APPROACHES TO BUILDING DIVERSITY, EQUITY, AND INCLUSION IN STUDENT LEARNING OUTCOMES ASSESSMENT

Kelly Burmeister Long, Katlynn Fisher, and Rachel Lathrop

The goal of student learning assessment is to improve teaching and learning, but this process has roots in systems of oppression. Most scholars and practitioners unknowingly perpetuate inequalities and oppression in assessment. To overcome inequities in assessment, scholars and practitioners have identified areas for improvement. This literature review captures the state of diversity, equity, and inclusion (DEI) in student learning outcome assessment practices. As the literature showed, to promote DEI in outcomes, practitioners should review student learning outcomes through a multicultural lens, making them relevant and inclusive for students. Addressing DEI in assessment methods involves recognizing biases, using mixed-methods assessments, and promoting inquiry-based activities. Interpretation of assessment data should avoid weaponization, embrace small sample insights, and foster a culture of inquiry. Of overall importance to the efficacy of DEI in assessment is prioritizing assessment, attracting talent that focuses on DEI, building institutional capacity, and recognizing efforts.

Keywords: diversity, equity, inclusion, learning outcomes, assessment methods, benchmarking, assessment data

Historically, college participation was predominantly limited to individuals who identified as White, male, and middle- to upper-class (Bok, 2013). However, with the advent of mandatory public K-12 education (Bowles & Gintis, 2011), changes in public policy to promote inclusion in education such as *Brown v. Board of Education* (Bok, 2013), and the growing diversification of the population in the United States (Jensen et al., 2021), higher education is now available to individuals from marginalized groups. Unfortunately, though inequities in enrollment may have improved in some sectors, inequities in student success outcomes remain (de Brey et al., 2019). To some, this inequity has resulted in calls for a greater emphasis on diversity, equity, and inclusion (DEI) initiatives in higher education.

Diversity often refers to the representation of people from various identity groups that "correspond to societal differences in power and privilege" resulting in some identity groups experiencing marginalization (American Psychological Association, 2021, para. 12). Beyond representation, inclusion refers to the environment that facilitates a sense of belonging and sharing of power for diverse groups; when focusing on outcomes, equity relates to the resources that are provided to support groups in achieving conditions for success (American Psychological Association, 2021). To achieve goals related to DEI, educators must delve into the systemic practices, processes, policies, and strategies that have contributed to educational disparities (Hobbs & Robinson, 2022). In recent decades, DEI has been used as a lens to examine and challenge long-

held beliefs, practices, processes, policies, and strategies. Research has found that DEI-informed practices relate to increased representation of marginalized students (White et al., 2013), higher student achievement (Anderson, 2017; Bradley, 2019; Padgett & Reid, 2002; White, 2016), and increased sense of belonging (Peck et al., 2022). For institutions interested in incorporating DEI throughout their organization and reducing disparities in student outcomes, one impactful area for change is student learning outcomes (SLOs) assessment.

Assessment of SLOs is described as encompassing all activities aimed at evaluating students' comprehension with the ultimate aim of enhancing their learning (Elkhoury et al., 2023). Student learning assessment is grounded in the idea that assessment can improve teaching and learning (Astin, 2012). However, the practice of assessment is also rooted in a history of racism and gender privilege (Milligan et al., 2021). Moreover, practitioners are persistently attentive to concerns regarding rigor, characterized as an academic challenge that facilitates learning and student advancement (Campbell et al., 2018). The concerns of rigor are juxtaposed against, and at odds with, assessment frameworks that are inherently based in biases, oppression, and privilege. It is possible that methods and practices that are noted as increasing rigor further perpetuate an inequitable landscape for students. Milligan et al. (2021) posited that there are two fundamental issues in assessment: (a) that assessment is structured in a way that produces inequitable outcomes and (b) that assessment practices are impacted by, and often grounded in, inequities. As more scholars call for DEI to be incorporated into assessment (Baker & Gordon, 2014; Hansen & Renguette, 2023; Montenegro & Jankowski, 2020; Ziskin & Young, 2023), all aspects of assessment should be considered to reduce inequities.

The cycle of assessment traditionally begins with the creation of SLOs (National Institute for Learning Outcomes Assessment [NILOA], n.d.), generally expected to reflect what students should know or be able to do upon successful completion of a course or program. Next, assessment methods are defined, creating descriptive plans that document measures used to assess learning outcomes statements (NILOA, n.d.), and generally benchmarks accompany assessment methods indicating the expected level of competency in the measured learning construct or skill. Once evidence of student learning is collected, results are interpreted, sometimes by an individual and other times by multiple stakeholders (NILOA, n.d.). The use of assessment data follows whereby actions that can improve student learning, generally through adjustments to curriculum or pedagogy, are created (NILOA, n.d.). Because this cycle is embedded in the framework of most institutions' teaching and learning processes, the act of student learning assessment is placed in a key position to promote and scaffold DEI in higher education.

Purpose

While enrollment of diverse student groups has grown, disparities in student success still exist for marginalized student groups. Data have shown that students who are low-income, first-generation, and identified with a marginalized racial or ethnic identity have lower persistence (National Student Clearinghouse Research Center, 2022) and graduation rates compared to White, middle- to upper-class peers (Cahalan et al., 2022; National Student Clearinghouse Research Center, 2022). Often, marginalized students are deemed at-risk and are viewed from a deficit lens (Ladson-Billings, 2006), which focuses on the students' lack of academic preparation and social and cultural capital needed to successfully navigate higher education. Viewing deficits within the students is a common tactic that results in avoiding the need to examine the design of the course, institution, or assessment processes for potential perpetuation of inequities and biases.

This literature review explores DEI in the student learning assessment process. As Singer-Freeman and Robinson (2020) found, more than half of assessment professionals view increasing equity as among the top three challenges in the field of assessment. This review focused on recommendations from practitioners and researchers regarding how SLOs and assessment can be used as strategies to address inequities in student success in higher education. Highlighting challenges and opportunities for promoting DEI in assessment, this article aims to offer a high-level view of the state of the field of assessment as it relates to DEI.

Method

This article used a narrative literature review to broadly describe the state of the field of DEI in SLO assessment (Grant & Booth, 2009). A search of the literature in fall 2023 focused on keywords including diversity, equity, and inclusion. These terms were paired with keywords aimed at specific assessment terms including learning outcomes, assessment methods, benchmarking, and assessment data. Due to the difficulty in finding literature on DEI related actions that resulted from student learning assessment, the phrase culturally responsive teaching was used to identify articles that focused on improving DEI in teaching. The keyword "higher education" was added to remove results focused on K-12 settings. Searches were conducted via Google Scholar, EBSCOhost, and ERIC. For the most relevant articles, the cited by feature in Google Scholar was selected and the resulting links were reviewed for additional relevant research.

