

# Redefining Quality Assessment in Canadian K-12 Schools With Empathy, Critical Consciousness and Metacognition

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**Abstract:** Over the past decades, educational pedagogies have been shaped by many theorists and frameworks. For the purpose of this paper, the researchers define educational pedagogy through a lens that is influenced by Paulo Freire. For instance, educational pedagogy can be defined as seeking a balance within the tension between freedom and authority, while navigating the challenging structures that shape educational institutions (Freire, 2005, 2020). These structures include the impact of lived experiences and realities, the role of curricula, and the changing interactions within society that influence the pedagogical frameworks in education (Freire, 2020). This paper begins to consider a new framework for assessment and evaluation in Ontario, Canada's K-12 schools, where educational pedagogy, empathy, metacognition, and critical consciousness may be posited as potential components moving forward. This paper deeply examines these three key elements of effective and authentic assessment: empathy, critical consciousness and metacognition. Each of these terms is defined and situated in a 21C digital learning context, and the authors suggest that new directions in assessment and evaluation must consider these three significant as fundamental to any redesign of assessment practices. Consideration may be given to the perspectives and experiences of educational leaders, educators, students, and their communities, and how these perspectives can shape the values and how we meet the challenges in education. Pedagogy in practice can often reflect the strategies and beliefs that influence educators' values and choices, and the resulting impact on learning. Part of these pedagogical considerations may include the development of empathy, critical consciousness and metacognition throughout the assessment and evaluation process. Using a Canadian context, the authors argue that post-pandemic learners require a different set of tools to learn, and post-pandemic teachers need to reconfigure the ways in which that learning is measured, assessed and evaluated.

**Keywords:** assessment, critical consciousness, metacognition, empathy, digital age

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## 1. Introduction

The overarching premise of this discussion paper is to examine the fundamental concepts of empathy, metacognition and critical consciousness as they relate to assessment and evaluation systems in Ontario, Canada's K-12 schools. While events like the COVID-19 pandemic may have led to shifts in pedagogical practice, longstanding assessment strategies have remained in education for centuries (Blum, 2020; Crooks, 1993; Kohn, 1994). As we navigate the next decades of educational development, students may need to develop new skills and competencies. Some would posit that we are in a Fourth Industrial Revolution (4IR), and as a result, there are changing competencies and skills that employers and institutions increasingly seek (Giammarco et al., 2020; Gray, 2016; Voogt et al., 2013; Waddell et al., 2018). The 4IR acknowledges the rapid change to technology and the impact on industry, societal patterns and processes, and the interconnectedness between technology and human interaction (Gray, 2016; Giammarco et al., 2020; Waddell et al., 2018; Voogt et al., 2013). As a result, skills such as creativity, problem-solving, negotiation and critical thinking, are suggested by numerous stakeholders in industry as potential competencies needed by students as they emerge from K-12 years (Gray, 2016; Schwab, 2018; World Economic Forum, 2016). The skills and assets that could be viewed as important for students in Ontario, Canada's K-12 schools have consequently changed over time. 21st century (21C) competencies reflect a set of themes, skills, and support systems that are seen as valuable for future life and career development (Barell, 2010; Canadians for 21st Century Learning and Innovation, 2012; Marzano and Heflebower, 2011). Growing Success (Ontario Ministry of Education, 2010) was published in Ontario, Canada over a decade ago and may not be reflective of these themes and skills. Empathy, metacognition, and critical consciousness can be integral to these emerging skills and provide value to the K-12 education system in Ontario, Canada.

Additionally, digital learning spaces may also be considered as technology continues to influence what is considered an environment for learning and skill development. The impact of the COVID-19 pandemic has changed several ways educators and students interact in various learning environments, both online and in-person (Luettchau, 2021; Oyedotun, 2020). There is a wide variety of types of online learning environments that each offer very different learning experiences (e.g. asynchronous, synchronous, blended, hybrid). One model, the Fully Online Learning Community (FOLC), posits how digital spaces are dynamic and co-created among educators and students through synchronous and asynchronous learning opportunities (Blayone et al., 2017). Further to this, Balkaya and Akkucuk (2021) explored how learning management systems (LMS) have an increasing impact on digital learning spaces, acting as an online extension or substitution of the physical classroom. These online learning systems can allow students and educators to collaborate with global colleagues, and provide opportunities to build self-paced learning strategies to manage individual goals and assess growth (Balkaya and Akkucuk, 2021). For example, Cox et al. (2018) argued how technology can provide students with opportunities to connect with others around the world, access materials, seek feedback, and investigate physical spaces through a technological lens. However, digital inequalities need to be addressed as online learning environments increase, and educators will require adequate opportunities to build capacity on strategies and pedagogical considerations in online learning environments (Luettchau, 2021; Oyedotun, 2020). Students and their communities should be considered when addressing barriers to online learning and how to best engage students in digital spaces (Chapman et al., 2020; Luettchau, 2021; Oyedotun, 2020).

