Journal of University Teaching & Learning Practice

Volume 20
Issue 5 *Quarterly Issue 2*

Article 13

2023

Exploring Faculty Mindsets in Equity-Oriented Assessment

Eliana Elkhoury
Athabasca University, Canada, eelkhoury@athabascau.ca

Ameera Ali
York University, Canada, aliamira@yorku.ca

Robin Sutherland-Harris
York University, Canada, robinsh@yorku.ca

Recommended Citation

Elkhoury, E., Ali, A., & Sutherland-Harris, R. (2023). Exploring Faculty Mindsets in Equity-Oriented Assessment. *Journal of University Teaching & Learning Practice, 20*(5). https://doi.org/10.53761/1.20.5.12

Exploring Faculty Mindsets in Equity-Oriented Assessment

Abstract

The COVID-19 pandemic and the resultant move to remote learning in 2020-2021 paved the way for deeper conversations about assessment practices in higher education. Over the last two years, there have been an increasing number of discussions about alternative assessments and about equity in assessment. This study examined the impact of a course (entitled “Equity in Assessment”) delivered by the authors on the participants’ understandings of equity and assessment. We used semi-structured interviews to collect data from the participants. Data collected from six interviews were systematically and thematically analysed in line with Braun and Clarke’s (2006) six stages of conducting thematic analyses. The data analysis resulted in three main emergent themes: flexibility, academic rigour, and wellness. The implications of the findings of this project are important for educational developers, institutional leadership, and researchers.

Practitioner Notes

1. The COVID-19 pandemic and shift to remote teaching has substantially influenced increasing awareness, inquiry, and practice around equity in assessment within higher education institutions.
2. With this substantial growth in recognition of the importance of equitable assessment, university instructors are eager to engage in equitable assessment practices, which often means that they do so within a system that is at times incompatible with equitable teaching and learning.
3. Challenges with this include resistance from other faculty members and leadership, catering to large and diverse classes, increasing workload demands, the investment of increased time and resources, lack of institutional support and community, and adverse effects on instructor well-being.
4. Implications suggest that more pan-university conversations around understanding equitable assessment should be prioritized, enhanced supports for instructors should be available, more opportunities for communal discussion and collaboration between instructors is required, and far more general support at the institutional level is necessitated.

Keywords

equity in assessment, educators wellness, reframed academic rigour, flexibility

Introduction

The COVID-19 pandemic and the resultant move to remote learning in 2020-2021 paved the way for deeper conversations about assessment practices in higher education. Over the last two years, there have been an increasing number of discussions about alternative assessments and about equity in assessment. For many educators, staff, and students in post-secondary contexts, the last two years (re)surfaced forgotten and sometimes ignored inequities of existing or traditional assessment strategies, which may include a lack of flexibility, limited accessibility, heightened stress or anxiety.

As educational developers housed in a central teaching and learning center at a large Canadian university, we found ourselves in frequent discussions with instructors about their assessments as they grappled first with the basics of moving assessments to an online environment, and then subsequently with ensuring that their adapted assessments were effective and feasible. With the move to online teaching and learning came new concerns about cheating and academic integrity as well. However, the pandemic also reminded educators of aspects of students' lives that they had previously been able to ignore more easily, such as access to technology, demands around full- or part-time work, family obligations, mental health issues exacerbated by the stress and uncertainty of the pandemic, and so on. Increasingly, we found that educators were realizing that in ignoring these elements they had also been ignoring aspects of student learning as well. As these conversations progressed, instructors started increasingly to talk about equity in assessment, and came to us in search of specific strategies, frameworks, or solutions to the challenges they perceived. It was an opportune time to design a mini course on equity in assessment.

Equity in Assessment: Designing and Implementing Alternative Learning Assessment to Foster Social Justice, was a course piloted as an Open Educational Resource (OER) in September 2021. Currently, there is little published work on equity in assessment, which played a factor in our choice to create our course as an OER. We hope other scholars, educators, and faculty developers will be able to contribute to and repurpose the work, customizing it based on their own needs and experiences and for their own global contexts. Our course pilot brought together seventeen post-secondary educators for an intensive ten-day exploration of key components of equitable assessment, educator self-reflection, and active collegial dialogue in pursuit of concrete changes to assessment practice.

In this environment, participants were sometimes invited to be quite open and vulnerable about their assessment beliefs and practices. In the context of equity and assessment, openness and vulnerability are paramount to understanding how educators view teaching and learning, and how this can influence one's approach to assessment. Sometimes, reflecting deeply on preconceived conceptions of teaching, learning, and assessment can elicit sensitive topics around bias, privilege, and identity,

Academic Editors

Section: Educational Psychology
Senior Editor: A/Prof Gail Wilson
Action Editor: Dr Jo-Anne Kelder

Publication

Received: 25 May 2022
Revision: 31 January 2023
Accepted: 30 April 2023
Published: 29 May 2023

which can be very personal. We were attentive to this in our course design and prioritized a trustful atmosphere (Brookfield, 1995). Our course learning outcomes asked educators to examine the philosophical and historical underpinnings of inequity in assessment as well as their positionality (and that of their discipline) in relation to equity in assessment to identify multiple strategies to design and implement equitable assessments, and to create an individualized action plan to take forward in their own teaching context. Positionality, in this context, refers to the ways in which one's social, political, and cultural context influence identity and values, which further influence practice and position as an educator.

As the course progressed, three emergent observations encouraged us to delve further into this topic. First, course participants approached equity as well as assessment from a wide range of different angles. Second, participants introduced aspects of equity in assessment that went beyond the original key components we had identified as course content. Third, as intended, participants were taking ownership of the course content and creating their own bespoke solutions to address specific teaching and learning contexts.

Our research therefore set out to investigate how the course impacted course participants in understandings of equity and assessment. As such, the research question guiding this study is: How has our course on equity and assessment influenced participants' understandings, perspectives, and praxis regarding this topic?

The remainder of this paper is divided into four sections. First, we will explain the theoretical framework and scholarly literature that supported the design of our course and informed our research. Second, we will describe our research methodology. Third, we present the findings from our data analysis and our reflection on those findings. Finally, we discuss the implications of our findings for practice; particularly for educational developers, institutional leadership, and researchers.

Theoretical definitions and literature reviews

We begin this section with three operational definitions of core concepts related to the course and the research: assessment, equity, and rigor.

Assessment is a broad term that often carries many implicit understandings and assumptions, shaped at individual and institutional levels by educational contexts and philosophies. In the context of both our course and the present research, we have explicitly defined assessment as "all the actions involved in checking student understanding in the goal of better supporting their learning". This definition is deliberately expansive, incorporating no-, low-, and high-stakes assessments, formative and summative, formal and informal. Our definition also embraces a theory of assessment as *for* learning, *of* learning, and *as* learning (Earl, 2006; Taras, 2010). Therefore, while assessment is embedded in all aspects of teaching and learning (Black, 2003), it also requires taking action (Wiliam, 2000). As Wiliam notes, "assessment yields information which provides a recipe for future action" (Wiliam, 2000 p.15), and therefore from the instructor perspective must also intentionally incorporate planning, implementation, and feedback, or, in other words, process, product, and function (Taras, 2007). At root, our definition and theoretical

framing of assessment asserts that the primary purpose of assessment is to improve student learning.

Equity, like assessment, is often broadly, sometimes even conflictingly, defined and theorized (Halsey, 1993; Marginson, 2011). For our purposes, both in our course and in the current research, we focus more specifically on defining equity in assessment, and deliberately cast a wide net to encompass the many varied approaches taken by higher education instructors. For us, equity in assessment is “the actions taken by educators to ensure all students have equal opportunities for success.”