Literature Review

DEI in Learning Outcomes

The majority of institutions in the United States utilize SLOs or formal statements of what students should know or do (Kuh et al., 2014). Put another way, SLOs articulate the knowledge and skills students are expected to gain from curricular and cocurricular experiences (Douglass et al., 2012). SLOs are driven by accreditation, faculty, and institutional leaders and can be stated at multiple levels including institutional, general education, programs, courses, and cocurricular activities (Kuh et al., 2014). Recognizing that not all institutions will want to incorporate DEI statements into SLOs, this section of the literature review focuses mainly on the ways that any learning outcome can be diverse, equitable, and inclusive. The section also includes recommendations from the literature on how to write SLOs with DEI concepts embedded within for those interested in explicitly writing SLO statements that support DEI concepts.

While graduation rates indicate successful completion of a program, student learning rates provide accountability by ensuring that students are learning the intended skills and knowledge within said programs. However, the way in which SLOs are designed may be biased, inequitable, and impacted by structural barriers (Buzzetto-Hollywood, 2023; McArthur, 2017; Montenegro & Jankowski, 2017). For example, often SLOs require interpretation and familiarity with the dominant cultural discourse in higher education (Maher, 2004). Addressing the growing diversity of student populations and the implementation of DEI initiatives in higher education necessitates a stronger emphasis on broadening the scope of subjects taught and assessed. This approach aims to counteract negative stereotypes associated with individuals perceived as different (Lambert et al., 2022). In this way, practitioners are challenged to consider SLOs using a multicultural lens and to consider whether there is bias inherent within the SLOs.

Further, learning outcomes should be student-centered and readily measurable (Montenegro & Jankowski, 2017; Nieminen, 2022) and use inclusive language that is culturally relevant to students (Rodriguez & Raby, 2019; Williams, 2023). Involving students in the production of learning outcomes ensures that outcomes are relevant, inclusive, and readily understood by students (Hansen & Renguette, 2023; Levy & Heiser, 2018; McArthur, 2017; de St Jorre & Boud, 2022). Including students in the development of SLOs also facilitates the use of appropriate student-focused and cultural language in learning outcomes statements to ensure that students understand what is expected of them (Montenegro & Jankowski, 2020).

When including students in the creation of SLOs, self-efficacy approaches may be considered. Buzzetto-Hollywood et al. (2019) described the use of a self-efficacy model that asserts that the level of an individual's goal achievement is directly impacted by their perception of their ability to achieve. Therefore, the involvement of students in a self-efficacy model of outcome development would involve students' visualization of the future, physical and emotional states, performance outcomes, vicarious experiences, and social persuasion (Buzzetto-Hollywood et al., 2019). Thus, questions for students in such a model may center around what they think they can achieve, learn, or do as a product of learning in a given class or how they see themselves after attaining learning in a given class. Self-efficacy models are one way to check the disparities that may exist between what a practitioner believes is possible for students to learn versus what students believe is possible to learn in the same course.

Another student-centered approach includes logic models, described as a visual representation illustrating the relationships among resources, activities, and desired outcomes within a course (Hansen & Renguette, 2023). By utilizing a logic model particularly with student involvement, educators can establish connections between course activities and resources. This process aims to support the development of course outcomes while empowering students to identify potential barriers to learning. Through this collaborative approach, students can assess how course activities and available resources may facilitate or hinder their learning experience, fostering a more inclusive and effective educational environment.

Cultural and social capital underscores the need for DEI in learning outcomes. Cultural capital is rooted in conflict theory, which views institutions as perpetuating inequality by valuing the culture of upper-middle-class, often White, patriarchal, and heteronormative contexts (Folk, 2019). Capital encompasses resources such as language and education, which can either facilitate or impede social mobility within specific sociocultural contexts (Folk, 2019). Many of the expectations in higher-status contexts remain implicit, making it challenging for those historically considered outsiders to navigate (Folk, 2019). Similar to the student-centered approach, the examination of cultural capital prompts educators to critically evaluate and reshape SLOs to bridge the gap between implicit expectations and the diverse backgrounds of students.

While many SLOs will undoubtedly relate to technical concepts relevant to programs, some areas may be able to add specific DEI-focused outcomes to improve student learning related to program-specific DEI issues. Fuentes et al. (2021) defined learning outcomes aligned with DEI ideology as those that include sociocultural frameworks, promote interpersonal relationships and teamwork, enhance self-efficacy, and build communities at multiple levels. Lybeck et al. (2021) developed a guide for the implementation of DEI learning outcomes that identifies four categories of outcomes—knowledge, skills, self-reflection, and action for change—that encourage not only the accumulation of knowledge but also problem-solving activities centered on social justice for diverse populations. In addition to identifying the categories of outcomes, Lybeck et al. suggested terminology that encourages practitioners to develop learning outcomes that prompt critical

thinking and clarify expectations to students. To further help educators, in 2009, the American Association of Colleges and Universities published a list of learning outcomes to guide liberal education such as civic knowledge and engagement, intercultural knowledge and competence, and ethical reasoning and action that align with DEI goals. Drawing on resources like those from Lybeck et al. and the American Association of Colleges and Universities (2009), practitioners can consider different aspects of DEI that may enhance student learning in their specific program areas.

Creating student-centered learning outcomes and embedding DEI into SLOs are two approaches to promoting DEI in higher education. Specifically, the literature identified several ways to move toward these approaches, including (a) reviewing SLOs from a multicultural lens; (b) ensuring students view SLOs as relevant, inclusive, and readily understood; (c) considering student self-efficacy beliefs; (d) empowering students to identify barriers to learning among stated outcomes; (e) bridging the gap between implicit expectations and the diverse backgrounds of students; and (f) using resources to incorporate different concepts of DEI into learning outcomes.

The focus of the next section shifts toward the pivotal role of assessment methods in both ensuring and enhancing student learning. Regardless of whether or not any of the SLOs relate to DEI, this section discusses strategies that can be used to evaluate any SLO for DEI. Emphasizing the need for transformative change, the literature underscores the significance of assessment leaders and practitioners as agents of change (Hansen & Renguette, 2023). In the pursuit of creating more inclusive and equitable educational environments, the forthcoming section delves into the concept of culturally responsive assessment methods and their role in fostering transformative change.