It may be important to consider the role of assessment and evaluation through emerging concepts such as the 4IR and 21C, and how these concepts can encourage empathy, metacognition, and critical consciousness both in-person and in digital learning spaces.

For instance, empathy is a core skill where human relationships are fostered through understanding, active listening, and communication (Brett et al., 2003; Blasco and Moreto, 2012; Goleman, 2005). Recognizing that emotions are complex, empathy asks that one considers the point of view of another while acknowledging that one's feelings and thoughts are individual (Brett et al., 2003; Blasco and Moreto, 2012). Assessment and evaluation in Ontario, Canada require an evaluative grade, and these grades may not communicate learning in a meaningful and clear way (Blackwelder, 2020; Blum, 2020; Kohn, 1999; Stommel, 2020) and often ignore the understanding and relationship building that empathy requires. It can be important to reflect on one's empathic responses, as a path towards deeper reflection which leads to metacognitive skills. These reflective strategies can also be encouraged through metacognitive skills.

Metacognition and critical reflective practices play an essential role in deep learning and foster a strong sense of the journey that is learning (Blum, 2020; Brookfield, 1998; Veenman et al., 2006). Brookfield (1998) discussed the lenses of critical reflection, including understanding our autobiographies as learners and understanding how personal experiences shape our understanding of how we learn and impact how educators may view and understand learning themselves. The structures in society combined with one's personal experience and values can impact how one can reflect on their learning and lived experiences (hooks, 1994; Brookfield, 1998; Immordino-Yang et al., 2018). In order to effectively reflect on how one learns, they need to feel safe in their learning environment regardless of race, gender, orientation, or class (hooks, 1994, Immordino-Yang et al., 2019; Immordino-Yang et al., 2018). Ontario's Growing Success (Ontario Ministry of Education, 2010) document defines metacognition as "thinking about one's own thought process" (p.149), without providing a rationale for its effectiveness, implementation strategies for educators and students, or mention of the impact it has on learning. Further consideration can be given in Ontario, Canada's document to inform metacognitive skills in assessment practices While deepening one's own understanding may be crucial in assessment, consideration can also be given to developing a critical awareness of more broader lived experiences through a critically conscious lens.

Freire (2005) describes critical consciousness as a sociopolitical tool that considers one's historical and social position and the impact that position has on shaping their reality. Critical theorists assert that one must question their individual, social, and cultural position and how societal structures uphold those positions (Blake and Masschelein, 2003; Freire, 2005). Thus, an in-depth understanding of the world and one's perception of the world may require a critical view of systemic inequities and take action against these systems (El-Amin et al., 2017; Freire, 2005; hooks,

1994). Ontario's Growing Success (Ontario Ministry of Education, 2010) can also consider critical consciousness in their assessment document to help inform skill development and deepen understanding.

## **2. Operational definitions**

Over the past decades, *educational pedagogies* have been shaped by many theorists and frameworks. For the purpose of this study, the researchers define educational pedagogy through a lens that is influenced by Paulo Freire. For instance, educational pedagogy can be defined as seeking a balance within the tension between freedom and authority, while navigating the challenging structures that shape educational institutions (Freire, 2005, 2020). These structures include the impact of lived experiences and realities, the role of curricula, and the changing interactions within society that influence the pedagogical frameworks in education (Freire, 2020). Pedagogical considerations may include the development of empathy as a means of building relationships between educators, students, and their families, throughout the assessment and evaluation process.

*Empathy* is a powerful emotion connected to the affective domain, which refers to one's feelings, cognition, and outward behaviours (Brett et al., 2003). By intentionally developing empathetic attitudes, the affective domain is triggered and provides an opportunity to understand the expansive range of emotions and resultant behaviours in response to these emotions (Blasco & Moreto, 2012; Brett et al., 2003). Grades can dehumanize the education system and harm the people learning within that system (Holt, 2004). The grading system diminishes our ability to understand the many factors that impact the learning process and reduces that judgement to a value or number. Goleman (2005) discusses emotional intelligence as the ability to hone in on one's emotional impulse and read and recognize emotions in others. The notion of being emotionally intelligent calls us to consider how one understands and acknowledges the emotional capacity of those around them (Goleman, 2005).

