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All That Glitters is Not Gold: Culturally Responsive Online Assessment and Pedagogy in Uncertain Times

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All That Glitters is Not Gold: 
Culturally Responsive Online Assessment and Pedagogy in Uncertain Times

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Introduction

The COVID-19 pandemic, racial tensions, climate change (e.g., wildfires and floods), and other social justice issues have changed the educational landscape in many countries worldwide. Teaching, learning, and assessment are no longer confined to brick-and-mortar classrooms. In the digital age, technology has permeated every aspect of our lives and work, even before the pandemic. Scholars have explored the idea of e-assessment (e-portfolio included), computerized assessment, automated scoring, technology-enabled assessment (dynamic, interactive, and simulated assessment tasks), technology-enhanced formative assessment, and game-based assessments (e.g., Bennett, 2002; Pellegrino & Quellmalz, 2010; Shute, 2011). Schools suddenly shifted to online platforms during the pandemic to ensure students were not losing academic learning. Many students and teachers had to adjust to an online environment, including those who are not tech-savvy. Online learning and assessment added a particular challenge for equity-deserving groups of learners (e.g., English language learners, immigrant children and youth, Indigenous students, students with special needs, and girls and women). Although the pandemic is now over, and many schools have returned to normal, this period provided valuable lessons.

This Special Issue captures poems, narratives, reflections, and studies on assessment and pedagogical practices from elementary schools to initial teacher preparation programs during the pandemic. Specifically, a collection of articles from researchers and educators from different countries and communities helps readers to reflect on pedagogical approaches, assessment methods, and technologies used to support learners during emergency remote teaching. Our quest is to explore whether online pedagogy and assessment practices are culturally sensitive and responsive to the learning needs of all students, especially those from disadvantaged socioeconomic backgrounds. Understanding this will inform the future design of culturally responsive online pedagogies and assessments for equity-deserving students and the review of teacher preparation and professional development programs.
Culturally responsive pedagogy and assessment are not new. A group of prominent Black American scholars (e.g., Edmund Gordon, Stafford Hood, Carol Lee, Gloria Ladson-Billings, and Jackie Jordan) have long called for providing pedagogies and assessments that are responsive to the need of racialized minority students in the US. Culturally responsive pedagogy or culturally relevant pedagogy was first introduced by Ladson-Billings (1995) as a teaching approach to leverage the cultural strengths of ethnically diverse students or students of color. According to Ladson-Billings (1995), culturally responsive pedagogy consists of three elements: (1) a focus on helping students to develop intellectual growth, moral development, and higher-order thinking skills, (2) developing students’ cultural or intercultural competence and fostering their positive ethnic and social identities, and (3) supporting students’ development of critical consciousness and empowering students to build capability to recognize and critique societal inequalities. Bernstein (1977) conceptualizes curriculum, pedagogy, and assessment are three interrelated message systems. Assessment will drive the other two message systems as teachers tend to teach to the test due to the pressure of accountability demands. As such, educational reforms need to begin with assessment.

In response to culturally responsive pedagogy, Hood (1998) notes that student learning must be effectively assessed by using assessment approaches that are culturally responsive. In essence, culturally responsive pedagogy should accompany culturally responsive assessment across different learning environments (e.g., online, blended, or face-to-face). Bennett (2002) aptly points out that assessment approaches should reflect the tools employed in teaching and learning. A misalignment between the modes of learning and assessment could result in an inaccurate measurement of student learning and achievement, which is a serious validity issue. Additionally, the eminent Edmund Gordon (2008) suggests that “educational tests [assessments] in the future will fall into disuse unless they are capable of effectively supporting a range of pedagogical functions” (p. 5). He further states that “assessments embedded in teaching and learning experiences, where the assessment data are extracted from the record of the teaching and learning transaction” (p. 5). This suggests that assessments will only be useful if the data are used to inform teaching and improve student learning.

Culturally responsive assessment and pedagogy have become important when researchers address equality, social justice, inclusion, and diversity issues, particularly when considering PreK-12 schools and higher education institutions. A new construct, “socioculturally responsive assessment,” recently emerged in education. This is defined by Randy Bennett (2023), the distinguished measurement expert and Chair in Assessment Innovation at the Educational Testing Service. In this Special Issue, the Guest Editors aim to explore the role of culturally responsive pedagogy and assessment in online learning environments during the COVID-19 pandemic. The challenges equity-deserving students and their families face in the past three years are enormous. On the surface, these may seem related to a lack of computer access and Internet connectivity. However, two decades ago, Bransford et al. (2000, p. 206), experts in the science of learning cautioned that “technologies do not guarantee effective learning”. On a deeper level, therefore, these challenges relate to how digital tools can be used effectively to design and implement intellectually demanding lessons and assessment tasks and create authentic learning environments that engage students. We posit that well-designed culturally responsive online assessment and pedagogy will motivate all students, irrespective of their socioeconomic status and their sociocultural backgrounds, and provide them with an equitable opportunity to do intellectual work and to build a positive self-identity, further contributing to
the development of their 21st century competencies (e.g., expert thinking, problem-solving, collaboration, ICT literacy, communication, self-efficacy, resilience, civic and social responsibility, and intercultural capability). This aligns with Ladson-Billings’s (1994) theory of how culturally relevant pedagogy can “empower students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes” (p. 382).