Assessment Methods

Student learning assessment is concerned with assessing student achievement in relation to particular learning outcomes (Kuh et al., 2014). Assessment can provide useful data regarding student achievement of learning concepts or abilities as well as identify inequities in student learning and outcomes through data disaggregation (Ladson-Billings, 2006). In terms of equitable assessments, there is a history of scholarship revealing inequitable measures of learning that exacerbate exclusion for marginalized populations and further perpetuate inequities (Ford & Helms, 2012) as well as those that promote inclusion (Ford & Helms, 2012; Nieminen, 2022).

A primary concern is the use of quantitative or qualitative data. Quantitative methods primarily collect data on student demographics and performance. Disaggregating student assessment data by demographic variables allows institutions to identify inequities in student performance on various outcomes (Montenegro & Jankowski, 2017). However, quantitative data often fail to elucidate why inequities in performance exist and, as the next section shows, can result in inequitable measures of learning. Qualitative data, measured through projects, papers, and assignments scored with rubrics, may further advance understandings of student performance in ways that support equity and inclusion.

Similar to the recommendations for creating SLOs, scholars recommend collecting student feedback to understand performance (Hobbs & Robinson, 2022) and utility value and inclusive content (Singer-Freeman et al., 2021). In addition to considerations of the type of data collected (i.e, qualitative or quantitative) and understanding student perceptions of assessment, there is a rich body of literature documenting bias in assessment methods as well as approaches for increasing equity in assessment.

Bias in Assessment Methods

Assessment has historically been based on the premise of objectivity and the idea that learning must be demonstrated in specific ways to be considered valid or effective (Montenegro & Jankowski, 2017). An illustrative instance involves standardized tests like the Graduate Record Exam, SAT, and IQ tests. These assessments frequently depend on frequency counts and comparisons to standards or cut scores that have been established primarily on samples from White populations (Ford & Helms, 2012). While standardized tests are based on the premise of external validity, the external validity of these tests is often weak or missing (Ford & Helms, 2012). Instead, standardized testing often relies on cultural norms in place of external validity (Hobbs & Robinson, 2022; Johnston, 2010). Standardized testing has contributed to exclusion for marginalized populations. For example, women and Black students have long experienced lower scores on average compared to male and White students on the Graduate Record Exam (Bleske-Rechek & Browne, 2014). Additionally, standardized tests can be primarily ableist and fail to account for different ways of learning and knowing, holding students to a White, male, heteronormative, neurotypical standard of learning, leading to incorrectly perceived gaps in achievement (Hobbs & Robinson, 2022). Further, the complex sentence structure of multiple-choice questions often used in standardized tests increases the chances that students will misinterpret the question (Singer-Freeman et al., 2019). The historical reliance on standardized testing, characterized by its implicit biases and cultural norms, has perpetuated inequities and contributed to exclusion particularly for marginalized populations. The limitations of standardized tests, including weak external validity and a failure to accommodate diverse learning styles, underscore the pressing need for a more inclusive and equitable approach to assessment in education.

Culturally Responsive Assessments

With the increasing diversity of the U.S. student population, there is a heightened emphasis on the impact of assessment practices in favoring and affirming specific types of learning and evidence of that learning (Montenegro & Jankowski, 2017). Such preferences can inadvertently strengthen the misconception among students that they are not a suitable fit for higher education or have limited agency in their own learning (Montenegro & Jankowski, 2017; Nieminen, 2022). As a result, there are greater calls for culturally responsive or equity-minded assessment that minimize "the perpetuation of systems of power and oppression" (Lundquist & Henning, 2020, p. 50), legitimize specific ways of knowing (Bullen & Flavell, 2022), and reject a one-size-fits-all approach to student learning assessment (Hundley, 2022).

Culturally responsive assessment challenges the idea that all students should be assessed in the same way by taking into account varying cultural and experiential backgrounds (Montenegro & Jankowski, 2017) and promoting the idea that assessment should be inclusive of different modes of knowledge consumption and demonstration. Culturally responsive assessment has been described as assessments that are both high in utility value and inclusive content (Singer-Freeman et al., 2019, 2021). Utility value is high when students find the assignment to have professional, academic, and personal value above and beyond the value of the assignment on their course grade (Singer-Freeman et al., 2019, 2021). Inclusive content is high when the assignment provides clear instructions, content is familiar to most or all students, and students have freedom in determining how they can demonstrate their knowledge and understanding (Singer-Freeman et al., 2019, 2021). Traditional forms of assessment such as standardized multiple-choice tests are often low in utility

(Singer-Freeman et al., 2019) as they fail to provide real-world connections and applications (Oliveri et al., 2020). Research has shown that assessments lacking both utility value and inclusivity often result in equity gaps when compared to assessments that are high in both utility value and inclusivity (Hobbs & Robinson, 2022). Culturally responsive assessments that are high in utility value and inclusive content include "reflective writing and applied learning projects" (Hobbs & Robinson, 2022, p. 148) such as rubrics, capstone projects, and portfolios. Another example of a culturally responsive assessment method is the use of adaptive testing that scaffolds a student's existing knowledge and learning (Hansen & Renguette, 2023). As opposed to standardized tests that are implemented uniformly with all students, adaptive testing adjusts to the competencies of the test taker and considers the unique knowledge, skills, and abilities of diverse student populations. Rubrics support structured assessment criteria while simultaneously allowing for flexibility in determining learning (Hansen & Renguette, 2023). Portfolios allow students to collect, connect, and reflect upon their academic experiences and assignments during their academic career (Hansen & Renguette, 2023). Such reflection allows students to direct their own learning and increases motivation (Bourke, 2022).

Culturally responsive assessment methods allow students to demonstrate progress toward and achievement of specific outcomes in a way that is congruent with established knowledge, sociocultural experiences, and methods of learning and knowledge acquisition while also allowing for reflection on their learning and the application of abstract concepts to their lives. Research has shown that assessments that employ mixed-methods assessment with the use of qualitative and quantitative data allows for a more comprehensive understanding of students' experiences and quantifiable outcomes (Hansen & Renguette, 2023). Lastly, practitioners should encourage inquiry-based activities and assignments for assessment measurement that allow students to engage their cultural identities in academic work.