Our definition is informed by the diversity of student bodies in the Canadian higher education setting, especially at our institution. This diversity was as apparent amongst the educators who took our course as it is in their own classrooms at the undergraduate or graduate level. For both us and our course participants, the diversity of our students means we approach equity from different angles. The diversity of our students means that our students come from different social, cultural, linguistic, and economic backgrounds. We also have international students, students with previous trauma experiences, minority and ethnic students, and students with accessibility requirements. An asset-based approach to both equity in general and equity in assessment more specifically is therefore central to our approach, as we highlight the strengths that student diversity brings to higher education teaching and learning (Celedón-Pattichis et al., 2018; Jacobs, 2019; Jacobs, 2012). This has implications not only for learners who may struggle at times, but also for those who are high-achieving, and the educational challenges of creating equitable assessments for both groups were a recurring topic of discussion amongst our course participants. We are aware that it is not possible to include all the characteristics that make our student body diverse. These characteristics served as our starting point as we planned and reviewed the course.

Consequently, in the context of higher education assessment practices, we embrace an approach to the definition of equity that moves beyond a simple focus on access, fairness, and achievement. Taking what Gutierrez (2013) terms, a “sociopolitical turn”, we foreground social justice, an emphasis on the critical construction and deconstruction of knowledge, and the vital role of intersectionality and lived experience as foundational elements of equitable and humane assessment practice.

Our focus on equity within the context of higher education assessment has pushed a third key term to the front of our work: **rigor**. As we reflected on our experiences as educational developers during the course design and development phase of this project, we anticipated that conversations with educators about equitable assessment practices would inevitably raise concerns about maintaining academic standards, or rigor. As educators are introduced to equitable assessment strategies and frameworks, there is often a misconception that enhancing equity necessitates relaxing meaningful disciplinary rigor in teaching and learning - a perspective that is sometimes shared by undergraduate and graduate students as well (Draeger et al., 2015; Schnee, 2008). Traditionally, notions of academic have often related to unspoken expectations around the ability of students to take on a heavy course workload, to perform academic engagement and achievement in particular codified ways, and to uphold received disciplinary “givens” – this approach to rigor neglects student diversity and in practice all-too-often serves as socio-economic gatekeeping (Campbell et al., 2018).

In contrast to this understanding of rigor, we follow a definition of meaningful academic rigor as "academic challenge that supports learning and growth in students" that is therefore supported and made more effective by an equity-informed approach that takes student diversity seriously (Campbell et al., 2018, p. 12). This definition aligns with, but is more open-ended, than that of Schwegler, for example, whose "integrated definition of academic rigor" emphasizes deliberately constructed, evidence-informed learning activities alongside opportunities for students to engage in the construction of knowledge, to demonstrate their learning, and to engage meaningfully with evidence (Schwegler, 2019). Equity-informed assessment practices can in fact enhance academic rigor by ensuring alignment with learning outcomes and assessment reliability - students cannot achieve the standards of academic rigor in their learning if they are not ready, and equitable practices can support student readiness to engage in disciplinary rigor (Bowman & Culver, 2018). Recent research into the neuroscience of learning supports such approaches as the "Ready for" framework, which seeks to move students towards independent, self-directed learners through supporting the necessary social, emotional, and cognitive conditions that are precursors of academically rigorous learning (Hammond & Jackson, 2015). It is this view of rigor as only possible when supported by equitable teaching and assessment practices that we embrace.

It is also important to acknowledge the influence of the work of Kolb in theorizing experiential learning and the learning cycle or spiral (Kolb, 2015). While we did not explicitly structure our course around Kolb's model of iterative cycles of concrete experience, reflective observation, abstract conceptualization, and active experimentation, as we moved into the data collection and analysis phase of this research project, we quickly recognized that this theoretical framework resonates with our own and our course participants' experiences regarding equity and assessment. Our qualitative analysis identified each of the four components of this cycle as influential in various ways and to varying degrees in our participants' descriptions of their understandings and practices of equitable assessment. Thus, Kolb's model is referenced in our results and discussion. It intersects at times with the themes that emerged from data analysis and provides a way of conceptualizing the path of participants in our research study both within and beyond the scope of our course.

Faculty mindsets on assessment during the COVID-19 pandemic

Scholarship on faculty attitudes and practices regarding assessment during the COVID-19 pandemic of 2020-21 shows five main themes illustrative of educator needs and priorities. First there were multiple calls to a more equitable approach to assessment. Second, instructors indicated that they became more aware of equity considerations in assessment. Third, the literature revealed that there were consequences on instructors' practices and consequences on students' experiences. Fourth, preventing cheating was a priority for instructors and with that came implications for equity. And finally, instructors indicated that they had varying training needs.

Calls for more equitable assessment took multiple forms, including, for example, an inclusive assessment framework presented by Fung et al. (2022). Other calls highlighted the importance of empathy (Gunasekara et al., 2022) in online assessment and compassion in assessment leadership in higher education (Yokuş, 2022). Similarly, the Alberta Council on Academic

Integrity (2020) also joined the call for more dialogue about equity and academic integrity, and researchers such as Boisvert et al. (2020), Eaton (2020), and Parnther (2020) called for considerations of how minoritized students are impacted differently by academic integrity reporting mechanisms. Finally, there were multiple calls for thoughtful choice of innovative assessment rather than relying on a one-size-fits-all approach (García-Peñalvo et al., 2020; Al-Salman & Haider, 2021). These calls were also echoed elsewhere (Fuller et al., 2020, p. 783): “assessments risk introducing error due to non-cognitive issues, and an attainment gap” if equity is not taken into consideration. In summary, the literature shows multiple calls to include more equity in assessment design following the pandemic and the moving to remote teaching.

Second, instructors indicated that they became more aware of equity considerations in assessment. This included access to technology (Camara, 2020; Langenfeld, 2020; Wiley & Buckendahl, 2020) as well as internet reliability (Evans & Knezevich, 2020), and accommodation of the needs of students with disabilities (Camara, 2020). In addition, instructors became more aware of the impact of online proctoring on students’ mental health (Elsalem, L. et al., (2021). Some found that responding to the cultural and linguistic diversity of students, and accommodating students with special needs in assessment were the most neglected aspects of assessment during the pandemic (Almossa & Alzahrani, 2022).

Third, the shift to remote teaching had consequences both for instructors' practices and for students’ experiences. The pandemic forced instructors to change their assessment practices (Bozkurt et al., 2020; Rapanta et al., 2020; Tejedor et al., 2021) which was one of the most difficult tasks (García-Peñalvo et al., 2021). Instructors were changing their assessments because they wanted to be equitable to all their students (Panadero et al., 2022). For example, Hsu et al., (2022) designed a flexible assessment method to emphasize student well-being. Other instructors indicated that it was not always possible to create equitable assessments (Almossa 2021). Two approaches to multiple assessment types are evident in the literature. Some studies indicate that instructors used more multiple-choice questions, fewer essay questions (Panadero, et al., 2022) and fewer formative assessments (Sharadgah & Sa’di, 2020). Others found that instructors used more alternative assessments like presentations, projects, assignments, and portfolios (Guangul et al., 2020). Although the reasons behind these different results could be related to multiple factors, it is important to note that responses to the need to change their assessment were not the same across higher education.

Assessment during the pandemic also had consequences on students’ experiences, shaped by both personal and contextual factors (Flores et al., 2022). Assessment impacted the stress, wellbeing, workload, and personal realities of students (St-Onge et al., 2022). Senel and Senel (2021) found that emergency remote teaching negatively impacted students’ involvement. This indicates that assessment choices play an active role in providing equitable opportunities for students.

