb the information in multiple modalities. After the introduction chapter, the authors discuss why reading is essential to the writing process and how students can read

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doi: 10.13001/joerhe.v2i1.7995 [CC-BY 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/)

more effectively. Next, the authors challenge readers to think and analyze rhetorically, starting with a definition of rhetoric in context and how to perform a rhetorical analysis. The authors extend these ideas with a discussion of the three rhetorical appeals: logos, pathos, and ethos. The section on logical fallacies shows how arguments can be weak and unsound by using these appeals.

The next chapter includes instructions on writing a summary and synthesizing information. Students can use these skills when preparing a quote for paraphrasing in a citation, bringing together multiple ideas. After covering summaries, including organization, introductions, body, and conclusion, the authors branch out to synthesizing in writing (types of synthesis, and synthesis in literature reviews).

Chapter Five contains tips on the writing process. This chapter has the most sections at thirteen and includes a diagram with each step of the process clarified in text. The next section is writing for your audience, which is followed by a section about understanding the assignment. Creating the thesis comes next, with samples to draw from throughout the chapter. The two following sections help students connect their thesis with their argument and their purpose with their claims. The former includes diagrams of the writing process as well as samples of good connections, bad connections, and the different types of connections. This section also includes additional resources such as writing centers at the University of North Carolina at Chapel Hill, Hamilton College, and Purdue University. Practice exercises include building a thesis from fact to implication and beyond the specific argument. The latter section includes samples of different types of arguments and additional practice exercises.

Definition and evaluation arguments and causal and proposal arguments are included in the next two sections. The benefits and strategies for shaping a definition (with sample strategies) are included in this section, too. Additionally, the authors include the steps to create an outline of an evaluation argument and exercises that allow students to practice. Causal and proposal arguments are covered in the next section and include identifying possible causes, causation versus correlation, and common elements and methods. The argumentative reasoning section discusses the weight of different reasons for arguments. The authors discuss evidence in the following two sections: “Supporting Evidence” includes types of support, context, and strong and weak support, and “Explaining Evidence” contains forms of explanation. The ways that writers fail to support their theses are examined in the next section, and the final section includes counterarguments, why and how a writer would use them, and where to find them.

Chapter Six examines the structure of a paper, from topic sentences to transitions to voice. The first section gives an overview of the basic structure of an essay, and the development of the body is examined in the next section. Creating effective topic sentences is covered next. Using paragraphs to enhance the flow within a student’s paper is subsequently examined, followed by how and why to use transitions, with examples and practice exercises. The next section examines introductions and conclusions (what to use, what to avoid, and how to make both effective). This section also contains examples, additional resources and a practice exercise. The authors then discuss tone and point of view and include a link to the Purdue OWL website for sentence variety strategies. The last two sections of Chapter Six examine the standard essay and how to move beyond it. Examples in the final section show multiple formats and techniques that a writer could use to organize their writing with non-standard organization.

Revising and refining a draft paper is covered in Chapter Seven. The first section of the chapter offers questions that the writer should ask themselves about their paper to ascertain its strengths and weaknesses. Peer review is covered after that, with questions that the reviewer may use to assess the work. Strategies for editing one's own paper are reviewed next, and this section includes multiple strategies for the writer to see their own paper in different ways. Precision and clarity in writing is examined in the following section with examples of imprecision and obscurity which can help the reader see the contrast between good and bad writing. The authors include exercises to help students practice transitioning from obscurity to clarity in their own work. The final section reviews grammar, including multiple links to extended versions of the current text.

Chapter Eight, "Multimodal Reading and Visual Rhetoric," covers non-standard types of media and how to handle them. The first section in this chapter covers both traditional and new media. Then, the authors discuss multimodal resources that can include elements such as infographics, blogs, videos, posters, images, graphs, audio, or texts and how to use them. Accessibility for these resources is also addressed. The final section, "Visual Rhetoric," or how images and symbols can communicate specific concepts, provides examples and outside links to illustrate the concept, in addition to practice exercises.