When developing culturally responsive assessments, researchers have outlined additional considerations. The first consideration relates to the biases surrounding the development of assessments. Oliveri et al. (2020) recommended not only assessing bias when designing an assessment but also using data from administration of the assessment to continually improve the assessment and address biases. Additionally, assessment leaders need to recognize the role they can play as change agents in creating a more inclusive and equitable environment for students (Hansen & Renguette, 2023). Ensuring assessment outcomes, practices, and methods are socially just, evidence-based, consider power structures, and promote equity rather than enhancing or maintaining inequities is essential. Further, assessment leaders need to work toward the use of a growth mindset while also recognizing more needs to be done to address structural inequities and institutionalized racism (Hansen & Renguette, 2023).

During the development of assessments, careful consideration should be given to the content, construct, and scoring procedures of items within the assessment in order to ensure that assessments are designed to measure specific outcomes, allow flexibility for different ways of knowing, and readily understood by a diverse group of learners (Bourke, 2022). Following implementation of an assessment, data should be disaggregated to identify inequities in performance, followed by a critical examination and reevaluation of the assessment to address those inequities. The second consideration involves understanding the students who are being assessed, which is especially important given the heterogeneity of student populations within many institutions, programs, and courses (Johnston, 2010). For example, Oliveri et al. (2020) identified different frameworks to consider fairness in assessment that investigate extraneous or bioecological factors that affect student performance on assessments. This process included

looking at the intersectionality of student identities, academic and life experiences, and physical environments (Tai et al., 2023). Understanding the identities and experiences of the students allows assessment professionals to ground assessments in familiarity (Johnston, 2010). The next consideration involved the format and restrictions on assessment. For example, time limits and due dates may limit the performance of students who have extracurricular responsibilities such as childcare or employment (Tai et al., 2023). Another example is the choice to give individual or group assessments on which students from individualistic and communistic cultural backgrounds, respectively, have been found to perform differently (e.g., Jian, 2021).

The key recommendations from this section highlighted the shortcomings of traditional assessment methods, particularly standardized tests, that have historically perpetuated inequities and exclusion for marginalized populations. Moreover, it calls for culturally responsive assessment methods emphasizing the important approaches that minimize perpetuation of power dynamics, legitimize diverse ways of knowing, and reject a one-size-fits-all approach. Culturally responsive assessments are described as those high in utility value and inclusive content, encompassing methods like rubrics, capstone projects, portfolios, and adaptive testing that allow for a more comprehensive and inclusive measurement of student learning. Additionally, the literature stressed the need to consider biases in assessment development, recognize the role of assessment leaders as change agents, and the adoption of a growth mindset while addressing structural inequities. Understanding students' diverse identities and experiences is also essential along with reconsidering the format and restrictions of assessments to ensure fairness and inclusivity.

Although this section discussed various assessment designs that foster DEI in higher education, it is crucial to emphasize that an ongoing commitment to questioning issues of justice and assessment is more vital than seeking permanent solutions (McArthur, 2016). Assessment leaders are tasked with scrutinizing assessment practices and methods with the goal of ensuring that these approaches are not only evidence-based but also socially just, taking into account power structures and actively promoting equity instead of perpetuating or exacerbating existing inequities (Hansen & Renguette, 2023). In the following section, the literature review turns to the point in the assessment process wherein data on SLOs are already collected and focuses on how people make meaning out of the data in their interpretations.

Interpretations of Assessment Data

Separate from the goals of DEI-focused outcomes or even equitable and inclusive assessment methods, the discussions that surround assessment data have the potential to support or inhibit DEI goals. Effective assessment goes beyond just data collection and analysis by informing a continuous improvement process for student learning. Therefore, it is important that institutions maintain a culture of inquiry to promote the collection and use of assessment data.

When it comes to applying DEI in discussions around assessment data in cases where data are split by student group, new issues arise. For example, as noted previously when marginalized student groups perform lower on traditional assessments than privileged student groups, they are often viewed through a deficit lens (Davis & Museus, 2019; Ladson-Billings, 2006). Deficit thinking positions students as the problem instead of the policies and practices put in place that disadvantage certain students (O'Shea et al., 2016). As Davis and Museus outlined, tackling deficit thinking involves questioning victim blaming orientations, focusing on pervasive systems of oppression, and challenging activities that reinforce hegemonic culture. One approach to stymie deficit thinking is designing culturally responsive assessments that move away from traditional

methods in favor of methods that are more likely to fairly measure the diversity of student learning both in the collection and interpretation of the data.

In equity-minded assessment, data-related conversations should be examined to ensure that data are not weaponized to facilitate self-confirming biases about student abilities and potential. Assessment leaders need to be careful not to utilize assessment results as proof that students are unprepared or disinterested in learning (Montenegro & Jankowski, 2020). Further, while small samples can inform assessment through trend data collected over time, equity-minded assessment is responsive to student needs by examining and helping individual students when they need it (Montenegro & Jankowski, 2020). Practitioners and assessment leaders should not disregard assessment data samples simply because they are small but view such samples as providing additional insights into the supports some students need to be successful in their learning.

In a recent study of faculty and administrator experiences using data to advance equity, five main themes emerged related to discussions of equity and assessment data (Ziskin & Young, 2023). The primary theme, performativity misalignment, characterizes the approaches and methods employed by institutions and management wherein success is determined by the establishment of uniform objectives and criteria. Specifically, Ziskin and Young found that equity was not included in the expectations and structures for assessment reporting or accountability. Participants mentioned a sort of push back on equity efforts as well as their limited time to deeply analyze the data in order to understand inequities. As one participant mentioned, if the institution overall does not value equity, such as in the mission statement, it is not likely going to be included in practice. The second theme was collaborators' resistance, which was enacted at times in the form of questioning the quality and validity of the data. This was so powerful that participants reported these doubts derailed equity conversations altogether. Related to resistance, a third theme of nonequity-minded frameworks emerged wherein participants used deficit frameworks to explain the data that resulted in inaction. Deficit frameworks further strengthen stereotypes and biases regarding the intellectual capabilities of student groups (Ladson-Billings, 2006; O'Shea et al., 2016; Smit, 2012). In response, higher education often focuses on fixing the student and assimilating them within the dominant culture (Smit, 2012). Unfortunately, the deficit framework and resultant strategies to improve student success often result in feelings of isolation that further contribute to inequities (Smit, 2012). The fourth theme of inequitable processes related to experiences where the viewpoints of individuals who advocated for equity were dismissed based on power dynamics in the assessment meetings. The fifth theme focused on a lack of structure for follow through or "closing the loop," which related to participatory equity work where discussion would be authentic and have enough structure to remain socially supportive.