Fourth, preventing cheating was a priority for instructors and with that came implications for equity. Preventing cheating was one of the most cited concerns in online assessment (Haider et al., 2022; Montenegro-Rueda et al., 2021; Senel & Senel, 2021). Instructors perceived challenges with online assessment and worried about their impact on the validity and reliability of the results (Al-Maqbali & Raja Hussain, 2022), which impacted their choice of assessment.

The significant role that academic integrity played during the pandemic proves that it should be an important topic when supporting instructors.

Fifth, instructors had training needs in how to conduct assessment online. Instructors would benefit from training on the different aspects of online assessments (Almossa, 2021; García-Peñalvo et al., 2021; Guangul et al., 2020; Sharadgah & Sa'di, 2020; Watermeyer et al., 2021; Chen et al., 2022). In addition, Sasere and Makhasane (2020) and García-Peñalvo et al. (2020) highlighted the importance of departmental support in assessment practices. Finally, Almossa and Alzahrani (2022) concluded that assessment training should take multiple forms such as new books in libraries, synchronous and asynchronous courses, live webinars, short and long courses, and one-on-one support.

Theorizing our course design

Informed by our understanding of faculty mindsets as outlined above, our course design sought to prioritize opportunities for reflection, application, and the co-construction of knowledge amongst a peer group of educators. To achieve this, we adopted the structure of Action Learning Sets (McGill & Brockbank, 2004), which organizes participants into "sets", or groups of four to five members. Sets meet repeatedly over a determined period and participants commit to making self-directed individual progress from meeting to meeting. This practice fundamentally involves communicating concerns, collaborative problem solving, and engaging in deep reflection (Flett & Tyler, 2018). It allowed each participant to remain centered in their own teaching contexts and to foreground their own priorities while also fostering an environment in which course learning is re- and co-constructed by course participants as experts in their own situated and disciplinary practices (Ajoku 2015; Scott et al. 2021).

As we were creating an online course, our design process was also informed by online learning theory. In particular, the Community of Inquiry (CoI) model, which emphasizes the importance of social, cognitive, and teaching presences in online learning spaces, shaped our approach to facilitation (Garrison, 2011). Synchronous sessions were places not only for explicating course content but also for critical reflection and critical discourse, in concert with the Action Learning Set structure (Garrison et al.,1999). The course formed a short-term community of inquiry focused on critical discussions about equity in assessment (Anderson, 2017). This eLearning framework is supplemented by research into building networks and microcultures in faculty development within higher education. In addition to communities of inquiries, significant conversations, and significant networks (Roxå & Mårtensson, 2009) play an important aspect in successful educator development. The network thus built during the course, which we see as a microculture site for equity-informed assessment practice (Mårtensson et al., 2014), intersects with other pathways and inter-related faculty development initiatives across the institution and lays the groundworks for ongoing communities and conversations about equity in assessment beyond the scope of our course (Roxå et al., 2011).

Finally, participants produced knowledge through the application of course learning in their own educational contexts. According to Guskey (2000), a change in the beliefs is not always directly manifested in practice. Similarly, Guskey (2002) suggests that trust in a new practice needs to be built by trying new techniques in small steps. Participant action plans encouraged instructors to translate their beliefs into practice. The Action Learning Sets supported by the CoI model and

our emphasis on emergent networks ensured that participants also had the opportunity to discuss, customize, and modify their action plans over the span of the course. As the course concluded, we felt compelled to connect directly with participants to gain a deeper understanding of the complexities involved in supporting equitable assessment. This research project seeks to illuminate the perspectives of the participants of our course, which we describe in further detail in the next section.

Research methodology

We engaged in non-probability purposive sampling wherein participants were selected directly from our Equity in Assessment course. Our procedure for participant recruitment entailed sending an email to all participants of our course detailing the study and inviting them to participate in their choice of either a focus group interview or an individual interview. Out of seventeen contacted potential participants, six individuals responded, each selecting to participate in an individual interview. Since individual interviews enable individuals to share their thoughts freely with the researcher in the absence of others, providing participants with spaces to engage this way is especially salient for individuals who may be apprehensive when disclosing personal perspectives (Roulston, 2011). This is particularly critical to ensure as sensitive issues may arise when dealing with the topic of equity.

In relation to our research question (“how has our course on equity and assessment influenced participants’ understandings, perspectives, and praxis regarding this topic?”), we developed a semi-structured interview guide to both structure our questions to address our research question, yet to also allow us to have flexibility to probe and collect information organically. Our objective was to understand how our course influenced our participants’ understandings, perspectives, and praxis, related to equity in assessment. This requires not only an understanding of their current and future plans for practice, but also the former knowledge and practice prior to taking our course. Our interview guide (Appendix B) contains questions that evoke perspectives and understandings on participants’ conceptions, experiences, and praxis of equity and assessment both prior to and after taking our course, and also seeks to understand our participants’ perceived areas of strength and growth in relation to the topic. We also take a strengths-based approach to our interview guide and ask participants to share strategies they may already have mastered that may advance equity in assessment and ask for insights into aspects that might have been missing from our course. We conclude our interview guide by asking participants to share any remaining inquiries they may have, to help us identify our next steps forward.

The individual interviews were semi-structured and were conducted virtually through Zoom by one researcher which helped to ensure consistency in the execution of the interview. We elected to conduct interviews over Zoom as this allowed us to ensure better accessibility and equity for our participants in that they did not have to physically meet with us at an in-person location and could participate from a location that was most accessible to them. Participants were also welcomed to turn off their video, access the live captioning, and utilize the chat to communicate. We had also originally selected Zoom as our platform to enhance the anonymity of focus group participants as they were welcome to turn off their video and use pseudonyms; however, as all participants were interested in individual interviews only, we did not conduct any

focus group interviews. The duration of the individual interviews ranged from 30 to 90 minutes, and they were audio recorded to aid with the transcription and data analysis process.

Since the interviews were conducted over Zoom, a transcript was able to be generated and manual transcription was not needed. All three researchers analyzed the data through the process of thematic analysis and met weekly to discuss the findings. Thematic analysis is an efficient and flexible analytical technique which enables researchers to generate common themes across a qualitative data set (Braun & Clarke, 2006). Through our thematic analysis we were able to identify meaningful and common themes in our data set as they pertained to the research questions and scope of the study. Data were systematically and thematically analyzed in line with Braun and Clarke's (2006) six stages of conducting thematic analyses as follows: 1) acquiring familiarity with the data prior to analyzing, 2) developing preliminary codes by reviewing the transcriptions, 3) establishing common themes, 4) assessing themes, 5) categorizing and operationalizing themes, and 6) writing up the results.

First, we each listened to the interview recordings and reviewed the interview transcripts while concurrently making notes to familiarize ourselves with the details of the interview conversations. Following this, we categorized our notes using keywords and common terms as indicators for prospective codes. For example: terms and concepts surrounding ideas of adaptability, improvisation, and variability were categorized together; notions of appropriate assessment standards, student workloads, and learning outcomes were categorized together; and mentions of exhaustion, instructor needs, and the need for support were categorized together. We then each manually coded the transcripts for common and recursive themes and met to discuss overlaps and anomalies amongst and between our codes. We concluded our analysis once we achieved thematic saturation, or in other words, once no new themes or codes were able to be gathered from our data (Guest et al., 2006), which resulted in our three themes: flexibility, rigor, and wellness. Finally, we evaluated and refined our established themes ensuring that all data subsumed within each theme were appropriately categorized. In this paper, all participant names have been replaced by pseudonyms to fully ensure anonymity. Our research project has received ethics approval from the York University Office of Research Ethics (Certificate number: 2022-005).

