A Social Constructivist View of Neoliberalism as it Pertains to the Education Quality and Accountability Office Testing and Howard Gardner’s Theory of Multiple Intelligences

By

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Abstract

Ontario teachers are encouraged to recognize all eight multiple intelligences of their students through the utilization of authentic assessment practices rather than paper and pencil tasks which allow fewer students to excel. Despite the push for authentic learning experiences, teachers are responsible for preparing students for the annual Education Quality and Accountability Office (EQAO) testing, a paper and pencil test which assesses only linguistic and mathematical intelligences of students. The amplified importance of scores due to outside pressure from parents, taxpayers and politicians as a result of global competition and neoliberal politics, is negatively impacting teachers’ abilities to recognize all of their students’ multiple intelligences. The majority of standardized testing literature criticizes the test rather than offering pragmatic ways to work with the current neoliberal system. This study adds to the extant literature by focusing on current realities for teachers as they work with the test in today’s classrooms. Using a qualitative, semi-structured interview process, three elementary educators were interviewed to discuss the impacts that the EQAO testing had on their abilities to cater to students’ multiple intelligences. Interview data was analyzed and coded using a qualitative case study method. Additionally, the use of a social constructivist lens, which valued the personal stories of three educators, revealed hidden impacts of EQAO scores on teacher instruction. Less focus on authentic assessment resulted in fewer opportunities for students of all multiple intelligences to identify and hone their talents. This points to a possible conflict within Ontario’s educational vision outlined in the ministry’s Achieving Excellence policy.

Keywords: multiple intelligences; standardized testing; neoliberalism
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A Social Constructivist View of Neoliberalism as it Pertains to EQAO Testing and Howard Gardner’s Theory of Multiple Intelligences

Chapter 1: Introduction

“Perhaps if we can mobilize the full range of human intelligences and ally them to an ethical sense, we can help increase the likelihood of our survival on this planet and perhaps even contribute to our thriving” – Howard Gardner (Gardner, 2005a, p. 53)

1.0 Introduction to the Research Study

In 1983, developmental psychologist Howard Gardner altered the societal view of human intelligence. In creating his Theory of Multiple Intelligences, he challenged the widely held notion that the complexity of human potential could be captured in a simple Intelligence Quotient (IQ) test result (Armstrong, 2009). Gardner argued that IQ and standardized test formats favoured only those with select aptitudes, allowing them to disproportionately excel in educational pursuits and economic endeavors. In Gardner’s eyes, creative individuals had been disregarded along with their untapped “human abilities” which, if utilized, would better our world (Gardner, 2011, p. 53).

Elements of Gardner’s theory have been adopted within Ontario’s educational mandates and assessment policies. There is evidence of his intelligence philosophy in Learning for All, an initiative of the Ontario Ministry of Education, encouraging teachers to identify and nurture the individual intelligences of their students (Ontario Ministry of Education [MEDU], 2013). This form of assessment in Learning for All is known as ‘authentic’ assessment and incorporates student journaling, interviews, portfolios, projects and more. Authentic assessment captures what students have learned in multiple ways, as opposed to the limited knowledge that they divulge in “constructed” testing environments which are less indicative of their abilities (Armstrong, 2009, p. 131). The idea that students require multiple avenues to access concepts and show their learning is emphasized in the province’s latest educational mission statement, Achieving
Excellence, released in 2014. This is indicative of a shift in the province’s educational ideals toward a model, which aims to encourage students’ “higher-order skills like critical thinking, communication, innovation, creativity, collaboration and entrepreneurship” (MEDU, 2014a, p. 3). Inventive teaching, technology, real-world connections, etc. are deemed as the key ingredients to make this possible. Embodied within them is the essence of Gardner’s Multiple Intelligences Theory due to specific acknowledgements of MI Theory in a number of subsidiary ministry documents.

Along with the use of authentic assessment, standardized tests are now used to measure student achievement on a grander scale in Canada. Since the late 1990s, students across Ontario have written an annual standardized test commissioned by the Education Quality and Accountability Office (EQAO), which assesses whether or not their knowledge and skills meet Ontario’s curricular expectations in the areas of language and mathematics. The test, which focuses only on reading, writing and arithmetic, is indicative of a shift toward “evidence-based assessment” – a prerequisite for effective decision-making in Ontario’s education system. (Education Quality and Accountability Office [EQAO], 2013, p. 24). The importance of EQAO is also emphasized in the province’s educational vision and is mentioned several times in Achieving Excellence, which emphasizes that test scores are a crucial element in earning the public’s trust in the education system.