In another recent study asking staff, faculty, administrators, and graduate students about obstacles they faced as they endeavored to engage in equity-centered assessment, Heiser et al. (2023) identified seven themes related to such barriers. The first theme related to a lack of knowledge, awareness, and understanding surrounding equity-centered assessment. Respondents cited lack of resources and knowledge regarding what equity-centered assessment is and how it should be conducted as well as how equity-centered assessment aligned with current assessment practices. The second theme related to the availability of data, which was often limited to institutional research staff, as well as lack of communication. Participants cited a lack of not only communication between departments but also communication regarding the collection and use of student data, similar to the second theme identified by Ziskin and Young (2023). The third theme related to the lack of capacity regarding resources and the prioritization of time (Heiser et al., 2023). The fourth theme related to a reluctance for a culture of assessment due to the perceived

additional time required for such efforts and a lack of understanding regarding the use (or misuse) of assessment data. Similar to Ziskin and Young's (2023) first theme, the fifth theme identified by Heiser et al. (2023) related to an institution's seemingly performative commitment to DEI. Participants reported pushback and backlash toward DEI assessment even when institutions promoted DEI in their mission statements or strategic plans. The sixth theme related to the political and legislative climate and whether participants were allowed to perform DEI assessment. Given the current attack on DEI initiatives by 40 bills proposed in 22 states as of October 2023 (Lu et al., 2023), it is no surprise that participants are worried about the legality of DEI assessment. Lastly, the seventh theme related to fear regarding navigating self-identity and biases as well as doing it incorrectly.

Counter to the barriers toward collection and use of assessment data toward DEI outcomes, Singer-Freeman et al. (2021) recommended instituting a culture of inquiry within an institution, highlighting the collaboration between assessment professionals and faculty as proposed by Cain (2014). Collaboration between faculty and assessment professionals is important given that faculty primarily implement assessments and may not also be professionals in assessment. Additionally, a culture of inquiry is defined as one that "uses data for critical analysis of equity in outcomes, fosters reflection and self-change, and focuses on institutional responsibility, rather than student deficits, when devising solutions" (Singer-Freeman et al., 2021, p. 45).

This content emphasizes the critical role of assessment data in promoting or hindering DEI goals. Beyond mere data collection, effective assessment should inform a continuous improvement process for student learning, necessitating a culture of inquiry within institutions. When discussing assessment data through a DEI lens, challenges arise when marginalized student groups perform lower on traditional assessments, leading to deficit thinking that places blame on students rather than addressing systemic issues. The dangers of weaponizing data to confirm biases about student abilities are highlighted, emphasizing the importance of equity-minded assessment that responds to individual student needs. Recent studies on faculty and administrator experiences and obstacles faced in engaging with equity-centered assessment work revealed recurring themes, including performativity misalignment, collaborators' resistance, nonequity-minded frameworks, inequitable processes, and a lack of structure for follow-through. Barriers identified in another study included a lack of knowledge, data availability issues, capacity limitations, reluctance to a culture of assessment, performative commitments to DEI, concerns about the political climate, and fear of navigating self-identity and biases. In contrast, the recommendation is made to institute a culture of inquiry within institutions, promoting collaboration between assessment professionals and faculty to use data critically for equity analysis, reflection, and institutional responsibility. The remaining sections highlight strategies toward developing a culture of inquiry as it relates to the use and implementation of alternative assessment practices.

Strategies for Creating a Culture of Inquiry

Navigating the complexities of culturally responsive teaching and assessment reveals an additional challenge: the need for a simultaneous awareness of how teaching, learning, and assessment mutually support and reinforce each other. While individual instructors may champion culturally responsive teaching, structural barriers often impede the development of a comprehensive culturally responsive assessment agenda within institutions. In order to promote an inclusive culture of assessment, leaders must make assessment a priority; attract and retain talent to support assessment; develop institutional and individual capacity for assessment; recognize, reward, and

promote assessment; and sustain a culture that is continuously supportive of assessment (Hundley, 2022). Such requirements may be difficult for assessment professionals who oversee assessment along with many other duties and responsibilities. Institutions may need to make assessment a priority as a whole instead of relying solely on one individual tasked with all assessment responsibilities. Assessment leadership in higher education should aim to be widely collaborative and context-specific while also valuing professional autonomy, such as academic freedom, to enhance student learning assessment processes and effectiveness (Hundley, 2022).

In the context of higher education, distributed leadership is seen as beneficial and having the potential to include all individuals contributing to the teaching and learning process such as faculty, staff, and students in developing and maintaining an assessment culture (Hundley, 2022). The notion of distributed leadership in higher education may be challenging, however, as administrative staff and faculty alike may be burdened with other responsibilities and thus view the assessment of student learning as an addition to their responsibilities instead of viewing it as a core, essential function to teaching and learning (Haviland, 2009). A solid understanding of distributed leadership is also important as it is not simply delegation but the presence of multiple leaders at various levels within the organization working together toward a shared goal (Hundley, 2022). The simple act of adopting a distributed leadership model may not address long-standing, structural issues noted above (Hundley, 2022). Thus, establishing a culture centered around students, which values interventions, improvements, and innovations based on evidence, requires leadership at all levels (Hundley, 2022).

Improving DEI Through Teaching Practice

Academic freedom allows professors discretion to determine their pedagogical and assessment approaches within their classroom. Unfortunately, this means that some professors may be using outdated and ineffective teaching methods (Bok, 2006) that result in inequitable student outcomes. For example, typical pedagogical considerations include time constraints and deadlines that deter underrepresented students faced with external constraints due to employment or childcare from continuing their academic journey (Whitburn & Thomas, 2023). Assessment allows professors to gather information regarding student outcomes, disaggregated by student characteristics, to assess and reconceptualize their teaching strategies. Culturally responsive assessment, as described above, allows students greater flexibility in demonstrating their knowledge and progress. Similarly, culturally responsive teaching encourages flexibility in teaching to account for diverse students' backgrounds, assets, and knowledge (Buzzetto-Hollywood, 2023).

