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# Adopting OER Course Materials: Instructor Experiences

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# Adopting OER Course Materials: Instructor Experiences

by

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## ABSTRACT

Traditional commercial textbooks used in postsecondary courses are often problematic due to their rigidity, tendency to mirror the dominant culture, and the substantial cost imposed upon students (Junkala et al., 2022; Lambert & Funk, 2022; Wu, 2022). Although replacing these texts with open educational resources (OER) can facilitate more equitable and inclusive pedagogical practices while removing a significant expense, there has been insufficient research surrounding instructors' experience of transitioning from a commercial textbook to OER course materials (Bagar-Fraley, 2022; Werth & Williams, 2022). Through semi-structured interviews with nine postsecondary instructors who teach with OER course materials, this basic qualitative study explores the experience of that transition. The findings indicate that adopting OER is a challenging and complex endeavor, and that the advantages associated with OER extend far beyond the cost savings for students. Transitioning from commercial textbooks to OER can improve student retention and ensure more equitable access to course materials. Teaching with OER materials can facilitate instructors' efforts to engage their students in transformative learning experiences through incorporating multiple perspectives, teaching more inclusively, and enhancing student engagement. Notably, when institutions support engagement in OER work, faculty outcomes can include improvement in job performance, job satisfaction, and retention. Thus, the results of this study have significant implications for faculty who are using or considering OER, as well as for institutional leaders and decision-makers who may shape support for OER initiatives.

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# CHAPTER ONE

As each new semester slides into view on the horizon, instructors and professors at colleges and universities around the world begin preparing for their upcoming courses. Learning objectives are articulated, syllabi are set up, grading policies are polished, and of course, textbooks are selected. Textbooks often drive curricula, and comprehensive texts may include homework exercises, quiz and test banks, and even lesson plans. Students frequently pay for online access codes that give them a digital version of their textbook, as well as practice exercises that provide immediate feedback (Hughes & Taylor, 2022; Marshall, 2018; Skinner & Howes, 2013). These useful features can come at a steep cost, and not only because of the hefty price tags.

Postsecondary institutions have an obligation to prepare students for life beyond the classroom, which requires engaging students in transformative learning experiences (Erzen et al., 2017). However, the lack of equity and inclusion in the traditional commercial textbook model can impede instructors' efforts to engage their students in transformative learning experiences. Commercial textbooks often fail to adequately reflect diverse perspectives, which can perpetuate power inequities and further minoritize underrepresented groups (Herman, 2007). Course materials featuring limited representation can negatively affect the learning experience of all students, and they can be particularly exclusionary for students whose identities do not match those of the dominant culture (Liddicoat, 2009; Paiz, 2015).

Recognizing the potential pitfalls of commercial textbooks, many college and university instructors are turning to open educational resources (OER) as a possible

solution (Bagar-Fraley, 2022; Hughes & Taylor, 2022; Leonard, 2022; McBride & Abramovich, 2022; Wu, 2022). These materials are usually free; their adoption is often encouraged and even financially supported by institutions; and there is substantial recent literature touting the potential to improve equity and inclusion through teaching with OER (Bagar-Fraley, 2022; Panke & Oeeshi, 2023; Pitt et al., 2020; Werth & Williams, 2022). When instructors adopt OER materials, they often also change the way they teach (Atkinson & Corbitt, 2022; Cox et al., 2022; Hilton, 2021). Literature on OER and open pedagogy has rarely cited transformative learning, more commonly focusing on equity and inclusion. However, researchers and practitioners have often described key components of transformative learning in the context of teaching with OER: multiple perspectives, inclusive teaching, and student engagement. Because teaching with OER can facilitate transformative learning, transitioning from commercial textbooks to OER can improve the capacity for institutions to provide the essential postsecondary educational experience of a change in learners' worldview (Anand et al., 2020; Mezirow, 1978, 2003b; Taylor & Cranton, 2012).

There has been a lack of research surrounding the actual experience of transitioning from a traditional commercial textbook to OER course materials, and uncertainty surrounding the process of OER adoption is likely one reason that OER adoption rates have remained relatively low (Bagar-Fraley, 2022; Hughes & Taylor, 2022). This study contributes to addressing this gap in the literature so that faculty and institutional decision-makers can design and implement more effective OER initiatives.

## Background of the Problem

While there may not be universal agreement about the purpose of higher education, it is reasonable to hope that graduates possess the knowledge, skill, and disposition required to function relatively well in the world beyond academia. As described by Southworth (2022), "learning is more than the accumulation of knowledge. It has the potential to transform, to fundamentally change who we are and how we engage with the world" (p. 52). Although commercial textbooks can contain an excellent breadth and depth of content, they may ignore or even hinder other important facets of adult student development (Baros, 2021; Herman, 2007; Lee, 2017). OER materials can provide a way to deliver the expected high-quality content while better facilitating transformative learning experiences through incorporating multiple perspectives, inclusive teaching, and student engagement (Bagar-Fraley, 2022; Panke & Oeeshi, 2023; Pitt et al., 2020; Werth & Williams, 2022). In sum, OER can facilitate transformative learning experiences, and this matters because transformative learning experiences are critical to effective postsecondary education.

### Imperatives of Higher Education

From individual learners and employers to society itself, there are many stakeholders with differing demands and expectations concerning colleges and universities (Marshall, 2018). Postsecondary education may have many functions, but my focus in this section is those obligations which might be relevant to the use of traditional commercial textbooks versus OER materials. First, colleges have a responsibility to control costs to students (Hilton, 2021), and to meet students' access needs regarding

course materials (Leonard, 2022). This obligation is often unfulfilled; colleges often require students to purchase textbooks that neither the students nor the instructors rely on for the course learning objectives (Wu, 2022), and textbook costs impact students' ability to remain enrolled and complete their degrees. (Bagar-Fraley, 2022; Hughes & Taylor, 2022; Leonard, 2022; Skinner & Howes, 2013; Wu, 2022). Where there are opportunities to reduce expenses for students, colleges should do so (Hilton, 2021; Hilton et al., 2016).

Another essential responsibility of postsecondary institutions is to provide an environment in which students can succeed (Bensimon, 2007). Harrison-Bernard et al. (2020) declared that "academic institutions of higher learning have a responsibility to educate and promote behaviors that are conducive to a positive inclusive educational environment" (p. 286). Textbooks are a central element of the educational environment, so it follows that institutions of higher learning have a responsibility to use inclusive course materials. However, this responsibility is not consistently met. Herman (2007) found that college textbooks often lend an authoritative voice to stereotypes, racism, and factually inaccurate "histories," and Junkala et al. (2022) observed that biology textbooks sometimes presented non-dominant identities as unnatural, or as deviations from the norm. It is especially important for students from underserved populations to perceive that their voice and experience has value in the academic setting (Bakermans et al., 2022; Munoz & Rendon, 2011; Pearce et al., 2022). Students who find their identities marginalized, ignored, or misrepresented in course materials are likely to become less engaged in the courses themselves (Bossu et al., 2019).

Many postsecondary institutions acknowledge their responsibility to equity and inclusion. This is evidenced by the implementation of a variety of campus initiatives and services committed to diversity, equity, and inclusion (DEI). For the purposes of this dissertation, equity can be considered as "the dedication of resources and intentions to address … structural inequalities of the past and or present, and to break the repetitive cycle of injustice" (Bossu et al., 2019, p. 2). It is working toward an educational experience in which outcomes are not determined by a student's race, gender, or income, for example. Inclusion involves responding to diversity in a way that demonstrates appreciation for the value of differences, identifying and removing barriers, and "should involve particular emphasis on those groups of learners who may be at risk of marginalisation, exclusion or underachievement" (Bossu et al., 2019, p. 2). DEI initiatives are the concrete actionable steps that go beyond a mission statement. For example, there may be learning communities or other extracurricular activities targeted at groups of students who share an identity that does not match the dominant culture (Hartwell et al., 2017; Snapp et al., 2015). There are likely to be anti-harassment policies, as well as designated offices for minoritized groups on campus (Patton et al., 2019; Snapp et al., 2015). Institutions may establish senior-level administrative positions for diversity officers and civic outreach specialists (Hurtado, 2007). Universities and colleges also sometimes offer additional academic programs, such as a Black Studies major (Patton et al., 2019). Finally, DEI efforts may also include teacher support such as professional development opportunities and professional communities of practice (Snapp et al., 2015).

Given the substantial literature in support of teaching practices that challenge the status quo of the dominant culture, one might be surprised to find that the DEI-related programs and initiatives being implemented today are "in response to the same needs expressed by students over the last 50 years" (Patton et al., 2019, p. 192). I do not intend to blur any distinction between DEI and transformative pedagogy, but the two concepts are linked. Transformative pedagogy can support DEI objectives, and improvements in DEI can facilitate transformative learning experiences. Likewise, obstacles to DEI-related pedagogical innovation can also represent obstacles to implementing transformative pedagogy. There are many such obstacles in higher education. Individual instructors' willingness to adopt transformative pedagogical practices is not sufficient to ensure implementation; they often encounter resistance, constraints, and even insurmountable obstacles. Support from professional community is essential for instructors seeking to cultivate positive change (Daly et al., 2022; McBride & Abramovich, 2022; Tualaulelei & Green, 2022; Tur et al., 2020). Transformative pedagogy cannot be effective if instructors are unable to use it.

In cases where an organization does encourage innovation and transformative learning, and there is also an instructor willing to lead that change, there is still no guarantee of success. Well-meaning instructors and organizations can still impede transformative learning (Moreu et al., 2021; Souza, 2020; Williams et al., 2019). For example, not all faculty are equally well prepared to engage students in critically reflective experiences such as examining existing power inequities (Lambert & Funk, 2022). Instructors may feel committed to inclusive teaching but hesitate to embrace

curricular innovation due to perceived lack of expertise and a need for more comprehensive training, support, and resources (Baggett, 2020; Baros, 2021; Daly et al., 2022).

The imperatives of postsecondary education extend from campus initiatives into the classroom; teaching approaches can have a profound impact on how students engage with the world beyond their college experience. As described by McGee and Banks (1995), "pedagogies that merely prepare students to fit into society and to experience social class mobility within existing structures—which are characterized by ... racial, ethnic, and gender stratification—are not helpful in building a democratic and just society" (p. 152). Erzen et al. (2017) similarly explained that postsecondary education must develop students' "creativity, critical inquiry, and independent thought" (Erzen p. 2). In other words, college graduates should be prepared to think for themselves and challenge existing structures. This kind of reflection on one's own assumptions, beliefs, and worldview is a central characteristic of transformative learning, and as described, transformative learning can be facilitated through teaching with OER.

**Open Pedagogy and Open Educational Resources**

This study is centered around the adoption of OER materials, and the concept of open pedagogy is an important element of this discussion. OER refers to educational materials, whereas open pedagogy describes an approach to teaching and learning that shares many characteristics of transformative pedagogy.

OER materials can share many characteristics with traditional commercial textbooks, but they always differ in their accessibility. Generally, OER are available to be

accessed, modified, and redistributed by instructors free of cost (Leonard, 2022). Some OER materials carry licenses that do not allow modifications, but access and use are consistently free (Wiley et al., 2014). There is a wealth of literature touting the benefits of OER use in postsecondary courses. Students are less likely to withdraw from courses that use OER materials (Bagar-Fraley, 2022), and learning outcomes with OER are on par with those achieved in courses that use commercial textbooks (Clinton & Khan, 2019; Hilton et al., 2016). The use of OER increases access to education (Panke & Oeeshi, 2023; Tur et al., 2020; Wu, 2022), and can help reduce the time to degree completion (Bagar-Fraley, 2022). However, the heart of OER is in how it is applied; OER should not simply be a free version of a commercial text, and an instructor who merely trades one for the other "fails to realize the potential of open pedagogy" (Werth & Williams, 2022, p. 13). Katz and Van (2022) cautioned that instructors should receive training surrounding using OER to improve equitable teaching practices. This is where the understanding of open pedagogy enriches the discussion, and where the connection with transformative learning is strongest.

A useful description of open pedagogy has been offered by Werth and Williams (2022), who explained that "the purpose of being open in educational endeavors from the literature could be reasonably distilled to the following six concepts: sharing, transparency, collaborative knowledge construction, deconstructing traditional power dynamics, personalized learning, and learner empowerment" (p. 9). Beyond the items of sharing and transparency, the remaining four concepts align with transformative learning theory.

## Transformative Learning Theory

If a key objective of higher education is teaching adults to think for themselves, then transformative learning theory is the ideal framework for understanding how educators might meet such an objective. Mezirow proposed this theory as a way of conceptualizing the dimension of adult learning that includes recognizing and reassessing one's own assumptions and ways of thinking (Mezirow, 1978, 1997, 2003a, 2003b; Mezirow & Taylor, 2009; Taylor & Cranton, 2012). Since its introduction, transformative learning theory has been evaluated, modified, and at least partially embraced by many academics and practitioners whose research complements the writings of Mezirow in informing this study.

A central tenet of transformative learning is the belief that students develop and revise their understanding of the world based on their experiences. Classrooms can challenge existing cultural norms by creating new ones. Moreu et al. (2021) described that "one of the most effective ways to promote an inclusive climate is to make salient that inclusion is a social norm. People's perceptions of social norms are determined in part by what their peers think and do" (p. 6). If a learning outcome is for students to embrace diversity, then classroom experiences in which students discover value in diversity would be instrumental in building toward that goal. If institutions want students to reflect on their own identity, then they should create opportunities within the classroom for students to do so (Hartwell et al., 2017; Snapp et al., 2015). Students construct knowledge through observing, and so instructors can improve equity and inclusion by creating environments in which students observe the desired behaviors and

attitudes (Bakermans et al., 2022). For example, students can read about activism, and through that experience, they process information and understanding about civic engagement. Instructors can also incorporate multiple perspectives to broaden students' understanding of themselves and their own worldview (Bakermans et al., 2022; Daly et al., 2022). Nevertheless, instructors may find that course materials impede their efforts to embrace a more transformative way of teaching (Calhoun et al., 2021; Coda, 2017; Lambert & Funk, 2022; Liddicoat, 2009; Snapp et al., 2015). Transformative learning requires that instructors implement transformative pedagogies, and traditional commercial textbooks can present an obstacle.

**Traditional Commercial Textbooks**

The literature surrounding commercial textbooks does not often provide a definition of these materials. Authors of articles that make reference to the college textbook perhaps take for granted that their readers share their own conceptualization, but some may be picturing an anachronistic dust-coated tome surpassing 800 translucent pages while others envision a snazzy vacuum-sealed bundle containing exercise manuals, quiz banks, answer keys, and a cardboard insert with a secure access code for a suite of online accessories reflecting the latest advances in the field. Clearly these are not equivalent materials. Both, however, could potentially fall into the definition that applies to this study.

Traditional commercial textbooks refer to those materials that are designed to be used as a learning tool, and which students are instructed to purchase. They are likely designed to include periodic exercises, and structured in such a way that an instructor can

design a course schedule to align with the book (Hughes & Taylor, 2022; Skinner & Howes, 2013). Indeed, many commercial textbooks include sample syllabi in instructor supplementary materials. More recently, it has become common for textbooks to offer online resources such as an electronic version of the text, access to exercises that are graded automatically, and even embedded learning management systems with instructor tools such as gradebooks, discussion boards, and messaging platforms (Hughes & Taylor, 2022). Because their ultimate goal is profit, commercial textbooks tend to offer a broad view of content and limit the inclusion of controversial material so they will appeal to a large audience (Cox et al., 2022). Importantly, commercial textbooks cannot be freely modified nor distributed; their access is restricted, and only the publishing company itself is allowed to create and disseminate new editions (Bagar-Fraley, 2022; Hughes & Taylor, 2022).

Keenly aware of dwindling demand, some large publishing companies are offering comprehensive packages (which they have termed “inclusive packages”) through which a student can access textbooks for multiple courses for a single fee (Leonard, 2022). These companies’ use of the term “inclusive” does not align with the concept of inclusive pedagogy. On the contrary, traditional commercial textbooks are not inclusive; they tend to mirror social inequities granting the dominant culture a position of superiority while implying that difference equates to deviance and deficiency (Baros, 2021; Cahnmann-Taylor & Coda, 2019; Coda, 2017; Lambert & Funk, 2022; Liddicoat, 2009). Traditional college education is teacher-centered (Panke & Oeeshi, 2023); it situates the textbook and the professor as the holders of knowledge, which students can

receive through reading the textbook and attending classes. Despite the teacher-centered nature of the traditional college pedagogical approach, the textbook itself is often the driver of the curriculum (Hughes & Taylor, 2022; Skinner & Howes, 2013); some researchers argue that this means teachers have lost autonomy with their reliance on commercial textbooks (Tollefson & Tsui, 2014). A final key feature of commercial textbooks is that they are prohibitively expensive for many students (Bagar-Fraley, 2022; Hughes & Taylor, 2022; Leonard, 2022; Skinner & Howes, 2013; Wu, 2022). This expense can result in inequitable access as some students do not have the same resources as their peers. In comparison to commercial textbooks, teaching with OER is more equitable and can better facilitate transformative learning. Despite this potential, OER adoption rates remain relatively low (Bagar-Fraley, 2022; Hughes & Taylor, 2022).

## Purpose of the Study

As teaching with OER becomes more popular, more instructors are making this transition, and many institutions are encouraging their faculty to do so (Hilton, 2021; Judith & Bull, 2016; McBride & Abramovich, 2022). Aside from the cost factor, many believe that OER can improve elements of equity and inclusion in university courses (Bagar-Fraley, 2022; Daly et al., 2022; Lambert & Funk, 2022; Tur et al., 2020; Werth & Williams, 2022). However, there is little data available about the transition process. It is not yet fully understood what motivates instructors to change texts, what obstacles are encountered, how and whether they are overcome, and how issues of equity and inclusion are addressed throughout the transition. Therefore, the purpose of this study is to improve understanding about the process of transitioning from a traditional commercial textbook

to OER course materials, as well as how the issues of equity and inclusion are taken into consideration.

## Research Questions and Methodology

This dissertation addresses two principal research questions: 1) What are the experiences of instructors who transition from a traditional commercial textbook to OER course materials? and 2) How are equity and inclusion incorporated into the transition from traditional textbooks to OER? The reason that the second research question asks about equity and inclusion rather than transformative learning comes from the literature. In the literature I reviewed for this study, researchers identified connections between key features of transformative learning (multiple perspectives, inclusive teaching, and student engagement) and OER and open pedagogy, but they did not explicitly link OER and transformative learning theory. Instead, the literature about OER and open pedagogy more frequently centered the terminology "equity and inclusion." Thus, my language choice for the second research question is a way of embracing shared language.

To collect data for this research, I recruited nine instructors who had adopted OER course materials, and then conducted virtual semi-structured interviews to capture their experiences. Through data analysis and interpretation, several key themes emerged addressing the research questions and telling the story of how instructors experienced the transition from traditional commercial textbooks to OER course materials, as well as how equity and inclusion were incorporated. By disseminating the findings of this research, I help address a gap in the literature regarding OER adoption. Specifically, this research contributes to the understanding of instructors' experiences, as well as the connection

between OER use and transformative learning experiences. With this improved awareness, both faculty and administrators may be better equipped to advocate for, design, and implement OER initiatives.

## Educational Significance

Postsecondary education represents a significant cost to students, not only in terms of tuition, fees, and materials, but also in the opportunity cost of taking courses instead of pursuing other work or opportunities (Marshall, 2018). To ensure an adequate return on students' investment, it is the responsibility of postsecondary institutions to adequately prepare students to engage with the world outside of academia, and this preparation requires engaging students in transformative learning experiences. Teaching with OER can facilitate transformative learning, and it has the potential to disrupt "capital-based knowledge systems that prioritize profit over information access and retention" (Werth & Williams, 2022, p. 9). OER can be especially impactful for students from marginalized groups (Panke & Oeeshi, 2023), and it can improve equity in student success. Institutions of higher education have a responsibility to provide equitable access and to eliminate inequities that negatively impact those groups which are statistically most at risk (Bossu et al., 2019, p. 2).

Although many instructors are aware of OER and its potential, the adoption rates remain low, likely due in part to the uncertainty surrounding the process of transitioning to OER (Bagar-Fraley, 2022; Hughes & Taylor, 2022). There has been little research surrounding instructors' experiences of implementation of OER course materials (Lantrip & Ray, 2021; McBride & Abramovich, 2022; Wu, 2022), and this study addresses this

gap in the literature. Many institutions, academic units, and individual instructors are investing substantial time, effort, and money in switching from traditional commercial textbooks to OER. Improved understanding of the experience itself, as well as how OER use can facilitate transformative learning, can help faculty select appropriate materials, manage their overall project with more confidence, and advocate more effectively for needed resources. Chapter Two consists of a review of the available literature related to adopting OER; Chapter Three describes the research study; Chapter Four presents the results of the data analysis; and finally, Chapter Five includes a discussion of the findings, as well as the implications, recommendations for practice, and possible directions for future research.

# CHAPTER TWO

The primary focus of this chapter is a review of the literature relevant to the understanding of the process of adopting OER course materials. However, before delving into the literature, I first describe how the overarching research paradigm of constructivism informed the design of the research study. The literature review then explores the essential theoretical framework of transformative learning, followed by an examination of postsecondary instructors' positions and dispositions in respect to their capacity for change. This provides the structure for understanding the context in which postsecondary instructors engage in curricular innovation. Next, there is a review of available literature about course materials themselves, and then an overview of articles connecting OER and transformative learning. Finally, I describe the limited literature surrounding instructors' experience of transitioning from commercial textbooks to OER texts.

## Research Paradigm: Constructivism

Often a guiding philosophy for qualitative research, constructivism situates data within a social or historical context, and assumes that meaning is complex, subjective, and socially constructed (Creswell & Creswell, J. D., 2018). Learners engage with the world around them, and learning is influenced by cultural and social context; interaction with others is key. Broadly, as proposed and examined by theorists such as Piaget, Vygotsky, and Kolb, constructivism proposes that meaning is created through experience (Zhou & Brown, 2015). Constructivism is particularly well suited to this research study because it is at the core of open pedagogy, which centers collaborative knowledge

construction and learner-center approaches (Werth & Williams, 2022). Crucially, these characteristics have also been described as representative of transformative learning and equity pedagogy (McGee & Banks, 1995; Mezirow, 2003b). In their discussion of transformative learning theory, Schnepfleitner and Ferreira (2021) leaned heavily on constructivist constructs when they explained that "it is only by exposing our ideas or experiences to critical reflection and dialogue and comparing them to the lived experiences of others that we can begin to uncover those biases or reassure ourselves of their objectivity" (p. 45). Constructivism, transformative learning, and open pedagogy share many defining characteristics, including students' active participation in their own learning, as well as the learning of others (Panke & Oeeshi, 2023). It is through these shared characteristics that constructivism informed my approach to this research study and the literature review contained in this chapter.

The constructivist nature of my perspective led me to include an examination of the context within which university and college instructors consider making curricular changes; in this section of the literature review, I situate the target experience within a social context. Additionally, the belief that meaning is subjective and socially constructed informed my selection of transformative learning theory as an overarching framework; transformative learning theory is grounded in learners' experience of reevaluating and reshaping their worldview through discourse with others. Finally, constructivist researchers acknowledge their positionality and its potential effect on their interpretation of participants' views; while others may seek to eliminate subjectivity as much as possible, constructivists include the subjectivity as a factor in the process of interpretating

meaning (Creswell & Creswell, J. D., 2018). This aspect of constructivism aligns with the feminist research approach I applied to this study, in acknowledging inevitable subjectivity, and in seeking to understand how research was affected by my positionality. Chapter Three elaborates further on feminist methodologies.

## Transformative Learning

As early as 1978, Jack Mezirow began sharing his developing theory of transformation describing the importance of critically evaluating one's own positions, and he asserted that this critical assessment could lead to behavior change and a more inclusive perspective (Mezirow, 1978). Transformative learning theory and transformational learning are relevant to the responsibilities of colleges and universities and can guide institutional priorities. Crucially, transformative pedagogy shares many characteristics with open pedagogy, providing a framework for adopting OER as part of a strategy to deliver a curriculum grounded in inclusive teaching, student engagement, and multiple perspectives.

### Transformative Learning Theory

The initial definition of transformative learning theory included three elements of transformation: a learner's meaning perspectives, frames of reference, and habits of mind (Mezirow, 1997, 2003a, 2003b; Mezirow & Taylor, 2009). However, as the theory developed through debate and discussion, it expanded to include various fourth dimensions. Illeris (2014) described this fourth affective and cognitive element as identity; Taylor (1997) emphasized the importance of critical reflection; Schnepfleitner and Ferreira (2021) proposed context as a fourth consideration, and Taylor and Cranton

(2012) identified empathy and change as key components of transformative learning. All iterations have posited that transformative learning describes a profound change in a learner's worldview (Anand et al., 2020; Mezirow, 1978, 2003b; Taylor & Cranton, 2012).

There are multiple theoretical frameworks that share characteristics with transformative learning theory, and the most important to this study is open pedagogy. Broadly defined as teaching and learning practices made possible through the use of open licensing of content (Werth & Williams, 2022), open pedagogy can further be conceptualized as involving these attributes: (a) participatory technologies; (b) people, openness, and trust; (c) innovation and creativity; (d) sharing ideas and resources; (e) connected community; (f) learner generated; (g) reflective practice; and (h) peer review (Hegarty, 2015).

Transformative learning theory also complements critical theory in challenging the status quo; where critical theory raises awareness to inspire action, transformative learning results in a fundamental change in perspective, which in turn influences actions (Wang et al., 2019). Indeed, critical theory is acknowledged as having contributed to Mezirow's development of transformative learning theory (Anand et al., 2020). Transformative theory similarly overlaps with equity pedagogy, which has been defined as "teaching strategies and classroom environments that help students from diverse racial, ethnic, and cultural groups attain the knowledge, skills, and attitudes needed to function effectively within, and help create and perpetuate a just, human and democratic society" (McGee & Banks, 1995, p. 152). Although critical theory, validation theory, and equity

pedagogy are all relevant, transformative learning is less prescriptive, allowing for flexibility in accounting for students' individual background and learning objectives; it does not require that all students embrace an equivalent vision of social justice. Transformative learning theory emerges as the most appropriate framework for this study because it is the least narrow in its definition of what students should experience: a transformation of their worldview (Anand et al., 2020; Mezirow, 1978, 2003b; Taylor & Cranton, 2012).

**Responsibilities of Colleges and Universities**

Mezirow (1997) claimed that an "educator's responsibility is to help learners reach their objectives in such a way that they will function as more autonomous, socially responsible thinkers" (p. 8). Connections between transformative learning theory and the imperatives of postsecondary institutions appeared frequently in the literature. For example, within a close examination of research on how learning occurs in adulthood, Lee (2017) concluded that perceptions, feelings, emotions, attachments, beliefs in self-efficacy, and effort were all essential, and that schools "will be most robust and generative when they take these fundamental underpinnings of human learning and development as starting points" (p. 105). Examining one's perceptions, attachments, and beliefs are part of the element of self-reflection that is central to transformative learning (Illeris, 2014; Taylor & Cranton, 2012; Wang et al., 2021). In additional examples, Bensimon (2007) and Lambert and Funk (2022) described responsibilities that colleges have toward minoritized students. Bensimon advised that colleges that attracted and enrolled students from underserved populations had a responsibility to provide them with

the tools and structures they needed to succeed. Lambert and Funk described that students belonging to oppressed populations were usually put in the position of having to understand their own paradigms in addition to those of the dominant culture. They went on to assert that such cultural translation should work both ways; those belonging to the dominant culture should also work to understand the paradigms of oppressed populations. This speaks to the importance of representing and validating multiple perspectives (Lambert & Funk, 2022), which is another fundamental element of transformative learning (Grabove, 1997; Southworth, 2022; Wang et al., 2019, 2021). As the many examples in this section suggest, one way that colleges and universities can fulfill their responsibilities toward students is with transformative pedagogy.