While the co-existence of authentic and standardized assessment is not inherently problematic, it is the misinterpretation of standardized scores by the public that becomes the issue (Hargreaves, 2012; Klinger & Rogers, 2011; Strickland & Strickland, 2000; Traub, 1994). The distribution of results is causing teachers to feel that these scores will adversely affect their jobs and reputations (Meaghan & Casas 1995; Strickland & Strickland, 2000). As such, the
contrived importance given these scores by media, politicians, taxpayers and the like are placing pressures on educators to de-emphasize authentic assessment that is more indicative of student abilities and instead replacing it with test preparation that is less beneficial for all students (Kempf, 2015; Koch, 2013; Meaghan & Casas, 1995; Ornstein, 2003). This suggests a possible discord within Ontario’s current educational vision. An emphasis of attaining public confidence through test scores encourages teachers to devote more classroom time to test preparation and less time to offer students varying opportunities to convey their knowledge and realize their unique aptitudes. Thus, in *Achieving Excellence*, the goal to increase the public’s confidence in the provincial education system may be eclipsing the policy’s other aspirations: to create a system where students can recognize their “hidden gifts” (MEDU, 2014a, p. 20) and “creative talent” (MEDU, 2014a, p. 1).

1.1 Rationale for the Study

The notion of quantifying student achievement and intelligence is not a new one. Evidence of this can be seen with the popularized use of IQ tests in the early 1900s (Gardner, 2005a) and dependence on test results through the 20th century (Gallagher, 2003). Furthermore, the dissemination and over-reliance on test scores is an international trend and not Canada-specific (Apple, 2004; Broom, 2012; Earl, 2002; Gallagher, 2003; Strickland & Strickland, 2000). I am interested in the work of Michael Apple (2004), Catherine Broom (2012) and Lorna Earl (2002), which have specific explanations for this international educational phenomenon. Broom (2012) indicates that score dependence is due to our “neoliberal” societal structure (p.18). Canadian political scientist, Rand Dyck (2009), defines neoliberalism as a political ideology that favours a free market and privatization of services over government intervention. Interestingly, Mike Harris, the former Progressive Conservative provincial premier who oversaw the
implementation of EQAO testing, has since been identified as a “neoliberal” (Dyck, 2009, p. 222).

According to Apple (2004), the impact of the neoliberal ideology on education can be seen as a form of “marketized solutions to educational problems” (p. 15). Standardized testing results are an attempt to demonstrate to taxpayers that their tax money is being well spent and that they are getting a “bang for their buck”. This is made easier by the technology-rich society in which we live where data is ever-present and used by “governments, ministries, districts and other agencies…to communicate with a whole range of stakeholders” such as taxpayers (Earl, 2002, p. 42). This literature regarding standardized testing would indicate that reliance on scores is deeply rooted in our national political ideology and is not simply a passing trend.

There is little possibility of our society abandoning its neoliberal structure, which means that evidence-based education and dissemination of EQAO results will likely prevail. The majority of research around standardized testing originates from the United States and has condemned the current educational landscape and the test makers within it rather than focusing on how teachers are navigating it. The commendable work by Kempf (2015) is some of the only research that specifically looks at EQAO’s testing impacts on Ontario teaching. While Kempf (2015) suggests a future where Ontario standardized testing should be changed in some way I will differentiate myself by arguing that teachers can successfully work within the current system. While the majority of the literature says change the test, I suggest changing the prep. This is made evident by educators who offer practical solutions that fuse test preparation into activities that reach more learners (Hammerman, 2005; Longo, 2010; Strickland & Strickland, 2000). All of these prescriptive measures have also originated solely from the United States. My study will adopt the realistic and prescriptive nature of the aforementioned studies, which favour
working within the pre-existing neoliberal structure rather than simply criticizing it. My research will shed light on the effects of teachers’ abilities to cater to all students’ multiple intelligences while simultaneously navigating a neoliberal society biased in favour of result-oriented data. In doing this, I will examine whether or not there are conflicting elements embedded within Ontario’s educational aspirations in *Achieving Excellence*, which may point to a disconnect between policy and practice. I have differentiated my focus from Kempf (2015) by choosing to look at impacts on instruction through a multiple intelligences lens and by continuous reference to Ontario educational policy. More specifically, I want to explore educators’ ability to uphold the province’s educational vision. I will seek to identify how Ontario’s grade 3 teachers are attempting to balance EQAO test preparation while tailoring lessons to students’ multiple intelligences, with an eye to uncovering constructive strategies these teachers may share with other educators going forward.