Culturally responsive online assessments should also enable timely, formative feedback. As Trumbull and Nelson-Barber (2019) indicate, “because formative assessment is so flexible, constrained only by the kind of evidence of learning needed, it can be shaped to be responsive to the cultural context” (p. 7) for Indigenous students. In early 2020, the unprecedented COVID-19 pandemic resulted in sudden school closures in 186 countries. More than 1.2 billion students and teachers at elementary and secondary levels were forced to learn, teach, and assess remotely using technologies (UNESCO, 2020). However, not every student had access to digital devices (e.g., computers, laptops, tablets, and smartphones) and Internet connectivity. The OECD’s Program for International Student Assessment (PISA) data (Schleicher, 2020) show that 95% of students in economically, developed countries (e.g., Switzerland, Norway, Austria) had a computer to use for their schoolwork while only 34% of students in developing countries (e.g., Indonesia) had a computer at home. Even within the most developed country, the US, there was a significant gap between socially and economically advantaged and disadvantaged students. All students from advantaged family backgrounds reported having a computer to work on, whereas 25% of those from disadvantaged backgrounds did not have a computer at home. According to the joint report by the United Nations Children’s Fund and International Telecommunication Union (2020), two-thirds of the world’s school-age children and adolescents (3-17 years old) did not have Internet access in their homes. Geography (e.g., urban versus rural) is also key to Internet connectivity in many countries. For example, 94% of 15-year-olds from privileged backgrounds in Mexico had Internet connection in their homes, compared to just 29% of those from disadvantaged backgrounds (OECD, 2020).

During the pandemic, the unplanned and rapid move to an online learning environment widened educational inequalities between students with low- and high-socioeconomic status (SES) family backgrounds and between students from low- and high-income countries. Many of the low-SES students were also historically marginalized; are also referred to as equity-deserving groups of learners (e.g., English language learners, students of color, the children of immigrants, Indigenous people, and students with special needs) who encounter barriers to equal access, opportunities, and resources due to visible and hidden discrimination and oppression. To address the issues of equal access and digital divides, governments and not-for-profit organizations have worked to provide computers and affordable Internet connections to marginalized communities. However, students’ adaptability to digital devices and online environments can add another layer of complexity to remote learning and assessment.

Warschauer and Matuchniak (2010) highlight that access to digital devices alone will not overcome inequity in use and outcome. They contend that the “notions of technology access have steadily shifted over the past 15 years [more than two decades ago] from a narrow focus on the physical availability of digital media to a broader focus on the sociotechnical factors that influence whether and how people access technology” (p. 182). Although students’ equal access to digital devices and Internet connectivity is a prerequisite for their online learning, they need to develop digital literacy, learn how to engage in digital learning, and use ICT more meaningfully.
According to Ma (2021), significant differences in students’ digital literacy and engagement with ICT are found between low- and high-SES schools, even in the same country. Such a disparity is referred to as the second-level digital divide. Ma (2021) further states that scholars have now turned “their focus on the third-level digital divide by examining inequality in the tangible outcomes achieved from ICT” (p. 116). This aligns with Warschauer and Matuchniak (2010) who underscore the importance of examining the sociotechnical factors influencing whether and how people access and use technology. Warschauer and Matuchniak (2010) call for the increased use of performance assessment that taps into students’ development of expert thinking, problem-solving skills, and ICT literacy. However, they acknowledge that such an assessment practice will necessitate providing teachers with professional development, resources, administrative support, and incentives to reorient their instruction and assessment to focus on students’ development of higher-order skills, which are essential for the 21st century.