Results and discussion

We found three main emergent themes in our data analysis: flexibility, academic rigor, and wellness. These themes speak directly to our research question as the themes of flexibility and academic rigor pertain to participants' ever-evolving understandings and perspectives on equity and assessment, while the theme of wellness speaks directly to their praxis of supporting equity and assessment from a subjective standpoint. In our findings, we also found evidence of Kolb's learning cycle in participant experiences and application of learning about equitable assessment as we conducted our data analysis (Kolb, 2015). Here we provide a description of each theme with examples from participants and further discussion in relation to relevant scholarship.

Flexibility

We found that the educators participating in our study have multiple approaches and understandings of equity, both as it applies specifically to assessment and more broadly within teaching and learning. However, one common or unifying feature of educator conceptualizations of equity in assessment centers on the need for flexibility, whether in instructor policies and procedures, in assessment design and delivery, or in connecting and communicating with students. In this section we discuss how our participants understood equity before, during, and after the course, and the reasons that led them to reflect on and prioritize learning more about equity in assessment. Finally, we will present related concerns that instructors mentioned which were not anticipated in our initial course design.

Becoming aware of (in)equity in assessment

Participants arrived in our course with varying levels of equity practice in their assessments, having developed awareness of students' needs at various stages of their career. For some participants, awareness about the variety of students' needs existed well before the course and even before the pandemic. For example, Qin explained that they were aware of those inequities during their studies and before they started their teaching position. They shared a strengths-based approach to equity similar to that presented by Celedón-Pattichis et al., (2018). Qin argued that students coming from different backgrounds have strengths that educators need to focus on instead of seeing this diversity as weakness. For Qin, as with several other of our participants, the need for equitable assessment is driven by an awareness of inequity. Their awareness of linguistic and socio-economic inequities in the different countries where they had previously taught shaped their perspective as an educator.

For Taylor, the awareness of the academic needs of students developed with the multiple iterations of a particular course they teach, which they came to see as a service course, filling the needs of students majoring in other disciplines, over time. Taylor developed the understanding that equity means recognizing not all students have the background knowledge to easily succeed in their course. For some of our other participants, it was not clear when their awareness had developed, or it had begun to emerge during our course. These varying levels of awareness about equity in assessment implies that there is a need to provide more learning opportunities about equitable assessment practice to educators in higher education. While we found that some participants, like Morgan and Taylor, were aware of systemic issues related to equity and their impact on student success and assessment design, we found less awareness of other aspects of equitable assessment, such as environmental microaggressions (Sue et al., 2007) in assessment (Henning et al., 2022).

Differing and evolving approaches to flexibility as an equity principle

When asked about pre-course understandings of equity, participants identified a variety of conceptualizations as to the meaning of equity in assessment, as mentioned. Offering choice and flexibility were the most prevalent understanding amongst our participants. For example, Olayemi observed that for them, equity in assessment meant,

> ...understanding that students are approaching our courses in a variety of different contexts: personal contexts; academic contexts; accessibility contexts. I think equity in

> assessment is implementing strategies that will be able to actually assess their acquisition of the knowledge or progress through the course in a way that acknowledges those different positionalities and maybe makes space for flexibility and so on – to ensure that each student can strive, regardless of their circumstances.

In addition, identifying and supporting student needs and emphasizing strengths were often mentioned as key to pre-course understandings of equitable assessment practice. Desi, in discussing their prior experiences in adapting existing assessment to enhance equity, reported that,

> It can start even with content and giving choices for students who come at the curriculum very differently. And I do think that's equity in assessment, because… what I am asking one group of students to do versus another can be purposeful and mindful about addressing the needs of a particular cohort.

Both approaches to supporting equity were also reinforced in participants as good practice during and after the course, while simultaneously, for some instructors, equity and flexibility moved away from being near equivalencies before taking the course and towards a more nuanced and distinct understanding of each concept.

For many, the scope of flexibility as an equity practice was considerably expanded by the course. By participating in inter-disciplinary conversations in the Action Learning Sets over the span of the course, educators became aware of a more expansive landscape of options for introducing flexibility as an equity-oriented practice. Olayemi, a language educator, reflected that “the course… showed me that this [increased assessment flexibility] is definitely possible because of the work of colleagues from all different disciplines, including [disciplines] as diverse as engineering.” Similarly, Taylor found that both teaching during the pandemic and engaging in the course encouraged them to think more about individual students rather than the classroom as a whole when it came to equitable and flexible assessment, saying that “sometimes we forget that our students come from different backgrounds.” Further, participants indicated that their understanding of equity in assessment was broadened to include equitable feedback as well, echoing research into the importance of providing each student with feedback that is appropriate to them individually (Knight & Yorke, 2003). They indicated that the course emphasized the *process* of ensuring equitable assessment and validated existing ideas and practices. They emerged with tangible techniques applicable to their classrooms. For example, Noor said: “there exist actual theories about that, and I was re-inventing the wheel.”

Unanticipated educator concerns

Our data analysis revealed several further aspects and applications of flexibility as a principle of equitable assessment that we had not fully anticipated in our course design. These concerns were raised by our participants during the course itself, through discussion in the Action Learning Sets, as well as in our subsequent interviews. There are three main sub-themes: large class contexts, institutional support, and high-performing students.

Some participants had concerns about large class sizes and the potential workload that comes when implementing an equitable approach to assessment. The desire to ground equitable

assessment practice in personal and connected relationships with students comprised part of this struggle. Morgan stated, “as classes become bigger that sort of intimacy or connection with the students becomes much more challenging but also, you must get through the course and the time is limited.” This is corroborated by multiple studies on the obstacles of implementing innovative techniques in large classrooms due to grading and feedback requirements (Liu & Xu, 2017). Hornsby and Osman (2014) argue that many educators who win teaching awards taught large classrooms and conclude that professional development focusing on instructor agency and providing support for techniques that facilitate the implementation of innovative assessment in large classrooms is needed.

Participants also raised related concerns around perceived lack of institutional support for equitable assessment practices. These systemic issues were expressed by Qin, who argued that equity in assessment should start at the institutional level and even beyond assessment itself. The absence of a larger culture of flexibility around equitable assessment meant that some participants felt that their individual efforts would not make a difference if the systemic issues related to equity are not addressed.

Finally, participants expressed concern for ensuring that equitable assessment practices be inclusive of those students who achieve the course objectives faster or more readily, and who may benefit from further challenges. Similar concerns are reflected in research by Varsavsky and Rayner, who investigate the use of differentiated assessment to provide challenging experiences to overachievers (2013). McBride (2004) also explores the issue of overachievers and argues that a one-size-fits-all approach does not work for all students. Participants’ concern with ensuring that flexibility did not inadvertently exclude high-performing students connects to our second major theme, academic rigor.

Academic rigor

Initially, course participants had a traditional understanding of academic rigor as outlined above: comprising expectations around the ability of students to take on a heavy course workload, to perform academic engagement and achievement in particular codified ways, and to uphold received disciplinary “givens”. This conception of rigor elicited concern about the impact of equity-related assessment practices on course quality or standards. Some participants had questions and reflections about rigor but were still developing the confidence and theoretical knowledge to re-frame the concept. Desi, for example, said,

> I've realized for myself - and this is a hard one for me to let go of - but I realized I absolutely definitely privilege the ability to write. A student who doesn't write well is probably a B or C student, which is a really narrow way to think about assessment and it's probably not equitable.

Others, like Olayemi, voiced their apprehensions about asking colleagues to change assessment practices: “I think it's where I fear most resistance - that colleagues might say, well we've watered it down so much we've made it too flexible; it's lost meaning; what are we really evaluating anymore.” Research suggests that, given the multiplicity of definitions and stakeholders in conversations about rigor, our participants are not alone in these concerns (Draeger et al., 2013; Schwegler, 2019, p.8).