1.2 Methodology and Research Questions

Examining the affects of EQAO testing on grade 3 teachers while inquiring about practical strategies requires the use of a methodology that gives equal weight to their individual and shared experiences. To do this effectively, I utilized the collective case study method, which values what is “common” and “particular” about the teachers I interviewed (Stake, 2000, p. 438). Exploring the generalities and specifics of these teachers’ experiences allowed me to effectively convey the “complex, situated and problematic” socio-political variables that surround EQAO testing (Stake, 2000, p. 440).

The overarching question, which governs this study, is as follows: “*Does EQAO testing affect teachers’ abilities to accommodate the multiple intelligences of students within Ontario’s grade 3 classrooms?*” I adopted the case study organizational structure, which dictates that my
research be framed by a “small number” of research sub-questions (Stake, 2000, p. 440). Those questions are as follows:

• What are some of the practical ways in which multiple intelligences can be accommodated in grade 3 classrooms today?

• Do Ontario teachers believe that the EQAO tests affect their ability to accommodate multiple intelligences in their classroom activities?

• How do teachers help prepare students with multiple intelligences for a standardized test?

Data was collected through three interviews conducted with a selection of grade 3 teachers within Ontario. Each interview was captured with a digital voice recorder and stored on a secure device. In selecting the participants, the only commonality I required among them is that they have some experience in preparation and administration of EQAO. In all other variables of the study (i.e. teacher location, level of experience etc.) I aimed for diversity as the “opportunity to learn” through their various experiences is essential (Stake, 2000, p. 447). Analyzing the final data for this case study involved continuous reflection and comparisons of perceived patterns within interview transcripts to allow for accurate interpretation of the trends identified within them (Stake, 2000).

1.3 Positioning Myself Within the Research

In my education and work as a journalist, I developed the firm belief that every story has, at least, two viewpoints. Through interacting with and telling the stories of those involved in controversial situations, I had to analyze, choose and articulate a number of positions on a particular issue. As such, I have seen first-hand the vast differentiation in perspectives that can arise among interviewees regarding an issue that, initially, may seem simple. When I had the opportunity to conduct a series of in-depth interviews with individuals, it became increasingly
apparent that their opinions were largely a construction of their past personal experiences. The longer stories, or “feature stories” as they are known in the media world, would emerge from these interviews and would form a fact-based narrative.

These revelations dictate that I will approach my research through the lens of a “social constructivist” (Schwandt, 2000, p. 197). As a social constructivist, I believe that knowledge is an ongoing and evolving entity shaped by personal experiences (Schwandt, 2000). Norman Denzin (2000) identified a link between journalism and social constructivist thinking by suggesting that every person has their own truth and that writers need to give credence to differing perspectives. I am approaching this research from the same viewpoint and I believe that the perspectives of every teacher I interview, while potentially diverse, are constructed through their prior knowledge and possess equal validity.

My work as a journalist has made me familiar with the challenge of constructing balanced stories discussing controversial topics about which I had preconceived firm opinions. I understand that my own unique experiences with EQAO testing as a student will shape my beliefs and research surrounding this topic and I realize I must be vigilant in recognizing my own negative bias when interviewing and identifying themes. As such, I am performing due diligence by providing the following snapshot – a personal memory of writing the EQAO test 18 years ago and how it affected me.

In 1997, I was one of the grade 3 students who participated in the first administration of the EQAO testing. I can vividly recall the plain cardboard boxes sitting at the front of the classroom containing our workbooks. Despite being in this room for the entirety of the academic year, my surroundings were unrecognizable – desks were scattered around the room leaving me more than an arms length from my nearest table partner and the once colourfully decorated wall
space full of reading tips and math memory joggers was shrouded by plain chart paper. I had hoped that at any moment those vibrant posters, whose outlines I could faintly make out, would burst through their bland coverings, returning the room to its jovial atmosphere. Our teacher stood before us with an uncharacteristic look of concern, which made my belly churn even more than it had been in the days leading up to the test. She repeated the rules that had been so diligently told to us over the last few months. As she finished reading out the final instructions we were each handed a single booklet. Why was I writing this? Does it count for our final mark? I had missed the signal to start and my eyes shot to the minute hand of the classroom clock. I had already wasted five minutes.

As I progressed through the public school system, I excelled in music, language, physical activity, creative projects and the interpersonal relationships that existed within my classes. However, my poor standardized test results negatively outweighed the satisfaction I gained from the success I achieved due to my varied aptitudes. To me, the EQAO test seemed to trump even my best report card marks due to teachers’ initiatives around our preparedness for the test as well as the importance these results held in the public realm. It seemed that, regardless of my other talents, only my abilities in math and language would define my future success. This notion of score importance reasserted itself when on the first day of my grade 10 mathematics class, our teacher began to graph our grade 9 EQAO math results to determine the skill levels in the class. Seeing my low score among my classmates’ outstanding marks was what I believe resulted in my lack of confidence in math, especially that year. The EQAO test results damaged my academic self-esteem and I passed math class that year by only a few percentage points.