Ma (2021) notes that although socioeconomic background is a key factor that explains the gap in students’ ICT engagement and digital skills for learning, teacher quality also plays a crucial role in closing such a gap. Therefore, Ma (2021) and Warschauer and Matuchniak (2010) emphasize providing resources and professional learning opportunities for teachers in low-SES schools. For instance, teachers would need support in using technology to design instruction and learning environments that bring “the wider world into the classroom” (Warschauer & Matuchniak, 2010, p. 215). Such contextualization or making connections to the real world will be more intellectually engaging and creates more enjoyable experiences, motivating students to learn challenging subjects. Koh et al. (2022) note that students who are disadvantaged and cannot afford to travel abroad for experiential learning can benefit from authentic learning experiences created by virtual reality (VR). VR is an emerging technology that simulates real-world experiences and employs a headset, position tracking, and 3D near-eye displays to give users an immersive feel of a virtual world and enable them to explore and interact with it.

As reflected in the first part of our theme for this Special Issue, all that glitters is not gold. Therefore, culturally responsive online assessment and pedagogy are significant equity and social justice issues that need to be interrogated given that we are in a complex, technology-infused world. Culture and technology are intertwined, so culturally responsive online assessment and pedagogy may sound good on paper. However, it is necessary to examine their implications in practice, particularly for equity-deserving groups of learners across different social and cultural contexts. The COVID-19 pandemic is only one global crisis. We do not know whether they will be more crises in the future, which may shut down our schools, colleges, universities, and workplaces again.

At the point of writing this editorial comment, most schools worldwide have reopened, and many students have returned to in-person learning. Some may have opted for hybrid or blended learning due to affordability and flexibility. Meanwhile, more emerging technologies, such as ChatGPT and other Artificial Intelligent (AI) tools, are being developed. The affordances and challenges of using these technologies in online teaching, learning, and assessment are still unknown. Students with access to these technologies and who are ICT literate may benefit because they can learn at their own pace and at any time. The technological advances also indicate that teaching, learning, and assessment in a post-pandemic era can occur outside of the traditional brick-and-mortar classroom. For the opponents of these technologies, the emergence of AI tools poses high risks, including plagiarism and the inauthenticity of student work.
Research has shown that online assessments and pedagogies can offer benefits (e.g., interactive environments, collection of rich diagnostic data, timely access to information about student learning, immediate feedback, flexibility, learning at your own pace, game-based learning, and gamified assessments) that traditional, face-to-face assessments cannot (e.g., Nye, 2022; Pellegrino & Quellmalz, 2010; Osborne et al., 2013; Whitelock, 2009). Nevertheless, there are also some constraints such as plagiarism, a lack of human interaction, technological support, and reliability and validity issues (e.g., Bennett, 2015; Nye, 2022). The Guest Editors posit that the use of digital technologies as an alternative modality in teaching and assessing students’ learning has become a reality and will become even more prominent in the foreseeable future. However, little is known about how well PreK-12 teachers are prepared to leverage educational technologies to make online assessments and pedagogies during the pandemic more culturally responsive to their students’ learning needs. Should students’ cultural backgrounds be considered in online pedagogies and assessments? The narratives and reflections from scholars from different disciplines and cultural contexts would help inform the design and implementation of culturally responsive online pedagogies and assessments that cater to all students, especially those historically marginalized who do not have much support during a global crisis.

In light of the urgency of remote teaching and assessment, the Editors of this Special Issue aim to understand what kinds of culturally responsive pedagogies and assessments were implemented by PreK-12 teachers and higher education instructors in online learning environments during the COVID-19 pandemic? What did they look like? How can equity-deserving groups of students and their teachers navigate challenges and obstacles when teaching, learning, and assessment are conducted online? How do online assessment and pedagogical design embrace students’ cultures, languages, and experiences? What support and professional learning opportunities are given to teachers and students in an online learning environment?

The Special Issue begins with the two poems “My Place/Your Place” and “The Wonder Test,” contributed by Sonia Aujla-Bhullar and Carol Lee, respectively. The poems reflected the authors’ personal experiences with and conceptions of assessment. Aujla-Bhullar and Lee come from very different cultural backgrounds, and both are academics who graduated from Canadian research-intensive universities.

Carol Lee’s article “Climbing Back into a Canoe in Deep Water” highlights an important issue: how tests and summative assessments in schools capture only narrowly defined knowledge and skills, which are compartmentalized and decontextualized. She recalls a recovery assessment from her youth and demonstrates how this kind of authentic assessment is missing from the repertoire of assessments in schools. Using a critical theory, she aptly points out that classroom and standardized assessments in Canadian schools never seem to focus on the “who”—children and youth are neither given a voice nor their identity are recognized in such assessments. Lee calls for “Respect, Permission, Agency, and Power” to be considered in assessments. From an Indigenous perspective, she compares individual and collective assessments and challenges the dominant culture bias in assessments. Lee proposed a need for critical assessment pedagogy more relevant to Indigenous students in Canadian schools.