**Characteristics of Transformative Pedagogy**

There is substantial literature concerned with operationalizing transformative learning theory in adult education contexts. An essential point of clarification is that transformative learning is not based on content (Taylor, 2000); students are not merely learning about others' beliefs, for example, but rather they are presented with circumstances that require them to reflect upon their own worldview (Illeris, 2014; Taylor & Cranton, 2012; Wang et al., 2021). Moreu et al. (2021) cited research demonstrating that "it is necessary to target inclusive behaviors directly rather than trying to change people's biased attitudes with the assumption that such change will translate into a subsequent behavior change" (p. 2). This implies that seminars on understanding racism, for example, may be less effective than implementing actively anti-racist programs. As described by Illeris (2014), the key challenge of transformative learning is

"to find and connect to the psychological or practical, internal or external potentials in the learners' existence, life, and world that are so strong that they can justify the exertion involved in a transformation" (p. 159). Three key components of transformative pedagogy that appear consistently in the literature are multiple perspectives, inclusive teaching, and student engagement.

### *Multiple Perspectives*

For students to be able to reflect on their own assumptions and beliefs, transformative learning often emphasizes exposure to multiple other perspectives (Grabove, 1997; Southworth, 2022; Wang et al., 2019, 2021). As described by Southworth (2022), "before we can effectively consider alternative perspectives, including potentially disconfirming evidence to our own view, we need to first understand the perspectives of others" (p. 50). Taylor (2000) agreed that students needed to be encouraged to explore alternative perspectives. In summary, "the more interpretations or points of view we have to dialectically sift through, the greater the likelihood we will discover a better or more dependable interpretation that can be maintained as a worldview or frame of reference" (Schnepfleitner & Ferreira, 2021, p. 44). Incorporating multiple perspectives refers mainly to bringing external viewpoints into the classroom, such as through assigning articles written by scholars from varied backgrounds. When the ideas, beliefs, and experiences of the students themselves are centered, this falls into the category of inclusive teaching.

### *Inclusive Teaching*

Many researchers have articulated the importance of an inclusive learning environment in fostering transformative learning. For example, Fleming (2022) argued that recognition and support were at the core of transformative learning and asserted that "the human capacity for recognizing and being recognized must be nurtured" (p.576). This refers to students' need to have their own experiences accepted and validated by both their instructor and their peers. Taylor (2000) agreed that students would benefit from the opportunity to share their personal histories with each other, and described the instructor's responsibility to establish a setting in which all participants' experiences are accepted as valid and important. Taylor further explained that for transformative learning to occur, educators must provide "a safe, open, and trusting environment for learning" (p. 9), and instructors should be "trusting, empathetic, and caring (…) as well as authentic and sincere" (p.10). Wang et al. (2021) agreed that a supportive and empathetic instructor was key for transformative learning, and Souza (2020) drew connections to student motivation, stating that students were more motivated to learn when they believed their contributions were considered a valuable part of a community learning process, as well as when they perceived that their instructors cared about their well-being.

The concept of multiple perspectives has already been introduced and described, but inclusive teaching is more than providing multiple viewpoints; Wang et al. (2021) emphasized the role of the instructor in ensuring that one view is not positioned as superior to another, and Mezirow (1997) described the importance of using materials that reflected learners' real lives. Transformative learning positions students as co-creators of

knowledge, and the instructor is a facilitator rather than an authority figure (Mezirow, 1997); this inclusive teaching element underscores the skill and knowledge required of instructors. Taylor (1997) and Schnepfleitner and Ferreira (2021) asserted that instructors needed to possess awareness of social context that might impact learners. Baros (2021) provided an example in the experiences of transgender students in Spanish language courses. In the case of Spanish, the Real Academia Española in Spain is the formal authority on the correctness of various language uses, and their refusal to adopt gender-neutral alternatives can reinforce heteronormativity and lead students to feel othered in their language classes (Baros, 2021). A Spanish instructor, on the other hand, could shift their pedagogical approach to include gender-neutral alternatives regardless of whether those alternatives have been officially accepted. This kind of pedagogy that questions the dominant structures can "allow for proliferating different ways of thinking and being, challenging traditional power/knowledge relations, and fostering a more equitable space for all" (Coda, 2017, p. 86). Lambert and Funk (2022) agreed that the dominant assumptions needed to be challenged, and they stated that collaborative learning experiences were more powerful for marginalized groups. Such collaborative experiences tie into the importance of student engagement in transformative learning.

### *Student Engagement*

The student engagement facet of transformative learning encompasses the participation of students, their interaction with others, and their active engagement in critical self-reflection. Transformative learning experiences should be "learner-centered, participative, interactive or constructivist in nature" (Schnepfleitner & Ferreira, 2021, p.

45). Mezirow (1997) and Taylor (2000) likewise emphasized the importance of student autonomy and a learner-centered approach. In this section, there is an overview of the student engagement aspect of transformative learning, as well as an exploration of critical perspectives toward engagement.

**Features of Student Engagement.** A key feature of transformative learning is discourse, which involves conversation whose purpose is to improve understanding of others' perspectives and of one's own perspectives (Mezirow, 2003b). Mezirow (1997) stated that learners needed to be given the opportunity to collaborate with each other, working together to understand issues and solve problems. When students engage with each other to work toward solutions, co-create meaning, and arrive at conclusions collaboratively, this supports the potential for transformative learning to occur (Anand et al., 2020; Fleming, 2022; Southworth, 2022). Transformative learning can be especially meaningful for students from minoritized backgrounds. In one study, Bakermans et al. (2022) found that women of color were the students who reported the greatest benefit from learning experiences in which students co-created knowledge. Lambert and Funk (2022) similarly asserted that the benefits of collaborative learning experiences could be greater for students from minoritized and underrepresented groups. It is outside the scope of this study to explore any correlation between students' identities and the impact of transformative learning; however, these observations by Bakermans et al. and Lambert and Funk are useful in affirming that the benefits of transformative learning do not apply only to those students who belong to the dominant culture.

A final aspect of student engagement that is central to transformative learning is critical self-reflection (Grabove, 1997; Schnepfleitner & Ferreira, 2021, 2021; Taylor, 2000; Wang et al., 2019). Without actively engaging in critical reflection, students may fail to recognize "disorienting dilemmas" in which their preexisting frames of reference or habits of mind are challenged (Mezirow, 1997). This requires that instructors dedicate time and space for students to reflect, and because of the disorienting nature of this experience, instructors also need to be skilled in allowing students autonomy while also supporting their learning process (Southworth, 2022). Without allowing students sufficient autonomy, instructors may inhibit their students' opportunity for critical self-reflection.

**Cautionary Considerations of Student Engagement.** While it is generally accepted that student engagement is positively correlated with student success, the literature also revealed potential dangers relating to student engagement. This portion of the literature highlights an essential consideration: the tenets of transformational learning can be misapplied in such a way that marginalization and silencing are perpetuated rather than corrected (Wang et al., 2019). Bensimon (2007) observed that "racialized practices and the unconscious dynamics of White privilege play an important role in who has access to forms of engagement that have greater exchange value" (p. 452). In other words, Bensimon believed that students from underrepresented groups were less likely to take advantage of opportunities to engage during their classes than students belonging to the dominant culture. The possible reasons cited ranged from internal beliefs that one's contributions were not welcome or valued to external racialized structures that

predictably excluded students of color from opportunities such as internships and study abroad (Bensimon, 2007). These observations stress the importance of instructors' creation of a learning environment in which all students perceive that their voices and experiences are valued. Inclusive teaching can mitigate some of the risks associated with student engagement.

Another caution surrounds the foundation of transformative learning itself. Engaging students in confronting their beliefs, assumptions, and existing power structures is not guaranteed to result in positive outcomes. Williams et al. (2019) described that "when civil discourse is simultaneously called for and neglected by White bodies in power, the constant interaction with racism can take an enhanced toll on Black and Brown social media users, resulting in racial battle fatigue" (p. 2). Although their research was focused on the impact of social media, this statement highlights an important consideration for instructors who might seek to raise critical issues. Well-meaning teachers can inadvertently re-create this situation in a classroom context if they engage their students in discourse but do not lead them to follow up with changes in actions (Williams et al., 2019). In addition, sometimes engaging students in these conversations is asking them to take the risk of being misunderstood, ridiculed, or rejected by their peers (Souza, 2020). Souza (2020) advised that educators keep in mind that the students most likely to feel comfortable sharing their opinions on controversial subjects are those belonging to the dominant culture. Verduzco similarly warned instructors against leaning on marginalized students to educate their white peers through publicly sharing their own deeply personal experiences of oppression (Verduzco-Baker,

2018). Underscoring the importance of adequate professional development and training for practitioners, these cautions apply to both transformative learning and open pedagogy.

**Connections between Transformative Learning and Open Pedagogy**

As described, there are many natural connections between transformative learning and open pedagogy, both of which stress accessible and learner-driven approaches to teaching (Werth & Williams, 2022). Panke and Oeeshi (2023) described the potential of open pedagogy to be transformative, and Werth and Williams (2022) implicitly tied open pedagogy to transformative learning, albeit without naming the latter. They asserted that open pedagogy—which features diverse representation, community, and collaboration—had the potential to facilitate spaces in which "traditional power structures are disrupted and voices which are frequently marginalized by the very structure of academia are heard" (p. 33).

Several OER initiatives have identified learning objectives and outcomes that align with transformative learning such as inclusion, student voice, and collaborative learning environments. For example, Bakermans et al. (2022) found that students who used an open annotation tool (engaging in an example of open pedagogy) reported a deeper understanding of course materials, as well as improved sense of engagement with their peers, and that this perception was more frequently expressed by women of color. However, the threads linking OER and transformative learning are not limited to the student experience. One initiative for faculty was Open for Antiracism, a professional development program whose purpose was "to support faculty wishing to learn how structural racism manifests within institutions and to change their teaching practices to be

antiracist, using the affordances of open educational resources (OER) and open pedagogy" (Daly et al., 2022, p. 457). Such engagement in the OER community can be transformative for educators (Tualaulelei & Green, 2022; Tur et al., 2020). Tur et al. (2020) shared research connecting open pedagogy to "shifts in identity and a transfiguration of self" (p. 5). Even if adopting OER materials does not result in a transformation as profound as a shift in identity, it can transform educators' teaching approach. Daly et al. (2022) reported that a substantial majority of faculty viewed the incorporation of open pedagogical techniques as an improvement to their teaching. Likewise, Tualaulelei and Green (2022) described how involving novice educators in OER could support their development of equity pedagogy, and Katz and Van (2022) agreed that OER could support implementation of equity pedagogy regardless of instructors' level of experience.

### Position and Motivation: Instructors' Capacity for Change

Focusing only on the benefits of OER and transformative teaching practices could lead to the mistaken impression that there is a simple approach to effective postsecondary education, if only faculty and administrators would implement it. The reality is more complex. Frydenberg and Matkin (2007) described how faculty desiring a change in course materials found themselves fighting the inertia of collegial organizations; changes are slow and require an immense amount of energy. Additionally, faculty may not have the capacity to adopt such practices. Much of the available literature regarding inclusive and open pedagogies noted factors that influence instructors' willingness, preparedness, and power to challenge the pedagogical status quo. In the first part of this section, I

explore the realities of postsecondary instruction to establish the context within which instructors make pedagogical and curricular decisions. Next, I review how instructors' skills and knowledge impact their capacity for meaningful change. If skills and knowledge are two ingredients necessary for implementing transformative pedagogy, a strategic social change approach to leadership may be a third. Finally, I discuss additional literature that reveals some limitations to the generalizability of the claims surrounding faculty experience and positionality, both within their classrooms and within their institutions.

**Realties of Postsecondary Instruction**

First, teaching itself is not the priority for many faculty, and this is often influenced by the priorities of their institutions. In cases in which faculty place a high importance on their own teaching practices, they often perceive that this does not align with their colleagues' priorities. Wright (2005) found that instructors at a research university tended to believe that they were both more dedicated to and more effective in their teaching when compared to their colleagues. There are also some situations in which teaching itself may be prioritized, but instructors find that their colleagues and professional communities are unsupportive of efforts aimed at improved equity and inclusion (Baggett, 2020; Baros, 2021). Also, when evaluating faculty members' eligibility for promotion and tenure, universities tend to weigh research activities more than advances in teaching practices (Hosoi et al., 2022; Marshall, 2018).

While factors relating to support from colleagues and institutions may be considered external, instructors are also driven by internal influences, and Wright (2005)

found that greater perceived alignment between the value placed on teaching by instructors and the institution corresponded with better job performance. Werth and Williams (2022) and Tur et al. (2020) shared research indicating that instructors were more motivated to make meaningful changes to their pedagogy in cases where they could see the connection between their practices and their values. Similarly, Daly et al. (2022) found that many faculty embarked on an open pedagogy project because of their commitment to antiracism. Taken together with the external factors, these observations suggest that there are many faculty whose values inspire their commitment to improving their teaching, and that these faculty are better positioned to make positive pedagogical changes when they have institutional support.

One additional overarching theme that immediately emerged from the literature review was instructor workload. Even willing, well-informed, and well-positioned instructors have found there were too many demands on their time, and they simply could not achieve everything they would like to (Bagar-Fraley, 2022; Skinner & Howes, 2013). Marshall (2018) reported that postsecondary educators were stretched thin, with multiple demands on their time and energy such as increased administrative duties and the need to adapt to new technologies. Souza (2020) highlighted yet another demand on faculty, noting that it is faculty's responsibility to intervene in cases of microaggressions.

Microaggressions are only one of several factors that contribute to a higher workload for women, faculty of color, and other faculty whose identities position them outside of the dominant culture. Because microaggressions are generally directed at those with targeted identities, it is likely that instructors with targeted identities are more

frequently faced with such situations, whether as the recipient or as a witness. In addition to navigating microaggressions, faculty with marginalized identities face many other stressors as well. In higher education, women earn less than men, have less job security, and are assigned less desirable teaching, advising, and committee work (Blackshear & Hollis, 2021). Women and faculty of color engage in more unpaid emotional labor than their colleagues (Blackshear & Hollis, 2021; Williams et al., 2019). These issues of disparity in faculty workload are particularly relevant to OER work because, in comparison to authorship of commercial textbooks, authorship of OER textbooks has featured higher representation by women, untenured faculty, and faculty of color (Thiede, 2019).

**Practitioner Skill and Knowledge**

College and university educators are generally accepted as experts in their fields, but they can lack knowledge in other areas, and these gaps in knowledge can impede curricular and pedagogical innovation. For example, considering the question of implementing commercial versus OER textbooks, lack of awareness of OER has been cited as the principal barrier to its wider implementation (Werth & Williams, 2022). A substantial amount of literature has stated that instructors need training and resources to feel effective in selecting course materials and implementing open pedagogy (Bagar-Fraley, 2022; Daly et al., 2022; Judith & Bull, 2016; McBride & Abramovich, 2022; Pitt et al., 2020).

Gibson and Hughes-Hassell (2017) proposed that faculty were responsible for conducting relevant research and ensuring alignment between their pedagogical approach

and current understanding in the field of adult education. Literature specifically surrounding OER, however, has suggested that institutions bear much of the responsibility to provide professional support. Bensimon (2007) proposed a model of assisted performance, in which a researcher works with a practitioner to create "an opportunity that enables practitioners to construct their own knowledge while taking into account particular needs and circumstances-their own as well as their students" (p. 463).

Other authors in the literature reviewed for this research study did not raise this one-on-one professional development structure, but there appeared to be consensus that teaching for inclusion and equity required training. Tualaulelei and Green (2022) asserted that teachers who were new to the profession were often less prepared to engage in equity pedagogy, stating that it "presents a challenge for many teachers because it involves a deep understanding of diversity and its role in society, as well as a sound knowledge of culturally relevant, responsive and sustaining practices" (p. 432). Although the understanding of this context is critical, knowledge alone is insufficient. Bensimon (2007) explained that instructors do not truly become equity-minded through merely learning about theory and attempting to apply it to their own work, and Williams et al. (2019) elaborated on this limitation, noting that racism is not solved through increased empathy and awareness of racism. Faculty need to understand the concepts themselves, as well as have the skills to guide students to reflect and construct knowledge together (McGee & Banks, 1995; Southworth, 2022). Successful implementation of equity-minded teaching requires that instructors possess the skill to incorporate concepts such as

racism, cultural assimilation, sexism, and immigration into their class discourse (Bensimon, 2007; McGee & Banks, 1995).

Wrapping up the discussion on practitioner knowledge, Tur et al. (2020) shared a unique perspective surrounding instructors' knowledge of themselves. They found that engaging in professional communities of practice dedicated to curricular innovation could inspire instructors' development of a professional identity. As instructors shared with colleagues their practices and ideas around adopting open pedagogy, the instructors themselves experienced a transformative process in which their concept of self, beliefs, attitudes, and professional norms and values were all integrated (Tur et al., 2020). Practitioner skill and knowledge impact both the adoption of OER and the implementation of transformative pedagogy.

**Strategic Social Change Leadership**

Given the immense time, effort, and risk associated with overhauling one's pedagogy, what are the driving factors that lead instructors to give up the convenience and predictability of commercial textbooks in favor of OER? Instructors' values are a central consideration, given that "education is by its very nature a value-laden endeavor" (Werth & Williams, 2022, p. 8). The strategic social change leadership model can inform the understanding of how instructors may conceive of their leadership role and their power to implement transformative pedagogical practices such as adopting OER. This model assumes that group action is motivated by valuing social justice, recognizing social inequity, and desiring to address root causes of systemic injustices (Dugan, 2017). Relatedly, the literature reveals that a key motivation for instructors adopting OER has

been its potential for improving equity and inclusion in pedagogy (Bakermans et al., 2022; Daly et al., 2022; Tualaulelei & Green, 2022), and these motivations align with concepts of transformative learning such as self-reflection, critical thinking, and challenging assumptions (Taylor & Cranton, 2012; Werth & Williams, 2022).

Teachers are leaders regardless of whether they are in a supervisory role (Hegarty, 2015; Tur et al., 2020), and effective team leadership "requires providing considerable attention and resources to the collective while not losing sight of individual needs" (Dugan, 2017, p. 160). Describing the strategic social change leadership model, Dugan (2017) offered three possible social justice visions: visions of transformation, which involves an attempt to transform the system; visions of inclusion, in which the goal is to adjust the system; and visions of preservation, in which the goal is to intervene and prevent further harm. All three of these visions are relevant in addressing the issue of course materials upholding dominant power structures in higher education classrooms. A vision of transformation might include replacing traditional textbooks and curriculums, such as in the creation and adoption of OER materials. An example of a vision of inclusion might be adapting course materials to be more inclusive of students' multiple identities and lived experiences. A vision of preservation would require the acknowledgement of the harm that is caused when classrooms fail to embrace the multiple perspectives available in the voices of marginalized and underrepresented groups who are often excluded from traditional textbooks and curricula. All three of these visions are relevant to projects in which OER and open pedagogy are implemented as tools to support and facilitate transformative learning experiences.

Finally, the strategic social change leadership model seeks to foster *collective* capacity for change, in addition to individual capacity (Dugan, 2017). “Once teachers and students have the tools to identify and critique systems of power, they may then undertake a project of societal transformation” (Baggett, 2020, p. 34). As established previously, these approaches fit the frameworks of both transformative learning and open pedagogy. Nevertheless, there is also a risk that the norms reinforced by instructors—and thereby learned and perpetuated by students—may mirror inequities of dominant ideologies (Dugan, 2017). Bensimon (2007) also noted that well-meaning practitioners may not notice the need to change their practices if they lack the cultural knowledge to understand how students’ individual backgrounds can impact their perceived engagement and performance. These considerations have been mentioned in reference to the need for instructor training and support, but the literature reveals additional limitations to the generalizability of claims about instructor disposition and capacity for change.

**Diversity and Disparity**

It is crucial to acknowledge that not all faculty are equally positioned to implement transformative pedagogy. The perception that underrepresented groups have less epistemic authority can impact how students respond to instructors; some of the commonly recommended inclusive teaching practices, such as greater student agency, may be less effective for women and faculty of color (Pittman & Tobin, 2022). There are relatively few teachers of color, either in the field or in the process of preparing to enter the field (Haddix, 2017; McGee & Banks, 1995; Pittman & Tobin, 2022). Faculty of color are frequently called upon to engage in unpaid emotional labor and knowledge

work surrounding supporting students of color, serving in roles linked to diversity, and educating both students and colleagues on questions of race (Blackshear & Hollis, 2021; Williams et al., 2019). Williams et al. (2019) further explained that to be perceived as professional, faculty of color were expected to manage their emotions in a way that was not expected of their white colleagues, and Pittman and Tobin (2022) described how faculty of color adopting a novel way of teaching were more likely to encounter resistance from their students. Even more notably, Pittman and Tobin (2022) and Matias (2012) explained that racial microaggressions can be physically harmful, often resulting in stress-related health issues. Thus, when presented with the opportunity to reimagine their teaching practices, many instructors are justified in fearing that the risks outweigh the benefit (Blackshear & Hollis, 2021; Werth & Williams, 2022). Therefore, although there appears to be consensus that teachers need more comprehensive training, support, and resources (Baggett, 2020; Baros, 2021; Tualaulelei & Green, 2022), it must also be understood that such support is not sufficient for all educators.

## Course Materials in Postsecondary Institutions

In addition to instructor motivation and capacity, course materials themselves can facilitate or impede the implementation of transformative pedagogical approaches. In this section, I present findings from the literature relating to both commercial textbooks and OER, beginning with the critiques of commercial textbooks, including their expense, rigidity, and issues of representation. Next, I explore research on the outcomes of OER use, the connections presumed and realized between OER and DEI, the characteristics

and functions of open pedagogy, and student and faculty perspectives on OER. Finally, I discuss the available literature concerning instructor experiences with OER.

Traditional commercial textbooks refer to materials that students purchase for their courses. These are copyrighted materials that have not been designed with a particular course in mind, but whose structure often guides the curriculum of the courses for which it is assigned (Bagar-Fraley, 2022; Hughes & Taylor, 2022; Skinner & Howes, 2013). In contrast, OER are materials that instructors and students can access, modify, and redistribute free of cost (Leonard, 2022). Although there are some licenses that limit permission to modify OER materials, it is free to access and use the materials (Wiley et al., 2014). There is some overlap between commercial publishing and OER. Some commercial publishing companies have begun offering access to OER within their learning management systems (Marshall, 2018); however, none of the literature reviewed for this dissertation appeared to classify such OER as commercial textbooks.

**Critiques of Traditional Commercial Textbooks**

Faculty and students agree on many of the benefits provided by textbooks, including the reliability and thoroughness of the content, consistency across multiple sections of a given course, and textbooks' role in facilitating understanding of the material (Skinner & Howes, 2013). Instructors found additional benefits in time-saving supplementary materials (Skinner & Howes, 2013), and students reported believing that textbooks could be a valuable resource for studying, and could help them achieve higher grades (Wu, 2022). However, students also noted significant disadvantages such as uncertainty whether all required course materials were worth their cost (Bagar-Fraley,

2022; Skinner & Howes, 2013; Wu, 2022). Faculty can influence students' perception of the value of course materials (Lambert & Funk, 2022; Skinner & Howes, 2013); without materials being prioritized by instructors, students often don't read the textbook even when they report a perception that there is value in completing the readings (Wu, 2022). Hosoi et al. (2022) found that students appreciated when faculty demonstrated awareness of financial and accessibility considerations, and criticized faculty who assigned many texts or selected expensive, irrelevant, or hard-to-find textbooks. In this section, I focus on the critiques of commercial textbooks rather than their advantages because the critiques contribute to an understanding of the impetus behind abandoning these materials in favor of OER. The literature offered a broad range of criticism, but the main themes were the expense and rigidity of traditional textbooks, as well as problems relating to representation.

### *Expense*

One of the main critiques of commercial textbooks is how expensive they are. Hughes and Taylor (2022) found that complaints about prices were justified, given that textbook costs increased by 1000% percent between 1977 and 2015, while inflation increased by less than 300%. Hosoi et al. (2022) found that textbook costs (which students reported as ranging from $30 to $250) had risen 36% between 2011 and 2021, and Wu (2022) shared that textbooks had become the fastest growing expense for undergraduate students in the last two decades.

Students have several options when faced with expensive required course materials. Wu (2022) found that delaying textbook purchase was the most common

strategy for dealing with high textbook costs, and that underrepresented students delayed purchasing a textbook most or all the time. One contributing factor was the timing of financial aid disbursement, which often occurs after the start of a term (McBride & Abramovich, 2022; Pitt et al., 2020; Wu, 2022). Wu also found that students often decided not to read the required texts because they believed they could meet the course objectives without them. Wu theorized that this belief and behavior may be influenced by instructors who, realizing that students often do not have the required textbook for the first several weeks of a term, have learned to teach without the textbook.

Skipping a textbook purchase entirely is another strategy. Some students opt to save money by forgoing the physical text and only purchasing online access, but most students prefer print rather than electronic texts (Hosoi et al., 2022). Hosoi et al. (2022) found that doctoral students rarely opted to skip obtaining a required textbook; they used other strategies such as sharing texts with peers and accessing required materials through their university library. Wu (2022), whose study was not limited to doctoral students, found that most students ultimately did purchase required texts, regardless of their financial situation. This would seem to indicate that many students choose to go without in some other area of their lives. Other studies, however, reported that a substantial proportion of students had chosen not to purchase a textbook due to its price (Bagar-Fraley, 2022; Burrows et al., 2022; Hughes & Taylor, 2022; Leonard, 2022; Skinner & Howes, 2013). This is significant because lack of textbooks can negatively impact students' academic progress. Hughes and Taylor (2022) reported that students without textbooks were more likely to fail courses, drop courses, take fewer courses, and choose

not to take courses due to high textbook costs. Hilton (2021) asserted that colleges and universities had a responsibility to take action to address the expense of course materials for students because access to quality materials could impact student success.

### *Rigidity*

Another common critique of commercial textbooks in the literature is their inflexible nature. Effective curriculum must be flexible enough to respond to real world concerns, and the rigidity of commercial textbooks can mean that they quickly become outdated and irrelevant (Cox et al., 2022). Classrooms cannot be fully inclusive—nor can they adequately support transformative learning experiences—if they ignore the events that continually shape students' worlds (Mezirow, 1997; Moreu et al., 2021). Burrows et al. (2022) found that several English language students believed their traditional textbook to be boring and inauthentic; it did not reflect students' reality. As described by Kellner (2003), "a glaring problem with contemporary educational institutions is that they become fixed in monomodal instruction with homogenized lesson plans, curricula, and pedagogy, and neglect to address novel political, cultural, or ecological problems" (p. 15). Instructors cannot redistribute nor change the content of textbooks that are copyrighted material (Leonard, 2022), and because textbooks often drive curriculum (Herman, 2007), this can make it difficult for instructors to maintain the relevance of their course content. Herman (2007) found that textbooks were such a powerful element of a course that their structure could support or impede the introduction of critical perspectives into the classroom.

A final observation on the rigidity of commercial textbooks relates to university policy that is intended to improve students' ability to take advantage of the lower cost of used books. Skinner and Howes (2013) explained that sometimes faculty were prevented from making changes to course materials because of university policies to use a given text for a minimum number of years. Such a policy may have been adopted to make it easier for students to access textbooks, but being required to continue using a given textbook can thwart instructors' attempts to address issues of representation in their course materials.