Working as a teacher candidate has allowed me to view the EQAO testing from an educator’s perspective rather than that of a student. While volunteering in a Toronto District
School Board (TDSB) grade 3 classroom during the 2013-2014 school year, I noticed the normalization regarding the preparation and procedures of EQAO testing. Students were well aware and informed about the assessment and were already preparing months in advance with the help of resources beyond school walls. There is a distinct difference in the attitude and atmosphere pertaining to EQAO for students now versus the experiences I had as an eight-year-old – EQAO is just one more hurdle for young students today. This mentality of both teachers and students creates a passivity wherein the validity, format or purposes of EQAO is not questioned. I believe that teachers should encourage students to think about the test critically and engage in dialogue with parents, educators and administrators about EQAO to discuss how test preparation could be made accessible and effective to all of the multiple intelligences of students.

1.4 Overview

This study is divided into five chapters. Chapter 1 presents a brief history of standardized testing in Ontario while discussing the purpose of studying this topic. Here I also include the research questions surrounding Ontario teachers’ experiences with EQAO, as well as my personal motivations in studying the affects of standardized testing. Chapter 2 contains a review of the literature surrounding Gardner’s MI Theory, standardized testing and the emphasis on evidence-based results within education today. Chapter 3 provides a detailed description of the qualitative methodology and procedure that will be used to conduct this study. This includes descriptions of the sample participants and the instruments that will be used within my interviews and subsequent data collection. Chapter 4 will identify teacher-participants in the study and describe the data from interviews as it addresses the effects of standardized testing preparation in classrooms. Chapter 5 includes limitations of the study, conclusions,
recommendations for practice and potential future research. References and a list of appendixes follow at the end.
2.0 Introduction

The previous chapter highlighted an inherent contradiction between Ontario’s standardized testing practices and educational mandates – teachers are encouraged to recognize the multiple intelligences of their students while simultaneously preparing them for a standardized test which assesses only linguistic and mathematical abilities. This literature review will present research that explains how socio-political factors contributed to the development of a contemporary neoliberal society where multiple intelligences and standardized testing are at odds with one another. While presenting relevant literature, I will discuss the history of standardized testing and the political motives backing it, which have helped to shape Ontario’s assessment landscape today. A discussion of these topics will shed light on and provide a rationale for my guiding research question: Does EQAO testing affect teachers’ abilities to accommodate the multiple intelligences of students within Ontario’s grade 3 classrooms?

2.1 History and Political Motivations Behind Standardized Testing

While there is a significant amount of literature that explores the many facets of standardized testing, the complete rich historical context in which standardized assessment was developed is often ignored. Before delving into a modern day analysis of standardized testing, it is important to have a holistic understanding of the past and present rationales for the use of standardized assessment. In doing so, a telling pattern emerges which reveals the longstanding history of governments using test results to keep education systems under political control. A number of researchers looked at how standardized assessment originally began in the mid-1800s by a number of key players of American and European descent (Gallagher, 2003; Gardner, 2005a; Garrison, 2009; Phelps, 2007; Scott, 2004). However, these sources differ in their
discussions of who used assessment and how they used it as an instrument of political control throughout various points in history.

2.1.1 A Tool for Political Control

In his historical account, Richard Phelps (2007) claims that Americans Horace Mann and Samuel Gridley Howe implemented testing for two reasons – to maintain “system wide quality control” as well as “content and performance standards” (p. 14). Phelps claims that underlying these motives was the goal of establishing a “meritocracy” where individuals in society were elevated above others based on their intellectual abilities (p. 15). Mark Garrison (2009) echoes these same sentiments and expands on Phelps’ work by addressing how Mann’s utilization of a “common standard for comparison” took power from schoolmasters to assess their own institutions and brought it into the hands of a more centralized power – the government (p. 68).

Some literature also shows that using tests to wield political power was not simply an American trend, but one that reached overseas as well. Educational psychologist, Carole Gallagher (2003), and cognitive psychologist, Howard Gardner (2005a), point to the invention of French psychologist Alfred Binet’s Intelligence Quotient (IQ) test. The results of the IQ test was used as a means of centralized control to determine who was accepted into schools while filtering out those deemed unworthy of educational benefits. Perhaps the most grueling use of tests for political control is emphasized by Tony Scott (2004) who describes an Americanized version of Binet’s IQ test used by Dr. Henry Goddard in filtering immigrants applying for U.S. entry where individuals were deported if they were deemed mentally inadequate or flawed.