One outcome of our course for many participants was increased confidence and vocabulary needed to reflect on and talk about rigor. Noor indicated that the course gave them "the confidence, but also gave me the language that allows me to break [it] down into clear criteria". Others were able to reframe their understanding of meaningful academic rigor to connect it with equitable assessment – for example by learning that rigor means providing clear and comprehensible assessment items that check student learning, not only challenge it.

Wellness/Self-efficacy

Wellness and self-efficacy were a third recurrent theme in our conversations with educators. They spoke about their own (and colleagues') ability to commit to the ongoing work required to develop, implement, and maintain equitable assessments. This was framed both in terms of workload impacting instructor wellness as well as in terms of perceived or real ability to effect change given institutional or disciplinary barriers.

Desi spoke about some of the challenges inherent in balancing educator wellness with student needs:

> The more choice we give the more work it is for us, right, and so you have people with good intentions, wanting to offer those flexible options–you can do an essay, or you can do an oral presentation–but you have to be able then to assess multiple versions of something which is going to require more work hours. So, I think just practically speaking that's actually one of the obstacles to equity and assessment. It needs to involve flexibility and choice, but most [instructors] are stretched pretty thin so if there's just one version of something required of all students it's a lot easier to implement. But then… you know, are you being equitable? Probably not.

Furthermore, they expressed concerns about their ability to balance course-wide equitable assessment practices against the needs of individual students, both in terms of their own wellness and what might be possible given institutional restrictions. Regarding offering more tailored assessment options to individual students and the associated workload, Desi observes, "I can't reasonably address all of their concerns or… it's not that I can't address them, I can't track where everybody's at, right, so I'm most confident with implementing something course wide." Desi further reflected that, "our overall institutional work conditions mitigate against being able to really robustly offer equitable assessment practices." There was also awareness of how equitable assessment practices could well be overtaxing to some colleagues, as Olayemi stated, "Contract faculty [are] not paid for teacher training and that kind of thing, so even the many of them who may have interest [are] already so overburdened with their courses."

Assessment culture was an additional stressing factor (Jankowski, 2017). Colleague disagreements and departmental and disciplinary expectations about assessment played a role in faculty wellness. For example, Taylor indicated that they needed to learn their role and how much leniency they had within the role. Participants felt that administrative constraints imposed by the university or department were not always aligned with equitable assessment. Desi spoke about the restrictions imposed on changes to assessment by course-, program-, and degree-level learning outcomes: "There are metrics we can't excuse ourselves from, so that's just that the caveat - that it exists within this larger context."

Compassion fatigue, a term borrowed from domains such as nursing and social work, has been adopted in higher education teaching and learning to articulate growing awareness of the "cost" of caring (Figley, 1995). Emotional exhaustion, disconnection, a reduced capacity for empathy, and depersonalization are all potential risks associated with compassion fatigue (Raimondi, 2019; Stoves, 2014). Our findings suggest some of our participants are at risk of experiencing compassion fatigue, particularly in the context of an ongoing pandemic and associated increased awareness of equity needs in higher education. Participants explained that considering equity needs in assessment for all students takes a toll: "But I must add it's become mentally exhausting" (Morgan).

As noted, these themes directly coincide with our research question as participants shared their evolving understandings of equity and assessment, the insights they gathered throughout the course, queries they continue to traverse, and challenges that they continue to grapple with on a personal level as they continue to engage with this work.

Kolb's learning cycle

In addition to the above mentioned three themes, our analysis encouraged us to situate both our course and participants' experiences in Kolb's learning cycle (Kolb, 2015). Overall, we observed that our course was effectively designed to support educators in the middle stages of Kolb's cycle–reflective observation and abstract conceptualization–providing a useful bridge between initial concrete experiences (stage one) and subsequent active experimentation (stage four) in their equitable assessment practices.

All our participants had existing concrete experience with assessing students in higher education contexts. They chose to take our course as a result of experiences that had often nudged them towards equitable assessment largely by chance. For example, Desi described being called for jury duty, which necessitated that their teaching assistant take over teaching the course for several weeks. Students appreciated the multiple expert perspectives on course content, and Desi came to realize that "collaboration is better". At the same time, participants were often not sure how to take appropriate next steps based on their concrete experiences and arrived in our course looking for ways to translate their prior experience and preliminary reflections into more deeply informed equitable assessment practices. As Desi said of collaboration, "but did I implement that in my courses afterwards? No."

Reflective observation and abstract conceptualization were both important activities for participants in our course, and they were often intertwined with one another, and connected with pre- and post-course elements of Kolb's cycle. Reflective observation in particular had begun, for many, before they reached the point of joining our course. For some, initial reflections had been spurred by the circumstances of the COVID-19 pandemic, while others had been reflecting on equitable assessment over a longer timeframe. Multiple triggers initiated this reflection, ranging from student diversity, to struggles with course material, to educator frustration with institutional or disciplinary practice. For many, our course content provided an additional trigger to reflective observation, as in the case of Olayemi, who mentioned that during our course they began to feel that their particular assessment practices were not fair to students.

Our participants' reflections were typically characterized by the identification of a gap in their knowledge of what was possible in an ideal world, what was acceptable to themselves or others in maintaining course rigor or standards, and what was expected by their departments and Faculties. This gap was commonly exacerbated by the absence of a community of colleagues willing to engage in reflective discussion and practice around equitable assessment. Participants expressed that our emphasis on peer discussion through the Action Learning Sets helped them extend the scope of their observations and begin the process of abstract conceptualization. Olayemi, for example, discussed how talking with their Action Learning Set group about applying equitable assessment strategies in a wide range of disciplinary contexts and course settings gave them "the confidence that this can be done and the tools to start to figure out how to take the theory and apply it to my discipline."

As implied in Olayemi's statement, participants found that our course provided a fruitful environment for engaging not only with abstract conceptualization (taking peer learning from one discipline and abstracting it for another) but also with looking forward to active experimentation (applying new tools and theories in practice). This is reinforced by research on teacher professional development, which suggests that change in classroom practice and in pedagogical beliefs is a challenging process for educators, and new pedagogical learnings are inextricably bound together with evidence of success in teaching practices (Guskey, 2002). Participants indicated that they found three course elements especially relevant in assisting both abstract conceptualization and active experimentation. First, participants appreciated feedback from colleagues. This finding is not surprising as learning communities are proven to support educators when using innovation (Furco & Moely, 2012). Second, participants indicated that having the option of discussing their own contexts was useful. This is corroborated by Lucey, Hauer, Boatright, and Fernandez (2020) who describe the problem of equity in assessment as a wicked problem demanding consideration of contextual equity. Finally, participants appreciated learning about small, concrete strategies and actionable steps and examples to apply, whether they heard them from us as course instructors or from the lived classroom experience of their colleagues. The need for a clear connection between a grand vision or overarching theory, such as those that support equitable assessment, and viable incremental change, is well-established in existing research (Guskey, 2000).

Implications and Recommendations

The implications of the findings of this project are important for educational developers, institutional leadership, and researchers. For educational developers, our findings have implications for faculty development offered by centers of teaching and learning. First, the concept of flexibility is a valuable entry point for deeper discussions of equitable assessment practices. Most instructors already offer some flexibility, even if in relatively small ways, and using this as a starting place from which to expand and deepen understanding of the meaning and power of flexibility as a powerful equity-oriented practice in assessment builds on existing expertise and teaching identities. Indeed, framing conversations on equity in assessment from a strengths-based position which highlight the equitable practices faculty are already engaged in can create a supportive environment, and one which enables reflections to begin on a note of competency and self-efficacy. This further underscores the need to provide opportunities for creating a community around assessment and providing space for instructors to discuss the practices they are already engaged in, practices they are eager to explore, and challenges they experience.