In Sepideh Mahani’s article, “Applying Culturally Relevant Pedagogy to Online Learning”, she begins by sharing her experience as a student who did not see her culture or ethnicity in curriculum. As an educator and researcher, Mahani has made it a priority to apply
culturally relevant pedagogy in designing meaningful learning experiences that fosters the relationship between culture and learning. From Mahani’s review of the literature, she defines and discusses culturally relevant and responsive pedagogy. Mahani provides a number of practical strategies, along with illustrative examples, to help instructors to design and implement culturally relevant pedagogy and assessment in online courses. She concludes the article noting that through designing learning that integrates culturally relevant content and assessment, instructors can create more inclusive learning experiences for all students.

In “Closing Research-Practice Gaps in the Delivery of Online Teaching and Learning”, Stephen MacGregor and Joshua Pigeon argue for the enhancement of research-practice connections in helping to foster greater evidence-informed practice for online teaching and learning. They begin the article by identifying and discussing four areas of practice. As part of this discussion, they examine disconnects and share examples that reflect some issues and challenges that occurred during emergency remote teaching. Drawing from this discussion, they present recommendations in three areas designed to strengthen the practitioner-researcher relationship in support of greater implementation of evidence-informed practices for online teaching and learning. Greater advocacy for researcher-practitioner partnerships is needed to support the advancement of online teaching and learning.

Kathleen Kellock’s article is entitled “Come Pandemic and Lockdowns, School Must Go On!” Using the four quadrants of Integral Theory, Kellock shares her experience and examines the challenges of preparing students for national standardized assessment during the pandemic. Kellock reports how teachers in Bahamas were left on their own with no formal plan or structure to guide their work during emergency remote teaching. However, both teachers and students were able to use a variety of technological devices to ensure that the “business of school” continued. She describes this experience as “pioneering a new frontier”. In her discussion, Kellock acknowledges the impact the pandemic has had on student learning. She noted in her country there are changes in modalities for instruction now being used, however the assessment practices have remained the same with national standardized exams. She reflected on the challenges she faced while trying to prepare her high school students for their national standardized examinations. Similar to other countries in the world, students in Bahamas suffered from learning loss during the pandemic. On a positive note, Kellock points out that “teachers and students were compelled to accelerate and embrace the use of technology in classrooms and schools” due to the pandemic. This has led to the tryout of new online platforms and alternative forms of assessment, which may help promote students’ 21st century skills in the future.

Noah Romero, Nate Koerber, Kenneth Fasching-Varner, and P. G. Schrader’s article “Relational Autonomy in Teacher Education: Deepening Teacher Quality through Indigenous and Decolonizing Education” offers a new vision for initial teacher preparation programs. Their vision was inspired by Indigenous education, particularly the model of community-accountable moral education, which suggests a need to decolonize the concept of autonomy. Romero et al. embrace and propose relational autonomy as a key dimension of teacher quality. Based on the feminist critiques of autonomy and Indigenous and decolonial conceptions of personhood, relational autonomy is defined as the personal and social factors that allow individuals to take principled action to benefit their communities. Romero et al.’s article reminds teacher educators that although the provision of resources, including digital devices and Internet connectivity is important, the focus needs to be on people—teachers must be prepared
not only in terms of content knowledge, pedagogical content knowledge, technological pedagogical content knowledge, and assessment literacy but also the moral dimension (implicit structure) of Shulman’s (2005) signature pedagogies.

The final article in this Special Issue, “Designing Culturally Responsive Online Assessments for Equity-Deserving Students” is contributed by Kim Koh, who herself is a researcher and teacher educator. For many years, Koh was an equity-deserving student herself. She begins her article with a brief review of the historical roots and evolution of culturally responsive assessment. From her multicultural experiences and educational preparation that transcend multiple disciplines (i.e., psychology, psychometrics, educational assessment, research methodology, teacher education, and Learning Sciences) and cultures, Koh discusses what the design of culturally responsive online assessments means for equity-deserving students.

In conclusion, as we emerge from the COVID-19 pandemic, what have we learned from our experiences with emergency remote teaching? As we reflect on our experiences and practices, as educators and/or researchers, how are we thinking differently in creating and supporting culturally responsive pedagogy and assessment in online environments? The authors in this Special Issue have illustrated key issues and approaches that can be built upon in the design of culturally responsive pedagogy and assessment that moves beyond what was experienced during emergency remote teaching. These new strategies and approaches help us to be more intentional and thoughtful in how we design and support culturally responsive practice in online K-12 and higher education learning environments. Finally, future research needs to focus on designing teacher preparation and professional development programs to help prepare prospective teachers and develop the capacity of inservice teachers in culturally responsive pedagogy and assessment with an eye toward equity, diversity, inclusion, and accessibility across different learning environments.

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