2.1.2 Grounded in History

Gallagher (2003) and Scott (2004) contribute to my research by presenting valuable perspectives derived from their embracing of this history of standardized testing. After a
comprehensive look into reform attempts in the U.S., Gallagher (2003) claims that the history of testing provides a justification for society’s dependence on assessment. This helps one better understand the current state of the testing environment. Gallagher emphasizes that despite transformation of the school system over a century, “educators face a future in which standardized testing will surely assert a dominant role” (p. 95). Scott (2004) echoes this when he recognizes that the permanence of standardized tests is likely due to its solid historical foundations. He suggests that new questions about testing that will help us define ourselves as “active participants” within the system will be more productive than criticizing it from the outside (Scott, 2004, p. 36).

Acknowledging the history of standardized assessment, Gallagher (2003) and Scott (2004) conduct a realistic evaluation of the contemporary testing scene. Where their work falls short is in their explanations as to the specifics of why testing will continue to be used in today’s education system. For me, the answer lies in a political trend beginning in the 1970s, which was only alluded to in the work of Gallagher (2003) and Scott (2004). It is noteworthy that standardized assessment has been used as a measure of teacher competence since Mann first utilized it in the 1800s, yet assessment results only started to alter teacher instruction in the 1970s (Gallagher, 2003; Moon, 2003; Nagy, 2000). I found that contemporary literature provides evidence of a political shift in the 1970s, which was the genesis of global competition in education. In Ontario, this competition let to the demand for educational accountability. This need for accountability was the catalyst, which drove the creation of standardized assessment in the province.
2.2 The Current Political Climate: What is Neoliberalism?

Since the initial use of standardized testing in the nineteenth century, the global political economy has changed a great deal, but testing as a means of political control has remained. Many researchers attribute a major shift in the global economy to the rise of neoliberalism in the 1970s, a political ideology, which is still strong today (Albo, 2002; Broom, 2012; Sattler, 2012). A number of educational theorists and political scientists agree that neoliberalism can be defined as a political ideology that favours market forces and privatization in place of government spending on public services (Apple, 2004; Broom, 2012; Dyke, 2009; Webb, Briscoe & Mussman, 2009). The result of an intertwined global political economy is competition among countries to be the best in many areas such as education (Adhikary, 2014; Broom, 2012; Webb, Briscoe & Mussman, 2009). Ontario New Democratic Party MPP, Peggy Sattler (2012), states that neoliberalism has caused a “redefinition of education from a public good to an instrument to enhance national and international competitiveness and meet the demands of a global economy” (p. 4). In other words, the role of education as a public service was changed to that of a business model where a numerical rank could be assigned to all educational systems.

2.2.1 Effects of Neoliberalism in Ontario

It could be argued that Sattler’s (2012) findings are biased in favour of her political views. However, research conducted by political scientists and educational researchers, Ranu Basu (2004) and George Bedard & Stephen Lawton (2000), reiterate this association of competition with neoliberalism and highlight the effects it has had on Ontario’s education system.

During the mid 1990’s there was an increased government and public demand for educational accountability in Ontario. Basu (2004) and Bedard & Lawton (2000) attribute this
demand to neoliberal Mike Harris – former Progressive Conservative Ontario Premier who was in power from 1995-2002. In their historical account of policy development in Ontario, Bedard and Lawion (2000) accredit the neoliberal movement to the “emphasis on control” exerted by Harris’ while in office. Basu (2004) explains that the Harris government created “centrally-controlled advisory agencies operating as neoliberal instruments of control” (p. 625). The Education Quality and Accountability Office, which now administers Ontario’s EQAO standardized tests, was one of these institutions. Sattler (2012) reiterates that the EQAO testing was borne out of a greater “centralization” of education and a heavier reliance on “evidence-based education…through standardized testing” (p. 20).

The pattern of educational centralization by governments parallels patterns seen in historical literature. The only difference is the reason for control. Test maker, Horace Mann, wanted to control those who would succeed in society while Mike Harris wanted to get the public’s support for educational spending cuts. Basu (2004) notes that standardized tests scores were used to “ensure accountability in order to remain competitive in a knowledge based market economy” (p. 621). The notion of global competition among the world’s education systems continues today and is mentioned several times in Achieving Excellence, a policy outlining the mission statement for Ontario’s educational system (MEDU, 2014a). In the document, references to world rankings are included which laud Ontario education for its superior quality and emphasizes how “time and again, international studies rank Ontario students among the best in the world” (MEDU, 2014a, p. 2).