On a similar note, by providing this type of space to participants in our project, our research also indicates that more opportunities for instructors to discuss and reframe rigor are needed, as this was a major theme to arise out of our conversations. This need should be accompanied by learning opportunities and learning communities. As revealed in our research, teaching and learning centers need to consider spaces where conversations about academic rigor take place. From an equity perspective, perhaps this entails rethinking understandings of ‘rigor’ in assessment and considering the ways in which traditional conceptualizations of rigor often serve to preserve inequitable systemic dynamics in education and further serve to reify the status quo. The notion of rigor is highly interrelated with equity and assessment as it is a concept through which systems of oppression and privilege in assessment practices become further pronounced.

Following the theme of rigor, is the theme of wellness. Equitable assessment cannot be separated from educator wellness and self-efficacy, and these challenges should be taken seriously given the impact of assessment on students' futures (Jones et al., 2021). Recent research on faculty wellness shows that teaching responsibilities play a role in faculty wellness second only to research responsibilities, though the specific impact of assessment on instructor wellbeing was not studied (Brandon & BrckaLorenz, 2021). As the demands on faculty members increase and given the important role that faculty play in student learning, faculty wellness becomes an essential foundation to students' success. Our findings indicate that faculty wellness is impacted by assessment beliefs and approaches, as well as by institutional and disciplinary approaches to assessment. More research is needed to explore how assessment design impacts faculty wellness and how institutions can support faculty in their pursuit of equitable assessments.

These implications elicit dynamics at both the micro and macro level. At the individual (micro) level, we must consider the challenges and emotional investment that are required for instructors to engage in equitable assessment practices. Equitable assessment often demands that instructors go above and beyond as they attempt to develop a system within a system that

is at times incompatible with equitable teaching and learning. As such, instructors often invest more time and resources into their teaching, which can affect them personally. Indeed, without adequate institutional support, the onus falls upon instructors to take on most of this labor, which can pose equity-related challenges to them. Operating within a system that works against equitable practice and supports the status quo can make it increasingly difficult to support equitable assessment and pedagogy. As Qin notes, if an instructor struggles to teach equitably, their students will struggle to learn equitably; one's access to teaching equitably affects students' access to learn equitably. This suggests implications at the institutional leadership (macro) level as institutional approaches to assessment, and equity in assessment more broadly, need to be reconceptualized and offer much more support to instructors on a macro level.

Conclusion

Assessment is powerful: it allows us to understand and measure student learning, to gather information that can inform and reshape our teaching, and to assist students in becoming self-aware and life-long learners. Now, more than ever, assessment also needs to support diversity, equity, and inclusion for the changing student population.

This project highlights the need to sustainably support equity and assessment; this means doing more than simply adding options for students but also supporting instructors, creating an institutional culture that prioritizes equity by reframing how we 'do' assessment, and by reaching out to students to co-collaborators in this process. Equity in assessment requires a holistic approach in order to be sustainable and to ensure that equity is also accessible for those doing the work.

Our research also demonstrated that there is a need for more research to explore a framework for instructor wellness that includes the intersection of wellness and assessment. The Action Learning Set model that we used in our course provided a space for faculty to come together, reflect, problem solve, and share challenges, questions, and experiences together, while the participant-focused approach we took to our research enabled instructor perspectives to be underscored. Yet, while these conversations were fruitful, they only cursorily addressed or touched upon the issue of instructor wellness in equity work. Given what participants have shared with us both in the course and in our research, we highly encourage a similar approach of inquiry to be applied to address the topic of wellness writ large. Moreover, our research fundamentally underscores the need to investigate student perspectives of equity and assessment to explore student experiences on the topic, to better understand students' needs, and to investigate how the practices of their instructors have helped or hindered their learning from an equity lens.

The pandemic encouraged people to show empathy toward each other which has also been reflected in higher education. Instructors developed more empathy for their individual students as they became aware of the inequities and the needs of each student, and this. We want to end this paper by asking ourselves and asking fellow higher education colleagues: how do we maintain this empathy post-pandemic? How do we sustain faculty in the often-taxing work of demonstrating their empathy through equitable assessment practices when the crisis abates?

Conflict of Interest

The author(s) disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their respective university.

References

Al-Maqbali, A. H., & Raja Hussain, R. M. (2022). The impact of online assessment challenges on assessment principles during COVID-19 in Oman. *Journal of University Teaching and Learning Practice*, *19*(2), 73–92. https://doi.org/10.53761/1.19.2.6

Almossa, S. Y. (2021). University students' perspectives toward learning and assessment during COVID-19. *Education and Information Technologies*, *26*(6), 7163-7181. https://doi.org/10.1007/s10639-021-10554-8

Almossa, S. Y., & Alzahrani, S. M. (2022). Assessment practices in Saudi higher education during the COVID-19 pandemic. *Humanities and Social Sciences Communications, 9*(1), 1–9. https://doi.org/10.1057/s41599-021-01025-z

Al Roomy, M. A. (2022). Exploring Teacher's Perspectives about Online Assessment during the COVID-19 Pandemic in a Saudi Context. *Arab World English Journal*, *8*, 3–16. https://doi.org/10.24093/awej/call8.1

Al-Salman, S., & Haider, A. S. (2021). Jordanian University Students' Views on Emergency Online Learning During COVID-19. *Online Learning*, *25*(1), 286–302. https://doi.org/10.24059/olj.v25i1.2470

Ajoku, P. (2015). Incorporating a transformational learning perspective in action learning sets. *Action Learning: Research and Practice*, *12*(1), 3–21. https://doi.org/10.1080/14767333.2014.991376

Anderson, T. (September 2017). *How Communities of Inquiry Drive Teaching and Learning in the Digital Age*. Contact North. https://teachonline.ca/tools-trends/how-communities-inquiry-drive-teaching-and-learning-digital-age

Black, P. (2003). The nature and value of formative assessment for learning. *Improving Schools*, *6*(3), 7-22. https://doi.org/10.1177/136548020300600304

Bowman, N. A., & Culver, K. (2018). Promoting Equity and Student Learning: Rigor in Undergraduate Academic Experiences. *New Directions for Higher Education*, *2018*(181), 47–57. https://doi.org/10.1002/he.20270

Bozkurt, A., et al. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, *15*(1), 1-126. https://doi.org/10.5281/zenodo.3878572

Brandon, J. & BrckaLorenz, A. (2021). Faculty Wellness. *FSSE Psychometric Portfolio*. https://scholarworks.iu.edu/dspace/bitstream/handle/2022/26359/Content%20Summary%20Faculty%20Wellness%20FINAL.pdf?sequence=3

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brockbank, A., & McGill, I. (2003). *The Action Learning Handbook: Powerful Techniques for Education, Professional Development and Training*. Routledge. https://doi.org/10.4324/9780203416334

Brookfield, S. D. (1995). *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass.