The theory of culturally relevant pedagogy was first introduced by Ladson-Billings in 1995. Ladson-Billings (2007) later described culturally relevant pedagogy as "teaching that uses student culture in order to maintain it and to transcend the negative effects of the dominant culture" (p. 19). Similar to culturally relevant assessment, culturally responsive pedagogy accounts for student diversity and incorporates representation of diverse histories, cultures, and ways of knowing. Culturally responsive pedagogy seeks to dismantle dominant norms and cultures within higher education while leveraging the cultural backgrounds and experiences of ethnically diverse students in order to make learning more relatable and impactful (Hutchison & McAlister-Shields, 2020). Culturally responsive pedagogy benefits all students regardless of prior academic experiences and the cultural capital with which they arrive on campus. Benefits of culturally responsive or relevant pedagogy include, among others, enhanced learner engagement, higher

expectations for all students, increased cultural competencies, and promotion of critical reflection (Buzzetto-Hollywood, 2023).

Given the diversity and heterogeneity of classrooms within higher education, it has been argued that it is impossible to prescribe universal culturally responsive pedagogical practices (Gay, 2013). However, multiple authors have identified guiding tenets to facilitate the adoption of culturally responsive pedagogy. For example, Ladson-Billings (1995) described how instructors exhibiting culturally relevant teaching hold high standards for themselves and their students. Likewise, Gay (2013) urged educators to substitute negative views of students and communities of color, characterized as pathological and deficient, with more optimistic perspectives; such thinking requires instructors to investigate their own biases in teaching and assessment. Additionally, instructors are called upon to continually explore and learn about instructional strategies and resources that will benefit their increasingly diverse student body (Hansen & Renguette, 2023). The second tenet focused on relationships wherein instructors encourage collaboration between students and the instructor as well as students and their peers. Student-instructor collaboration ensures that student identities, voice, and way of learning are incorporated into the curriculum (Muniz, 2020) thereby increasing student motivation. The third tenet focused on the conception and assessment of knowledge. Culturally relevant instructors recognize and incorporate students' prior knowledge, experiences, and cultures into the curriculum. Incorporation of diversity into the pedagogy requires instructors to acknowledge racial and ethnic differences instead of claiming neutrality among different racial and ethnic groups while also acknowledging the normative reality of diverse cultures (Gay, 2013).

Academic freedom grants professors' autonomy, but academic freedom paired with outdated teaching methods can lead to inequitable outcomes. Assessment helps professors refine teaching strategies. Culturally responsive assessment aligns with teaching that accommodates diverse backgrounds. Culturally relevant pedagogy, promoting student success through diverse representation, benefits all students. Guiding tenets include self-conception, relationship-building, and knowledge assessment. Over the years, historically Black colleges and universities have been unmatched in the implementation of culturally responsive teaching (Buzzetto-Hollywood, 2023); however, any institution can benefit from culturally responsive teaching. Higher education is at a pivotal moment in its history when the incoming generation is more diverse than previous ones (Buzzetto-Hollywood, 2023; Hutchison & McAlister-Shields, 2020). Some pedagogical approaches no longer meet the needs of this increasingly diverse student body (Hutchison & McAlister-Shields, 2020), prompting a need for greater adoption of culturally responsive teaching and assessment to meet the needs of current and future students.

Conclusion

To enhance DEI in outcomes, practitioners can review SLOs through a multicultural lens, ensuring students perceive SLOs as relevant and inclusive, considering student self-efficacy beliefs, empowering students to identify barriers to learning outcomes, bridging the gap between implicit expectations and diverse student backgrounds, and utilizing resources to incorporate various DEI concepts into learning outcomes. In tackling DEI in assessment methods, practitioners can focus on recognizing biases, employing mixed-methods assessments, and encouraging inquiry-based activities. To address DEI in interpretations of data, practitioners need to avoid weaponizing data, viewing small sample sizes as unworthy, and foster a culture of inquiry that uses data for critical analysis and reflection. Finally, to create a culture of inquiry, practitioners are advised to prioritize

assessment, attract and retain assessment talent, develop capacity, recognize and reward assessment efforts, and sustain a supportive culture.

While this article outlined the efforts that have been made to incorporate DEI into SLO assessment, such efforts are, of course, entirely optional. For some institutions, DEI is a stated component of their institutional missions, and it is at such institutions that information on approaches and pitfalls as outlined in this literature review become relevant. However, as media has reported, even before the Supreme Court struck down affirmative action in admissions, DEI programs have been under attack by politicians (Bhaskara, 2023). As more institutions begin to grapple with plans for DEI in assessment, it was useful in this literature review to explore the state of the field.

Future research should explore the extent to which DEI is on the radar of assessment professionals. The practices used by assessment offices to promote DEI in outcomes, methods, results interpretation, and actions to improve teaching and learning should also be explored. Finally, it would be helpful to understand the extent to which assessment officers are facing internal or external pressure to incorporate or remove DEI from assessment. Understanding the motivations for incorporating DEI in assessment would also reveal interesting social justice dynamics in higher education that can inform leaders on actions to take in order to align institutional efforts with their missions.

References

American Association of Colleges and Universities. (2009). *Valid assessment of learning in undergraduate education.* https://www.aacu.org/initiatives/value

American Psychological Association. (2021). *Equity, diversity, and inclusion framework*. https://www.apa.org/about/apa/equity-diversity-inclusion/equity-division-inclusion-framework.pdf

Anderson, A. A. (2017). *The effects of the summer school program on the persistence and progression rates of academically underprepared African American first year college students* (Publication No. 10684140) [Doctoral dissertation, Texas Southern University]. ProQuest Dissertations and Theses Global.

Astin, A. W. (2012). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Rowman & Littlefield Publishers.

Baker, E. L., & Gordon, E. W. (2014). From the assessment of education to the assessment for education: Policy and futures. *Teachers College Record*, *116*(11), 1–24.

Bhaskara, V. (2023). DEI is under attack at colleges and universities. *Forbes*. https://www.forbes.com/sites/vinaybhaskara/2023/07/07/dei-is-under-attack-at-colleges-and-universities/?sh=3c2a02ed7dae

Bleske-Rechek, A., & Browne, K. (2014). Trends in GRE scores and graduate enrollments by gender and ethnicity. *Intelligence*, *46*, 25–34.

Bok, D. (2006). *Our underachieving colleges: A candid look at how much students learn and why they should be learning more.* Princeton University Press.

Bok, D. (2013). *Higher education in America: Revised edition.* Princeton University Press.

Bourke, R. (2022). Normalising alternative assessment approaches for inclusion. In R. Ajjawi, J. Tai, D. Boud, & T. Jorre de St Jorre (Eds.), *Assessment for inclusion in higher education* (pp. 189–198). Routledge.