### *Lack of Representation*

Student achievement and learning outcomes are improved with the incorporation of culturally relevant curriculum, as well as when the curriculum integrates the experiences and perspectives of people from diverse backgrounds (Snapp et al., 2015). Researchers and practitioners have indicated that commercial textbooks often fail to reflect the diversity and reality of students' lived experiences. This is significant because transformative learning depends on students' opportunity to reflect on real-world concerns (Mezirow, 1997). Additionally, minoritized students who perceive that their courses invalidate or erase their identities "may become uninvested in those courses, decreasing their likelihood for success or continued study" (Baros, 2021, p. 4). This means that the students who are most negatively impacted by the lack of representation in course materials are those who already face additional barriers to success due to not belonging to the dominant culture in their community or institution. An overreliance on

traditional textbooks reduces the opportunities for students to see their own identities reflected in course materials (Glynn & Wassell, 2018).

A postsecondary classroom may not be a very diverse space, due to the relatively small subset of the population that attends college, but those who determine the curriculum have the power to bring the voices of the oppressed into that space (Lambert & Funk, 2022). According to Calhoun et al. (2021), "diverse and inclusive introductory courses are key to creating a diverse and inclusive discipline" (p. 14). Gibson and Hughes-Hassell (2017) extended this argument, stating that "ignoring concepts such as race, intersectionality, and power represents tacit promotion of a colorblind epistemology and pedagogy that promotes whiteness as normative, dismisses discussion of marginalized experiences as disruption to the norm" (p. 322). However, the issue of representation is not limited to the question of who appears in the course materials. Textbooks provide a framework for how learning and knowledge are conceptualized, but unfortunately traditional textbooks are often white-centric and ignore other epistemologies such as indigenous knowledge (Frydenberg & Matkin, 2007; Lambert & Funk, 2022).

### *Problematic Representation*

It is crucial to understand that students perceive textbooks as representative of what they are supposed to learn. Herman (2007) stated that commercial textbooks were perceived as having more authority than professors, and Hosoi et al. (2022) reported that many students believed "assigning textbooks was a way for the university to legitimize what was being taught" (p. 25). In this way, textbooks can contribute to students'

perceptions about themselves and others, and so the homogeneity of the people and ideas featured in commercial textbooks is not the only issue of representation.

Often the dominant culture does share space with others, but in a way that perpetuates the power imbalances and oppressive structures found outside of the classroom (Cahnmann-Taylor & Coda, 2019; Coda, 2017; Lambert & Funk, 2022). For example, Liddicoat (2009) and Paiz (2015) argued that heteronormativity in language classrooms—and course materials—often positioned the dominant culture as correct, and marginalized sexual identities as deviant. Students who expressed their sexuality or gender identity in a way that did not match the dominant culture's expectation were openly critiqued as being objectively incorrect (Liddicoat, 2009). For example, if a language learner used masculine language structures while describing themselves or their partner, and the instructor believed the student or the student's partner was likely a woman, the instructor might "correct" the student's language. Liddicoat (2009) framed such instances as evidence that "the classroom has the potential to exercise a policing role of the identities that are expressed through the ways in which identities are treated, and the ways in which norms are invoked" (p. 201). In other words, the learning environment (which is often driven by a textbook) has the power to implicitly teach students that some ideas and identities are superior to others. Junkala et al. (2022) observed that biology textbooks—which sometimes present sexuality and gender identities as disorders—shaped students' ideas about which identities were natural. Junkala et al. (2022) further found that textbooks presented being male, heterosexual, and able-bodied as the norm, with all others being deviations from that norm. In an example from another field,

Clawson (2002) found that depictions of poverty in an Economics textbook overwhelmingly featured Black people, wordlessly perpetuating racial stereotypes.

These examples lend credence to the claim that initiatives that seek to challenge hegemony and adopt transformative teaching practices need to deviate from the commercial textbook. Traditional textbooks' lack of critical approaches to content is one of the factors hindering instructors' ability to move toward "critical teaching and learning" (Herman, 2007, p. 121). One promising practice for avoiding the expense, rigidity, and issues of representation associated with commercial textbooks is the use of OER.

**Open Educational Resources**

Although much of the literature on OER has centered on the rising cost of course materials (Bagar-Fraley, 2022; Burrows et al., 2022; Hughes & Taylor, 2022; Wu, 2022), other authors have claimed that instructors adopting OER were usually motivated by values and beliefs (Cox et al., 2022; Daly et al., 2022; Hegarty, 2015; Panke & Oeeshi, 2023; Tur et al., 2020). Many faculty who have adopted and created OER did so to challenge the status quo, address the lack of student voice and representation in their course materials, and amplify voices that previously had not been valued, or even included (Bagar-Fraley, 2022; Bakermans et al., 2022; Cox et al., 2022; Daly et al., 2022; Lambert & Funk, 2022). This section includes an overview of research on the impact of OER usage; the link between OER and inclusion, self-reflection, and other concepts essential to transformative learning; and open teaching practices and learning experiences. Finally, after an examination of faculty and student perspectives toward

OER and open pedagogy, there is a review of the available literature that is most closely aligned with this research study: the experiences of instructors who have transitioned from commercial textbooks to OER materials.

Although the potential for positive outcomes with OER is well supported in the literature, these benefits may not be a direct result of the materials themselves, but rather instructors' engagement and disposition toward OER (Bol et al., 2022). It is possible that instructors were more invested in the courses they taught with OER because their use of OER was motivated by their commitment to improve their teaching practices (Cox et al., 2022; Daly et al., 2022; Tur et al., 2020; Werth & Williams, 2022). OER adoption is often accompanied by a change in pedagogy (Atkinson & Corbitt, 2022; Cox et al., 2022; Hilton, 2021), and I found no research attempting to distinguish between the impact of the newly adopted pedagogy and the impact of the OER materials themselves. Consequently, it should be understood that "OER use" described in the literature may include the instructor's pedagogical approach. I explicitly address teaching practices in the Open Pedagogy section.

### *Outcomes of OER Use*

Much of the research published on OER implementation has touted impressive outcomes. When instructors assign OER textbooks, they improve accessibility because students can access materials at the beginning of the term, rather than postponing a textbook purchase due to the expense (Hughes & Taylor, 2022; Pitt et al., 2020; Wu, 2022). Leonard (2022) suggested that using OER could "improve students' experience in the classroom, allowing them to stress less and learn more" (p. 719). Panke and Oeeshi

(2023) described that OER use resulted in increased motivation, engagement, critical thinking, and collaboration among students.

Establishing a causal relationship between OER adoption and student learning is extremely difficult, not least because often the pedagogical approach changes along with the change in texts (Atkinson & Corbitt, 2022; Cox et al., 2022; Hilton, 2021). Nevertheless, there have been several studies along this line of inquiry, and the results have been promising overall. Bol et al. (2022) critiqued the limitations of other research connecting OER with improved grades, but they agreed there was not a decrease in success, finding no difference in final exam scores or course completion rates between students using an OER textbook and those using a commercial text. Students in courses that used OER materials achieved the same level of learning as students in courses that used traditional commercial textbooks (Bagar-Fraley, 2022; Hilton, 2020, 2021). Additionally, multiple studies found that attrition rates were lower in courses that used OER (Bagar-Fraley, 2022; Bol et al., 2022).

### *OER for DEI*

There is substantial literature describing how instructors could improve diversity, equity, and inclusion in their courses using OER materials. Bakermans et al. (2022) found that OER served to improve equitable student engagement by challenging unspoken power dynamics. They explained that students enter classrooms with preconceived notions regarding who has both knowledge and the right to speak. This is termed students' "epistemic authority," and the authors observed trends in students' engagement based on these preexisting beliefs:

> These beliefs and assumptions lead to a double-edged sword of behaviors: students who believe they have low epistemic authority themselves stay silent; at the same time, those with a high sense of their own epistemic authority not only engage but often presume their engagement takes precedence over those they see as having relatively little epistemic authority. (p. 509)

Although OER authorship continues to reflect the white-male-centric patterns of traditional textbooks, it does trend toward a more diverse set of perspectives. A 2019 study found that among commercial textbooks, 66.1% of authors were male, 96.1% were white, and 70.1% held the rank of professor or professor emeritus. In contrast, among OER textbook authors, 50.4% were male, 89.6% were white, and only 31.4% held the rank of professor or professor emeritus (Thiede, 2019). Although this study did not distinguish between those who authored original works and those who adapted existing OERs, the results indicate that OER materials include a greater diversity of perspectives than what is found in commercial textbooks, and this represents a positive shift for students (Lambert & Funk, 2022). Presenting students with diverse perspectives shows them that "the lived experiences of people of color and other marginalized communities are legitimate, appropriate, and critical to understanding, analyzing, and challenging oppressive structures, practices, and discourses" (Gibson and Hughes-Hassell, 2017, p. 323). Along these same lines, Frydenberg and Matkin (2007) stated that there had been a push for development of OER that shared indigenous knowledge, as a means of countering the "academic colonialism" that limited whose knowledge was legitimized through inclusion in course materials. Lambert and Funk (2022) corroborated this claim in sharing their experience of creating OER that incorporated Indigenous knowledge.

Many practitioners and researchers have framed their OER projects as fundamentally intertwined with DEI (Bossu et al., 2019; Daly et al., 2022; Katz & Van,

2022; Leonard, 2022; Tualaulelei & Green, 2022). However, not all OER materials are equally inclusive. For example, Burrows et al. (2022) advised instructors to adapt OER to "remove references that may be upsetting or unnecessarily controversial" (p. 5). This was contextualized in the instructors' field of English language teaching, but the recommendation serves as a reminder that not all who author or use OER share the intention that students challenge their existing beliefs or question the status quo.

### *Open Pedagogy*

One goal of open pedagogy is to increase the engagement of students who are more often silent during class discussion (Bakermans et al., 2022), and instructors can improve student engagement and diversity of representation with open pedagogy (Bagar-Fraley, 2022; Panke & Oeeshi, 2023; Werth & Williams, 2022). Many open education projects involve students in the process of knowledge creation, in which students are authors of materials that are then openly accessible to others (Carter & Redondo, 2022; Werth & Williams, 2022). In addition, many authors have asserted that addressing political injustice and involving students as co-creators of knowledge were central to the motivations of instructors who sought to create and adopt OER and implement open pedagogies (Bali et al., 2020; Carter & Redondo, 2022; Cox et al., 2022).

Carter and Redondo (2022) found that both learners and faculty who participated in co-creating OER "perceived that they gained a deeper understanding of the content, developed their ability to collaborate with others, and enhanced their writing and technical skills" (p. 2). Werth and Williams (2022) similarly observed that "open pedagogy is not simply a means for content delivery but the space for students and

faculty to claim ownership of the learning environment and explicitly have their voices heard" (p. 9).

In one example of application, Daly et. al (2022) shared the principles of antiracist pedagogy that inform the Open for Antiracism faculty development program:

> Be race conscious. Think systemically and structurally. Expose systemic and/or structural racism. Examine a discipline's history. Ask how knowledge is defined and accepted. Ask who gets to have a voice in the discipline. Include voices and perspectives from many peoples and groups. Invite students to contribute their own perspectives and experiences. (p. 458)

Although these principles refer specifically to antiracist pedagogy and not open pedagogy, they established the context of the Open for Antiracism initiative.

Open pedagogy can be particularly effective in improving the engagement of marginalized students, and Bakermans et al. (2022) found that collaborative learning approaches could help students of color to access the contributions of other students of color:

> As textbooks are often dominated by white voices, the increased access to peers' knowledge provides a more diverse academic conversation. Without exception, women of color expressed valuing the ability to connect with a diversity of viewpoints and positioned that exposure as beneficial to their own learning. For students of color, accessing how other students of color think about the same concepts is part of the social justice potential of open, social annotation. (p. 516)

Open educational pedagogies can increase the opportunity for individual students to participate in interpreting and sharing knowledge (Bakermans et al., 2022). However, just as not all OER are equally inclusive, open pedagogy is not guaranteed to result in more equitable outcomes in all cases. For example, Bakermans et al. (2022) also found that white women tended to leverage other students' learning for their own, which the

researchers believed mirrored societal "power dynamics that commodify students of colors' intellectual labor for white students' benefit" (Bakermans et al., 2022, p. 516).

### *Perspectives on OER*

Faculty and students alike have shared both positive and negative opinions about OER. Wu (2022) found that students overwhelmingly expressed positive attitudes toward OER, most frequently citing the benefit of having free texts. Hosoi et al. (2022) found that students expressed distrust of faculty who assigned books they had authored themselves, but this was shared in the context of commercial textbooks, so it is unclear whether it applies to OER. Hosoi et al. (2022) also found that doctoral students cited inclusive content as a significant benefit of OER. Aside from saving students the expense of purchasing a textbook, faculty have appreciated the ability to modify course materials to fit their unique needs (Atkinson & Corbitt, 2022; Burrows et al., 2022; Frydenberg & Matkin, 2007; Leonard, 2022).

Available research has suggested that faculty feel very positively about OER. One common theme in the literature is faculty's perception of increased student engagement in courses taught with OER (Bakermans et al., 2022; Daly et al., 2022). However, much of the literature has described the authors' own experiences, and it is therefore less likely to contain the opinions of faculty with very negative perceptions; those who have published articles about their work tend to be those who have seen great potential in OER (Atkinson & Corbitt, 2022; Burrows et al., 2022). Werth and Williams (2022) stated that most instructors were initially drawn to OER because of their underlying values. This suggests that instructors feel a personal commitment to what they believe open pedagogy

can help them achieve. Supporting this interpretation, Tur et al. (2020) asserted that "openness is not simply a value-neutral affordance of the application of networked digital technologies in educational contexts; openness should instead be understood as a strategy in service of an underpinning mission or ethos" (p. 4).

Nevertheless, researchers have identified several areas in which instructors have reported challenges with open pedagogy and OER. Bagar-Fraley (2022) asserted that "the successful creation of OERs and their integration in a course place a significant burden on teachers" (p. 77). Questions of accessibility and the legal considerations in navigating the many open licenses are two more areas that make OER adoption challenging for teachers (Bagar-Fraley, 2022; Judith & Bull, 2016). Thus, even if OER implementation were found to reliably achieve all it promises, it is not a simple endeavor, and the work involved is not evenly distributed among all stakeholders:

> The burden of ensuring that ... OERs work optimally in the classroom and to facilitate appropriate comprehension, research, and analysis falls to teachers, some of whom might have little-to-no training in this area and are already overtaxed from having to choose or locate the appropriate OER for their course. (Bagar-Fraley, 2022, p. 79)

Leonard (2022) found that instructors reported needing substantial administrative support to adopt OER materials, and Panke and Oeeshi (2023) found that the workload associated with developing an effective open pedagogical approach could be a significant barrier for interested instructors.

Beyond the question of workload, Hosoi et al. (2022) claimed that the most significant barrier to OER adoption is its lack of professional recognition. Faculty members are wary of the time and effort required to implement open pedagogy, and "those concerns are compounded if the faculty member thinks that the time and effort

expended on OEP [open educational pedagogy] will not be recognized in the normal career progression processes, namely tenure and promotion" (Hosoi et al., 2022, p. 27). Atkinson and Corbitt (2022) and Hilton (2021) observed that faculty were reluctant to take on the task of adopting OER without feeling confident in the quality and efficacy of such materials.

Another factor that influences instructors' perceptions of OER and open pedagogy is the extent to which they are prepared to engage in equity pedagogy. In terms of open pedagogy, co-creation of materials can highlight existing power structures, and it requires both faculty and student self-awareness and willingness to examine power imbalances (Carter & Redondo, 2022; Lambert & Funk, 2022). Furthermore, for many untenured faculty and faculty of color, giving up tried-and-true methods to incorporate more inclusive practices might result in poor evaluations from students, which poses too significant a risk (Blackshear & Hollis, 2021; Pittman & Tobin, 2022).

Finally, not all OER is of equal quality (Bagar-Fraley, 2022; Frydenberg & Matkin, 2007; Hilton, 2020). There has been a lack of clear norms in OER development, which means that OER might contain problematic representation in the same way as commercial textbooks (Panke & Oeeshi, 2023). Some internal curricular efforts manage to include diverse perspectives but fail to "question and disrupt dominant narratives that promote exclusion and discrimination based on gender, race, culture or language" (Bossu et al., 2019, p. 3). And lastly, some question whether adopting OER is worth the effort, given that many students choose not to read textbooks, regardless of their cost (Skinner & Howes, 2013; Wu, 2022).

### *Experiences in OER Adoption*

A small number of OER authors have published reports and research on their own experiences replacing commercial textbooks with OER (Atkinson & Corbitt, 2022; Burrows et al., 2022; Ceciliano & Notman, 2022; Lambert & Funk, 2022), but there has been very little research conducted on instructors' experiences. One study published by Cox et al. (2022) researched instructors' reported success in completing open textbook initiatives, but the study involved only four participants in South Africa, of which only one ended up completing their OER project. One key takeaway from the study was that the challenges of academic life impeded the success of the OER project taken by three of the instructors, and that the fourth instructor—the only one to complete their project—fell into the agency category of "autonomous reflexive," defined as someone ambitious, task-oriented, unafraid of sharing imperfect deliverables, and "strategic in their approach to constraints" (p. 138). These findings can contribute to an understanding of how instructors' disposition can influence their capacity for curricular innovation.

Reports written by instructors detailing their own experiences are more readily available. In one case, Burrows et al. (2022) shared their experience adopting OER for English as a Second Language programs. They mentioned that cultural responsiveness was an important consideration for them, but their report was mainly focused on how they located and vetted materials (Burrows et al., 2022). Atkinson and Corbitt (2022) shared challenges and successes throughout their OER-creation experience, but this account reflected the experience of only these two authors. The same is true in Ceciliano and Notman's (2022) report of the experience of developing and implementing a new

OER textbook and curriculum for Beginning Spanish. Lambert and Funk (2022) described their creation of a Cultural Capability unit featuring indigenous knowledge as an equity-focused pedagogy, and they shared their findings that "students discussed gaining different types or levels of cultural capabilities, on a spectrum from thinking differently to enacting their cultural capability through doing/saying things differently in university, professional and personal/societal contexts" (p. 528). Although all these accounts were largely positive, they were written by the faculty who underwent the process, and they are therefore limited to the authors' own experiences. Firsthand accounts are valuable, but they provide a limited view.

Al Abri et al. (2022) shared findings surrounding how instructors adopting OER approached their work. They found that instructors were determined to utilize a "learner-centered pedagogical model using the principles from the constructivist approach to teaching and learning" (Al Abri et al., 2022, p. 171). They further asserted that "OER-enabled pedagogy promotes students' active participation in knowledge construction by prompting learners to collaborate, contribute, and connect to learning communities beyond the limits of the course" (Al Abri et al., 2022, p. 172). Although their study focused only on the design and development stage of a single OER project, the findings of Al Abri et al. (2022) corroborate claims made by Carter and Redondo (2022) and Werth and Williams (2022) regarding the capacity of OER to facilitate meaningful student engagement.

In another study relating to OER adoption, Judith and Bull (2016) conducted an extensive review of available literature and compiled an overview of obstacles that

instructors were likely to encounter, as well as strategic ways to address those obstacles. While useful, their report focused more on institutional logistics such as awareness of OER, resources for assessing quality of OER, and training surrounding licensing. Where the faculty reports of their own experiences had a very narrow view of OER adoption, Judith and Bull's (2016) overview was very wide, with no attention directed toward the experiences of individual instructors.

Instructors were interviewed about their OER experiences in a qualitative study by McBride and Abramovich (2022). Although their approach was very similar to the study described in this dissertation, McBride and Abramovich had very different research questions. They sought to explore the boundary-spanning properties of the OER adoption process, and they found that "instructors in higher education who implement OER in their courses often may engage with groups of people they normally do not work with through regular course implementation efforts, thus experiencing boundary crossing" (McBride & Abramovich, 2022, p. 7). This insight suggests that the experience of transitioning to OER might have an unexplored impact on OER adopters' pedagogy, professional development, and even career trajectory. Tur et al. (2023) further elaborated on the transformative power of the experience of adopting open pedagogy, stating that "the transition to asserting oneself as an open educator may involve confronting and deconstructing how he or she was taught and learned how to educate" (p. 9).

Regarding similarity to this research study, only one study in my search was guided by research questions surrounding instructors' experiences adopting OER: Lantrip and Ray (2021) collected survey responses from 39 Oregon community college

instructors. The survey touched on motivation, support, and perception of outcomes, and—as it was based on Likert scales—collected quantitative data. Lantrip and Ray found that faculty were inspired by OER to make changes to their pedagogical approach, and that they reported observing significant improvements in student engagement. Their research did not collect qualitative data nor directly address equity and inclusion, and the authors stated that future research should explore those elements (Lantrip & Ray, 2021). The included research study contributes to the literature by addressing these notable gaps.

## Summary

Many authors have published findings relating to transformative learning theory, critiques of traditional commercial textbooks, and various aspects of OER creation and adoption. Inclusion and engagement are at the heart of transformative teaching practices (Anand et al., 2020), and this aligns with open pedagogy, which challenges traditional power structures through learner empowerment and values-driven teaching practices (Carter & Redondo, 2022; Lambert & Funk, 2022; Werth & Williams, 2022). Many students opt not to purchase required textbooks (Bagar-Fraley, 2022; Hughes & Taylor, 2022; Leonard, 2022; Skinner & Howes, 2013; Wu, 2022), and commercial textbooks can impede instructors' efforts to improve inclusion (Herman, 2007). In contrast, OER use can facilitate instructors' use of inclusive and transformative pedagogy (Bakermans et al., 2022; Bali et al., 2020; Bossu et al., 2019; Daly et al., 2022; Katz & Van, 2022). Further, research on learning outcomes found that courses taught with OER were no less effective than those using commercial textbooks (Hilton, 2021).

Despite the benefits of adopting OER, the number of faculty choosing to make this transition has remained relatively low (Bagar-Fraley, 2022; Hughes & Taylor, 2022), and the literature has highlighted possible contributing factors including practitioners' lack of knowledge, skill, support, and time. There are issues of workload to overcome in any curricular revision project, and teachers have reported lacking the training, time, and resources they would need in order to feel confident selecting OER materials (Bagar-Fraley, 2022; McBride & Abramovich, 2022). Herman (2007) also noted that faculty considering OER would understandably be hesitant to embrace a project that would require them "to spend an entire summer reworking daily curriculum from nothing, particularly in a system that gives little reward for teaching critical thinking skills that cannot be measured by standardized tests" (p. 135). Although several authors have included instructor perspectives in their research, there has been insufficient research on the actual experiences of the instructors who have transitioned from commercial textbooks to OER.

# CHAPTER THREE

The purpose of this study is to improve understanding about the process of transitioning from a traditional commercial textbook to OER course materials, as well as how issues of equity and inclusion are taken into consideration. The practice of requiring students to purchase traditional commercial textbooks in higher education perpetuates inequity in access. The costs are not generally included in tuition, and students awaiting loan disbursement may not be able to acquire the required materials until after the first assignments are due (McBride & Abramovich, 2022; Pitt et al., 2020; Wu, 2022). OER offer a solution. They are free to students, and often accessible online at any time. There is also extensive research demonstrating that OER have the potential to improve equity and inclusion (Bagar-Fraley, 2022; Bakermans et al., 2022; Daly et al., 2022, 2022; Panke & Oeeshi, 2023), and thereby facilitate transformative learning. However, there is insufficient research on the experiences of faculty who make the switch from commercial textbooks to OER. Without data on the experience of transitioning from commercial texts to OER, faculty hang their hopes on anecdotes. They may be adopting new curricula that is free but exhibits the same lack of inclusivity encountered in traditional textbooks or continues to uphold the position of superiority of the dominant culture. With a more comprehensive understanding of the experiences of faculty who adopt OER materials, supervisors and administrators are better equipped to support these faculty. Hearing from other faculty members who have taken on the change to OER, those who are involved in the decision-making process have more complete information and are better positioned to

enhance the benefits and reduce the risks associated with transitioning from commercial textbooks to OER materials.

In this basic qualitative research study, I explore the experiences of faculty who had transitioned from a commercial textbook to OER. There are two principal research questions: 1) What are the experiences of instructors who transition from a traditional commercial textbook to OER course materials? and 2) How are equity and inclusion incorporated into the transition from traditional textbooks to OER?

## Researcher Perspective

To address the research question of the experiences of faculty who transition from commercial textbooks to OER, I conducted a basic qualitative study. This choice of research design was one element of the study that was impacted by my perspective as the researcher. In this section, I describe my reasons for selecting a basic qualitative design, as well as the ways in which my approach to the study was grounded in feminist methodologies. Lastly, I discuss how my positionality was likely to influence the research process, and what steps I took to bracket my own experiences.

### Research Design

Basic qualitative research was the most appropriate design for this study because it "has as its goal understanding how people make sense of their experiences" (Merriam & Tisdell, 2016, p. 42). I sought to understand instructors' experiences at a greater depth than what could be accomplished through a quantitative study, with the intent that the resulting analysis would yield "a highly descriptive, detailed presentation of the setting and in particular, the findings of a study" (Merriam & Tisdell, 2016, p. 257).

Furthermore, it was important that participants' voices be reflected in the data I collected, to ensure an accurate depiction of their experiences. Semi-structured interviews allowed for flexibility in participant responses, as well as the opportunity to capture experiences in the instructors' own words (Merriam & Tisdell, 2016).

**Feminist Methodologies**

My approach to this research was grounded in feminist methodologies, which is both critical and intersectional, as summarized by Leavy and Harris (2019):

> Feminist research committed to fighting against intersectional and multiple oppressions requires that we recognize that while we might inhabit some of those minority positions, we cannot inhabit them all, and that we still have a scholarly, political, and interpersonal commitment to fight equally for them all. (p. 7)

Thus, a feminist research approach does not mean focusing solely on the experiences of women. Rather, feminist methodologies can be defined as those whose purpose is "to find what has been ignored, censored, and suppressed," to "seek a science that minimizes harm and control in the research process," and to "seek a methodology that will support research of value to women, leading to social change or action beneficial to women" (DeVault, 1996, pp. 32-33). These three features of feminist methodologies were each reflected in the design of this research study.

First, feminist methodologies intend to amplify the voices of those whose stories have not been told (DeVault, 1996). Authorship of OER textbooks has featured higher representation by women, untenured faculty, and faculty of color in comparison to authorship of commercial textbooks (Thiede, 2019). Because of this difference in representation, research into OER presents an opportunity to hear from faculty whose experiences are underrepresented in academia.

Second, researchers who adopt feminist methodologies are willing to relinquish some control to their participants (DeVault, 1996). In alignment with this aspect of feminist methodologies, the interviews in this study were semi-structured, and their open-ended prompts and questions allowed participants to bring up and elaborate on the topics that were most central to their experiences. TallBear (2014) described a feminist-Indigenous approach to research, recommending that researchers "think creatively about the research process as a relationship-building process, as a professional networking process with colleagues (not "subjects"), as an opportunity for conversation and sharing of knowledge, not simply data gathering" (p. 2). As I conducted this research, I connected with peers across the state of Oregon. This relationship-centered approach—which is an aspect of the feminist research practice of relinquishing control—was instrumental in creating interview spaces that would allow for openness, honesty, and vulnerability. The open-ended semi-structured interview design was intended to give participants meaningful agency during the conversation, as they would not be limited to a prescribed list of talking points; my focus as researcher was on the faithful representation of the voices of the participants.

Finally, feminist methodologies often have the underlying goals of inspiring social change and benefitting women (DeVault, 1996). Women are underrepresented in tenured and tenure-track faculty roles despite making up nearly half of postsecondary educators (Blackshear & Hollis, 2021). This means that women in higher education generally have less job security, are given less desirable teaching assignments, and earn lower salaries than their male colleagues (Blackshear & Hollis, 2021). The fact that

women author a greater percentage of OER than commercial textbooks does not bode well for addressing the pay gap; women's increased authorship of OER means that women are engaging in uncompensated labor at a higher rate than men. However, research that explores the benefits of OER can help establish OER authorship and adaptation as legitimate scholarship, and this can support women faculty who seek promotion and tenure (Hosoi et al., 2022). In this way, this research study seeks to benefit women, as described in this third element of feminist methodologies. Additionally, this research explicitly addresses equity and inclusion as components of transformative learning, which is intrinsically connected to teaching for social change (Hyde, 2021; Southworth, 2022; Wang et al., 2019). By researching the ways in which transformative learning is incorporated in the experience of adopting OER, this study seeks to contribute important data to the literature on OER, better equipping future instructors and administrators who are considering adopting OER and implementing transformative pedagogy.