The next chapter guides the reader through the research process, starting with the research question. This section helps the reader choose a topic and translate the topic into a question by providing research strategies that help the reader create a plan to answer their research question. This section offers questions the writer can ask themselves about their topic to consider where to get the answers. Research using academic databases comes next, with tips about using databases effectively. The authors provide an overview of using effective keywords in the next section. The final section recommends ways to organize citations for a reference page.

"Sources and Research" are the topics for the next chapter. The first section examines primary, secondary, and tertiary sources, their differences and their uses. Popular sources are considered in the next section, including a definition of what makes a popular source; authority, accuracy, currency, and relevance are also considered for these sources. Academic sources are reviewed in the next two sections. What makes an academic source, and the evaluation of these sources, is explored in the first of the two sections. The second section lays out what an academic source will look like and what each section should contain. The last section gives an overview of how to conduct primary research with examples of qualitative and quantitative research.

Chapter 11 explores source integration and in-text citations. The first section discusses using sources ethically without skewing them for a student's own purpose. Quoting, paraphrasing, and summarizing are reviewed in the next two sections. The first of these two sections contains when to directly quote, how to do so, and doing so smoothly. Templates for adding quotes into a paper are noted. The second of these two sections cover paraphrasing and summarizing citations and how to tell the difference between the two. Next, the use of signal phrases, to help blend quotes into a paper, is explored. Finally, plagiarism is examined, with multiple outside links for further information.

The final chapter covers MLA and APA styles, including formatting, in-text citations, and works cited for both styles. Examples, exercises, or both for each category are provided, including outside sources.

This OER is a broad, all-inclusive resource for instructors of first year writing classes though the quality of the chapters varies throughout the resource. While most of the chapters are comprehensive, some chapters indicate methods of writing without much detail or use of samples to show preferred outcomes. Several chapters contain notes for graphics that are not present. The chapters are uneven regarding the number of supplementary and practice materials, samples, and other media.

Despite the listed deficits, this OER is a comprehensive resource for instructors of first year writing classes. Instructors can select chapters or sections to bolster their students' skills during their first year of academic writing. The book provides granular information for students attempting to write academically. Each chapter section offers one element of the main subject, allowing readers to digest the full idea incrementally. This resource can be used as a supplement to any general education class for students new to college writing.

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ISKME. (n.d.). OER about. OER Commons. <https://oercommons.org/about>



## JOERHE OER Textbook Rubric<sup>1</sup>

Title of OER material: Rhetoric matters: A guide to success in first year writing.

Author of content: Falik, A., Larue, D., Piano, D., Watts, T. & White, J.

URL to OER content:

<https://www.oercommons.org/courses/rhetoric-matters-a-guide-to-success-in-the-first-year-writing-class>

Criterion	Strong	Limited	Weak	Not Applicable
Resource meets the 5 Rs of OER.	X			
Content is useful, thoroughly explained, and easily understood.	X			
Content is appropriate for the learning level of the intended audience and suggests ways to use the material with diverse learners.		X		

<sup>1</sup> This work, *JOERHE OER Review Rubric*, is a derivative of "[Affordable Learning Georgia Quality Standards for Open Educational Resources](#)" by the University System of Georgia, used under a [Creative Commons Attribution 4.0 International license](#). This version has been adapted by Chelsee Dickson (2023). This work is licensed under a [Creative Commons Attribution 4.0 International license](#).

All components and elements are present and well developed (i.e., directions for course activities are included and clear).	X			
Resource includes valuable instructional exercises to assist in deeper learning, engagement, practice of knowledge, and/or mastery of skills.	X			
Resource is functional, well designed, operates as intended, and is easy to use by both instructor and student.	X			
Content is presented with no or minimal bias or slant.	X			
Content is up-to-date and appropriately current.	X			
Resource and its content comply with ADA accessibility standards.		X		
Resource reflects diversity and inclusion regarding culture, gender, ethnicity, national origin, age, disability, sexual orientation, education, or religion.			X	