Bowles, S., & Gintis, H. (2011). *Schooling in capitalist America: Educational reform and the contradictions of economic life*. Haymarket Books.

Bradley, A. (2019). *The impact of college success program on first generation college students in their preparation for college* (Publication No. 27788648) [Doctoral dissertation, University of Southern California]. ProQuest Dissertations and Theses Global.

Bullen, J., & Flavell, H. (2022). Decolonising the indigenised curricula: Preparing Australian graduates for a workplace and world in flux. *Higher Education Research and Development*, *41*(5).

Buzzetto-Hollywood, N. (2023). Decolonization and culturally responsive teaching practices and the role of historically Black colleges and universities. *Journal of Education and Human Development*, *12*(1), 1–15.

Buzzetto-Hollywood, N., Mitchell, B. C., & Hill, A. J. (2019). Introducing a mindset intervention to improve student success. *Interdisciplinary Journal of e-Skills and Lifelong Learning*, *15*, 135–155.

Cahalan, M. P., Addison, M., Brunt, N., Patel, P. R., Vaughan, T., III, Genao, A., & Perna, L. W. (2022). *Indicators of higher education equity in the United States: 2022 historical trend report*. The Pell Institute. https://www.pellinstitute.org/pell-institute-indicators-2022

Cain, T. R. (2014). *Assessment and academic freedom: In concert, not conflict.* National Institute for Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2019/02/OccasionalPaper22.pdf

Campbell, C. M., Dortch, D., & Burt, B. A. (2018). Reframing rigor: A modern look at challenge and support in higher education. *New Directions for Higher Education*, *2018*(181), 11–23.

Davis, L. P., & Museus, S. D. (2019). What is deficit thinking? An analysis of conceptualizations of deficit thinking and implications for scholarly research. *NCID Currents*, *1*(1), 117–130.

de Brey, C., Musu, L., McFarland, J., Wilkinson-Flicker, S., Diliberti, M., Zhang, A., Branstetter, C., & Wang, X. (2019). *Status and trends in the education of racial and ethnic groups 2018*. U.S. Department of Education. https://nces.ed.gov/pubs2019/2019038.pdf

de St Jorre, T. J., & Boud, D. (2022). More than assessment task design: Promoting equity for students from low socio-economic status backgrounds. In R. Ajjawi, J. Tai, D. Boud, & T. Jorre de St Jorre (Eds.), *Assessment for inclusion in higher education* (pp. 142–152). Routledge.

Douglass, J. A., Thomson, G., & Zhao, C.-M. (2012). The learning outcomes race: The value of self-reported gains in large research universities. *Higher Education*, *64(*3), 317–335. https://doi.org/10.1007/s10734-011-9496-x

Elkhoury, E., Ali, A., & Sutherland-Harris, R. (2023). Exploring faculty mindsets in equity-oriented assessment. *Journal of University Teaching & Learning Practice*, *20*(5), 1–25.

Folk, A. L. (2019). Reframing information literacy as academic cultural capital: A critical and equity-based foundation for practice, assessment, and scholarship. *College & Research Libraries*, *80*(5), 658–673.

Ford, D. Y., & Helms, J. E. (2012). Overview and introduction: Testing and assessing African Americans: "Unbiased" tests are still unfair. *The Journal of Negro Education*, *81*(3), 186–189.

Fuentes, M. A., Zelaya, D. G., & Madsen, J. W. (2021). Rethinking the course syllabus: Considerations for promoting equity, diversity, and inclusion. *Teaching of Psychology*, *48*(1), 69–79.

Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry*, *43*(1), 48–70.

Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, *26*, 91–108.

Hansen, M., & Renguette, C. (2023). Applying a diversity, equity, inclusion, and justice (DEIJ) lens to assessment. In M. Hansen & C. Renguette (Eds.), *Trends in assessment* (pp. 31–45). Routledge.

Haviland, D. (2009). Why are faculty wary of assessment? *Academic Leadership: The Online Journal*, *7*(3), 21–27.

Heiser, C. A., Coleman, J., Yngve, K. N., Dixon, K. M., Henning, G. W., Lundquist, A. E., & Rice, A. (2023). *Exploring barriers to equity-centered assessment in higher education*. National Institute for Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2023/08/Equity-Report_Barriers-to-Equity_Centered-Assessment.pdf

Hobbs, H., & Robinson, C. (2022). Culturally relevant assessment: Examining equity gaps in assignment types. In H. Hobbs & C. Robinson (Eds.), *Reframing assessment to center equity* (pp. 145–165). Routledge.

Hundley, S. P. (2022). Distributed leadership for assessment: Considerations for individuals, institutions, and the profession. *Research & Practice in Assessment*, *17*(2), 40–51.

Hutchison, L., & McAlister-Shields, L. (2020). Culturally responsive teaching: Its application in higher education environments. *Education Sciences*, *10*(5), 124–136.

Jensen, E., Jones, N., Rabe, M., Pratt, B., Medina, L., Orozco, K., & Spell, L. (2021). *The chance that two people chosen at random are of different race or ethnicity groups has increased since 2010*. https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-racially-ethnically-diverse-than-2010.html

Jian, X. (2021). Why interculturalisation? A neo-Marxist approach to accommodate cultural diversity in higher education. *Educational Theory and Philosophy*, *43*(4), 387–399.

Johnston, P. M. G. (2010). Towards culturally appropriate assessment? A contribution to the debates. *Higher Education Quarterly*, *64*(3), 231–245.

Kuh, G. D., Jankowski, N., Ikenberry, S. O., & Kinzie, J. L. (2014). *Knowing what students know and can do: The current state of student learning outcomes assessment in US colleges and universities*. National Institute for Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2019/02/2013AbridgedSurveyReport.pdf

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, *32*(3), 465–491.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Educational Researcher*, *35*(7), 3–12.

Ladson-Billings, G. (2007). *The dreamkeepers successful teachers of African American children*. Jossey-Bass Publishers.

Lambert, S., Funk, J., & Adam, T. (2022). What can decolonisation of curriculum tell us about inclusive assessment? In R. Ajjawi, J. Tai, D. Boud, & T. Jorre de St Jorre (Eds.), *Assessment for inclusion in higher education* (pp. 52–62). Routledge.