**Researcher Positionality**

The relationship-building approach of feminist methodology described by TallBear (2014) guided my commitment to listen fully to my participants' stories and set my own assumptions and experiences aside. However, to effectively bracket my own experience, it is essential to acknowledge my positionality (Creswell & Creswell, J. D., 2018; Holmes, 2022). I have strong personal connections to the topic of adopting OER materials, and my own experience directly inspired this research study. I spent nearly 20 years teaching in colleges and universities, and I wrote and implemented an OER

textbook in the college Spanish courses for which I served as Coordinator. My experience was largely positive and strongly motivated by the desire to improve equity and inclusion, and this connection with the topic of my research had the potential to cause bias. However, I took steps to ensure the reliability of the data collected in this study.

To reduce the possibility that my experiences would interfere with data collection and analysis, I designed the study to help ensure data validity. First, I carefully designed the interview questions and prompts to avoid giving the impression that participants were meant to answer in a certain way. Second, the prompts were open-ended so that participants had some agency over the direction of the conversation. Third, I sent an introduction including a written description of my experience adopting OER, rather than relying on an impromptu narration at the beginning of each interview. This allowed me to share my connection to the topic before each interview while also ensuring that I did not use any language that could lead participants to preemptively modify their own stories due to knowledge of mine. Nevertheless, it was not possible to conduct this research with absolute objectivity, nor did I seek to do so. During the interviews, I engaged in conversation with study participants, verbally and non-verbally conveying interest, compassion, surprise, and countless other forms of feedback that could have influenced what participants chose to share. As described in the Feminist Methodologies section, this conversational relationship-centered approach was an intentional aspect of the research design.

In addition to my experience with creating and adopting an OER, there are several elements of my identity that reflect the dominant culture in US institutions of higher

education. For example, I am white and cisgender. Feminist frameworks provide a reminder that my understanding is impacted by these facets of my identity. “Feminist research does not claim to be neutral, and this lack of neutrality has brought it under critique from researchers who embrace a positivist approach to scientific inquiry” (Bell, 2015, p. 33). I acknowledge that my identity and experiences impact my research, but subjectivity in qualitative research is inevitable and does not invalidate research findings (DeVault, 1996; Holmes, 2022; Matias, 2012; Saldaña, 2013).

As I connected with colleagues across the state, I sought to keep present in my mind the fact that my own experiences and interpretations of my experiences were likely to be different from those of my peers whose identities do not so closely match those of Oregon’s dominant culture. Alcoff (1991) explained how identities can impact the ways in which people express themselves:

> Some of us have been taught that by right of having the dominant gender, class, race, letters after our name, or some other criterion, we are more likely to have the truth. Others have been taught the opposite and will speak haltingly, with apologies, if they speak at all. (p. 17)

Acknowledging these possible influences on my perspective and those of my participants, I committed to providing a faithful representation of my participants’ experiences and not discounting others’ interpretations out of some assumption that my own interpretation was more valid.

## Population and Participant Selection

For this study, I recruited nine instructors who had transitioned or were in the process of transitioning from traditional commercial textbooks to OER course materials. Participants were Oregon college and university instructors who were teaching a course

using OER materials, and eight of the nine participants had previously used commercial textbook for that course; one instructor did not describe having previously required commercial texts. Having completed the transition was not required, nor was having been the decision-maker regarding the adoption of OER. I used a combination of convenience sampling and criteria sampling. First, I recruited assistance from Amy Hofer, Oregon's Statewide Open Education Program Director, to have my request for participants emailed to Open Oregon's mailing list. My request included details regarding criteria, as well as encouragement for recipients to forward the message to anyone who would be interested in participating (see Appendix A).

Although this study was not associated with any specific institution, it was location-bound in that the participants had experience teaching with OER in Oregon universities and colleges. This decision was made in part out of convenience because I live, work, and study in Oregon and already have familiarity with Oregon postsecondary institutions. However, Oregon is also a leader in OER initiatives, and therefore a logical choice for conducting further research on OER.

Oregon has demonstrated a significant interest in controlling costs for higher education students, as reflected in policy surrounding textbook affordability, including House Bill 2919 (passed in 2021), which requires timely disclosure of required texts (State of Oregon, n.d.). Financial support for public universities and community colleges in Oregon is largely determined by the Higher Education Coordinating Commission (HECC). The HECC participates in state legislature through the Joint Legislative Task Force on Student Success for Underrepresented Students in Higher Education (State of

Oregon, n.d.). In 2015, the Committee on Higher Education, Innovation, and Workforce Development sponsored House Bill (HB) 2871, which established an Open Educational Resources Grant Program. In this program, grants are awarded in support of the development and implementation of OER. Amy Hofer, Oregon's Statewide Open Education Program Director, described how the success of the grant program led to additional advocacy for continued support (A. Hofer, personal communication, April 25, 2022). That outcome, reflected in HB 5024, was that the HECC budget for Operations for 2019-21 included $669,200 in continued funding for the OER program. Significantly, this structure of continued funding meant that the renewal of that funding would be automatic in future years, rather than requiring ongoing advocacy.

In addition to Oregon's history of leadership in supporting OER, conducting OER research within Oregon is a logical decision because of the research that has already been completed. Specifically, the quantitative study conducted by Lantrip and Ray (2021) surveyed 39 instructors representing 16 of Oregon's 17 community colleges. Drawing from a similar group of participants allowed this study to minimize confounding factors and more effectively complement the research that was already done.

As described, Open Oregon is an organization that receives state funding to advance goals aimed at development and adoption of Open Educational Resources (OER) in colleges and universities across the state. Their programming is offered at no cost to Oregon's public higher education institutions, and many of their projects offer compensation to participants. One of these programs is the Equity and Open Education cohort. While the cohort for instructional faculty has been offered several times, there are

also cohorts for teaching and learning support staff, such as instructional designers and librarians. As noted, Amy Hofer distributed my invitation to the Open Oregon mailing list, and this list included many participants from the rosters of these cohorts. The findings of this research study are not in any way intended to reflect the success of the Equity and Open Education cohort program; contacting attendees of this program was merely a method of convenience sampling.

The semi-structured interview approach was designed to allow participants to bring up any issue that stood out in their memory. However, because equitable and inclusive teaching practices are part of my research questions, I wanted to be sure to include at least some participants who were likely to have considered such issues during their transition from traditional textbooks to OER. Because the mailing list included past participants of the Equity and Open Education cohorts, I was able to guess that at least some participants would have some level of familiarity with equity and OER. I did not attempt to exclude participants who had not attended an Equity and Open Education cohort. However, an additional consideration is the fact that I served as a facilitator for one of the Equity and Open Education cohorts in spring of 2022. To reduce the possibility of selection bias I ensured that none of the final study participants had attended the cohort I facilitated.

## Procedures

In this section, I describe in detail the steps involved in this study. I summarize information about sample recruitment and selection and expand on how I prepared

participants for the study. I describe the interview itself, as well as how I collected, organized, stored, and will ultimately destroy the data.

**Sample Recruitment and Selection**

As a preliminary step toward participant recruitment, I contacted the director of Open Oregon, Amy Hofer, and she agreed to allow me the use of Open Oregon's email listserv. Open Oregon is a state-funded organization that has been instrumental in supporting college- and university-level open education initiatives throughout Oregon, including multiple cohorts in Equity and Open Education. I sent a call for participants to Amy Hofer, and she forwarded it (see Appendix A) to all the contacts on Open Oregon's listserv, which included past cohort members. The call for participants included details of eligibility: Oregon college and university instructors who had transitioned from commercial textbooks to OER materials. Recipients of this message were encouraged to forward it to colleagues who may be eligible and interested in participating in the research. Seven participants responded initially. To recruit additional participants, I sent individual invitations to several instructors listed as OER authors on a university library page. This resulted in two more instructors consenting to participate, bringing the total to nine participants. It is important to note that one of the instructors who responded to the invitation did not describe having previously used commercial textbook materials; they had authored OER, and they taught with OER. Therefore, while eight of the nine study participants had undergone a transition from commercial to OER, one participant's contributions were less about the transition, and more about the implementation. I

determined that the experience of teaching with OER was sufficient for this instructor to be eligible to participate.

**Informed Consent**

Because the consent form (see Appendix B) contained useful details about the study, I included a copy of the form when I sent out the invitation to participate. I collected a signed form for each participant. This form included an explanation of how their data would be used and protected, a statement explaining potential risks and rewards of participation, and a reminder that they were free to withdraw from the study at any point. The consent form clearly expressed that I could not guarantee anonymity, but that I committed to protecting the confidentiality of all participants.

**Data Collection and Instruments**

The data for this study was comprised of demographic surveys and interview transcripts. Before each interview, I sent participants an introduction (see Appendix C), an outline of the interview protocol (see Appendix D), and a brief survey (see Appendix E). In the introduction, I explained who I was and why I was conducting this research. I also disclosed that I had experienced adopting OER course materials as a postsecondary instructor, avoiding using language that implied whether my experience had been generally positive or negative. It was important for me to use neutral language in this introduction to avoid influencing the way participants thought about their own experiences. The outline of the interview protocol informed participants that the interview would be recorded, and that the recordings would be destroyed at the conclusion of the study. The survey requested descriptive demographic data for each

participant, which allowed me to build an understanding of the diversity of background experiences represented in the study's participants. This diversity is described in the Participants section of this chapter.

I collected interview data over the course of nine semi-structured interviews, held virtually over Zoom, which were recorded and transcribed. Zoom generated a transcript of each interview, which I later reviewed for accuracy. As each interview began, I greeted the participant and thanked them for their participation, and introduced myself and my reasons for doing the research. At this step, I read from the prepared introduction that they had already received over email (see Appendix C). Reading a prepared statement that they had already received instead of giving an impromptu description aloud served two purposes. First, it began the conversation with very low-stakes content; the focus was on me as the reader, rather than on the participant, and they had already read this information and did not need to pay close attention or respond to it. Second, it served to remind the participant that I had experienced transitioning to OER, and that the research mattered to me. I then asked if they had questions about the research itself before beginning the recording. Participants were not given a copy of the detailed interview protocol (Appendix F), but rather only the protocol outline, to avoid exerting excessive control over how interviewees described their experiences. Once the recording had begun, I asked for their verbal consent to be recorded before giving the first interview prompt.

Each interview lasted approximately one hour. Although Seidman (2019) recommended interviews of at least 90 minutes, a shorter interview was appropriate for

this study because it recognized that participants had busy lives, and their time was valuable. During the interview, I actively engaged in conversation with the participants. I asked follow-up questions, prompted for more information or clarification, and occasionally shared pieces of my own experience. Interview data was representative of what was salient for the participants, but this study also had specific research questions, and therefore needed to collect specific data. I committed to allowing space for participants to have some agency over the conversation, in line with a feminist methodological approach (DeVault, 1996; TallBear, 2014). However, in instances where participants had not sufficiently addressed the issues relating to this study's research questions on their own, I redirected the conversation.

### Data Organization and Security

Demographic and identifying information for participants was stored separately from interview transcripts and memos. All data collected for this study was stored in a password-protected virtual space. This included all interview recordings and transcripts, as well as the separately stored demographic and identifying information about the participants. Participants were invited to provide their own pseudonyms. Recordings will be deleted upon the conclusion of the study, and other data will be deleted after three years. It is possible that some records may still exist in participants' own digital spaces, but all records that I have held will be destroyed via deletion.

## Instruments and Measures

This study used two instruments: an open-ended demographic survey (see Appendix E) and a semi-structured interview (see Appendix F). The survey consisted of

six questions designed to gather identifying and descriptive data about each participant. Participants provided their names, institutions, and position titles for the purposes of verifying eligibility to participate, and to facilitate any necessary follow-up. The fourth question prompted participants to briefly describe their role at their institution. The fifth question asked about educational background and professional development, and the sixth question, which was marked as optional, invited participants to share any identities that they believed were significant. These two final questions were intentionally open-ended and not multiple-choice because this study desired to capture participants' own voice. Finally, because the answers to these questions contained identifying information, these survey responses were stored separately from the interview data, and they are only included in this final report in such a way that participants' confidentiality is protected.

Each interview had a total of four main questions and prompts: 1) Tell me about your experience transitioning from a commercial textbook to OER course materials; 2) How have considerations of inclusion and equity been incorporated? 3) What would you want to happen differently if you were to go through the OER adoption process again? And 4) Is there anything else you would like to tell me about your experiences with adopting OER? These four items were thoughtfully designed to uphold a feminist methodological approach, as well as to collect data that would answer the research questions: 1) What are the experiences of instructors who transition from a traditional commercial textbook to OER course materials? and 2) How are equity and inclusion incorporated into the transition from traditional textbooks to OER?

The first interview prompt was the most open, simply inviting participants to tell me about their experience transitioning from a commercial textbook to OER course materials. This prompt directly addressed the first research question, and it allowed me to capture participants' experiences in their own words. Beginning with such an open prompt was intended to ensure that participants had the space to share whatever pieces of their experience were most salient in their minds. Elements of instructor experience that appeared in the literature included motivation, support, workload, and practitioner skill and knowledge. Accordingly, my detailed interview protocol (see Appendix F) contained several supplementary prompts and questions that might encourage participants to elaborate on these areas. This gave me the opportunity to evaluate whether my participants' experiences were congruent with the existing research.

The second question in the interview asked participants how considerations of equity and inclusion had been incorporated, which directly addressed the second research question. Because participants had received the question in advance, they had likely already had the opportunity to reflect on the relevance of equity and inclusion to their experience of adopting OER materials. The third interview question asked participants what they would want to happen differently if they were to go through the process again. While the first two questions focused on participants' actual experiences, this third question invited them to hypothesize. This question was intentionally worded in such a way that the interviewee could interpret whether it referred to what they themselves might do differently, or how they imagined external factors could be improved. This had the potential to bring up aspects of their experience that they had not yet mentioned, as it

encouraged participants to think outside of their reality and imagine what could be different. The fourth question served a similar function, asking interviewees what else they would like to share about their experience. This question allowed participants to raise issues that had been neglected earlier in the conversation, but it also marked that the interview was closing, and it gave interviewees a chance to return to the highlights of their experience. By ending on this question, I reiterated that the focus of this research was the experience of the participants. Upon the conclusion of each interview, I requested permission to contact participants if I had further questions, and I invited them to email me with any follow-up questions or comments.

## Data Analysis

Once I collected interview transcripts, I began cleaning and analyzing the data. Cleaning the data involved listening to the interview recordings while reading through the transcripts that Zoom had automatically generated and editing for accuracy. For example, one Zoom transcript initially indicated that the participant had referenced "send gauge," when in fact they had said "Cengage." Next, I uploaded the transcripts into Atlas TI, a software program designed to help with coding. Merriam and Tisdell (2016) recommended five steps to qualitative data analysis, and I used these steps to broadly guide the analysis. Because of the specificity of the interview questions themselves, I was able to establish provisional codes such as reasons for adopting OER, support received, and challenges encountered. In my initial coding of the data, I applied these provisional codes where appropriate, and otherwise used an open coding approach. I did not narrow my interpretation to fit the provisional codes. For example, I quickly abandoned the code

"support received" in favor of more detailed variants that captured the type of support, its adequacy, whether it had been sought out, and why it was important. Saldaña (2013) explained that this open style of first-cycle coding would be appropriate for most qualitative data, and particularly for new researchers. This advice aligned with the first step recommended by Merriam and Tisdell (2016): constructing categories.

The second step was sorting the categories and data, and this included identifying connections and relationships among categories (Merriam & Tisdell, 2016). For this stage, I applied focused coding as the second-cycle coding style. As described by Saldaña (2013), focused coding seeks to identify the most salient categories. This was also the stage where codes were sorted into "parents" and "children," or general codes and subcodes (Saldaña, 2013). For example, I might have determined that all the above-named variants were children of the "support received" parent code. However, the patterns that emerged did not lead me back to my provisional codes. Instead, for example, I determined that the support-related code of needing administrator buy-in was a sibling of the textbook-related code of feeling stuck in a system. I identified connections among codes, and then worked to articulate how they were connected.

Merriam and Tisdell (2016) prescribed the third step of naming the categories and the fourth step of deciding how many categories were significant. This is where I determined which labels were the most appropriate for the many codes I had identified, adjusting as needed to fit the data. For example, needing administrator buy-in and feeling stuck in a system were children codes under a parent code that I later decided to name

"Being an instructor in higher ed." I also decided which parent codes were representative of the most significant themes.

The final stage of qualitative data analysis according to Merriam and Tisdell (2016) is to describe the data through a more abstract conceptualization. This involves interpreting and articulating the meaning behind the data. At this stage, I synthesized what I had learned from the coding process, producing "a summative and data-supported statement about the particulars of a research study" (Saldaña, 2013, p. 252). This analysis is detailed in the next chapter.

## Participants

Participants included nine postsecondary instructors from various institutions, with various levels of experience, assorted backgrounds, and different professional development exposure regarding OER and transformational learning. As previously explained, the results are presented in such a way as to protect the identities of the study participants. Table 1 lists participants and provides information about their institutions and faculty role, but it does not include demographic information. If I were to share a single participant's job title, subject matter, and age, for example, it could be identifying. For this reason, the instructors' identity traits and other demographic information are not organized here as complete profiles, but rather as a collection of characteristics. Additionally, participants provided information in different ways and in different amounts. While some listed a job title, others included a resume. While one wrote a substantive description of the impact of their upbringing, others provided a list of identity markers, and still others chose not to answer the optional questions. The survey did not

collect the same information about each participant, and the information in this section is limited to what participants chose to share. Consequently, it should not be assumed to be comprehensive. The purpose of this section is to introduce the participants and highlight the diversity of perspectives represented in this study.

**Table 1**

*Overview of Study Participants*

| Name | 2-year | 4-year | Public | Private | Full-time | Adjunct |
|---|---|---|---|---|---|---|
| Alexandra | | X | | X | X | |
| Ana | | X | X | | X | |
| Bartlett | X | | X | | | X |
| Gregory | | X | X | | X | |
| Lynn | | X | X | | X | |
| Rahel | X | X | X | | X | X |
| Rowshan | | X | X | | X | |
| Sophie | | X | X | | X | |
| Tolls | X | | X | | X | |

Professionally, this study's participants have taught at two-year community colleges as well as universities that grant graduate degrees. Instructors' own educational background varied; their highest degree completed included bachelor's, master's, and doctorate degrees. They reported job titles including Adjunct Faculty, Full-time Faculty, Teaching Assistant Professor, Professor, and Assistant Professor. All participants were teachers, and other institutional roles and responsibilities involved research, program coordination, and committee service. Experience teaching college and university students ranged from five years to over 20 years, and the subjects taught included science and technology, business and economics, language and communication, and interdisciplinary

social and cultural studies. Some had just begun teaching with OER, and some had been working with OER for many years.

In response to the optional demographic questions, study participants reported racial and ethnic identities including mixed-race, Black, white, South Asian, Middle Eastern, and Indonesian (sometimes in combination). Some shared that their country of origin was outside of the United States, and some identified with non-majority (both locally and worldwide) religious beliefs. Participants' reported ages ranged from 30 to "old." They described their sex, gender, and sexuality using terms such as woman, female, guy, male, queer, and cisgender. Other demographic details included having experienced a "privileged" childhood, being a second-generation American, having been the first in their family to attend college, living with disabilities, and having been raised in a working-class culture.

Using a recruitment strategy that relied on volunteers, this research did not intentionally seek out input from instructors who had transitioned to OER and were unhappy with the switch. However, the instructors who did participate were forthcoming about the challenges they had experienced. This study also excludes instructors who had been interested in OER but ended up deciding to continue teaching with commercial textbook materials, and the sample size was too small to meaningfully explore any influence of gender, academic role, academic experience, or other trait. Nonetheless, the diversity in the backgrounds and experiences of this study's nine participants enhances the richness of the data.

## Conclusion

The results of a basic qualitative research study with nine participants are not generalizable to other contexts (Creswell & Creswell, J. D., 2018; Saldaña, 2013; Seidman, 2019), but this research nevertheless contributes to addressing a significant gap in the available literature surrounding the adoption of OER and may be transferable to other contexts. As described, I acknowledge that my experiences and identities create a potential for researcher bias, and throughout this research and analysis I remained committed to bracketing my experiences and centering the voices and stories of my participants. My extensive background with this issue has helped me to identify the need for a greater understanding of how instructors experience the process of OER adoption. Instructors who transition from traditional commercial textbooks to OER materials are often doing so with insufficient information and support. The literature has shown that OER have the potential to improve inclusion and student engagement, as well as facilitate transformative learning experiences. However, it has also highlighted significant barriers to adopting OER. This study contributes to a more complete understanding of instructors' experience, which can help educators and administrators to design processes that realize the full potential of OER adoption.

# CHAPTER FOUR

Established interview questions made it possible to anticipate broad themes such as instructors' motivation for adopting OER materials, the importance of support for implementation, learning outcomes, and perceptions of the role of equity and inclusion. However, the themes that ultimately emerged from the data were more richly nuanced. Chapter Four identifies and elaborates on each of these themes. As participants spoke about the costs associated with commercial textbooks, their observations went far beyond the price tag and its impact on students. As they discussed support for implementation, they shared what kinds of compensation were most helpful, and they articulated perceived connections between compensation and institutional commitment. Conversation surrounding the textbook and learning outcomes revealed a broad range of perspectives comparing the content and quality of commercial and OER course materials. Unexpected threads included instructors' beliefs about effective teaching, what it means to be a postsecondary instructor, and how their professional experiences were impacted by their identities.

## The Cost of Costly Materials

Hefty price tags were referenced by all participants as they discussed their reasons for transitioning from commercial textbooks to OER materials, and cost was the first factor listed by seven of the nine interviewees. Instructors cited commercial textbook prices ranging from $50 to $400, but the damage dealt to students' bank accounts was only one piece of the problem. Study participants described how high textbook costs negatively affected students, the institution, and the instructors themselves.

## Cost to Students

As instructors discussed the burden placed on students whose courses require commercial textbooks, their observations went beyond the direct, immediate financial impact of the textbook purchase. Sophie, for example, highlighted an affective liability, commenting on students' emotional experience in having to divulge financial challenges to their professors:

> My students are having a hard time, not being able to buy the book, and that's difficult because some of them would not tell me right away—because they're ashamed. And I get it. I understand that it's not easy to say, "hey, I don't have $45 to actually buy the book for this class."

Among the study participants, there was a shared sense that the significance of the price was dependent upon what students were receiving in exchange for their investment; that expensive textbooks were a substantial barrier to access; and that this barrier disproportionately affected underserved and underrepresented demographics.

### *Value*

Nearly all the instructors interviewed expressed that commercial course materials were not worth what students were expected to pay. After describing the various course materials students had been expected to buy, Bartlett concluded, "once I saw the cost, I just went, 'this is ridiculous.'" As Rahel described her team's decision to transition to OER, she shared their assessment, "we didn't feel that [the commercial textbook] was worth the ROI—like what we were getting out of that textbook didn't justify spending over $150." Instructors offered several explanations for their conclusion that the textbooks were not worth their price: students often did not plan to keep the materials after the course had ended; the course activities only required access to a portion of the

textbook; the textbook quickly became outdated; and the textbook did not offer anything that was not available for free elsewhere.

One common observation was that the content in commercial textbooks could easily be found elsewhere. As Tolls summarized, “why do people have to spend $400 on a math textbook? Two plus two will always be four.” Alexandra similarly asserted that foundational courses could be taught for free, and Gregory agreed, “you can find these topics in every introductory textbook.” Bartlett expanded on this observation in relation to his field:

> When I compared [the OER text] to the text from Pearson that I was using, other than illustrations and graphs and charts—I mean, it's not like I have cutting-edge science here. These are concepts and principles that have been around since I took [this course decades ago]. Other than bells and whistles, not much has changed.

He went on to explain, “I don't believe that the person using the Cengage textbook this term is teaching a different class than I am teaching using the OpenStax textbook, because they all have the same concepts.” Particularly for foundational and introductory courses, instructors indicated that the content was not unique enough to justify the textbook costs; other sources provided the same information as what was contained in the commercial textbook, and at no cost.

As an instructor in a field that applies to a broad range of academic and professional specializations, Tolls highlighted the reality that students often resell textbooks after a course has ended, and that this is more likely with courses outside of a student’s primary field of study. She shared, “if students aren't majoring in [subject], I don't want to ask them to pay $200 for a textbook where if they try to sell it back, they're going to get 30 bucks for it.” Tolls explained that students can only recover a small

portion of their costs though reselling textbooks, and so the opportunity to resell a textbook does not mean the textbook is affordable.

Gregory and Alexandra both expressed that the commercial textbook they had previously assigned was better than the OER they transitioned to. However, Gregory did not believe the difference in quality justified the difference in cost, explaining, “the book we used before was written better, and it was a little bit more enjoyable to read, but I've certainly never had anyone say, ‘oh, I would pay the $200 for a better book.’” Alexandra made a similar observation within the context of collecting student feedback about the course:

> When you're asking them [for feedback after the course] then they don't think about the cost at that point. They really just think about the content, which is good because you don't want them to say, “I don't care how bad this course is, so long as it's free,” right? No one goes, “I don't care. I'd rather pay something and have a good time.” No one's ever said that.

Alexandra shared that the expensive course package she used to require for her students was a very thorough, effective, high-quality product, concluding, “you were getting something for what you were paying.” Nevertheless, both Gregory and Alexandra indicated that their students generally had not taken full advantage of all the features of their course materials. As Gregory explained, the commercial textbook package he has assigned previously “had to be used in a very specific way to be beneficial to students, and the majority of students aren’t really willing to do that.” Alexandra similarly observed, “students weren't completing every single exercise. So, it's not like they were getting every penny's worth.” Gregory and Alexandra’s previous resources had been excellent, but that level of excellence was both expensive and unnecessary. Even when

commercial textbooks were very high quality, what students were getting was not worth what they were paying.

### *Access*

As participants elaborated on the impacts of high textbook prices, they identified issues of access as a significant non-monetary cost to students, and several shared their OER access experiences for comparison. The essence of the access conversation was that students without the textbook did not have the necessary resources to engage fully in the learning experience. Further, several instructors reported having noticed that this cost was disproportionately affecting certain groups of students.

Many study participants shared that when they had required a commercial textbook, some students did not purchase it, and as a result they did not have access to the information they needed for the course. Elaborating on this occurrence, Rowshan highlighted different experiences at different institutions:

> I used to assign a textbook for students, and it was not really affordable for them—for many of the students—particularly at [university in Oregon]. I included that textbook—that commercial textbook—when I was teaching in [another state], and not all of the students, but at least half of them tried to buy that book, but at [university in Oregon] I can literally say no one would do that. And then they try to stick to the slides or asking for the class slides, and you know that slides are not always detailed, comprehensive, and it's not a good reference. I mean, for further studies.

As indicated in this observation, Rowshan found that her students would often attempt to rely on supplementary course materials other than the textbook, but that those resources did not contain the level of detail that her students needed.

Both Tolls and Rowshan drew comparisons to OER within the context of access. Tolls expressed that she found access to be a key advantage of OERs, and she

emphasized that the benefits of this feature extended outside of the context of coursework:

> OER to me is like a library. You don't necessarily have to have a credential to go in there, right? It's open source. You just go; you get it. If you leave [your institution], and you need access to something, that's where you can go. You have a plethora of knowledge from so many different focuses. And so, outside of just being cost effective, or actually just completely free, students can go there for anything.