Furthermore, *metacognition* is thinking about how you learn and how what is learned may be relevant, mainly when framed within one's beliefs, values, and experiences (Brown et al., 2014; Flavell, 1979; hooks, 1994). Being reflective and understanding how we learn are essential. However, our learners need to feel safe and nurtured in their environment for reflection, learning, and risk-taking to be effective (Immordino-Yang et al., 2018; Immordino-Yang et al., 2019). To do well, we must *feel* well, starting with building a safe space that reflects the needs of each individual.

Finally, *critical consciousness* is an integral sociopolitical tool that asks learners to question their historical and social situations based on reality (Freire, 2005). Grounded in critical theory, the essential value of consciousness lies in its inherent demand for one to question individual, social, and cultural developments while simultaneously interrogating how social and economic structures are produced and reproduced (Blake and Masschelein, 2003). Education is one of many systems and, like many systems, can support and perpetuate inherently oppressive ideologies (Freire, 2005; hooks, 1994). It is crucial that our society's look at the systemic barriers presented in our world, and our students must be equipped with the skills and knowledge to interrogate and question these systems.

## **3. Overview of Canadian Provincial assessment guidelines**

Growing Success (Ontario Ministry of Education, 2010) defines assessment as "the process of gathering information that accurately reflects" (p. 28) how a student is meeting curriculum expectations, while evaluation is "judging the quality of student learning" (p. 38) concerning set standards of achievement and assigning value to that quality; in essence, the process of assigning a 'value' to one's learning. Assessment and evaluation can be far more nuanced than Growing Success's (Ontario Ministry of Education, 2010) suggestions. Considering what and how we assess, and determine what to evaluate, requires thoughtful interrogation into factors like curriculum design, school leadership, systemic barriers, and the pedagogy of staff or the entire school (Blum, 2020; Kohn, 2020; Stommel, 2020; Chu, 2020). The purpose of assessment can be argued as pervasive, providing lifelong skills that foster critical reflection of growth, knowledge, and applying constructive feedback (Boud and Falchikov, 2007; Fu et al., 2018; O'Connor and Lessing, 2017). Where Growing Success (Ontario Ministry of Education, 2010) posits assessment and evaluation as a means to prescribe a value to learning, research suggests we consider the vastness and diversity in the factors that foster learning and promote authentic means of assessment (Bialystok and Kukar, 2018; Cumming and Maxwell, 1999; Herrington et al., 2014; Swaffield, 2011; Vu and Dall'Alba, 2014).

Assessment is the collection of evidence that describes how pedagogy shaped the learners' growth, leaving the evaluation as the narrow measure of specific skills or capacities (Herrington, 2014; McDonald 2012). New terminology - like authentic assessment, ungrading, gradeless assessment, portfolio and contract assessment - has taken shape throughout the decades (Bialystok and Kukar, 2018; Blum, 2020; Herrington, 2014; McDonald 2012; Sackstein, 2015) in an attempt to redefine and understand more deeply the multifaceted world that is assessment and evaluation of learning.

### **Formative Assessment**

Formative assessment uses gathered evidence of learning by educators, peers, and learners to decide the next steps in the learning journey (Black and Wiliam, 2009). Often, exemplars of formative assessment can include assigned homework, reflections, quizzes or 'exit passes,' tests, and examinations (Black and Wiliam, 2009). Growing Success (Ontario Ministry of Education, 2010) defines formative assessment as an assessment that "takes place during instruction to provide direction for improvement [and] adjustment to instructional programs for individual students and a whole class." (p. 147). Thus, emerging terms like an assessment for, as, and of learning take shape to structure pedagogical assessment.

### **Assessment for, as, and of learning**

Assessment for learning is "the process of seeking and interpreting evidence for use by learners and their teachers" (Assessment Reform Group, 2002, p. 2); assessment as learning focuses on the "fostering of students' capacity over time to be their own best assessors" (Western and Northern Canadian Protocol, p. 42); and assessment of learning is what often "becomes public and results in statements or symbols about how well students are learning" (Western and Northern Canadian Protocol, p. 55). Interestingly, Growing Success (Ontario Ministry of Education, 2010) defines assessment of learning as the understanding that it "often contributes to pivotal decisions that will affect students' futures" (Western and Northern Canadian Protocol, p. 55). Therefore, it is possible to interpret that Ontario's assessment and evaluation document could support this notion that evaluation as grades can impact students on such a deep level it can infringe on their future.