Levy, J., & Heiser, C. (2018, March). *Inclusive assessment practice*. National Institute of Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2019/08/EquityResponse_LevyHeiser.pdf

Lundquist, A. E., & Henning, G. (2020). From avoiding bias to social justice: A continuum of assessment practices to advance diversity, equity, and inclusion. In A. D. Spicer-Runnels

& T. E. Simpson (Eds.), *Developing an intercultural responsive leadership style for faculty and administrators* (pp. 47–61). IGI Global.

Lu, A., Elias, J., June, A. W., Charles, J. B., Hall, E., Huiskes, H., Marijolovic, K., Roberts-Grmela, J., Schermele, Z., & Surovell, E. (2023, May 16). DEI legislation tracker. *The Chronicle of Higher Education*. https://www.chronicle.com/article/here-are-the-states-where-lawmakers-are-seeking-to-ban-colleges-dei-efforts

Lybeck, K., Schomberg, J., & Scott, K. (2021). *Diversity, equity & inclusion program learning outcomes considerations.* Library Services Publications. https://cornerstone.lib.mnsu.edu/lib_services_fac_pubs/187

Maher, A. (2004). Learning outcomes in higher education: Implications for curriculum design and student learning. *Journal of Hospitality Leisure Sport & Tourism Education, 3*(2), 46–54.

McArthur, J. (2016). Assessment for social justice: The role of assessment in achieving social justice. *Assessment and Evaluation in Higher Education*, *41*(7), 967–981.

McArthur, J. (2017). *Opportunities for social justice within & through assessment*. National Institute of Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2019/08/EquityResponse-McArthur.pdf

Milligan, S., Rhodes, T., Opoczynski, R., Nastal, J., Heiser, C., & Carvan, M. (2021). Equity in assessment: The grand challenge and exploration of the current landscape. *Intersection: A Journal at the Intersection of Assessment and Learning*, *2*(3), 1–16.

Montenegro, E., & Jankowski, N. A. (2017). *Equity and assessment: Moving towards culturally responsive assessment.* National Institute for Learning Outcomes Assessment. https://files.eric.ed.gov/fulltext/ED574461.pdf

Montenegro, E., & Jankowski, N. A. (2020). *A new decade for assessment: Embedding equity into assessment praxis.* National Institute for Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2020/01/A-New-Decade-for-Assessment.pdf

Muniz, J. (2020). *Culturally responsive teaching: A reflection guide.* New America. https://www.newamerica.org/education-policy/policy-papers/culturally-responsive-teaching-competencies/

National Institute for Learning Outcomes Assessment. (n.d.). *Components of student learning assessment.* https://www.learningoutcomesassessment.org/ourwork/transparency-framework/components

National Student Clearinghouse Research Center. (2022). *Persistence and retention: Fall 2020 beginning postsecondary student cohort*. https://nscresearchcenter.org/wp-content/uploads/SnapshotReport33.pdf

Nieminen, J. H. (2022). Assessment for inclusion: Rethinking inclusive assessment in higher education. *Teaching in Higher Education*, 1–19. https://doi.org/10.1080/13562517.2021.2021395

Oliveri, M. E., Nastal, J., & Slomp, D. (2020). Reflections on equity-centered design. *ETS Research Report Series, 2020*(1), 1–11.

O'Shea, S., Lysaght, P., Roberts, J. & Harwood, V. (2016). Shifting the blame in higher education - Social inclusion and deficit discourses. *Higher Education Research and Development*, *35*(2), 322–336.

Padgett, V. R., & Reid, J. F., Jr. (2002). Five year evaluation of the student diversity program: A retrospective quasi-experiment. *Journal of College Student Retention: Research, Theory & Practice, 4*(2), 135–145.

Peck, A., Rosch, D. M., & De Sawal, D. M. (2022). Student belonging: A critical pillar in the scholarship of diversity, equity, and inclusion in campus activities. *Journal of Campus Activities Practice and Scholarship, 4*(1), 5–11.

Rodriguez, A. A., & Raby, P. (2019). Lessons learned from indigenizing a media program at an Ontario community college. *College Quarterly, 22*(1), 17–32.

Singer-Freeman, K., Hobbs, H., & Robinson, C. (2019). Theoretical matrix of culturally relevant assessment. *Assessment Update, 31*(4), 1–16.

Singer-Freeman, K., & Robinson, C. (2020). Grand challenges for assessment in higher education. *Research & Practice in Assessment*, *15*(2), 1–20.

Singer-Freeman, K., Robinson, C., & Bastone, L. (2021). Balancing the freedom to teach with the freedom to learn: The critical role of assessment professionals in ensuring educational equity. In E. Sengupta & P. Blessinger (Eds.), *Teaching and learning practices for academic freedom: Volume 34* (pp. 39–51). Emerald Publishing Limited.

Smit, R. (2012). Towards a clearer understanding of student disadvantage in higher education: Problematising deficit thinking. *Higher Education Research & Development*, *31*(3), 369–380.

Tai, J., Ajjawi, R., Boud, D., & de St Jorre, T. J. (2023). Promoting equity and social justice through assessment for inclusion. In R. Ajjawi, J. Tai, D. Boud, & T. Jorre de St Jorre (Eds.), *Assessment for inclusion in higher education* (pp. 9–18). Routledge.

Whitburn, B., & Thomas, M. K. E. (2023). Ontological assessment decisions in teaching and learning. In R. Ajjawi, J. Tai, D. Boud, & T. Jorre de St Jorre (Eds.), *Assessment for inclusion in higher education* (pp. 74–84). Routledge.

White, C., Louis, B., Persky, A., Howell, D. T., Griffin, L. M., Simmons-Yon, A., & Scolaro, K. L. (2013). Institutional strategies to achieve diversity and inclusion in pharmacy education. *American Journal of Pharmaceutical Education, 77*(5), 1–8.

White, W. C. (2016). *A statewide mentoring program: Impact on African American male student success* (Publication No. 10147685) [Doctoral dissertation, Wingate University]. ProQuest Dissertations and Theses Global.

Williams, J. L. (2023). Exploring the role of institutional culture in student affairs assessment practitioners' experiences implementing equity-centered assessment. [Doctoral Dissertation, Virginia Commonwealth University]. VCU Scholars Compass. https://scholarscompass.vcu.edu/cgi/viewcontent.cgi?params=/context/etd/article/8423/&path_info=Williams_Dissertation.pdf

Ziskin, M. B., & Young, P. C. (2023). Using assessment data to advance equity: Five things that get in the way. *Intersection: A Journal at the Intersection of Assessment and Learning, (4)*2, 1–30.