Rowshan also cited access as an advantage of OER, and she shared a specific example of how using OER had made it easier to meet her students' needs when the Covid pandemic impeded their ability to attend classes in person:

> I authored this [OER] textbook during the summer after the pandemic, and then from the fall we went back to [in-person] school. But I had some students—because they were immune compromised, they had to on and off attend the class. Or I had some student parents who had to, for example, miss the class for a week. And when they were asking for class materials to catch up, I was just letting them know that, well, we're working on Chapter Five of the textbook. And they found it very helpful and reliable because that was the textbook, and it was accessible everywhere.

Despite the general accessibility of OER course materials, instructors shared that OER did not provide a solution to all issues of access. Tolls described needing to reformat OER materials to make them accessible to students who struggled to read them, as well as specifically seeking materials with additional accessibility features such as accompanying videos or audio recordings. Rowshan also experienced challenges with the accessibility of OER materials for students who relied on assistive technology such as screen readers. She explained that platforms that had been supported at one institution were not available at another, which limited the formats available to Rowshan's students.

Several instructors noted that issues of access had impacted some students more than others. Sophie and Lynn each pointed out that the student population served at their

institution was particularly likely to struggle to afford course materials. Gregory described how students receiving financial aid often encountered access challenges, explaining, “if they're using financial aid to purchase their textbooks, they can't necessarily purchase them until they receive that aid.” Bartlett shared similar observations about which students were most impacted, and how the situation changed when he switched to OER course materials:

> More students who couldn't afford the textbook without their financial aid to start with were students that were minority disadvantaged. And my only reading of that is from their names—because that's all I see is their names—but I would see more students with names that appeared to be minority names emailing me, saying, “I can't get the textbook. I won't be able to start for a week.” You know what? From day one they have access to the OpenStax textbook because of the digital print.

Ana recalled noticing that international students were more likely to forego purchasing the textbook, even though her institution at the time “had tons of international students because they were really working on their diversity.” In further reflection, Ana shared how the concept of access as an issue of equity was not something she had recognized in her earlier teaching experience:

> I remember us all talking about it as teachers, too, “So-and-so never buys the book; So-and-so never buys the book.” But we never really had the conversation about, “can So-and-so afford the book? How can we make that more accessible to them?”

In this circumstance, one demographic group—a key demographic identified in institutional initiatives—was less likely than others to be able to access educational material. Ana’s experience serves as an example of how the collateral damage from high textbook costs can extend from individual students all the way to the institution.

**Cost to Institution**

While inequitable access may hinder the success of institutional initiatives aimed at supporting specific demographic groups, such an effect is difficult to quantify. Several instructors indicated that textbook costs had a negative financial impact in a more easily observable way: reduced enrollment and poor retention rates. Ana shared that her current institution was implementing initiatives to improve retention, and that she was interested in conducting research surrounding the impact of OER adoption on the DFW (final grades of D or F, and withdrawal) and retention rates. The implication was that Ana had noticed an improvement with OER.

Teaching online asynchronous courses at more than one institution, Bartlett described one college's process by which students who did not submit work during the first ten days of the course were "administratively withdrawn from the class." Aside from the impact to the students who were dropped, this means that when students were unable to pay for required materials early enough in the term to submit assignments within the first ten days, enrollment was directly impacted. Bartlett summed up the access-related effects of transitioning to OER:

> The difference in access is I don't lose students right at the start. Because my students have access to the textbook sooner, I retain students that I was losing. I mean, that's just a fact. I've already seen this year—every student started the year with the textbook. I didn't have one student say they didn't have the textbook.

Not only does this mean that Bartlett's students avoided the disruption of being dropped from a course, but also that the institution kept students enrolled. Although Bartlett did not directly address this connection, retaining his students meant that Bartlett maintained more robust class numbers. When there are not enough students enrolled, institutions may

cancel course sections, and adjunct instructors likely lose the corresponding income. Over time, ongoing low enrollments can threaten the stability of full-time faculty positions and even academic programs.

Alexandra shared that it was important for her program to have healthy class sizes, and how an expensive textbook had negatively impacted enrollment in her courses. She recounted, “I had students who told me, ‘I just don't have money to buy that textbook. So, I'm gonna take another [option to satisfy the degree requirement].’ So, I do need to worry about retention and attracting students.” In Alexandra’s case, the institution may have been able to keep that student enrolled, but if too many of Alexandra’s students opted to take a different course, then Alexandra’s program could be at risk of facing cuts to classes and faculty because of low student numbers.

**Cost to Instructors**

In Alexandra’s case, losing students to other programs was one challenge that she had encountered because of an expensive textbook. None of the instructors in this study explicitly referenced cost when describing the ways in which they were negatively impacted because their course required materials that students could not access freely. However, several participants described circumstances in which the inaccessibility of the commercial course materials had resulted in additional workload, and some also described an emotional burden as they operated within the traditional college textbook model.

Some instructors indicated that their workload was negatively impacted when they assigned textbooks that were too expensive for students to purchase. To ensure their

students had the information they needed, the instructors themselves took on the responsibility of identifying and implementing alternative solutions. When their students explained they would not be able to purchase the text until later in the term, both Gregory and Bartlett reached out to the publisher of the course materials to request an option for free short-term access. When Tolls' students said they could not afford the textbook, she made photocopies of the pages the students would need. Tolls described arriving at OER though her determination to provide course information to her students without requiring a textbook:

> I have teacher copies. I'll just pull from them, create lecture slides. I read through copyright laws for Oregon and the United States front and back. How many pages can I photocopy before it becomes a copyright issue? How long of a video can I show before becomes a copyright issue? And then I started pulling things from OER and kind of creating my own readings. […] So that's kind of my journey on how I ended up using OER course materials.

It is worth noting that study participants did not describe their increased workload with any sense of irritation toward the students who did not purchase required textbooks. Rather, instructors were determined to find a way to meet their students' needs.

When a tone of frustration did arise, it was in recounting additional unreasonable obstacles. Bartlett shared a specific experience reaching out to a publisher representative to get textbook access for his students:

> I said, "I've got half a dozen students that can't access a textbook." [Then the textbook representative said,] "well, we can't get you that. That's copyrighted information. You'll have to pay for that for the students." I said, "wait a second—these kids are just waiting to buy your textbook. They just can't pay for it for a week or two. But you can't give me the first chapter so they can work on the first assignment?" And she goes, "well, no, that's not how the policy works for us, because what if they don't buy the textbook?" I said, "well, then they probably don't finish the course." But that just floored me—that that was the response from my textbook rep.

Fortunately, Bartlett's interaction with an unhelpful publisher did not appear to be a common experience. Gregory described receiving more supportive customer service, with two different publishers each willing to provide free trial codes for students who needed more time to be able to afford a textbook purchase. Nevertheless, these experiences align with those shared by other instructors, providing examples of how expensive textbooks could sometimes increase instructor workload.

Another non-financial toll that several instructors described was the experience of conflict in holding strong personal convictions against the system in which they and their students were expected to participate. Alexandra stated, "I have almost an objection of my own to it. There's no reason why textbooks should cost that much." Gregory explained how information from a colleague had inspired an ethical objection to supporting publishers, "[a colleague] explained to me how really evil Pearson is. She's like, 'don't support them. Don't give them your money.' She told me about the things they did. I was like, 'wow, that's really bad.'"

Recounting the experience of being given the choice of whether to use the standard textbook when teaching at one community college, Tolls recalled deciding, "well, if I have an option, I'm not going to." As described, Tolls spent a substantial amount of time finding and compiling content and materials for her students to access free of cost. Most study participants received some kind of compensation for their OER work, but Tolls did not.

## Compensation for Transformation

According to study participants, students were not the only ones who found themselves lacking sufficient resources. In stating simply, “we’re not paid enough,” Bartlett expressed a sentiment that nearly all his fellow instructors conveyed in some way. Instructors referenced both time and money as they discussed compensation for the work involved in transitioning from commercial materials to OER. Under the umbrella of compensation, study participants shared the meaning they associated with institutional investment in OER, their experiences with grants, and the importance of compensation in the form of time. One instructor did not bring up compensation at all, but among the eight who did discuss it, none reported having received sufficient compensation for their work.

### Interpreting Institutional Investment

As instructors described the financial and time-related resources they had needed, requested, received, and dreamt of, an underlying thread emerged: institutional compensation was perceived as indicative of institutional commitment. Gregory summed up the importance of institutions providing resources for the initiatives they claim to support, “should you kind of put your money where your mouth is? Oh, yeah, it's important.” Rahel expressed a belief that it was the institution’s responsibility to ensure that instructors had the necessary resources, asserting, “if instructors aren't given the resources that they need to revise something and to teach, then, in my opinion, the course isn't good, you know? It's not what it's supposed to be.” Rowshan similarly highlighted the importance of institutional commitment, not only in financing the OER creation and adoption, but also in communicating to instructors about available opportunities. As she

described, staff at her institution were “really working hard and raising the awareness among teachers and instructors. So, the first reason that I got to that point of authoring an open-source text was awareness that this was a good opportunity.” For Rowshan, communication was one way that her institution indicated its support for OER initiatives.

Other instructors’ experiences varied, and participants provided several examples of the two distinct perspectives of being appreciated versus feeling under-supported. Rahel was able to collaborate with other instructors as she worked to adapt and implement OER course materials, and she received funding that compensated other instructors for the time they contributed to Rahel’s course re-design. Rahel described this strong institutional commitment to her project:

> [the project of transitioning to OER] was approved, and then, you know, we discussed how much time it was gonna take. And actually, it got adjusted, because then it took more time, and they actually adjusted that, so that was nice. And then I also had an online learning specialist working with me to help rebuild the course shell.

Gregory described how it had felt to be awarded a grant for his OER work, “it was kind of nice to have that recognition and say, ‘hey, this is important to us, so we will give you some money to do it.’” Both Rahel and Gregory conveyed feeling that their OER work was valued.

In contrast, Sophie shared that in her experience, it seemed her institution’s support was less than what another institution might have provided:

> Another instructor that I know, at another institution, [is] gonna get, for example, a course release for changing the curriculum, which I think should be the normal path. And actually, this person said, “oh, you should ask your institution. They're definitely gonna give you a course release.” And I'm like, “yeah, probably not.”

Sophie had found herself spending a great deal of time on technical aspects of her textbook which were unrelated to the content, pedagogy, or curriculum design. She expressed frustration at this use of her time, saying, “I mean, if [institutions are] pushing OER, could there be a place where, you know, you get technical help?” Sophie’s experience highlights the perception that if an institution’s support does not adequately address OER initiatives’ needs, it appears to contradict any claim that the institution supports OER initiatives.

**Funding the Transition to OER**

Financial compensation was brought up by most of the study participants, and they reported a wide range of experiences. Rowshan shared that one of the reasons she ended up creating an OER text was “because [funding institution] said, ‘well, we're gonna fund you for authoring a new textbook in this area.’ And that was actually a very good incentive.” Most of the instructors in this study had received grants, and Rahel articulated a direct connection between funding and OER use, “if they're like, ‘oh, we also have grant funds that could help support this process if you use an OER textbook.’ Wow! That might really change the conversation, right?” Sophie and Rowshan also found grants very helpful, but Sophie pointed out that applying for a grant is a time-consuming process itself, “I mean, think about the time you spend. You're working on your book, you have to think about, writing a grant proposal. It's just a lot. It's really—it's just a lot.”

Bartlett and Tolls had undergone the transition to OER without compensation for the additional work. Bartlett shared that he had been awarded a grant to participate in a

summer professional development opportunity, but he had never received the promised stipend, and Tolls had applied to multiple funding opportunities but had not been selected. Tolls indicated that her work would continue even without the funding, and that she would also keep applying:

> I will continue to apply for funding. I don't think that's ever gonna stop for me until I actually get it. Every time there's funding available, I'll just update my proposal to fit the questions for that year and just keep submitting until it happens. And until then, just continue growing what I have.

Gregory explained that he had not been aware of funding opportunities until they were mentioned by a colleague, and that time was a factor in his decision to apply for one grant instead of another.

> I learned about [a grant opportunity] after the fact. But she's like, "oh, you can still apply for it." And so, we had—I think we still do, through Open Oregon—a little grant for implementing. Actually, I remember there were two programs. One was for implementing an open source, and the other was for creating an open source, and [the grant for OER creation] was, you know, more money. But I did the implementing because I wasn't really interested in creating one, or—wait—I wouldn't say I wasn't interested; I didn't have the time to create one.

Although Rowshan did receive grant funding, she explained that the grant had not been enough to pay her adequately for the time she dedicated to the project, "funding is very important. Particularly when I was authoring that textbook, I wish that I could have been paid a summer salary because it took my whole summer." Rowshan explained that spending a summer writing an OER textbook meant sacrificing the opportunity to engage in any other work related to her research agenda. For Sophie, financial compensation was less of a priority; what she needed was more time to the work of creating and implementing an OER textbook and curriculum.

**The Time It Takes**

Study participants shared that transitioning from a commercial textbook to OER course materials had required a large amount of time, and as previously described, there was a wide range of experiences regarding compensation for the time. Most instructors said they had not had enough time or indicated that the result would have been better if they had been able to dedicate more time to the project. As Sophie spoke about the grant funding for the OER textbook she was co-authoring, she explained that her objective was to secure course releases so that she could balance her OER work with her teaching load, stating, "I don't need money—I mean, everybody needs money—but what I need is time. Because teaching three courses while developing a textbook? You know what it is, it's insane." Instructors reflected on the importance of compensation in the form of time, described specific needs, and shared their strategies for managing time-related constraints.

While some study participants seemed frustrated by the limitations imposed by time issues, others conveyed a sense of resignation or acceptance of the inevitability of having insufficient time. Sophie asserted, "switching textbooks, regardless—OER or not—is an immense amount of work for coordinators or teachers or [whoever] because you have to review and redo everything." Alexandra provided the additional context of how additional time for her OER work could benefit students. She explained that having more time to locate high-quality materials could help her students receive more timely feedback on their performance, as well as making her time commitment as the instructor more reasonable:

> What I really need is to find more online free resources that have automatically generated answers that I can guide the students to rather than me correcting every single error over and over and over and over, which is not really sustainable.

Though the most common approach was a complete transition from one term or academic year to the next, some described how they had spread out the adoption process. Sophie summarized the multi-year process:

> You can implement everything the first year, with everything that's given to you [the OER textbook and all the supplementary materials]. And the second year, you adjust. We're gonna dive more into it as we teach with it, because we're gonna seek students' feedback. And as we go, then we'll have a better picture for what we wanted.

This iterative approach was popular; several instructors expressed the intention to continue making improvements to their OER materials and corresponding curricula over time. Alexandra further explained:

> I can only develop so much as I go. Next fall I can develop some more and keep adding, and if I do that every year, eventually there'll be just as much for them to practice on as there was [with the commercial textbook used previously]. I just can't produce the amount of work that the $300 textbook had on my own.

For Ana, the iterative nature was not only in reference to her own OER project, but also in her own understanding of OER:

> It's step by step by step. I do take advantage of the grants that are out there. Our school has been great about that. And so, every summer I plan out what class I'm going to upgrade. And that's what I do. The journey has been like, "this is what an OER is," to, "oh, *this* is what an OER is," and it's expanded every year, you know? So, I think it's just part of the journey.

Several instructors expressed a similar belief that the process of gaining familiarity with OER systems and existing resources required a significant amount of time.

Particularly for those who were newer to OER, one frequently cited need was the time to adequately vet available OER materials. Gregory reflected, "you know, a big

thing, I think, for a lot of folks might be the time to find something and kind of vet it and be like, ‘is this acceptable to me?’” Rahel elaborated on the various elements that instructors need to consider when evaluating OER materials:

> Before I even start this whole process, I have to choose [an OER textbook], right? And that can be a time-consuming process. Do they have resources? Do they cover DEI stuff? Are there different types of [professionals in the field] profiled? Are there videos available? Are there case tests available for assignments? And then, are there instructor materials? Right? If there's no instructor resources, I'm not even gonna look at that textbook to be honest with you, because again, I don't have the time to do all this stuff. I'm not being compensated.

These experiences show that even when an OER already exists, the process of locating, reviewing, adopting, and adapting that resource can require a great deal of time.

Rahel’s OER project involved finding and adopting an OER textbook, as well as redesigning the curriculum. It is relevant to note that Rahel’s role at the funding institution was as an adjunct instructor. She found that the time she had been allotted for the OER work was not enough to develop the additional resources that her institution expected:

> I did receive a small stipend to make some additions, but there was an expectation that there were also going to be newly recorded videos and all that kind of stuff. And I'm like, “I'm out of time. I've already spent all of this time just updating the course. You're gonna have to give me another stipend or a grant or something if you want me to then re-record all the videos,” because they were professional, and you know, that was outside my teaching time.

Bartlett joined Rahel in highlighting faculty status as an additional part of the equation, describing that for “adjunct faculty to completely develop a non-textbook based OER course is extremely time consuming, and we're not paid enough.”

As Sophie and Rahel talked about the time aspect of their projects, both expressed a need for technical support. Rahel’s institution had online learning support specialists

who helped her design the course shell in her institution's learning management system. Rahel found this assistance helpful but noted that she still ended up spending a lot of time on technical issues, explaining, "so I'm providing all the content, which is fine, but then I was also expected to go in and edit, and you know, check things and fix things." Although Sophie did not receive the technical support that she would have found useful, she elaborated on how that support would have allowed her to focus more on the content itself, which would have been a more effective use of her time:

> I don't understand why none of us have access to editing services. You know, video editing services, help with our website. I mean, we're doing everything. It's ridiculous, right? I'd rather be creating the materials rather than spend so much time on editing, formatting, all that nitty, gritty work that has to be done, right? I just want to create this—the material. I'm not a publisher, and I'm not an editor. And when people publish with a regular publishing company, they only do their creative work. They're not asked to do all the other stuff, right? They just submit what they have in mind, their activities, and they [the publisher] put it together, looking good. We [OER authors] had to do all that. And that's a lot of work.

It is worth noting that technology support needs did not impact all instructors equally. Rowshan shared, "when I got to the point that I wanted to create that textbook, I realized that the platform [Pressbooks] was quite user-friendly." For Rowshan, technology concerns did not present the additional time constraints that they had for Sophie and Rahel. Nevertheless, whether instructors had created their own OER texts or adopted existing resources, they found that redesigning a course required a great deal of time.

**How and Why Instructors Foot the Bill**

Most study participants reported that they were not fully compensated for what they had personally invested in the transition to OER, and unpaid time dedicated to OER work is only one of the examples instructors shared. In addition to working for free, instructors explained that choosing to create or adopt OER course materials meant

sacrificing other professional opportunities, and it also constituted a significant financial and professional risk. Despite the costs incurred, study participants described holding strong convictions that using OER was the right decision for their students.

Some instructors expressed that when they chose to engage in the work of transitioning to OER, it meant sacrificing another opportunity. Rowshan described how some professors may view their options, "you may weigh the different tasks that you can do and say, 'well, I can do this research and get a summer salary versus I can author an open-source textbook.'" Still, making money was not the only opportunity OER authors and adopters risked missing. Rowshan went on to explain that faculty publication requirements could be a particularly persuasive consideration for those on the tenure track:

> Sometimes even if there is no payment, you prefer to publish a paper, which is peer reviewed and can be listed as one of your contributions—an achievement, while an open-source textbook, which you cannot easily get reviewed, might not be considered as one of your accomplishments. It doesn't count as a scholarly publication.

Instructors who need to be certain their work will support their case for promotion may opt not to spend their time and energy creating an OER textbook.

Sophie described a recurring internal struggle as she evaluated whether her OER work was worth what it might cost her. She emphasized that instructors may not be willing to accept the risk associated with abandoning a tried-and-true curriculum in favor of authoring and adopting OER:

> A lot of instructors are overworked, and they're tired, and it takes a lot of time, right? Again, I come back to this issue, and believe me, I was almost to the point where—you know what? This is working, and why am I even changing all this, right? Because now the critics are gonna come directly to me, because on top of me changing the curriculum, it's the book I co-authored.

Nevertheless, Sophie had persisted despite the risk. She described her commitment to following through with implementing her redesigned OER-structured curriculum:

> It's something I want to do. So, you know, I'm gonna probably work next summer for free just to implement all this—just because I want it. But you know, am I doing this because I get a free course, release or something? No, it's not gonna happen. So, I do it just because I want to change. I want to teach with something different. I want to move towards more what we're doing in the [OER] book.

Tolls and Lynn both described a long-standing resistance to the practice of requiring students to purchase commercial textbooks. As Lynn shared how her OER journey had begun with a textbook she had co-authored with a colleague, she reflected:

> I don't even know that they were calling it "OER" yet when that happened. But I think we were in like the first group of people who were—second, maybe—who were doing that from the initiatives with the library. So that was kind of like the official start of my thinking about it in that way. But for a long time, I had already been using—not capital "OER"—[but] really believing in wanting to provide students no-cost, or at worst low-cost, ways to access materials.

Lynn described her objection to the commercial textbook model as an ethical consideration, "I was just like, 'I can't in good conscience ask this person to spend this kind of money on a text.'" Tolls held similar convictions, and she elaborated on how the circumstances had contributed to her decision to separate from a previous employer. She explained that having to require students to purchase expensive textbook materials was "a big reason why I left [previous institution]. I was like, 'I can't do this. It makes me feel gross. I feel disgusting. I don't want to do this.'" Even though redesigning their courses was time-consuming and risky, and they did not always feel adequately supported, instructors expressed a common conviction that the status quo—teaching out of traditional commercial textbooks—needed to change.

## Comparing Content and Quality

In addition to the issues of access and the cost to students, most instructors cited content as a significant contributing factor in their decision to transition from commercial textbooks to OER. Sophie stated, “I wanted things that would have not been probably found in a commercial textbook.” As Sophie went on to describe what those “things” were, she talked about inclusion, the social justice lens that she and her co-authors were applying, and the representation of diverse perspectives. Sophie explained that her OER textbook was more gender inclusive than typical textbooks in her field, which frequently feature real and hypothetical people—but none outside of the gender binary. In addition to representation, instructors highlighted differences between OER and commercial textbooks in how current the content was, its adaptability, and the availability of supplementary resources. To establish adequate context for how instructors judged the differences in content and quality, it is valuable to understand how instructors described using textbooks in their courses.

### The Role of the Textbook

Instructors’ textbook use varied significantly. Bartlett shared that while teaching with a commercial textbook, his online asynchronous courses had been very textbook driven. He recounted having explained to a colleague, “your textbook makes your whole course because that’s what makes your ability to further the concepts, to get the questions up. All of that happens out of the textbook.” As for the OER version of Bartlett’s course, it was clear that the textbook was still central, as he explained, “when you're teaching asynchronously, you’re teaching primarily out of a textbook, teaching chapters in weekly

modules." However, Bartlett described having adopted a more intentional approach to finding and incorporate supplementary resources and activities that supported the development of critical thinking skills. He provided the example of topic papers and discussion questions addressing themes such as inequity. Bartlett used the OER textbook as a student resource and reliable source of information, but he adjusted the class activities based on his pedagogical approach and his students. This appeared to be the most common role of the textbook among the study participants.

Alexandra expressed that a course textbook provided a carefully designed, dependable structure, explaining that "when you have the textbook, you have something to rely on—sort of something that feels safe." Still, Alexandra's classes were not limited to the textbook content; she adapted every course to that term's students. Similarly, Gregory considered the textbook a supplementary resource for students:

> I don't use the textbook that much or teach from it. It's like just a resource for students. So, I don't follow it that closely. I have my own thing. [I tell students,] "if you're looking at the textbook, this is where it is—the topic we're talking about."

Rowshan also described the textbook as a resource for her students to understand topics in greater depth, and to access additional models and useful links. For Ana, the textbook provided students information and examples surrounding essential concepts, and then Ana incorporated a variety of strategies to customize content, adapting to incorporate her students' interests and experiences. In Rahel's field, real people are often featured as examples in textbooks, and so a course textbook was a key mechanism for students to see who was engaging in her field outside of the academic context. For Rahel, one advantage

of transitioning to OER was the opportunity for more diverse representation in the people students would perceive as contributors and professionals in her field.

**Diversity of Perspectives**

In listing their reasons for transitioning to OER, several instructors described wanting to expand the perspectives featured in their course materials. Tolls shared how representing a broad diversity of perspectives was important in course content relating to public speaking:

> A lot of public speaking materials are geared more towards Western audiences, like eye contact, body language, all these types of things that don't talk about Eastern customs when it comes to public speaking, right? I teach a tremendous number of immigrant students and non-native English-speaking students, and I understand the importance of having to speak to Western culture. But I also don't want to neglect Ethiopian culture, Vietnamese culture, or Chinese culture.

Rahel similarly emphasized the importance of representation, “my students are extremely diverse. They're first-generation college students—different cultural, ethnic backgrounds and races. It's critically important that when we’re teaching, and when we’re showing examples of [professionals in the field], that they see themselves reflected.” These two perspectives capture the central issues in diverse representation. Instructors wanted course materials that would expose students to a variety of perspectives that were different from their own, and they also wanted students to be able to see their own identities featured.

Rowshan and Gregory both reported that commercial textbooks in their field tended to highlight the contributions made by men. In the OER that Gregory adopted, profiles of significant people are not a feature, but Gregory expressed the belief that textbooks would ideally feature contributions made by women. Rowshan shared her

approach to improving the diversity of representation in a field traditionally dominated by male scholars and professionals:

> I once got a comment from one of my students saying, "well, we are always seeing that in [this field, all the people presented as significant figures] are male. And we would like to hear more about the achievements, or like scholarly works of women." I mean, basically hearing about diverse groups of scholars. I try to embed that in my open-source textbook by including, for example, case studies, talks from different groups of scholars, different ethnic groups, different gender groups, different age groups.

When asked whether her students had noticed a difference, Rowshan explained that her students using the OER "realize that there are quite diverse works from all over the world from different groups." However, these students had never experienced the previous male-dominated version of the course, "so, they didn't feel the lack of that inclusion." Sophie also observed that her students did not often comment on diversity of perspectives, noting, "they aren't seeing what it was before." Sophie provided an additional perspective regarding inclusion in course materials, sharing what she had noticed in an updated version of a commercial textbook that was supposedly more inclusive:

> [The publisher] mentioned that they are coming up with a new version of the book that would be more inclusive, but they sent me some sample lessons, and I didn't see anything [indicating improved] representation. My students are not represented in the textbook. You know, it's very higher-class centered. […] It's nice to see, but can my students relate to that? No, they don't.

Sophie explained that in comparison to the commercial textbook, her OER contained themes that her students would find more relevant to their reality.

Rahel and Bartlett expressed the belief that when students can see themselves represented in the course materials, it is easier for them to see how the course content is relevant to their own lives. Rahel stated that her OER textbook contained a greater

diversity of representation than the commercial textbook she had used previously, and she highlighted that diversity of context was important in addition to the diversity of the people represented:

> The examples and the resources that are used [in the OER] represent my students more broadly, you know, in terms of who's being interviewed. [Diversity of representation is valuable] not only because it needs to be people's experiences. [It is also valuable to represent] the different kinds of industries that they're working in, you know, the different communities that they're working in, or a part of. Are you rural? Are you urban? Are you suburban? There's a lot of diversity and I think it's also really important. And the reason why I'm moving towards it is again, because I want students to see themselves in it. I want them to have those examples.

Diversity in context was also important to Bartlett, and he adjusted his course's content based on his knowledge of his students' other courses. He explained that even though all introductory courses in his field covered the same foundational concepts, he intentionally chose to center inequity and environmental issues because those concepts were likely to receive less coverage in other courses. For Bartlett and several other study participants, the adoption and use of OER had been instrumental in facilitating the inclusion of a greater diversity of perspectives.

**Adaptability**

The ability to adjust course content to include more perspectives is one example of how instructors reported taking advantage of the adaptability of OER materials. Within the context of comparing OER and commercial textbooks, study participants expressed that one of the best features of OER was the instructors' ability to modify course materials, or as Rowshan summarized, "update them pretty easily without any cost." This flexibility permitted instructors to keep course materials current, change content to

address their students' needs and interests, and adapt materials to suit their own pedagogical approach.