To appease a public who were now demanding accountability, standardized test scores were widely disseminated. Canadian education professors Don Klinger and Todd Rogers (2011) offer an explanation for the reliance on test scores we see today:
Given the accountability frameworks that exist in education, provincial/state, national and even international, assessment programs are being used to compare educational jurisdictions and determine the quality of education within jurisdictions. Taxpayers, politicians, business leaders, and parents want to know if they are getting their “money’s worth” and that the youth of today will be prepared for the world of tomorrow and such assessments provide the “answers” to these questions. (p. 140)

2.2.2 Society’s Reliance on Data

The work of former EQAO director/education professor, Lorna Earl (2002), further explains why EQAO test scores are essential to the public. Because we are now a society “awash with data,” the public has come to expect that educational institutions can demonstrate their competence by presenting quantitative test scores (Earl, 2002, p. 42). The Fraser Institute now uses these test scores to rank Ontario schools from best to worst. Earl (2002) adds that data ranking has become so commonplace in our culture and that we constantly depend on numbers in other areas of our lives. Examples range from the “Toronto Stock Exchange to polling to nightclubs swiping licenses for identification and for marketing” (Earl, 2002, p. 42).

An analysis of the literature surrounding the rise of neoliberalism and our reliance on data indicate that both are firmly engrained in our society. Sattler (2012) emphasized that “…educational governance has been towards greater centralization, standardization of curriculum, results-based education, and increased accountability for student performance through standardized testing – regardless of the political ideologies of the governing party” (p. 20). This captures the permanence of neoliberalism; even though Mike Harris is no longer in power, neoliberal policies along with government centralization of education, dominate today. This realization has helped me to narrow the focus of my study. As standardized testing is firmly
embedded in our political ideology, simply analyzing and condemning the use of testing alone would be impractical because of the permanence of the current system. Instead, it makes more sense for me to explore how Ontario’s grade 3 teachers are working within the neoliberal framework and standardized testing environment currently in place. I am interested in exploring whether the province’s goal to “enhance public confidence” in Achieving Excellence is impacting teachers’ abilities to boost “excellence”, “well-being” and “equity” in Ontario’s classrooms – ideals that the policy deems equally valuable to raising test scores (MEDU, 2014a, p. 2). The problem with relying on standardized tests results above all other forms of assessment is that they are not indicative of all student abilities or “multiple intelligences” as cognitive psychologist Howard Gardner (2005a) would call them (p. 50).

2.3 The Theory of Multiple Intelligence: A Critique of Standardized Testing

During the 1980s when neoliberalism was beginning to establish itself, Howard Gardner (2005a) presented his Theory of Multiple Intelligences (MI). Gardner’s theory argues that every individual possesses all eight intelligences: “linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal and naturalist”, but the strength these intelligences in each person varies (Armstrong, 2009, p. 7). Gardner (2005a) developed this theory, in part, to condemn the use of IQ and standardized tests (i.e. “paper-and-pencil tests”) (p. 55), which he claims do not adequately capture all students’ abilities (p. 51). Armstrong (2009) claims that standardized tests, which contain multiple choice and fill-in-the-blank questions, do not provide an adequate assessment of student potential. To Gardner (2005a) multiple choice and fill-in-the-blank questions, allow only those who are linguistically and logically-mathematically inclined to score well (p. 51). This leaves those whose main talents lie in the other intelligences to be marginalized by society in school and later in life (p. 50). In other words, standardized tests
are not “intelligence fair” (Gardner, 2011, p. 21) as society has placed “linguistic and logical-mathematical intelligences…on a pedestal” (Gardner, 2011, p. 49). The grade three standardized tests in Ontario include multiple choice and fill-in-the-blank questions that Gardner condemns here (EQAO, 2014).