Camara, W. (2020). Never let a crisis go to waste: Large-scale assessment and the response to COVID-19. *Educational Measurement: Issues and Practice*, *39*(3), 10-18. https://doi.org/10.1111/emip.12358

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. https://doi.org/10.1002/he.20267

Celedón-Pattichis, S., et al. (2018). Asset-based approaches to equitable mathematics education research and practice. *Journal for Research in Mathematics Education*, *49*(4), 373-389. https://doi.org/10.5951/jresematheduc.49.4.0373

Chen, V., Sandford, A., LaGrone, M., Charbonneau, K., Kong, J., & Ragavaloo, S. (2022). An exploration of instructors' and students' perspectives on remote delivery of courses during the COVID-19 pandemic. *British Journal of Educational Technology*, *53*(3), 512-533. https://doi.org/10.1111/bjet.13205

Draeger, J., del Prado Hill, P., & Mahler, R. (2015). Developing a Student Conception of Academic Rigor. *Innovative Higher Education, 40*(3), 215–228. https://doi.org/10.1007/s10755-014-9308-1

Dumitru, D. (2012). Communities of inquiry. A method to teach. *Procedia – Social and Behavioral Sciences 33*, 238 – 242. https://doi.org/10.1016/j.sbspro.2012.01.119

Eaton, S. E., Boisvert, S., Hamilton, M. J., Kier, C. A., Olfert, M., Teymouri, N., & Toye, M. A. (2020). *Alberta Council on Academic Integrity (ACAI) 2019-2020 Annual Report.* pp. 1-54. http://hdl.handle.net/1880/112970

Elsalem, L., Al-Azzam, N., Jum'ah, A. A., & Obeidat, N. (2021). Remote E-exams during Covid-19 pandemic: A cross-sectional study of students' preferences and academic dishonesty in faculties of medical sciences. *Annals of Medicine and Surgery*, *62*, 326–333. https://doi.org/10.1016/j.amsu.2021.01.054

Evans, J., & Knezevich, L. (2020). Impacts of COVID-19 on the law school admission test. *Educational Measurement: Issues and Practice*, *39*(3), 22-23. https://doi.org/10.1111/emip.12367

Figley, C. R. (1995). *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in Those Who Treat The Traumatized*. Routledge. https://doi.org/10.4324/9780203777381

Flett, J., & Tyler, M. (2019). Action Learning and professional formation of youth and community work students. *The Journal of Practice Teaching and Learning*, *16*(3), 38-58. https://doi.org/10.1921/jpts.v16i3.1173

Flores, M. A., Barros, A., Simão, A. M. V., Pereira, D., Flores, P., Fernandes, E., Costa, L., & Ferreira, P. C. (2022). Portuguese higher education students' adaptation to online teaching and learning in times of the COVID-19 pandemic: Personal and contextual factors. *Higher Education*, *83*(6), 1389–1408. https://doi.org/10.1007/s10734-021-00748-x

Fuller, R., Joynes, V., Cooper, J., Boursicot, K., & Roberts, T. (2020). Could COVID-19 be our 'There is no alternative' (TINA) opportunity to enhance assessment? *Medical Teacher*, *42*(7), 781-786. https://doi.org/10.1080/0142159X.2020.1779206

Fung, C. Y., Su, S. I., Perry, E. J., & Garcia, M. B. (2022). Development of a socioeconomic inclusive assessment framework for online learning in higher education. In M. B. Garcia, (Ed.), *Socioeconomic Inclusion During an Era of Online Education* (pp. 23-46). IGI Global. https://doi.org/10.4018/978-1-6684-4364-4

Furco, A., & Moely, B. E. (2012). Using learning communities to build faculty support for pedagogical innovation: A multi-campus study. *The Journal of Higher Education*, *83*(1), 128–153. https://doi.org/10.1353/jhe.2012.0006

García-Peñalvo, F. J., Corell, A., Abella-García, V., & Grande-de-Prado, M. (2021). Recommendations for mandatory online assessment in higher education during the COVID-19 pandemic. In D. Burgos, A. Tilili, & A. Tabacco (Eds.), *Radical Solutions for Education in a Crisis Context* (pp. 85-98). Springer Singapore. https://doi.org/10.1007/978-981-15-7869-4

Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice* (2nd ed.). Routledge.

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2*(2), 87-105. https://doi.org/10.1016/S1096-7516(00)00016-6

Guangul, F. M., Suhail, A. H., Khalit, M. I., & Khidhir, B. A. (2020). Challenges of remote assessment in higher education in the context of COVID-19: a case study of Middle East College. *Educational Assessment, Evaluation and Accountability*, *32*(4), 519-535. https://doi.org/10.1007/s11092-020-09340-w

Gunasekara, A., Turner, K., Fung, C. Y., & Stough, C. (2022). Impact of lecturers' emotional intelligence on students' learning and engagement in remote learning spaces: A cross-cultural study. *Australasian Journal of Educational Technology*, *38*(4), 112-126. https://doi.org/10.14742/ajet.7848

Gutiérrez, R. (2013). The Sociopolitical Turn in Mathematics Education. *Journal for Research in Mathematics Education, 44*(1), 37–68. https://doi.org/10.5951/jresematheduc.44.1.0037

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82. https://doi.org/10.1177/1525822X05279903

Guskey, T. R. (2000). *Evaluating Professional Development*. Corwin Press.

Guskey, T. R. (2002). Professional Development and Teacher Change. *Teachers and Teaching*, *8*(3), 381–391. https://doi.org/10.1080/135406002100000512

Haider, A. S., Hussein, R. F., & Saed, H. A. (2022). Jordanian University Instructors' Practices and Perceptions of Online Testing in the COVID-19 Era. *Frontiers in Education*, *7*, Article 856129. https://doi.org/10.3389/feduc.2022.856129

Harfitt, G. J. (2013). Why 'small' can be better: An exploration of the relationships between class size and pedagogical practices. *Research Papers in Education*, *28*(3), 330–345. https://doi.org/10.1080/02671522.2011.653389

Halsey, A. H. (1993). Trends in Access and Equity in Higher Education: Britain in international perspective. *Oxford Review of Education*, *19*(2), 129–140. https://doi.org/10.1080/0305498930190201

Hammond, Z. (2015). *Culturally Responsive Teaching and The Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students.* Corwin Press.

Henning, G. W., Baker, G. R., Jankowski, N. A., Lundquist, A. E., & Montenegro, E. (Eds.). (2022). *Reframing Assessment to Center Equity: Theories, Models, and Practices*. Stylus Publishing.

Hornsby, D., & Osman, R. (2014). Massification in higher education: Large classes and student learning. *Higher Education*, *67*, 711–719. https://doi.org/10.1007/s10734-014-9733-1

Hsu, K. C., Mulholland, B., Ambrose, G. A., Szekelyhidi, S. M., & Craker, A. (2021). *Flexible Assessment in Math During (and After) COVID*. [Poster and Paper Presentation]. Association for Educational Communications and Technology (AECT) Conference. https://sites.nd.edu/real/2021/11/01/poster-paper-flexible-assessment-in-math-during-and-after-covid/

Jacobs, J. (2012). Teacher Leaders and Equity-Centered Pedagogy: Empowerment and Development through Action Research. *Journal of Research in Education*, *22*(2), 74–102.

Jacobs, J. (2019). "I Believe in Home Language, but the Tests Don't": Addressing Linguistic Diversity within Assessment Practices across Literacy Teacher Preparation and Classroom Practice. *Teachers College Record*, *121*(7). https://doi.org/10.1177/016146811912100705

Jankowski, N. A. (2017). Moving toward a philosophy of assessment. *Assessment Update*, 29(3), 10-11. https://doi.org/10.1002/au.30096

Jones, E., Priestley, M., Brewster, L., Wilbraham, S. J., Hughes, G., & Spanner, L. (2021). Student wellbeing and assessment in higher education: The balancing act. *Assessment & Evaluation in Higher Education*, *46*(3), 438–450. https://doi.org/10.1080/02602938.2020.1782344

Peter, K., & Mantz, Y. (2003). *Assessment, Learning and Employability*. McGraw-Hill Education.

Kolb, D. A. (2015). *Experiential Learning: Experience as the Source of Learning and Development* (2nd ed.). Pearson Education.