Some instructors noted that OER materials could easily become outdated, but most indicated that in comparison to commercial textbooks, OER provided more up-to-date content. In the OER version of his course, Bartlett referred his students to YouTube videos and other public information sources as way of incorporating up-to-date content in student discussions, and he described needing to continuously review that material, "I have to check every week because you never know who's taking their links off of public [websites]." In this case, because the videos themselves were not part of Bartlett's OER, the implication was teaching with OER had inspired or facilitated Bartlett's pedagogical choice to include very current content in his courses. Alexandra agreed that adaptability was "a big advantage of OERs," elaborating on the convenience of "the ability to change your course all the way up to a week before, or before starting a chapter, [in the event that] you realize that given the current events, [another approach] would be a much more interesting angle." Bartlett and Alexandra had both observed that OER made it easier to adjust course content in a timely fashion.

Aside from helping to keep materials current, instructors indicated that the ability to adjust the content to meet students' needs was a significant advantage of OER. Rahel, Rowshan, and Bartlett all reported that students often started their courses without the expected level of familiarity or skill with foundational content knowledge. Rahel reported being able to address this gap by incorporating strategically selected chapters from an OER. Rowshan designed her OER to be less mathematically focused than typical

textbooks in her subject matter, thus diminishing the math-skills obstacle for her students. Rowshan also described that OER's adaptability was valuable, "for example, if one year I realized maybe I should emphasize this particular subsection a little bit more including further examples, or [if] I made a model, [or if I wanted to add] one or two images." The ability to easily make changes to her OER meant that Rowshan could continue modifying her course content within the textbook itself, as opposed to presenting her students with exceptions and additions outside of the course's main resource.

Sophie described the importance of adaptability in considering her students' geographical context when designing OER. In her case, the issue of students' geographical location arose in part because she was co-authoring a textbook with instructors outside of Oregon, one of whom was teaching in Florida. Sophie described the importance of maintaining awareness that students and instructors in different locations may have different perspectives on textbook content:

> I think it's a good thing to be aware of [issues of inclusion], but because we're working with someone who's in Florida, you know, that colleague in particular is always like, "wait, we have to be—yes, going that way, but we cannot go too much that way, either." […] We still need to be mindful of who is gonna use this textbook.

Sophie described her institution's immediate geographical location as "very extreme and very progressive," and she provided the example of her textbook's explicit discussion of gender inclusive language. Sophie elaborated on how this presented a challenge when co-authoring across state lines, explaining, "I don't know the details on the laws in Florida." The implication was that themes such as gender inclusion may not be well received in Florida and may in fact be subject to content restrictions imposed by state legislation. Sophie brought the conversation back to the advantage of adaptability, pointing out that

anyone adopting her OER would have the flexibility to remove or replace content as needed. She explained, “it's a Google doc, so you can copy it and remove all that if you feel like it's gonna put you in a position that's gonna be uncomfortable.”

Alexandra explained that she modified her classes every term, and she articulated how the adaptability of OER could be useful as she adapted to her students in each class’s unique context:

> No matter how good the textbook can be—or could be—there's no way one can write the perfect textbook for everyone, cause context is always slightly different. If there's seven students [as opposed to a larger class size], that's already gonna modify what would be in theory the perfect textbook. So, in a way, OER really does let me work.

She reflected that it had been a “good surprise” to find that the OER material was “more malleable.” However, to capture the full context of Alexandra’s comments, it is important to include her observation that she had not found outdated textbooks problematic. She explained that she had encountered “no problems substituting and adding to the coursework” when she was using a commercial textbook in the previous format of her course.

Beyond adapting content to keep it updated or to meet students’ needs, Rowshan pointed out that with OER she could “tailor the content based on my teaching method very easily.” Rowshan conveyed an ongoing active engagement in professional development opportunities relating to teaching:

> A part of my research agenda is learning science, [and] whatever I do as one of my research streams, I also study. How do we teach STEM to non-STEM students? And just focusing on different instructional approaches and strategies is a part of my research.

Rowshan highlighted the value of having course materials that could grow and change along with her pedagogy. She explained, “editing and updating the textbook based on the students’ needs, or based on even the growth and improvement of my teaching style will be much easier through open-source textbook platforms versus the way that you publish a commercial textbook.” This observation summarizes study participants’ comments surrounding the adaptability of OER course materials. OER made it easier for instructors to make changes to the content according to their teaching approach, current events, geographical location, and their students’ needs and interests.

**Supplementary Resources**

Despite the ability to adjust and add to OER course materials, several study participants highlighted the advantages of their commercial textbook’s robust bank of supplementary resources. Although some found that OER texts had more resources available than their commercial counterparts, the more common experience was that transitioning to OER meant fewer instructor resources, as well as fewer practice exercises for students.

Rahel and Sophie had each experienced OER textbooks with more robust instructor resources than their previous commercial texts. Rahel adopted an OER that included “all these additional resources. There are PowerPoints; there are test banks; there are discussion questions. You're not having to create it from thin air. It [the OER I adopted] actually did come with a DEI guide.” Sophie shared that her approach to her OER text included a lot of additional materials, “the more material available the better. So, we're keeping that in mind when developing our OER. So, a lot of ancillary materials.

It's nice to know that there are materials that you can use without having to create everything."

As described, Alexandra found that the OER textbook lacked sufficient practice exercises for her students to receive timely feedback on their progress. This difference between commercial and OER texts meant that with OER Alexandra was spending more time grading and providing feedback, and at the same time her students were receiving less feedback. Alexandra shared, "I don't know exactly how I will resolve that because I can't actually [provide]—you know, for 22 students—all of the [feedback] that they were getting from this automatically computer-generated [feedback process]." In Alexandra's case, it turned out that the OER textbook did have additional supplementary resources:

> It wasn't until I got to Chapter Three that I realized in working with the people who'd written a book that there were self-corrected exercises for each chapter that they could do [where] they would submit their answers and get [feedback on their] answers automatically.

The discovery of these additional resources was helpful, and Alexandra expressed the belief that the second term would run more smoothly. However, she also shared that she anticipated needing to continue developing her own supplementary resources over time. In summary, most study participants indicated that commercial textbooks had more supplementary resources than OER texts, but some had adopted OER textbooks with more resources than their commercial counterparts. The common perception was that both instructors and students benefitted from having access to an abundance of supplementary resources.

One caution was offered by Bartlett. He described that the OER he had adopted did not include a platform to assist instructors in structuring the course and tracking

student performance. Bartlett explained that to address this need, OpenStax had partnered with apps that would be helpful to instructors and would cost $25 per student. Bartlett had decided not to take advantage of that opportunity, explaining that using such platforms "takes us away from the OER side of it. It takes us into—we're getting into a package." Bartlett asserted that "staying with a textbook platform—it makes you lazy. You use their texts; you use their links." When asked whether his ability to find and incorporate supplementary videos, links, and other resources would have been the same if he had stayed with a commercial textbook rather than switching to OER, Bartlett responded, "I wouldn't have looked. OER has [made me] think more about things like that. OER has made me look." For Bartlett, it was preferable for OER to depart from the comprehensive package model of commercial textbooks.

**For Better or Worse**

In reflecting on all these differences in content, study participants discussed at length the advantages and disadvantages of both OER and commercial textbooks. There was no consensus suggesting one was inherently better than the other. The question of quality emerged in several areas, such as how inclusive the content was, what kind of review process preceded publication, and whether students achieved the target learning outcomes.

Overall, study participants indicated a belief that OER course materials were more inclusive than commercial textbooks, and that teaching with OER facilitated more inclusive teaching methods. However, several instructors shared counterpoints to consider. Rowshan, for example, expressed that authors could make their content more

inclusive regardless of the publishing platform, “even if you publish something as a commercial textbook, you still have that opportunity to think more inclusively.” Gregory pointed out that the OER he had adopted was not particularly inclusive in its language, saying they tended to use names like “Bob”, “Frank”, and “Jane”, and that “they'll alternate between he and she, but it is still very bimodal in terms of the gender.” Tolls and Alexandra shared that any gaps in their commercial texts had not caused any difficulty for them; they had successfully incorporated culturally relevant supplementary materials and activities for their students.

For Alexandra, one way to measure a textbook’s quality was to measure students’ learning. As noted, Alexandra believed that her students had learned more with the commercial textbook program she had used previously. She stated, “if I could go back to that expensive textbook and it didn't cost anyone anything, I absolutely would.” However, she also expressed optimism that her experience teaching with OER would improve over time:

> It was a tough semester of teaching with using OER for the first time, and I do think that with time, repetition, and tweaking things around, I'm going to get it to just where I want it. That's my hope. So, we'd have this same interview three years from now, and I'd be like, “I would never go back to a textbook.”

Lynn, Bartlett, Ana, Rahel, and Tolls all conveyed a belief that at least some of the learning outcomes they wanted for their students could not be achieved through a textbook.

Several instructors discussed the value of some kind of mechanism to ensure the quality of an OER textbook. Gregory and Bartlett both used OERs that had been peer reviewed, and Gregory described how that had made his OER adoption “a lot easier,

because I was pretty confident that, okay, it went through almost the same exact process that a traditional, you know, publisher textbook does." A widely used review system for OER was a suggestion proposed by Sophie, Rowshan, and Rahel.

Rahel's institution used the Quality Matters system to review her OER, and Rahel provided an overview of what such a review entailed:

> Quality Matters is a national process for online learning that ensures that courses meet learning objectives; that they meet accessibility standards; that they're organized in a logical manner; that they're organized consistently, like module through module; and that your assessment tools also are actually meeting the learning objectives.

Rahel described how the broad adoption of such a system would make it easier to trust the quality of OER materials:

> [Quality Matters] might be something for OER to look at. Like, how do you sync with this national standard? The criteria are very specific, so it's not like it would be difficult, you know. In my opinion, when you have more specific criteria, it's easier to figure out what we have to do, right?

In this observation, Rahel indicates that having a very clear review process would make the OER authorship process more straightforward, in addition to improving the consistency and reliability of OER quality.

Though instructors expressed appreciation for the availability of supplementary resources with commercial textbooks, as well as the ability to feel confident in the quality of those materials, they pointed out OER remedies such as gathering resources over time and establishing a quality review process for OER. The essential conclusion appeared to be that the diversity of perspectives and adaptability of OER provided advantages that commercial textbooks did not. As instructors emphasized the importance of certain

features, they revealed some underlying beliefs about the principles and practices of effective teaching and learning.

## Beliefs about Teaching and Learning

None of the interview questions asked study participants to share their beliefs about teaching and learning, but this theme was a persistent feature in each instructor's description of their experience transitioning to OER. As they spoke in detail about the changes they had made, how they chose to design their courses, and which elements of a textbook they found useful, they were also revealing their beliefs about effective teaching. The main practices highlighted by participants included: ensuring course content would be relevant to students outside of the academic context; incorporating multiple perspectives; providing timely feedback on students' performance; engaging students; and incorporating some degree of critical pedagogy. In contextualizing their observations about the characteristics of effective teaching, it is useful to first establish that study participants did not all express the same beliefs about what their students should learn.

### Desired Learning Outcomes

Instructors were not asked to describe what they wanted their students to learn, so the interview data captured only those desired learning outcomes which instructors chose to highlight as they discussed their experiences; it cannot be assumed that they would have disagreed with outcomes described by others. Some instructors emphasized content-specific learning outcomes as a function of their job, while others focused more on students' career objectives. Still others indicated wanting students to learn how to think,

and one instructor shared her conviction that education could serve a "liberatory and transformative purpose" for both students and instructors.

Alexandra, Rowshan, Gregory, and Bartlett all expressed that it was important for their students to improve specific skills and knowledge associated with the course content. They explained that students were expected to have a certain level of skills and knowledge to move on to other courses in their field of study.

Several instructors shared their perspective that students in their courses should learn more than the course content itself. Rahel emphasized the importance of considering students' broader career goals:

> There's a bit of a finite timeline with textbooks in terms of, "we're here. We're teaching you this." Yeah, but where are they going? What are the next steps? "Oh, we just have to teach you this information." For me, that's 40% of it, right? Because students have to also learn how to get into an industry, how to network in an industry, how to get a job in an industry. That's the other 60%, in my opinion, because otherwise they aren't getting jobs. And that's the end goal here. They're completing their education; they're getting a job; they're improving their standard of living. You know, all these other goals.

Bartlett did not use the same career-focused framework, but he did describe the belief that critical thinking skills were essential for students to succeed outside of the context of higher education:

> You can teach anybody anything. You can't teach him how to think, but you can teach him any product knowledge you need to teach him. […] What's the critical thinking I want out of these people? What do I want? And what I really determined it was: originality.

Lynn described her course design as one that rejected the traditional model in which students learn content and then prove they have learned the content. In short, Lynn's students were responsible for assessing their own performance. When asked about whether she had encountered resistance from her students, Lynn explained:

> The group of students who's the most resistant to it probably won't be surprising. It's students who are actually super high achievers and have really learned to impress—you know, that they can get away with a lot and still come out with an A because, you know, they are privileged to be able to learn in accordance with how they're being taught, and they can produce material [in a way that] effectively persuades the instructor that they've got it figured out. [Those students] can often push back because they don't know what it is to do their best work.

Lynn wanted her students to learn about themselves, critically reflect upon "the ways they have been socialized," and take an active role in their education. Accordingly, Lynn spoke very little about the content of her courses, focusing instead on the processes and methods she used. Despite the variation in instructors' beliefs about what their students should learn, study participants were largely in agreement about key characteristics of effective teaching.

**Relevance to Students**

Eight of the nine instructors interviewed indicated that course content needed to be relevant to students, and many of their comments were previously included in the context of why adaptability was an important feature for them. Several commented that their courses were different every term. Lynn shared, "I do a lot of adjusting, and then every term is different, too, because students are also contributing to content. Every term is like its own little jewel of a class that will never exist again." Alexandra made a similar observation when she explained that no textbook could possibly contain everything that she would need for a given course because every term she would "have to then adapt it to the specific students" in her class.

As described, several instructors mentioned appreciating the ability to modify their course content based on current events. Bartlett shared having recently designed a

video for his OER course to explain a particular concept using examples that were local to his students so they could more easily identify the real-life application.

**Multiple Perspectives**

Just as the topic of relevance was covered in more depth under the context of adaptability, the practice of incorporating multiple perspectives was discussed within the context of the diversity of perspectives in OER. It was presented as a desirable textbook feature because instructors believed that incorporating multiple perspectives was a characteristic of effective teaching.

Ana shared that students in her courses were guided to critically reflect on their own pre-existing beliefs about the subject matter, and to consider what factors had contributed to that lens. In Ana's field, there are often two distinct perspectives, and she described reiterating to students, "we're gonna make sure that we are looking at both sides of every issue and balancing that constantly."

In addition to teaching in an Oregon institution, Bartlett also had experience using OER to teach students in Arizona. As he described his approach emphasizing inequity and encouraging critical thinking, he talked about the understanding he wanted his students to gain:

> The whole way through, we're talking about how the system sets up—well, the system sets up an unequal system. And what I want the students to be able to see at the end of that—without getting in trouble in Arizona, because they don't like it when I say that—but that they see that the system itself is what creates the problem. And that's the last paper we write is about the system. And I can bring in all these links to different articles—different news feeds where they can say, "oh, yeah, when they started redlining, you know, a hundred years ago, that created the problems we have now in terms of real estate. Oh, so that's how that happens. It's a systemic problem."

By presenting multiple sources of information instead of directing students to a single authoritative commercial textbook, Bartlett positioned his students to arrive at their own conclusions through a process of discovery.

**Feedback on Student Performance**

Providing feedback to students in a timely manner was mentioned by several instructors. Gregory noted that lack of feedback caused frustration for students, and both he and Alexandra described how their previous commercial textbook had included an online component that gave students immediate feedback as they worked through homework and quizzes. Alexandra expressed that feedback was key to student performance. She observed that learning outcomes with the OER textbook had been weaker than with the commercial textbook, and she shared her belief that one way to improve student performance was "by providing daily feedback, which is, of course, time consuming now in a different way." For Alexandra, the transition to OER meant that her students no longer received the amount of immediate feedback that was possible with commercial textbook programs' automatically graded exercises.

Lynn also highlighted the importance of providing feedback to students, but with her subject matter, the feedback could not have been given automatically. Lynn described meeting individually with students to have a conversation about their work and to explore what activities or adjustments could help the student move closer to their goals. Lynn shared, "that to me is the richer experience, where you're really helping a person figure out what they want to be about, and then helping them get there." Though instructors

described very different kinds of student feedback, several conveyed that it was an essential element of effective teaching.

**Student Engagement**

Student engagement was also frequently mentioned as a desirable feature of a higher education course, and there was substantial variation in the kinds of engagement instructors wanted from students. Rahel described the importance of designing activities that encouraged active participation, "you can't just read the textbook, right? That's not gonna do anything." Aside from active participation, other kinds of engagement cited by study participants included student-directed and even student-generated content, as well as co-creation of knowledge.

Ana shared that she had begun soliciting input from her students so that the course content and resources would reflect what students had requested or suggested. Both Ana and Lynn described incorporating class activities in which students taught each other and shared personal experiences. Ana described how this approach took advantage of the breadth of her students' expertise, "so they're using kind of the content, but then informing each other. And they have such a broad perspective and experience. I'm not just asking rote kind of, you know, 'what does this mean?' It's 'share your experience.'"

When Lynn discussed student engagement, she emphasized agency more than active participation:

> We need to claim an education and be, effectively, agents of our own education, and not be passive recipients. So many of our students have been socialized to be passive consumers of education, and to just sit back and receive an education. And so, in my courses, we start from this place of, "what is it gonna mean for you to actually engage as the agent of your own education? […] And I think if I'm gonna say that I want that to happen, then I have to be willing to relinquish some

> control, because otherwise, I'm like “you should be actively engaged, but I'm gonna make all the decisions in the class.” [Instead, I convey to students], “even if you hate the class, I want you to engage with it in ways that are meaningful to you, or that you at least pretend are, because you should be engaging. You should be claiming your education.

In Lynn’s courses, one way in which students were actively engaged was in building modules for other students to work through. She explained that students were instructed to locate accessible scholarly materials for their classmates to use. With this example, Lynn elaborated on how OER complemented her teaching approach in terms of the kind of engagement she asked of her students:

> So, a lot of them are going to OER texts, and I show them how to do that. It's way easier for me as an instructor to share power with students and share responsibility for co-building the class when we're using open educational resources. It absolutely aligns with my pedagogy in that way, and my commitments for students to be actively participating in co-creating the course experience.

Lynn further explained her belief that involving students in designing learning experiences for each other could improve learning outcomes:

> There's also, I think, research—I'm not up to date on it—in adult learning that the best way to learn something is to teach it. If you're actually developing curriculum, you're gonna learn a thing differently. […] So, I just think assuming that role is a really powerful way to learn for our students.

Finally, Lynn explained that OER made it easier for her to engage her students in co-creating the learning experience:

> They've pulled together content, they've written an assignment, and students are working through the modules of each other at this point. In some way that happens in all of my courses, where students are designing the course really with me. I set the stage for it, but then they bring in their own content, and they develop processes to ensure that their colleagues are learning. That's so much easier to do with OER.

Co-authoring was another possibility for instructors to engage students in co-construction. Lynn had co-authored previously with students, and Ana indicated interest in involving students in developing and publishing OER materials.

**Critical Pedagogy**

Ana and Bartlett both described strategically incorporating critical reflection in their curriculum design, and Sophie and Tolls both emphasized ways in which their courses helped students to consider viewpoints that did not reflect the dominant culture. However, while several instructors touched on concepts related to critical pedagogy, only one participant spoke in detail about intentionally implementing a critical pedagogical approach. Lynn shared, "I really believe in and use what I would maybe call liberatory pedagogies or critical pedagogies, where students and faculty are co-learners and co-teachers together." She explained how the structure of her courses encouraged students to reflect critically:

> Students are having to confront the ways that they have been socialized. And if they're thinking about the ways they've been socialized as a student, it helps them to think about the way they've been socialized in other aspects, too—you know, relative to gender, relative to race, ethnicity, nationality. And so, it opens the door to new forms of curiosity about the social and political forces that play themselves out on our lives. To have them start to wonder about this relative to their own behaviors as a student is helpful because it opens the door to an openness to wondering about other things.

Lynn shared her belief that OER could facilitate this kind of pedagogical innovation, "I just think, for those of us who care about teaching towards justice and teaching towards equity, it's one of those practices that helps to get us there." As instructors shared their experiences creating and adopting OER, they also shared their beliefs about effective

teaching and learning. This additional context is useful in determining the lens or framework through which study participants viewed their OER experiences.

## Being Instructional Faculty in Higher Ed

As instructors described their OER experiences, there emerged several common threads surrounding their professional positions. Study participants described challenges with meeting others' expectations, acquiring necessary support from institutional leaders and decision-makers, and advocating for change within a well-established system. They also shared the various roles of community, as an inspiration for their OER work, an outcome of that work, and an essential professional opportunity.

### Meeting Expectations

Multiple participants talked about the challenge of meeting expectations. These expectations were sometimes described as coming from their students or institutions, and sometimes they seemed self-imposed. Bartlett—an adjunct instructor—shared that one of his colleagues resisted transitioning from their established commercial textbook program to OER, and he empathized with her hesitation, explaining:

> Full-time faculty at community colleges are given impossible tasks, and they have to do all this stuff to keep their job. And so, she didn't want to switch because it meant a lot more work, and it still does, and she doesn't get to get out of that work.

Alexandra—a tenured full-time professor at a university—agreed that the workload for her position did not allow for innovation in her approach to teaching:

> We have different committee service and things that we do, and over the years, it's kind of expected that full time faculty—you know, tenured—will have already figured out everything about their courses. Like, what else could they be working so hard on to do? And it definitely felt like I had this status of someone who is supposed to have it all already figured out.

This pressure was also conveyed by Rahel, who explained, “frankly, I feel like that's what we, as educators, have an issue with, is that the onus keeps being placed on us to fill in all these gaps. And then, you know we're not being paid sufficiently.”

A few instructors discussed the tenure and promotion process, and they expressed that their open publications may be considered as inferior to other kinds of scholarly publishing. As previously noted, Rowshan described that tenure-track instructors may be less interested in publishing OER because “it doesn't count as a scholarly publication.” Sophie shared encountering the same issue:

> So, there's this whole conversation right now about what counts as a publication or not. I think they're gonna want to see who is using your OER. So, we're gonna have to try to find ways to track that, because I think—people who do not see the validity of an OER, you would have to convince them otherwise. And that's gonna require work on the part of people who have written those OER to prove that their OER is as a legitimate as any other publication. Going through my promotion was a good eye opening on what people see as legitimate published work—what counts as scholarly activity.

Both Sophie and Rowshan stated that having a peer-review system for OER course materials could help OER authors to have their work recognized and valued in the promotion and tenure process. Lynn shared that she had twice undergone external reviews as part of a promotion application, and she described her approach for discussing her open publications within that context:

> In my narratives that I put together, I talked explicitly about choosing to publish in places that were more accessible—that that was important to me; that I wanted folks to be able to be able to access it whether they were inside or outside an institution. […] There are conversations I want to be part of as I've benefited from other people bringing that conversation to me. […] I kind of articulated head on [that] it's really important to me to publish in as open a way as possible.

Lynn elaborated on how her own perception of her responsibilities did not always align with what the institution expected of her. She shared the example of professors

being directed to retain students, explaining, “if a student knows that they don't want to be here, my job is not to retain them; my job is to help them, you know, discern that fact, or whatever their future is gonna be.” Tolls similarly expressed that sometimes she found it necessary to deviate from institutional expectations in order to meet what she believed were her responsibilities to her students. After recounting that she had copied pages of a textbook for students who couldn’t afford it, Tolls reflected, “who am I to stand between [the students] and their success? I'm an instructor. I was hired to teach students. I wasn't hired to be a barrier for students.” For several instructors, transitioning to OER required balance between addressing their institution’s expectations and advocating for a change.

**Following the Leader**

Several participants shared ways in which decisions made by institutional leaders had helped or hindered the process of transitioning from commercial textbooks to OER. Bartlett and Rahel both found that having the support of senior leadership was a key factor in making an OER project possible. Bartlett reported that initially his department chair had been “dead set against” adopting OER because she had a heavy workload, and “to have a publisher's platform made it way easier for her.” Bartlett had later noticed that the college’s associate dean was active in an OER group, and he reached out to the dean directly to advocate for OER use. A few months later, Bartlett was given the green light to adopt the OER. He summarized, “once a dean came onboard [OER] was something they wanted, but until the dean was on board it wasn't something they wanted.”

In Rahel’s experience, having the dean’s support meant that an instructor’s faculty status would not affect their eligibility to receive compensation for their OER project. As

she explained, “whether you’re full-time or adjunct—that doesn't matter. If your dean says we need this course revised, then it doesn't matter who does it.” Rahel and Bartlett’s OER projects were made possible because they secured the backing of administrators in their institutions. Ana also acknowledged the value of such support, and she shared related challenges she had noticed:

> We've talked about this in our OER committee. I think it's all about money at the end of the day, right? So, my colleagues and I will talk about [the fact that] doing this kind of work [OER] doesn't necessarily bring in tons of grant dollars and things like that. And how does the administration see the value of this kind of work, where, if you were publishing a textbook, that would be seen as valuable, right? But an OER isn't as much.

Ana described that institutions undervalued OER work because it was not perceived as generating any financial benefit. She further explained that the general understanding of OER was limited in scope:

> Now, students and faculty know at least what they think an OER is, right? It's saving students money. So, that's how most people define it, right? And I think the administration sees it the same way. But those of us that are in the OER circle, we understand that it's way more than just saving students money. […] Faculty, staff, administration—they've got a pretty narrow definition of what this is and why it's good.

When asked to expand on what a more complete definition of OER would entail, Ana elaborated:

> I think it's the equity, the inclusion, the pedagogy that can be really developed along with [OER use]. […] You know, I'm sure in another five years, when you say “OER,” everybody will know that means greater equity, greater inclusion, greater, you know, welcoming of students, and [multiple] perspectives and all of that kind of stuff.

Bartlett shared Ana’s belief that successful OER advocacy would need to include educating institutional leaders and decision-makers about OER. He expressed that he would not have been able to adopt OER as an adjunct if he had not been able to get “the

ear of the associate dean," explaining, "as an adjunct faculty, the only way you can do it is to have some kind of a workaround." Bartlett further asserted that more research on OER was necessary, and that adjunct instructors needed to be included in that research:

> If we don't research [OER use], we don't know if it's any good. We have our gut feelings, I mean, it's wonderful to have gut instinct, but that isn't what sells it to administrations. So, now we have to do this [referencing the interview]. We have to do the research. And if you don't have adjunct faculty jumping in with our experience, then all you have is resident faculty, who have a completely different experience.

With these observations, Bartlett underscored the impact that faculty status could have on OER initiatives.

**Stuck in the Status Quo**

In addition to decisions made by leaders and administrators, participants described that established practices, administrative policies, and their own assumptions had presented challenges in transitioning to OER. For example, Bartlett shared that when he had begun to investigate switching to OER, he had been told, "it'd be really great if we could, but we were locked into a Cengage package." Bartlett also shared an earlier experience highlighting the difficulty of escaping the status quo. He recalled that when he had first started teaching at one institution, he was asked what textbook he wanted to use:

> I was coming from an environment where they told me what text I was going to use to an environment where I got to choose. But here's how trapped we are in the model: I immediately went to publishers and looked to see what text I wanted to use.

At that point in his career, he had not yet identified alternatives to using commercial textbooks. He went on to explain, "I was trapped in the model, and I ended up using a Pearson text, which [cost students taking two-term sequence] 250 bucks. and I'm thinking, 'but the tuition's only 300, and I'm and I'm only one class.'"