Along with MI theory, Gardner (2005b) presented the idea of “authentic assessments” – real world “projects, exhibitions, portfolios” etc. that cater to all multiple intelligences and better capture all student abilities (p. 143). Here, Gardner emphasizes why it is important to recognize all students’ multiple intelligences by using authentic forms of assessment in school:

In my view, the purpose of school should be to develop intelligences and to help people reach vocational and avocational goals that are appropriate to their particular spectrum of intelligences. People who are helped to do so, I believe, feel more engaged and competent and therefore more inclined to serve society in a constructive way. (p. 50)

2.3.1 MI Theory and Students with Exceptionalities

Armstrong (2009) and Stefanakis (2011) emphasize the importance of fostering an educational environment where students with exceptionalities are also able to see their societal contributions. Armstrong (2009), Kornhaber (2001) and Stefanakis (2011) all point to the Theory of Multiple Intelligences as a way to help these students feel valued. In an examination of special education south of the boarder, Armstrong (2009) explains how “educators have had a disturbing tendency…to work from a deficit paradigm – focusing on what student’s can’t do – in an attempt to help students succeed in school” (p. 149). He explains how viewing all students through a multiple intelligences lens changes that through using a “growth paradigm” rather than the former “deficit paradigm” described above (Armstrong, 2009, p. 151). By focusing on the dominant intelligences of a student and enhancing those rather than focusing on what they cannot
do, a teacher can “perceive children with special needs as whole persons possessing strengths in many intelligence areas” (Armstrong, 2009, p. 149). These benefits of MI Theory are reiterated by Stefanakis (2011) in Differentiated Assessment where Gardner’s multiple intelligences are adapted to create practical assessment strategies for all students including those with exceptionalities. Stefanakis (2011) advocates for change in the American education system and encourages teachers to confront their students with the question “How is this student smart?” rather than “Is this student smart?” (p. 32). Stefanakis (2011) asserts that a system, which utilizes multiple intelligences theory into both instruction and assessment practices helps to reach every learner “including those who may be difficult to teach” (p. 32). Recognition of student MIs is crucial in Ontario as 83 per cent of elementary students with exceptionalities spend the majority of their day in regular classrooms (MEDU, 2014b).

The importance of viewing all students through this positive lens has been adopted in Ontario’s educational policy, Achieving Excellence in its emphasis on enhancing student equity in classrooms. The benefits of Gardner’s multiple intelligence theory discussed by Armstrong (2009) and Stefanakis (2011) are specifically mentioned in Ontario’s subsidiary education policies such as Learning for All and Education for All.

2.3.2 MI Fostering Student Motivation and Creativity

In A Theory of Human Motivation Abraham Maslow (1943) argued that a human’s basic needs must be met before they are able to achieve “self-fulfillment” (p. 382). In essence, the recognition of students’ multiple intelligences in the classroom pushes them past the “esteem” level of Maslow’s hierarchy to the “self-actualization” level where they can participate in critical thinking and fully utilize their imaginations and creative potential in school and in society (Maslow, p. 383). In essence, helping a student feel like they are safe and are celebrated for
contributions they can make with their own talents in the classroom/school community are needs that need to be met before they can participate in imaginative thinking and creative problem solving, skills whose importance are highly valued in society today. Additional literature on creativity by Csikszentmihalyi & Getzels (1971) indicate that individuals have the best chance of being “successful” in creating an innovative product when they work in an environment where “sociocultural conditions that reward originality” are present (p. 52). Therefore, students require recognition of their MIs plus a stimulating environment with opportunities to practice innovative solutions to real-world problems in order to develop creative thinking skills.

This creativity and imagination is essential in twenty-first century education. In an article, which emphasizes the importance of implementing MI theory in the classroom, Ninah Beliavsky (2006) reiterates Gardner’s sentiments about the benefits of recognizing various intelligences in classrooms. Beliavsky (2006) claims that teachers who take a “multifaceted approach to understanding” in order to recognize all multiple intelligences in the classroom help to motivate students and enhance their creativity (p. 9). When students have more motivation, they can be more creative and imaginative. Saebø, McCammon, & O'Farrell (2007) claim that due to industrial outsourcing in countries like Canada students will require solid creative skills to prepare them for success in the future as there is a shift toward a more service-based industry.

**2.3.3 MI & Technology**

Along with the evolution of a knowledge-based economy dominated by digital media comes the identification and valuation of “twenty-first century skills” such as “creativity” as well as “innovation,” “entrepreneurship” and “originality” (Gardner & Davis, 2013, p. 122). In their recent publication, *The App Generation*, Howard Gardner and Katie Davis (2013) discuss how technology affects and changes “young people’s thought processes, personalities, imaginations
What is noteworthy here is Gardner and Davis’ (2013) claim that technology has the ability to recognize and enhance students’ multiple intelligences and creative abilities:

The digital media enable a far greater spectrum of intellectual tools. Not only does this opening up of opinions allow many more forms of understanding. It also exposes young people to different forms and formulations of knowledge. It gives additional forms of expression to all, and most especially to those whose strengths may not lie in the traditional arenas of language and logic – for example, to future architects, musicians, designers, craftspeople, and maybe even creators of innovative new software. (p. 181)

The inclusion of technology in Ontario’s classrooms and greater investment in digital tools is indicative of the province’s recognition of its value technology holds for student learning. In Achieving Excellence, the ministry aims to “invest in innovative teaching practices and instructional methods enabled by technology to more precisely engage and address the learning needs of all students” (MEDU, 2014a, p. 6). The idea that it is essential to meet the needs and various learning styles of students before they can be creative signifies the importance that the ministry places on technology and its ability to help students with multiple intelligences demonstrate their full potential.