Langenfeld, T. (2020). Internet-based proctored assessment: security and fairness issues. *Educational Measurement: Issues and Practice*, *39*(3), 24-27. https://doi.org/10.1111/emip.12359

Liu, J., & Xu, Y. (2017). Assessment for Learning in English Language Classrooms in China: Contexts, Problems, and Solutions. In H. Reinders, D. Nunan, & B. Zou (Eds.), *Innovation in Language Learning and Teaching: The Case of China* (pp. 17–37). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-60092-9_2

Marginson, S. (2011). Equity, status and freedom: A note on higher education. *Cambridge Journal of Education*, *41*(1), 23–36. https://doi.org/10.1080/0305764X.2010.549456

Mårtensson, K., Roxå, T., & Stensaker, B. (2014). From Quality Assurance to Quality Practices: An Investigation of Strong Microcultures in Teaching and Learning. *Studies in Higher Education*, *39*(4), 534–545. https://doi.org/10.1080/03075079.2012.709493

McBride, B. (2004). Data-driven instructional methods: 'One-strategy-fits-all' doesn't work in real classrooms. *Technological Horizons in Education Journal 31*(11): 38–40.

Montenegro-Rueda, M., Luque-de la Rosa, A., Sarasola Sánchez-Serrano, J. L., & Fernández-Cerero, J. (2021). Assessment in Higher Education during the COVID-19 Pandemic: A Systematic Review. *Sustainability*, *13*(19), 10509. https://doi.org/10.3390/su131910509

Panadero, E., Fraile, J., Pinedo, L., Rodríguez-Hernández, C., & Díez, F. (2022). Changes in classroom assessment practices during emergency remote teaching due to COVID-19. *Assessment in Education: Principles, Policy & Practice*, *29*(3), 361–382. https://doi.org/10.1080/0969594X.2022.2067123

Peters, S. J. (2022). The challenges of achieving equity within public school gifted and talented programs. *Gifted Child Quarterly*, *66*(2), 82-94. https://doi.org/10.1177/00169862211002535

Raimondi, T. P. (2019). Compassion Fatigue in Higher Education: Lessons From Other Helping Fields. *Change*: *The Magazine of Higher Learning*, *51*(3), 52–58. https://doi.org/10.1080/00091383.2019.1606609

Roulston, K. (2011). Working through challenges in doing interview research. *International Journal of Qualitative Methods*, *10*(4), 348-366. https://doi.org/10.1177/160940691101000404

Roxå, T., & Mårtensson, K. (2009). Significant conversations and significant networks–exploring the backstage of the teaching arena. *Studies in Higher Education*, *34*(5), 547-559. https://doi.org/10.1080/03075070802597200

Roxå, T., Mårtensson, K., & Alveteg, M. (2011). Understanding and Influencing Teaching and Learning Cultures at University: A Network Approach. *Higher Education: The International Journal of Higher Education and Educational Planning*, *62*(1), 99–111. https://doi.org/10.1007/s10734-010-9368-9

Schnee, E. (2008). “In the real world no one drops their standards for you”: Academic Rigor in A College Worker Education Program. *Equity & Excellence in Education*, *41*(1), 62–80. https://doi.org/10.1080/10665680701764502

Schwegler, A. F. (2019). Academic Rigor: A Comprehensive Definition (Quality Matters White Paper). *Quality Matters*. https://www.qualitymatters.org/sites/default/files/research-docs-pdfs/QM-WP-1-Academic-Rigor-A-Comprehensive-Definition-2019.pdf

Scott, D., Sanyal, C., Winterburn, K., & Abbott, C. (2021). Flexing, adapting and evolving action learning. *Action Learning: Research and Practice*, *18*(2), 151–152. https://doi.org/10.1080/14767333.2021.1935002

Şenel, S., & Şenel, H. C. (2021). Remote assessment in higher education during COVID-19 pandemic. *International Journal of Assessment Tools in Education*, *8*(2), 81-199. https://doi.org/10.21449/ijate.820140

Sharadgah, T. A., & Sa'di, R. A. (2020). Preparedness of institutions of higher education for assessment in virtual learning environments during the Covid-19 lockdown: Evidence of bona fide challenges and pragmatic solutions. *Journal of Information Technology Education: Research*, *19*, 755-774. https://doi.org/10.28945/4615

St-Onge, C., Ouellet, K., Lakhal, S., Dubé, T., & Marceau, M. (2022). COVID-19 as the tipping point for integrating e-assessment in higher education practices. *British Journal of Educational Technology*, *53*(2), 349-366. https://doi.org/10.1111/bjet.13169

Stoves, D. R. (2014). *Compelled to Act: The Negotiation of Compassion Fatigue Among Student Affairs Professionals* (Order No. 3620005). Available from ProQuest Dissertations & Theses Global. (1537056992).

Tuah, N. A. A., & Naing, L. (2021). Is online assessment in higher education institutions during COVID-19 pandemic reliable? *Siriraj Medical Journal*, *73*(1), 61-68. https://doi.org/10.33192/Smj.2021.09

Varsavsky, C., & Rayner, G. (2013). Strategies that challenge: Exploring the use of differentiated assessment to challenge high-achieving students in large enrolment undergraduate cohorts. *Assessment & Evaluation in Higher Education*, *38*(7), 789-802. https://doi.org/10.1080/02602938.2012.714739

Watermeyer, R., Crick, T., & Knight, C. (2021). Digital disruption in the time of COVID-19: Learning technologists' accounts of institutional barriers to online learning, teaching and assessment in UK universities. *International Journal for Academic Development*, *27*(2), 148-162. https://doi.org/10.1080/1360144X.2021.1990064

Wiley, A., & Buckendahl, C. W. (2020). Your guess is as good as ours. *Educational Measurement: Issues and Practice*, *39*(3), 49-52. https://doi.org/10.1111/emip.12366

Wiliam, D. (Nov 2000). *Integrating Summative and Formative Functions of Assessment* [Keynote address]. European Association for Educational Assessment Conference, Prague, Czech Republic. https://discovery.ucl.ac.uk/id/eprint/10001151/1/Wiliam2000IntergratingAEA-E_2000_keynoteaddress.pdf Accessed 13 May 2022.

Yokuş, G. (2022). Developing a guiding model of educational leadership in higher education during the COVID-19 pandemic: A grounded theory study. *Participatory Educational Research*, *9*(1), 362-387. https://doi.org/10.17275/per.22.20.9.1

Appendices

Appendix A: Pseudonym List

Participant	Pseudonym	Discipline
1	Qin	Social Sciences
2	Morgan	STEM
3	Taylor	STEM
4	Olayemi	Humanities
5	Desi	Social Sciences
6	Noor	Humanities

Appendix B: Interview Guide

Interview and Focus Group Semi-Structured Interview Guide

1. What does equity in assessment mean to you?
2. What is your experience with equity and assessment, broadly speaking?
3. What was your objective in taking our course on Equity in Assessment?
4. What was your approach to equity in assessment prior to taking our course?
5. How did our course broadly inform your understanding of equity in assessment?
6. How did our course broadly inform your practice of equity in assessment?
7. What specific strategies (if any) have you learned from our course regarding equity in assessment?
8. What specific strategies from our course (if any) have you implemented in your own practice to ensure equity in assessment?
9. What strategies (re equity and assessment) do you feel most confident implementing in your own practice?
10. What strategies (re equity and assessment) do you feel least confident implementing in your own practice (if any)?

11. Are there any equity-informed strategies of your own that you implement in your assessment design that were not discussed in our course?

12. What is something you would have liked to see covered in our course that was not addressed?

13. What do you think are some challenges or broader issues concerning equity in assessment?

14. What questions remain for you regarding equity in assessment?