Bartlett and Tolls both expressed that having an OER structure already in place at their institutions would have made it easier for them to use OER. Reflecting on his experience, Bartlett hypothesized, “had there built in a systematic structural track where you had an OER track and a mainstream publishing track, it [using OER] would have just been part of the process, which is what should have happened but didn't.” I asked what such a structure might look like, and he provided this example:

> If you were teaching a biology course, you’d have the option of a biology OER or a biology [commercial] textbook. I don't teach biology, so I don't know what they'd look like, but it's that type of thing, where you'd have options, and you could choose one or the other.

For Tolls, improved structural support would have included guidance on where to begin: “I think what have worked better was to have somewhere to start, [such as] our department [saying], ‘hey, these are the OERs that seem to be what people use the most. Start here.’”

Bartlett expressed a belief that detaching from the status quo by teaching with OER had shifted his perspective:

> You begin to think outside of the box, and it makes your students think outside of the box. And I think when I came to teaching, saying I wanted students to learn how to think—it’s taken me years to figure out how to make students learn to think, because even though I said it, I didn't really know what I meant. […] To begin using OER in the classroom, you have to be slightly braver, because it's too easy to let the publisher platform do it for you.

With this observation, Bartlett emphasized both the value and the importance of separating from the status quo of the traditional commercial textbook model.

**Community**

In addition to support from college and university leaders, every study participant mentioned influential interactions with colleagues, whether in their departments or

around the world. Members of instructors' professional communities had inspired them to adopt OER, helped them select and refine their materials, and even co-authored OER textbooks with the instructors.

Most of the study participants described having made the decision to use OER on their own, but some made the transition with colleagues who were also teaching the same subject. Gregory shared feeling lucky that colleagues at his institution were supportive in their OER advocacy:

> I've been very fortunate to have it be [so much a] part of the culture. Our previous librarian, she would go to people, and she would say—not in a judgmental way, but you know—say, "Hey, you're using this textbook. Have you considered switching to an open access resource? I will help you find something."

Tolls similarly expressed appreciation for the collaborative nature of her professional community. As an example from within her institution, Tolls shared that when Covid caused all courses to abruptly shift to an online format, one of Tolls' colleagues generously shared an online course template that other instructors could simply copy. Tolls found community connections across the country:

> I've worked with instructors all kind of all over the place. I feel as though I've networked pretty heavily. If I can't access something, [I can reach out] like, "hey, I've been trying to add something to this particular OER. Can I get access to this article—or whatever—so I can include part of it?" And they're like, "Yeah, here it is, go for it." So, the network, the collaboration is there.

Sophie reported her experience on the receiving end of such requests:

> People share, and you know, that's great. [For example,] people contact me because I guess somehow they found out that I adopted [an OER textbook]—they would contact me and say, "do you have anything?" And I would share my entire folder like, "there you go." Because that's like—give it forward. It's my turn now to give it away.

Sophie expressed that it was part of the OER community culture for instructors to help each other.

Beyond sharing materials, Tolls reported that being able to discuss teaching approaches with another instructor teaching the same subject "was really helpful [because] it allowed me to see what OER she was using—if it was different from the one I was using—I mean, it's the same information, but how it's presented is different." Ana also expressed that engaging in communities of practice was very valuable. She described having attended Open Oregon's Equity and Open Education faculty cohort:

> I just thought it was amazing, and just was so much fun just to talk with other people from around the state. I try to promote that as much as I can, because I really do think these those experiences are super valuable. […] I just think that's a journey that you individually have to travel on, you know, and be around other people who are going through that same journey, knowing that you don't know anything—or much—and you just try to absorb what you can from other people, and keep your mind open."

With this observation, Ana indicated that the individual aspect of professional growth was important to consider, but that individual growth could be facilitated through contact with other learners and practitioners.

Lynn expressed agreement with other instructors' assertion that engagement in communities of practice was beneficial, and she described what instructors could gain from such interactions:

> I think that it's through these connections that we find kind of an internal professional courage to try the new things that are challenging and a little risky, and sometimes don't work as well as we would like, but give us plenty of room to think about how to make it work better.

In addition to building the confidence to take professional risks, Lynn expressed that instructors could benefit from celebrating their successes in community. Specifically,

Lynn shared, “I wish that we had spaces where we could really celebrate how it's transformative for us as faculty to open up our teaching practices in these ways.” A significant part of instructors’ OER experiences was linked to their roles as postsecondary instructional faculty.

### Personal and Professional

Before the interviews, participants had submitted responses to a demographic survey that included an optional question about their identities. During the interview, participants were given another opportunity to address anything about their identities that they believed had impacted their experiences. None of the instructors interviewed expressed having encountered any additional challenges due to their identities. However, Rowshan and Lynn each elaborated on the ways their experience had been positively impacted because of who they were.

Rowshan shared how her experience authoring an OER textbook was influenced by her background as someone outside of the dominant culture in many different contexts:

> I was raised as a person who was always different from the majority of the people in her town. I was always considered to be a member of a minority group, being sometimes the only person in a group who is different, either language-wise, gender-wise, sometimes age-wise. And from the time I was a kid, even in my homeland country, I was not following the major religion. And I had this thought in my mind always that [I belonged] to all of these groups. [Being able to] contribute to people all around the world; [being] connected to these cities while [physically being] somewhere else; the idea that you can be heard pretty widely by what you do through an open access online platform—that’s a great opportunity for me to feel more comfortable with what I'm doing—feel that I'm contributing to all those points of my identities.

Rowshan found that participating in the OER professional community was a way for her to build connections and reach people that she otherwise would not have reached.

Lynn also described how her identity helped her to implement effective teaching practices:

> I feel like [queerness] has been a real benefit to me as a teacher seeking transformative experiences myself, and to be in places where students can experience transformation, because I'm just kind of like, "I don't care if you think I'm weird; I am weird. I don't fit, and none of you fit either. And most of you are trying to hide that. So, let's just all be who we are and try to have a meaningful experience together." And so, I think that I am read by students as caring about them, wanting them to care about their education, caring about their experience, and [being] supportive of them. I feel like queerness for me has really helped to modulate my experience in a way that hasn't stopped me from trying to engage with students in the way that I do.

Lynn's observation not only provided an example of how the personal could impact the professional, but it also conveyed Lynn's belief that it was important for her students to feel supported.

## Reflecting on Results

All study participants shared their perspectives regarding the relative success of their OER initiatives, and they referenced a variety of feedback mechanisms. Some instructors had conducted formal polls and course evaluations, sometimes the feedback seemed to be ad hoc commentary during class, and sometimes the participant was sharing their sense of the outcomes without attributing the data to any specific source. In addition to student-related outcomes, several instructors expressed that they had personally been impacted by their OER work.

### Results for Students

Nearly every instructor indicated that students were appreciative of not having to buy a textbook. Rowshan reported, "I introduced them to the open-source textbook, and they were so happy." Tolls shared a similar response, "all of them are really appreciative.

They're like, ‘is there a textbook?’ I'm like, ‘nope, no textbook,’ and [they’re] like, ‘oh, thank God, yes, okay, awesome.’” For some instructors, it seemed that students’ only feedback was being grateful for the free materials.

Alexandra and Sophie’s students appreciated saving money, and they also provided input on adjustments that were made during the term. Alexandra shared that her informal midterm evaluations had included a lot of “encouraging feedback in that they were noticing a lot of the improvements.” In Sophie’s experience, students were less critical, or “gentler” when evaluating OER courses. She explained, “we usually communicate to students that, ‘guess what, it's an OER. There are some imperfections, and we want you to help us make it better.’”

Aside from the cost savings, instructors also reported receiving positive student comments about the content of their OER textbooks. In most of the interviews, when instructors mentioned using more inclusive materials, I asked whether their students had noticed those elements. Ana shared, “when I asked them for feedback, that was the thing that they [appreciated]—not only the saving money, but they said it was so great to get multiple perspectives from the different resources.”

As Sophie talked about her students’ impression of her textbook’s inclusion of multiple perspectives, she initially stated that students did not tend to notice such details, but then shared an anecdote where a student was pleasantly surprised to see their culture featured in the course materials:

> It's not like students see equity and inclusion. We want to add it to the material because we feel like it's not there. I mean, I've never had a student telling me, “I'm not represented in this textbook.” […] You know, when presenting all the celebrations—Christmas, whatever—I added a lot of other celebrations, you

> know, just to make it more representative of the world. And a student like, out loud, goes, "oh, my gosh! This is the first time I see my celebration! My country!"

Sophie went on to clarify that the kinds of inclusion that she believed usually escaped students' notice were "little things like, you know, instead of describing your typical male [or] female, you describe someone who's nonbinary. It's hard to say what students see or not see, because it's not like they would express it right away." As described, Rowshan's students did not notice any change in the inclusion of diverse perspectives because they had never experienced the less diverse version of the course.

**Results for Instructors**

Although I did not ask participants to tell me whether they had noticed any changes in themselves, several reflected openly on how they had been impacted by their own OER work. For example, Gregory described a shift in his perspective toward the practice of requiring students to purchase textbooks:

> When I started teaching, I did have the kind of attitude of "oh, that's just part of the cost of attending school." [Previously], I taught at small liberal arts colleges, which I think it's kind of fair to say oftentimes have a somewhat homogenous student body, right? I mean, most of the people there are from very financially secure backgrounds. But then, [at current institution] we have a significant number of non-traditional students or students who are just paying their own way through college and working to support that. [Talking with them, I learned] that it can make a huge difference not having that $200 textbook. [In contrast, when I first started teaching] I didn't realize how many people really do struggle with that.

Through this description, Gregory conveyed having developed more empathy toward his students. Similarly, Sophie explicitly identified an increase in empathy, but for her it was connected to the content of her OER work, rather than the cost:

> While developing the OER with social justice and equality in mind, it has also made me aware of my own biases and my own privileges, which is uncomfortable but necessary to move forward. It has also helped me develop more empathy.

Ana also described that she had become much more aware of the perspectives featured in her courses, as well as her own lens, “I'm thinking about my perspective. […] I'm much more aware of all of my assignments, and really thinking in terms of the different resources that I use.”

As she reflected on how her OER journey had unfolded, Ana shared that she had participated in a Learner Experience program offered through Oregon State, explaining that it had changed the way she perceived her work:

> [The program is] really all about building online classes using design thinking and really thinking about the user experience. […] That was just a huge piece for me because when you start going through that [you think], “oh, I think my class is really well designed.” But then you go through a process like this, and you think, “oh… My class isn’t well designed at all. It's overwhelming for students to when they first come in here.”

Ana also brought up her participation in the Equity and Open Education professional development opportunity offered through Open Oregon, indicating that it had been particularly impactful for her:

> That one was like, mind blowing for me because I went into that thinking, “oh, OER is about saving students money,” right? And [then I learned] that's how we add equity and inclusion, right? I had no idea. So, it was really just like, “oh, wow! I've just really learned something here.” So, that was really great.

In Ana’s observations, she expressed having gained valuable awareness about how students experienced her courses, as well as a sense of excitement and enthusiasm about sharing and applying what she had learned.

Bartlett expounded on the concept of a shift in instructor perspective, indicating that using OER had led to a transformation in his teaching. He stated that using OER “means you're not just picking up a Cengage textbook and saying, ‘okay, I'm going to do Cengage tests, I'm going to do Cengage [everything].’” In this context, Bartlett was

explaining that instructors using OER had more ownership over their course materials. He expressed that using OER consequently gave instructors more ownership over the course content:

> [To use OER], you have to be willing to step away from mainstream. And I think it then makes you braver to try to relate things, any public links you can. And I think because I use OER I'm braver in the sense of doing that.

As previously described, OER was instrumental in facilitating Bartlett's ability to break away from the status quo. However, as he asserted, "there's something about using OER that fundamentally changes how you think as a faculty," Bartlett conveyed having experienced a more profound internal transformation. Study participants reported that teaching and learning with OER had resulted in positive outcomes for both students and instructors.

## Conclusion

Study participants shared a broad range of experiences surrounding the process of OER adoption, as well as teaching with OER. The diversity of their perspectives allows for a more complete understanding of the challenges and opportunities of OER, the ways in which OER use can impact both students and instructors, and what kinds of support are most helpful to instructors. Alexandra expressed, "we're at the beginning of OER. And, you know, it's always gonna be a little rocky in the beginning, and then it'll get better." Other study participants similarly expressed enthusiasm, optimism, and a commitment to continuous improvement.

# CHAPTER FIVE

As an increasing number of college and university instructional faculty opt to replace their courses' traditional commercial textbooks with OER materials, lessons learned from their experiences can help to inform future OER initiatives. This study answered two principal research questions: 1) What are the experiences of instructors who transition from a traditional commercial textbook to OER course materials? and 2) How are equity and inclusion incorporated into the transition from traditional textbooks to OER? This chapter examines the alignment between the literature and this study's results for each of the principal themes, and then discusses the significance and implications of these findings. Following an outline of specific recommendations for practice, I describe possible directions for future research.

## Discussion

As detailed in Chapter Two, existing literature has indicated that OER have the potential to facilitate transformative learning experiences, and research has also described some of the challenges of OER adoption. In many cases, the comments made by this study's participants align with observations and claims that have already emerged through previous research. In other instances, the experiences shared by instructors in this study present alternative perspectives or counterpoints. Whether through corroboration, revision, or opposition, this study's findings complement the literature with the perspectives and lived experiences of individual instructors.

**The Cost of Costly Materials**

On the issue of cost, study participants echoed many points found in previous research, citing financial expense, beliefs about teaching, and personal convictions among their motivations for adopting OER (Cox et al., 2022; Daly et al., 2022; Hegarty, 2015; Panke & Oeeshi, 2023; Tur et al., 2020). Instructors also agreed with literature stating that textbook costs impact the student experience, that some students are impacted more than others, and that OER can improve accessibility (Bagar-Fraley, 2022; Hughes & Taylor, 2022; Leonard, 2022; Skinner & Howes, 2013; Wu, 2022). Study participants further corroborated earlier studies reporting lower attrition rates in courses using OER (Bagar-Fraley, 2022; Bol et al., 2022).

The issue of possibly losing students to other programs within the same institution, as brought up by study participant Alexandra, offers a dimension of cost that was not highlighted in the literature review: high textbook costs can threaten the security of instructors' courses, and even programs. However, instructors did not state that colleges and universities had a responsibility to remove the barriers to access caused by expensive textbooks, as asserted by Hilton (2021) and Leonard (2022).

While the surface-level findings on the topic of cost largely echo the points already present in the literature, there is an alarming underlying implication. Postsecondary instructors believe that high textbook costs negatively impact student success, and in some cases also threaten to destabilize instructor's career. However, instructors often perceive that addressing the problem of high textbook costs is their own responsibility, as opposed to being the responsibility of the institution. Instructors believe

that expensive course materials can cause harm, and they also believe that it is within their power to reduce the harm caused by expensive course materials. On one hand, this belief is evidence that instructors feel empowered and motivated to act. On the other hand, it means that instructors feel change cannot happen unless they do the work themselves. This may lead instructors to blame themselves and each other, both for the harm experienced by students and for any precarity in their career that might be a consequence of high textbook costs.

This study does not explore how institutions determine their support for projects and initiatives (such as OER adoption) that seek to address the problems associated with commercial textbooks. However, the results reveal a skewed perception of where the responsibility ultimately lies. The literature is clear: it is the responsibility of postsecondary institutions to ensure equitable access and to engage students in transformative learning experiences. OER adoption and open pedagogy are tools that facilitate transformative learning and equitable access. Therefore, when institutions compensate instructors for OER work, it should not be framed or perceived as an award to an instructor, but rather as payment for instructors' time and expertise, just as any other professional should be fairly compensated by their employer. When institutions fail to fulfill their obligations, it is not the responsibility of instructors to do the work for free. Many instructors are interested in OER adoption, and teaching with OER can be an effective way for postsecondary institutions to deliver equitable access to transformative learning experiences. This is an excellent opportunity for institutions; the professionals they need are readily available and willing to take on the work. It is incumbent upon the

institution to embrace this opportunity by compensating employees for their work and expertise, and by providing any necessary resources.

**Compensation for Transformation**

Previous research reported that issues of workload could be a significant deterrent for instructors interested in adopting OER (Bagar-Fraley, 2022; McBride & Abramovich, 2022). Study participants confirmed that transitioning to OER was very time-consuming, and they corroborated the need for administrative support described by Leonard (2022). Some participants raised the point that moving to OER could be a risky financial and professional endeavor for instructors, which was also mentioned in the literature (Blackshear & Hollis, 2021; Pittman & Tobin, 2022). Instructors' interpretation of institutional support did not appear in the literature in the same way it did during the interviews for this study. As described in Chapter Four, study participants indicated a belief that compensation provided by their institutions was evidence of how much the institution valued OER work; when the compensation was inadequate, instructors perceived that institutions did not sufficiently value the work.

There were some challenges of OER adoption cited in the literature that were not emphasized by study participants, including questions of accessibility and the legal considerations in navigating open licenses (Bagar-Fraley, 2022; Judith & Bull, 2016). Previous research has described that teachers are in need of more comprehensive training, support, and resources necessary for vetting OER materials and completing the transition from commercial textbooks ( Bagar-Fraley, 2022; Baggett, 2020; Baros, 2021; Tualaulelei & Green, 2022). Study participants echoed the need for time, support, and

resources, but they did not mention needing additional training. Although several instructors had accessed OER-specific professional development, few participants offered this information unprompted, and only one spoke at length about what she had learned during such training.

It is notable that the literature emphasized a need for training, whereas study participants tended to leave it out as they shared their stories. Although this indicates that training may not be a top priority for instructors, it does not mean that instructors fail to recognize the value of training; several instructors recounted meaningful professional development opportunities. Importantly, although study participants emphasized the importance of institutional support for OER initiatives, the support they wanted was the time and funding necessary for the instructors themselves to take on the work of addressing the problems presented by requiring students to purchase commercial textbooks. As in the previous section, the implication is that instructors believe that a transition to OER materials can only happen if they take on the work themselves.

Finally, there is an intriguing connection between OER compensation and faculty retention. Instructors in this study expressed a belief that institutions possessed the ability to make the resources of time and money available, and that when such support was unavailable, it was because someone had made the decision not to offer it. As described, instructors perceived that institutional investment in compensation for OER initiatives was indicative of institutional values; instructors believed that if they were not adequately compensated, it meant that their institutions did not adequately value the outcomes that OER could facilitate. Because engagement in OER work itself is often driven by

instructors' values (Cox et al., 2022; Daly et al., 2022; Hegarty, 2015; Panke & Oeeshi, 2023; Tur et al., 2020), instructors who are not adequately compensated for their OER work may perceive that their institutions (in not supporting OER initiatives) do not share their values. According to Wright (2005), when faculty believed their values were aligned with the mission of their institution, their job performance was better, they reported higher job satisfaction, and they were less likely to look for employment elsewhere. Thus, adequately funding OER projects has the potential to improve faculty retention and job performance.

**Comparing Content and Quality**

Study participants agreed with literature stating that not all OER was of equal quality (Bagar-Fraley, 2022; Frydenberg & Matkin, 2007; Hilton, 2020). As they compared commercial textbook materials with OER, interviewees spoke about the benefit of time-saving supplementary materials that often accompany commercial textbooks, as Skinner and Howes (2013) had described. Some participants noted that the supplementary materials accompanying commercial textbooks provided students with a valuable opportunity to receive timely feedback on their performance, and that when instructors transitioned to OER, they were not able to provide the same level of feedback.

Study participants also agreed with the findings from previous research regarding the utility of OER adaptability (Atkinson & Corbitt, 2022; Burrows et al., 2022; Frydenberg & Matkin, 2007; Leonard, 2022). However, while OER texts are more adaptable than commercial textbooks, they are also susceptible to becoming outdated. Although the literature pointed to outdated content as a disadvantage of commercial

textbooks (Cox et al., 2022), study participants expressed that the issue of outdated content affects both commercial and OER materials. They described needing to frequently revise their materials and incorporate up-to-date supplementary resources. The difference appeared to lie in the ease of updating OER. Additionally, instructors in this study expressed that the benefit of OER adaptability was only partially about updated content; it was important for instructors to be able to customize the content for a specific group of students, as well as to align with a preferred pedagogical approach.

Although most study participants cited representation in course materials as a key reason for their use of OER, the literature conveyed a more overt social-justice lens, saying that OER adopters were often motivated by a desire to challenge the status quo and present perspectives of marginalized and oppressed populations (Bagar-Fraley, 2022; Bakermans et al., 2022; Cox et al., 2022; Daly et al., 2022; Lambert & Funk, 2022). Some study participants did express similar convictions, but most described the issue of representation in broader terms relating to the content's relevance to students and reflection of their reality. This emphasis on students' ability to see themselves in the course content was also featured in the literature (Baros, 2021; Glynn & Wassell, 2018).

In some cases, transitioning to OER means losing access to a system that had provided students with timely feedback on their work. As instructors plan for a transition to OER, it is important for them to consider the various ways their students use course materials. It cannot be claimed that either OER or commercial textbooks are of superior quality; each has advantages and disadvantages. For instructors, adaptability and representation are two of the most advantageous features of OER. Instructors appreciate

the ease of adjusting course materials based on recent events, as well as their unique group of students. It is impossible to design an enduring textbook that always references recent events and is tailored to every term's class. For this reason, anyone involved in planning for OER use needs to ensure they plan for regular revision.

**Beliefs about Teaching and Learning**

Nearly all study participants expressed agreement with research claiming that OER have the potential to improve equity and inclusion (Bagar-Fraley, 2022; Bakermans et al., 2022; Daly et al., 2022; Panke & Oeeshi, 2023). However, there was a very broad range of how study participants addressed equity and inclusion. For the most part, equity was brought up regarding cost and access, and inclusion was brought up regarding diversity of representation in the materials and making the course content relevant to students' individual interests and experiences. As explained in Chapter One, it was a strategic decision to center equity and inclusion in the second research question (How are equity and inclusion incorporated into the transition from traditional textbooks to OER?) rather than transformative learning. Although transformative learning theory provides a relevant framework for understanding the experiences that effective postsecondary education delivers, the available research on OER more frequently references equity and inclusion. I anticipated that the terminology of equity and inclusion would be more familiar to study participants, and ultimately only one instructor made the explicit connection between OER and transformative learning experiences. However, the data that emerged as instructors expressed their beliefs about teaching and learning yielded valuable insight into the relationship between OER and transformative learning.

In agreement with the literature surrounding transformative learning, study participants perceived that it was valuable for courses to present students with multiple perspectives (Grabove, 1997; Southworth, 2022; Wang et al., 2019, 2021). The importance of the diversity of perspectives was also highlighted by both instructors and previous literature (Calhoun et al., 2021; Lambert & Funk, 2022; Schnepfleitner & Ferreira, 2021; Snapp et al., 2015). Collaboration and student voice received less emphasis from study participants, but several described critical thinking as an important feature of their pedagogical approach. Although Carter and Redondo (2022) and Werth and Williams (2022) indicated that many OER projects engage students in co-creation of knowledge, only one study participant reported regularly applying such an approach. This same study participant was the only one who spoke in depth about how OER facilitated critical pedagogies, but nearly all participants corroborated the findings of Al Abri et al. (2022), Carter and Redondo (2022), and Werth and Williams (2022) affirming the capacity of OER to facilitate meaningful student engagement. Panke and Oeeshi (2023) found that OER use resulted in increased motivation, engagement, critical thinking, and collaboration among students, but most study participants mentioned only one or two of those outcomes. Only one participant explicitly agreed with literature stating that OER could facilitate inclusive and transformative pedagogy (Bakermans et al., 2022; Bali et al., 2020; Bossu et al., 2019; Daly et al., 2022; Katz & Van, 2022). Nonetheless, as described in Chapter Four, most study participants expressed findings related to transformative learning, though without using that terminology.

Together, the literature review and the study participants provided numerous examples of how OER contributed to instructors' ability to implement teaching practices that align with transformative pedagogy. In Chapters One and Two, I explained that transformative learning experiences are one way to fulfill the imperatives of higher education. OER use can be an effective strategy for postsecondary instructors to engage their students in transformative learning experiences, and thereby help to realize the learning outcomes that higher education is meant to provide.

**Being Instructional Faculty in Higher Ed**

Study participants emphasized the importance of having buy-in from institutional leadership, and they provided greater detail than the "institutional support" often referenced in the literature. Study participants specified roles such as department chairs and deans; regardless of institutional mission or culture, instructors needed support from specific leaders with the power and authority to make decisions related to instructors' courses, and some study participants proposed that institutions integrate OER at a structural level. Although only two study participants brought up the issue of OER not being recognized as legitimate scholarly activity for the purposes of promotion and tenure, their comments align with the literature claiming that instructors may be discouraged from open publication due to its lack of professional recognition (Hosoi et al., 2022). Career advancement is an important consideration for instructors, and working on OER may not be worth it for an instructor who needs to focus their time and energy on peer reviewed publications to support their application for promotion.

As study participants discussed their experiences with OER, they also raised issues related to their institutional roles that were not prominently discussed in the literature. Most notably, instructors in this study shared several observations about the expectations held by others, as well as what they expected of themselves. The literature touched on the topic of workload in several ways, such as in describing that instructors had too many demands on their time (Bagar-Fraley, 2022; Marshall, 2018; Skinner & Howes, 2013), but workload is different from expectations. This alternative framing suggests that the workload itself is only one part of the challenge, and instructors are also impacted by their own perception of what it means to be instructional faculty, as well as by others' expectations.

Study participants agreed with the literature stating that support from a professional community was valuable as they redesigned their courses (Daly et al., 2022; McBride & Abramovich, 2022; Tualaulelei & Green, 2022; Tur et al., 2020). However, study participants did not mention having encountered resistance from communities and colleagues who were unsupportive of DEI efforts, cited in the literature as an obstacle facing instructors (Baggett, 2020; Baros, 2021). Nearly every time study participants mentioned colleagues, the context was about support and collaboration. Where they reported disagreeing with colleagues, the disagreement was not about DEI. Regarding professional network outside of an instructor's institution, most study participants agreed that their OER work had led them to connect with a broader professional network. However, when this came up in interviews, it was almost always because I had asked

about it; few study participants identified any connection between OER and the expansion of their professional network without prompting.

The distribution of power and authority in higher education can mean that instructors are unable to implement OER, transformative pedagogy, or other innovative practices. When these instructors also hold the belief that it is their responsibility to address problems such as those exacerbated by expensive textbooks, they face a paradox: they are at fault for failing to take an action that they are prevented from taking. As described, it is in fact the responsibility of the institution to ensure equitable access and transformative learning. Connecting with colleagues in communities of practice can help instructors to grapple with such incongruencies. Institutions can also ease these conflicts through investment in OER initiatives, as well as systemic adjustments such as integrating OER at a structural level and recognizing open publications as scholarly contributions for the purposes of promotion and tenure.

**Personal and Professional**

For the most part, study participants did not report experiencing what the literature described surrounding the potential impact of instructors' identities on their experience adopting OER. In general terms, previous research had indicated that women and faculty of color, as well as those with other minoritized identities, were likely to encounter more obstacles in adopting more inclusive pedagogical approaches (Blackshear & Hollis, 2021; Pittman & Tobin, 2022; Williams et al., 2019). Only two study participants spoke in depth about their identities, and both described not belonging to the dominant culture. Neither one of them expressed that this had presented obstacles. To the

contrary, they both described that their identities had positively impacted their experiences teaching with OER. One possible explanation is that inclusive teaching requires self-awareness and willingness to examine power imbalances (Carter & Redondo, 2022; Lambert & Funk, 2022), and some instructors have more experience in this area than others due to their identities. While the experiences of two instructors certainly does not refute earlier research, this does offer a valuable alternative perspective: an instructor's personal lived experience with a marginalized identity can provide an advantage as they implement more inclusive teaching practices.