## **4. Technology and assessment**

Numerous models of online learning communities have been developed, such as the Community of Inquiry framework (Garrison et al., 2010), Communities of Practice (Li et al., 2009), and the Fully Online Learning Community (FOLC) (vanOostveen et al., 2016). These online communities integrate structures and social interactions into digital learning spaces, and articulate how technology can shape learning communities (Garrison et al., 2010; Li et al., 2009; vanOostveen et al., 2016). Technology has also influenced assessment practices, as multimedia tools like collaborative learning platforms and digital feedback strategies can foster collaborative, integrated and interdependent learning environments (Herrington and Herrington, 1998; Reeves et al., 2002; Reynolds, 2010; Timmins et al., 2016). Digital tools can aim to support assessment and evaluation practices that reflect the learning outcomes required in the 4IR. For example, online portfolios or learning management systems (LMS) can provide learners with frequent and continuous feedback documented in a single digital space (Reynolds, 2010). Technology also allows students to curate samples from their learning, reflect on their strengths, and identify next steps provided in response to feedback (Chiaravalli, 2020; Reynolds, 2010; Sackstein, 2020). Barber (2020) discussed the use of digital moments, replicating in-person relationship building activities by uploading images or quotes to create community. Technology can provide tools and strategies such as digital moments that promote a sense of safety, inclusion, and creativity when educators and students engage in dialogue related to assessment and evaluation (Barber, 2020). Consideration should also be given to technological inequity with respect to access to connectivity and devices, personal privacy, and accessibility tools (Timmins et al., 2016).

## **5. Conclusion: The intersection of metacognition, empathy, culture of care**

The researchers found that the literature in this study supported how developing a culture of care through empathy can play an essential role in Ontario, Canada's assessment practices (Boske et al., 2017; Carroll and Mcbain, 2021; Hartman et al., 2017; Nojan, 2020). Educators and educational leaders can apply empathic ways of connecting with

students and their families, and recognize the role that empathy can play in assessment practices. Berkovich (2020) found that empathy was identified as one of the most ideal traits for educators to embody. Educators and educational leaders can build new ideas and constructs based on the lived experiences of their students, and aim to prioritize empathy when implementing assessment practices. Furthermore, it is important to also recognize how educators may need to receive empathy, supporting their personal and professional growth in order to provide support to their students (Berkovich, 2020). The researcher found that the value of a caring culture should be considered with respect to assessment practices. This commitment to build trust and empathy can foster strong community relationships where students and their families could feel safe and valued regardless of race, ethnicity, gender, sexuality, or socioeconomic status (Boske et al., 2017; Bourke and Mentis, 2014; Casale et al., 2018; Conrad, 2020). Growing Success (Ontario Ministry of Education, 2010) only mentions empathy twice, and could aim to consider the role of empathic responses in assessment. However, this foundation of trust and empathy should be an ongoing commitment that continually aims to honour the voices of their community and be responsive in their practice. A reflective learning community can be a foundation of a caring and empathetic culture.

This type of supportive learning environment can provide ideal conditions for students to develop skills in metacognition, critical thinking, risk taking and growth. Metacognition involves thinking about one's own thinking process, habits, and strategies that contribute to learning and reflection (Brookfield, 1998; Blum, 2020; Veenman et al., 2006). The researcher found in the literature that supportive communities, involving educators, students, and their families, could allow individuals to think metacognitively, reflecting on their own experiences and understandings, and recognize personal strengths to develop goals for each individual need (Berkovich, 2020; Bourke and Mentis, 2014; Hechter, 2019; Lac, 2021; Nojan, 2020).

Further consideration and next steps resulting from this discussion encourages Ontario, Canada's K-12 education stakeholders to consider an iteration of their assessment document that reflects empathy, metacognition, and critical consciousness. A potential reconsideration of the role these skills play in assessment and learning might help inform a new framework for assessment and evaluation in Ontario Canada's K-12 schools. By inviting students, their families, and educators as partners in the assessment process, educators may encourage learners to think about their own learning strengths and needs while articulating and sharing their journey. An understanding and empathetic community can support these highly reflective environments where educators, students, and their families can work together to share their thinking metacognitively and reflect on growth and identify future goals collaboratively through a critically conscious lens that considers the lived experiences of their learning community.

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