**Reflecting on Results**

Student outcomes reported by study participants aligned with those presented in the literature: students in courses using OER appreciated having free texts, as well as inclusive content (Hosoi et al., 2022; Wu, 2022). Most study participants—but not all—agreed that students had achieved the same level of learning with OER as with commercial textbooks (Bagar-Fraley, 2022; Hilton, 2020, 2021). As previously mentioned, instructors also perceived that OER use was instrumental in their ability to present multiple perspectives, teach more inclusively, and foster student engagement. However, what stood out most to me was how the study participants described the ways in which they themselves had changed.

Although some participants stated that their pedagogical approach had not changed when they transitioned to OER, most indicated agreement with the findings by Daly et al. (2022) that incorporating OER had improved their teaching. McBride and Abramovich (2022) described that the OER adoption process could result in

transformation as faculty engage beyond their accustomed professional contacts and practices. Several study participants conveyed some level of transformation, describing that their adoption or creation of OER was accompanied by a shift in perspective: they were more interested in their students' experiences; they were more empathetic; and they were more intentional about the diversity of perspectives featured in their courses. Some study participants had been inspired through connections with colleagues, or pivotal professional development experiences. These observations corroborate previous findings that engagement with the OER community can be transformative for educators (Tualaulelei & Green, 2022; Tur et al., 2020). Study participant Lynn underscored the value of this kind of engagement. When asked what she would want to be different if she were to adopt OER again, Lynn replied:

> Well, I think this isn't so much about adopting the materials themselves, but even to be asked to have this conversation. You know, I just think we don't—whether it's around this or anything else—we don't have collegial conversations that actually advance the kinds of practices like OER that actually contribute to justice, equity—you know, meeting the diverse needs of students [and creating a] context in which they can see themselves reflected in those materials. We just don't have enough spaces where we talk about that, grapple with it, talk about what it means, talk about why it's hard.

Transitioning from commercial textbooks to OER can be transformational for instructors. It positions them to reflect critically on many aspects of their work, such as their beliefs about teaching and learning, the alignment between their values and their pedagogy, their students' interests and goals, and their own positionality. The experience of adopting OER prompts instructors to connect with colleagues and communities outside of their typical professional sphere, and as they gain experience with OER, they are positioned to share their experiences. Instructors who adopt or create OER often embark

on a risky venture that increases their workload with no guarantee of a return on their investment. However, OER use can facilitate transformative learning experiences for students, and there is immense professional growth potential for instructors.

## Recommendations for Practice

Although this study focused on the experiences of instructors using OER, the implications apply to a broader range of institutional roles. Supported by the findings and implications of this study, as well as the existing literature, the following recommendations are divided into three categories based on institutional roles: faculty who are currently using OER, faculty who are considering adopting or creating OER, and those who occupy administrative, leadership, or otherwise influential roles in postsecondary institutions.

### For Faculty Using OER

Faculty who have already adopted OER can substantially impact the experiences of others, and they can also take steps to improve their own experiences going forward. As more instructors consider transitioning from commercial textbooks to OER, it is valuable to learn from those who have already completed the switch. Institutional leaders may also look to these lessons learned when deciding how to support future OER initiatives. And finally, those already using OER can benefit from expanding their community of practice and professional network.

#### *Document the Process*

By documenting and sharing their experiences, instructors using OER can make the adoption process smoother for others. Acquiring necessary resources and support

requires first demonstrating the value of using OER, and theory touting potential outcomes is likely to be less convincing than a report of how OER has worked in practice. Instructors can collect quantitative data surrounding student grades and attrition rates, as well as any other markers of performance their institution has emphasized. Qualitative data can also capture richer information surrounding experiences and perceptions of students and instructors. If gathering data is not feasible, instructors should keep in mind that anecdotes can also be powerful. Collecting and sharing stories can help others to refine their plans, avoid a pitfall in the process, secure needed support, and create a more successful outcome for themselves and their students.

Another use for documentation is in working around the reported disconnect between OER and the promotion and tenure process. Institutions' reluctance to consider OER work as a valid scholarly achievement may be temporary, but in the meantime, the immense amount of research that goes into an OER project can itself serve as the basis for peer-reviewed journal articles. Such articles can add valuable lines to lists of publications, and they can also strengthen the reputation of OER by giving it space in a more traditionally prestigious context.

Finally, documentation can serve a self-reflective purpose. I recommend that instructors lean into the transformative potential of OER, not only for their students, but for themselves. Documenting the experience can fulfill the self-reflection function that is essential to transformative learning (Mezirow, 1978, 1997, 2003a, 2003b; Mezirow & Taylor, 2009; Taylor & Cranton, 2012). Embracing this transformation can be disorienting, but it can also result in improved alignment between instructors' values and

practices. I believe there is real potential for OER projects to serve as a kind of antidote to burn-out, renewing instructors' passion for teaching.

### *Advocate for Resources and Support*

Admittedly, it is difficult for OER to be an antidote to burn-out when adopting OER can result in an unmanageable workload. Often instructors have adopted OER without compensation, and they continue to improve their materials without the resources and support they need. Unfortunately, this may set a precedent that compensation is unnecessary. It can also perpetuate the belief that it is the responsibility of instructors, and not institutions, to address problems resulting from high textbook costs. Even when instructors have successfully implemented OER, it is important to be vocal about how the implementation was made possible. For example, institutional decision-makers should be aware if a lack of support has forced instructors to reduce the amount of feedback provided to students or spend an inordinate amount of time editing and dealing with technological issues. If instructors are working for free, their employers should know. Folks who decide whether a grant can be used for a course release should be aware of what it means (or meant) for a project's outcome. The consequences of inadequate support should be made explicit so that decision-makers can make informed decisions. OER adopters and creators are more likely to receive the support and resources they need if other adopters and creators are indicating a need for the same level of support.

### *Create Community*

Instructors do not tend to find out about OER through their own exploration; they hear about it through institutional initiatives or from their colleagues. This means that

faculty who are already familiar with OER have an important role to play in spreading awareness. Having experienced the transition to OER positions faculty to provide mentorship to others. This not only helps the mentee by providing guidance, but mentoring others can also fulfill a self-reflective function in support of the transformative learning process for experienced OER instructors. As experienced OER users talk with colleagues using commercial textbooks, it is essential to keep in mind that faculty are not all equally well positioned to adopt OER; instructors should avoid implying that OER adoption works well in all cases. In a mentorship role, faculty can also help to interrupt the narrative that instructors are solely responsible for issues resulting from expensive textbooks. Participation in communities of practice can also expose faculty to new opportunities in teaching with OER. For example, through conversations with other OER practitioners, faculty may be encouraged to try co-creating materials with their students. Faculty may also build on their experiences with transformative pedagogy and explore ways to implement more critical pedagogies. If an institution does not have existing spaces for instructors to talk about teaching, formal or informal, faculty can advocate for those spaces.

**For Faculty Considering OER**

As described, learning from the experiences of others is essential for faculty embarking on an OER project. It is important to recognize that OER projects can start small, and that anyone creating and sharing OER materials must commit to high quality standards. Finally, given the immense amount work involved, instructors need to manage the expectations surrounding any OER project.

### *Build a Network*

Foundational to OER is the ability to build upon work that has already been done, and this concept is not limited to the OER materials themselves. Instructors who are already teaching with OER are often excited to share what they have learned, and they are an excellent resource for faculty who are considering adopting OER. Importantly, even when faculty do not have the flexibility to adopt an OER text, they can still apply the related practices of open pedagogy and transformative learning to their courses. Finding and building a professional network can help faculty to plan and implement their OER projects more effectively. Communities of practice may also provide opportunities for co-authorship, and they are ongoing; they do not disband when someone completes a project. Faculty should seek communities of practice outside of their institutions; multiple perspectives are valuable for instructors just as they are for students.

### *Commit to Quality*

As OER use increases, a commitment to quality is essential. Although some study participants indicated that a standard review process for OER publications could help faculty feel more confident in the quality of the materials, I believe it is unlikely such a process will be implemented. Access is central to OER, and the implementation of a standard review process would impose restrictions to publication; presumably, an OER text that had not gone through the review process would not be accessible in the same way as those that had. All OER authors and contributors must prioritize quality to mitigate the risk of publishing a text that turns out to be inaccurate or fails to comply with the licensing restrictions of another OER. Responsible participation in publishing OER

materials includes a commitment to producing high-quality materials and ensuring meticulous observation of licensing restrictions. Additionally, in those subjects in which immediate feedback on student performance has been a valuable feature of commercial materials, OER authors and adapters should identify and implement strategies (whether in their materials or in their pedagogy) for mitigating any negative effects from losing access to those commercial materials.

### *Scale Expectations*

Faculty members who plan to adopt or create OER are likely to face challenges similar to those described by this study's participants, and scaling expectations early in the process can help instructors to manage those challenges. Teaching with OER is an opportunity to engage students in transformative learning experiences, but it is not an all-or-nothing endeavor; instructors can narrow the focus to teaching more inclusively and incorporating multiple perspectives, for example. It is important to develop a realistic project plan that does not underestimate the amount of time required, nor overestimate the comprehensiveness of their project's deliverables. Given the immense undertaking that adopting OER represents, instructors should build in enough time to re-evaluate their pedagogy in addition to their course materials. This can save them from having to take on a second transformation. One useful strategy includes scaffolding the project and piloting on a smaller scale initially, but if that is not feasible, it is still important to consider OER adoption as an iterative process; even with excellent initial planning, faculty will refine their understanding and approach along the way. They will also want to tailor their materials to each term's unique student group, and to incorporate current events. For

these reasons, instructors need to reserve adequate time for updating, supplementing, and adapting materials regularly.

Managing the expectations of institutional leaders is also key. Instructors should maintain open and honest communication about the scope of their project, any adjustments to the timeline, and what kinds of support are needed. Instructors who feel it is safe to do so should point out that it is the institution's responsibility to address barriers to student access. As faculty members research in preparation for an OER project, they can gather data that is useful for their institutional leaders. By building a clear, well-supported proposal, instructors can help equip their institutional leaders to advocate successfully on their behalf.

Finally, it is valuable for faculty to maintain an awareness of how they are impacted by their perceptions of others' expectations, as well as any self-imposed expectations. A community of practice in which instructors openly share their struggles and ask questions can help instructors resist perfectionism, embrace the process, and set achievable goals.

**For Institutional Decision-Makers and Influencers**

Whether a leader's influence is limited to one academic unit or expands across several institutions, decision-makers play an integral role in helping or hindering OER initiatives. As described by study participants, a department chair can make or break an academic unit's OER project, and a dean can inspire or impede institutional initiatives. One high-impact recommendation for administrators, leadership, and other institutional decision-makers is to integrate OER at a structural level. Even if such a large-scale

approach is out of reach, those in influential positions can provide invaluable support through investing in OER initiatives and being vocal in their recognition of OER achievements.

### *Integrate OER at a Structural Level*

As described in Chapter Two, legislation has been passed in Oregon establishing requirements for institutions in relation to textbook costs. Such legislation provides an impetus for institutions to consider OER, but there is a risk that institutions pass a directive along to academic units without providing them the resources needed for compliance. Integrating OER at a structural level would entail establishing institutional expectations that instructors assign OER textbooks instead of commercial textbooks wherever possible, as well as creating a comprehensive support system for OER implementation. This system would provide technical support, for example, as well as dedicated library services to aid faculty in locating appropriate texts. Faculty would be compensated for the time spent on adapting materials for the courses specific to their institution. Perhaps ongoing OER funding could be made available in much the same way that many institutions currently offer professional development funds. Creating this system would require a substantial initial investment, but without integrating OER at a structural level, OER projects continue to move forward in siloed, ad hoc ways, which are likely to be less cost-effective over the long term.

### *Invest in OER Projects and Initiatives*

As previously explained, OER projects have the potential to improve job performance, increase job satisfaction, and improve faculty retention. However,

instructors need support from their institutions to implement OER. One form of support is in compensating instructors and providing the resources they need for adopting or creating OER. Additionally, leaders are often in conversations that do not include instructors, and they have a responsibility to advocate for instructors' needs in those spaces when relevant. For example, if a colleague questions the need for a library position specializing in OER during a budgetary discussion, leaders can take advantage of the opportunity to highlight the potential for OER to improve retention and student success. They can also contribute to a shared understanding that it is the responsibility of the institution to ensure equitable access to course materials. It is also important for decision-makers to be transparent about barriers to OER initiatives; without evidence to the contrary, instructors may interpret a lack of resource investment as a lack of commitment, and possibly a misalignment between the values of the instructor and the values of the institution.

Finally, a community of practice provides valuable support to instructors. Supporting collaborative professional spaces such as workgroups that pay a stipend to participants could mitigate some of the risk experienced by instructors who choose to dedicate their time to OER work. Adjunct instructors must be included in these spaces, and they must be compensated for their time and expertise.

***Recognize OER Publications and Achievements***

Decision-makers must be aware of how much their voice matters, and they should be vocal about their support of OER. Promotion and tenure details may be laid out in a labor contract, but to whatever extent possible, institutional leaders should develop a

culture and practice of recognizing OER contributions as legitimate scholarly activity. A review requirement can still be included. The point is to correct for the fact that tenure-track faculty may be discouraged from OER work because it does not count in the promotion and tenure process.

The recognition of OER achievements does not need to be limited to the promotion and tenure context. It presents an opportunity to recognize and reward the work done in many areas. For example, in addition to innovative instructors, institutions could recognize library staff who provide superior OER support, departments whose OER activity is particularly impactful, technical support staff who help instructors with OER accessibility and polishing online course shells, and classes of students who co-create OER. Such visibility conveys institutional commitment and contributes to a culture that values OER. Relatedly, is important for institutional messaging surrounding OER to highlight advantages such as accessibility and student success; if OER is perceived as only a cost-saving measure, then the institution's commitment to OER may be interpreted as merely a commitment to saving money.

## Future Research

There are many possible directions for future research into OER. The participants in this study repeated much of what had appeared in previous research, but they also offered new perspectives and proposed alternative ways to view similar themes. Even minor adjustments to the research design could yield valuable new information. For example, I could repeat the same interview process with the same instructors in a couple of years and analyze how their responses had changed, or I could invite instructors to a

focus group session and explore how the conversation is different in a group setting. The topics that I am most interested in, however, would involve gathering more detailed information about the experiences of a greater number of instructors.

**What Institutional Support Means**

It is clearly important for instructors to receive adequate compensation for their OER work. However, it is not clear what "adequate compensation" would entail. For example, what outcomes are associated with the amount of funding, and to what extent? Such research could improve understanding of the consequences of underfunding OER initiatives, and it could also help to establish general compensation recommendations. It would also be useful to understand how funding is spent. If it often goes to editing support, for example, it may be more efficient for institutions to provide editing services in house.

I would be especially interested in further exploration of instructors' perception that compensation is indicative of institutional commitment. In analyzing the data for this study and exploring its connection to the literature, I discovered an interesting thread: when institutions fail to adequately compensate instructors for OER work, instructors sometimes perceive it as an indication that the institution does not value OER work. Given that OER work itself is often driven by an instructor's values, a failure to compensate OER work could be interpreted as a misalignment between the instructor's values and those of the institution. Wright (2005) found that when instructor and institutional values align, it can result in improved job performance, better job satisfaction, and less likelihood that instructors would seek employment elsewhere. If

inadequate compensation is interpreted as *misalignment* in values, then adequate compensation may be interpreted as *alignment* in values. If the flow of this logic is realized in practice, then institutions could improve job performance, increase job satisfaction, and improve faculty retention by adequately funding OER projects and other initiatives reflective of instructors' values. The research contained herein is sufficient to claim that such an impact is possible, but further research would be valuable for testing the hypothesis.

**Separating Open Pedagogy from OER**

Many of the touted advantages of OER, including multiple perspectives, inclusive teaching, and student engagement, are not intrinsic properties of OER, but rather characteristics of transformative learning experiences and open pedagogy. OER and open pedagogy are often intertwined, both in the literature and in instructors' reflections on their experiences and their beliefs about teaching. However, it is possible to use OER and teach in a way that reinforces harmful cultural norms, perpetuates othering, and positions students as mere recipients of information. It is also possible to use open pedagogy with commercial textbooks. Existing research does not address the balance of influence between teaching with OER materials and teaching using open pedagogy. For instructors who are already committed to transformative teaching, for example, how impactful would a transition from commercial to OER materials be? Understanding this distinction would lend important clarity to discussions surrounding OER adoption and help faculty to select appropriate materials and manage their OER projects more effectively.

**OER and Faculty Self-Perception**

Much of the conversation about OER focuses on student needs and student outcomes. However, I was struck by what I saw and heard as this study's participants shared their stories with me. They were excited to share what they had learned, and they were open about critically reflecting on their own previous beliefs about issues of equity and access. They conveyed a sense of purpose, determination, enthusiasm for their work. As noted, several instructors described themselves as more empathic, more aware of systemic inequities that impacted their students, and more aware of their own positionality. They also described themselves as pioneers, resources and support for other instructors, and advocates of OER. Whereas this study looked at the experiences of instructors who adopted OER, an additional approach could specifically explore changes in instructors' self-perception.

In the design of any future research studies, I would continue to apply feminist methodologies. In this dissertation's study design, feminist methodologies led me to embrace a relationship-centered approach, engaging in conversation and knowledge-sharing with my peers. I was honored by participants' honesty and vulnerability as they shared their excitement, frustration, personal convictions, and critical reflections, and feminist methodologies were key in helping me to create a comfortable, open interview space. Future feminist research can provide opportunities for additional relationship-building within the OER professional community, amplify the perspectives of those who are underrepresented in academia, and inspire social change.

## Conclusion

The findings reported in previous research, as well as the experiences shared by this study's participants, contribute to an improved understanding of the experience of adopting OER. Many instructors are motivated to adopt OER because pedagogies associated with OER use align with instructors' values, as well as a belief that the burden of mitigating the negative impacts of high textbook costs falls to them. Instructors especially appreciate the adaptability of OER, as well as the opportunity to improve representation in course materials. Participating in OER projects and with the OER community can be a transformative experience for instructors. Teaching with OER, instructors can feel empowered to innovate and teach in a more transformative way, students enjoy timely and equitable access to course materials, and the institution keeps more students enrolled. OER use can facilitate the implementation of transformative pedagogies, which can help to fulfill postsecondary institutions' responsibilities to their students. Through intentional investment in OER initiatives, strategic planning and advocacy, and engagement in communities of practice, faculty and institutional decision-makers can more effectively realize the full potential of OER.

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# APPENDIX A

Invitation to Participate

Dear Open Education colleagues across Oregon,

I hope you are enjoying your summer!

I am writing to invite your participation in a research project that I am completing as a component of a doctoral program in Educational Leadership and Policy.

I am interested in learning more about how instructors experience the transition from commercial textbooks to Open Educational Resources (OER), as well as how equity and inclusion are incorporated in the process.

Equity and inclusion are part of my study, but they are not a factor in eligibility to participate. If you have experienced transitioning from a commercial textbook to OER as an Oregon college or university instructional faculty member, I hope you will consider sharing your story.

Please also forward this invitation to any of your colleagues who have transitioned from commercial textbooks to OER.

I am attaching the Consent to Participate form, which contains more information about the study. I hope you will participate!

If you are willing to share your story, please sign the attached consent form and return it to me at ceciliano@pdx.edu by August 30, 2023. Interviews will be scheduled to take place before December 1, 2023.

If you have any questions, please email me at ceciliano@pdx.edu.

Thank you for considering this invitation, and I hope to hear from you soon!

Best,
Jenny Ceciliano

# APPENDIX B

Consent to Participate in Research

**Project Title:** Adopting OER Course Materials: Instructor Experience
**Population:** Postsecondary Instructors
**Researchers:** Jenny Ceciliano and Karen Haley, Educational Leadership and Policy
Portland State University
**Researcher Contact:** cecilian@pdx.edu and khaley@pdx.edu

You are being asked to take part in a research study. The box below highlights the main information about this research for you to consider when making a decision whether or not to join in the study. Please carefully look over the information given to you on this form. Please ask about any of the information you do not understand before you decide to agree to take part.

| Key Information for You to Consider |
| --- |
| **Voluntary Consent**. You are being asked to volunteer for a research study. It is up to you whether you choose to take part or not. There is no penalty if you choose not to join in or decide to stop your involvement.<br>**Why is the study being done?** The reason for this research is to improve understanding about the instructor experience of transitioning from a traditional commercial textbook to an OER text, as well as how the issues of equity and inclusion are taken into consideration.<br>**How long will it take?** Your participation in the interview will last one hour. There may be additional follow-up communication afterwards.<br>**What will I be expected to do?** You will be asked to participate in a one-hour interview whose audio will be recorded.<br>**Risks.** One of the possible risks or discomforts of taking part in this study include reflecting on negative past experiences. This study does not pose more than minimal risk to participants.<br>**Benefits**. Some of the benefits that may be expected include having your story heard, as well as a sense of contributing to a broader understanding in a meaningful way.<br>**Options.** Participation is voluntary and the only alternative is to not participate. |

**What happens to the information collected?**
Information collected for this research will be used for the student researcher's dissertation in pursuit of an Ed.D. in Educational Leadership and Policy. The data will be used to form a rich, detailed description of the experiences of instructors who transition from commercial textbooks to open educational resources (OER).

**How will my privacy and data be protected?**
We will take measures to protect your privacy including storing all identifying information separately from the audio recordings of the interviews, as well as removing

any potentially identifying information from the data before including it in the research findings. Despite taking steps to protect your privacy, we can never fully guarantee that your privacy will be protected.

To protect all your personal information, we will store all data on password-protected accounts and devices. Despite these precautions, we can never fully guarantee that all your study information will not be revealed.

Individuals and organizations that conduct or monitor this research may be permitted access to inspect research records. This may include private information. These individuals and organizations include the Institutional Review Board that reviewed this research as well as the faculty advisor to the student researcher.

**What if I want to stop my part in this research?**
Your part in this study is voluntary. You do not have to take part in this study, but if you do, you may stop at any time. You have the right to choose not to take part in any study activity or completely stop at any point without penalty or loss of benefits to which you are otherwise entitled. Your decision whether to join in will not affect your relationship with the researchers or Portland State University.

**Will I be paid for being in this research?**
No, there is no payment for participation.

**Who can answer my questions about this research?**
If you have questions, concerns, or have experienced a research related injury, contact the research team at:
Jenny Ceciliano, ceciliano@pdx.edu, 503-395-7394
Dr. Karen Haley, khaley@pdx.edu , 503-725-8270

**Who can I speak to about my rights as a part of research?**
The Portland State University Institutional Review Board ("IRB") is overseeing this research. The IRB is a group of people who independently review research studies to ensure the rights and welfare of participants are protected. The Office of Research Integrity is the office at Portland State University that supports the IRB. If you have questions about your rights, or wish to speak with someone other than the research team, you may contact:
Office of Research Integrity
PO Box 751
Portland, OR 97207-0751
Phone: (503) 725-5484
Toll Free: 1 (877) 480-4400
Email: psuirb@pdx.edu

**Consent Statement**

I have had the opportunity to read and consider the information in this form. I have asked any questions necessary to make a decision about my taking part in the study. I understand that I can ask more questions at any time.

By signing below, I understand that I am volunteering to take part in this research. I understand that I am not waiving any legal rights. I have been provided with a copy of this consent form. I understand that if my ability to consent for myself changes, either I or my legal representative may be asked to provide consent before I continue in the study.

I consent to join in this study.

| **Name of Adult Participant** | **Signature of Adult Participant** | **Date** |
|---|---|---|

**Researcher Signature** (to be completed at time of informed consent)
I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

| **Name of Research Team Member** | **Signature of Research Team Member** | **Date** |
|---|---|---|

# APPENDIX C

Researcher Introduction

I am a student in the Educational Leadership and Policy Ed.D. program, and I am conducting this research for my dissertation in that program. I have over 20 years of experiencing teaching adults, and part of that experience has included transitioning from using a commercial textbook to using open educational resources (OER). I have found that there is insufficient research concerning how instructors experience the transition from commercial textbooks to OER, as well as how equity and inclusion are incorporated, and I hope this study will contribute to addressing that gap in available research.

# APPENDIX D

Interview Protocol Outline Emailed to Participants

Thank you again for your participation in this study. The interview will last approximately one hour, and it will encompass the four questions below. The audio of the interview will be recorded, and those recordings will be destroyed at the conclusion of the study.

1. Tell me about your experience transitioning from a commercial textbook to OER course materials.
2. How have considerations of inclusion and equity been incorporated?
3. What would you want to happen differently if you were to go through the process of OER adoption again?
4. Is there anything else you would like to tell me about your experiences with adopting OER?

# APPENDIX E

Descriptive and Demographic Survey

1. Name
2. Institution
3. Position title
4. Brief description of your role at your institution
5. Significant education and professional development (such as degrees, workshops, certificates, conferences). Please include dates or date estimates where possible.
6. (Optional) Significant identities (such as race, religion, gender, age range, ability, nationality)

# APPENDIX F

Detailed Interview Protocol

**First**, I will greet the participant warmly and chat about unimportant and/or unrelated topics for a few minutes. Examples: I hope you're managing to stay cool! How was your weekend? This morning has been entertaining so far; my dog…

**Second**, I will thank the participant for their willingness to talk with me and share their experiences. I will read aloud the introduction of who I am and why I am doing this research (see Appendix C), as well as the interview protocol outline without the questions (see Appendix D), and I will ask if they have any questions before we start.

**Third**, I will begin the recording and ask them their name and whether they consent to being recorded.

**Fourth**, I will begin the interview itself. I will use the follow-up prompts and questions in order to encourage elaboration, but I will avoid exerting so much control that participants cannot share what is on their mind.

1. Tell me about your experience transitioning from a commercial textbook to OER course materials.
a. Take me through your thought process as you decided to make the change; what were your motivations/concerns/hopes/needs?
b. What factors have affected your ability to carry out the transition from a commercial textbook to OER?
i. What support did you have throughout the process? (e.g., colleagues (in/out of your department/institution), administration, grants, mentors)
c. Where did you compromise and why?
d. How did it go (for you and for the students)? (Consider both during and after the transition.)
i. What were the challenges?
ii. What were the successes?

2. How have considerations of inclusion and equity been incorporated?
a. Were equity and inclusion a factor in deciding to change? (e.g., problems that you hoped to address, or opportunities you hoped to pursue)
b. Have you noticed improved equity and inclusion? (e.g., student outcomes, your own teaching)
c. What might have made it possible to better incorporate equity and inclusion?

Definition of equity in this context: "The dedication of resources and intentions to address, for example, structural inequalities of the past and or present, and to break the repetitive cycle of injustice" (Bossu et al., 2019, p. 2). It is working toward an

educational experience in which outcomes are not determined by a student's race, gender, or income, for example.

Definition of inclusion: Inclusion involves responding to diversity in a way that demonstrates appreciation for the value of differences, identifying and removing barriers, and "should involve particular emphasis on those groups of learners who may be at risk of marginalisation, exclusion or underachievement" (Bossu et al., 2019, p. 2).

3. What would you want to happen differently if you were to go through the process of OER adoption again?
a. What might have helped you achieve a better outcome? (Consider both internal and external factors, e.g., your own approach, or the support given to you.)
b. What would you do differently if you could do it again?

4. Is there anything else you would like to tell me about your experiences with adopting OER?

5. May I contact you again if I have further questions?

**Finally**, I will stop the recording and thank the participant again for their time and for sharing their experience. I will explain the next steps in this part of my research, including additional interviews, transcribing the interviews, sending them the transcript so that they can check that their experience was accurately captured. I will invite them to email me with any follow-up comments or questions.

**Lastly**, I will return to unimportant topics to warmly close the conversation. Examples: I hope you get some time away from work over the break. Will you get to head back out to the beach again soon? Good luck with this new term!