2.3.4 MI Theory in Policy and Practice

There is evidence that MI theory is gaining recognition in educational systems across the globe (Armstrong, 2009). In his book Multiple Intelligences in the Classroom, author Thomas Armstrong (2009) compares standardized and authentic assessment and offers real world authentic assessment strategies that have been successful within U.S. classrooms. Practical strategies, such as those Armstrong suggests, are now being recognized in education policies and
classrooms around the world. Countries such as “Australia, Bangladesh…China, Denmark, Ireland and the Netherlands” have seen MI theory injected into their “white papers, recommendations by ministries, and even legislation” (Gardner, 2006, p. 248).

Gardner’s theory is also gaining ground in Canada as evidenced by the inclusion of MI theory within Ontario’s educational ministry documents and school board initiatives.¹ Ontario teachers are being encouraged to implement Gardner’s theory into their classrooms by recognizing their students’ multiple intelligences in order to create a “learning profile” for each student (MEDU, 2013, p. 18). Learning each student’s unique aptitudes helps teachers to “differentiate instruction” – creating activities the benefit all students (p. 18). Despite the fact that the words “multiple intelligences” are not repeated verbatim in the province’s educational mission outlined in Achieving Excellence, an overarching theme gives homage to Gardner’s theory. Achieving Excellence acknowledges that students are individuals who are “born with gifts” while more specific references to MI Theory are made in supplementary provincial policy (MEDU, 2014a, p. 8).

2.4 The De-Professionalization of Teachers

Along with recognizing student intelligences in classrooms, Ontario’s educational policies highlight the importance of standardized test results in aiding student achievement and public confidence. While the use of standardized tests is not inherently problematic, some literature suggests that the attention and contrived importance of the test results is impacting teachers’ ability to use more authentic forms of assessment in classrooms that reach more students. The widely publicized tests results have caused the de-professionalization of teachers,

¹ Some of these documents include the MOE’s documents Learning for All, Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6, The Differentiated Instruction Scrapbook, Finding Common Ground: Character Development in Ontario School’s, K-12 and school board initiatives such as the Toronto District School Board’s Multiple Intelligence and Leadership Program.
as they feel obligated to take more classroom time to teach the concepts and subjects included on the tests while neglecting other subjects.

Strickland and Strickland (2000) offer a well-researched discussion highlighting the problems of the over-reliance of standardized test results within the United States. In an analysis of teacher anecdotes, Strickland and Strickland (2000) point out the dangers of reliance on test results on behalf of the media, politicians and other authorities as a means to assess the quality of education. The authors argue that the test results themselves are not reflective of students’ true abilities or teachers’ ‘class goals’ (Strickland & Strickland, 2000, p. 108). The anecdotes describe the pressures on teachers to take valuable time out of their regular schedule to help students “become familiar with the tricks and traps” (i.e. teaching how to write multiple choice, short answer questions, etc.) of standardized tests, ultimately taking away time to create differentiated instruction for students (Strickland & Strickland, 2000, p. 121).

Klein, Zevenbergen and Brown (2006) echo these findings in a case study where they explored the influence of standardized test results on the instruction practices of Western New York educators. Of the teachers they questioned and surveyed, 100 per cent admitted to prepping students for standardized testing in some fashion (Klein, Zevenbergen & Brown, 2006, p. 151). Klein, Zevenbergen and Brown (2006) also noted that a mere nine per cent of teachers claimed that they tailored work to “individual learning styles” of the students in their classrooms (p. 153). Even with the limited participants in this research group, these findings prove that teachers are feeling pressured to teach to the test in the United States.

2.4.1 U.S. Versus Canada: A Fair Comparison?

In the eyes of the EQAO, studies from the U.S. like that of Strickland & Strickland (2000) and Klein, Zevenbergen and Brown (2006) are irrelevant to Ontario. EQAO officials have
attempted to differentiate Ontario from their American counterparts by arguing that much higher stakes accompany teachers administering tests south of the border. They substantiate this by emphasizing how U.S. test results “directly affect teacher evaluation and compensation” while in Ontario, the test “does not influence teacher evaluation or compensation” (EQAO, n.d.). Furthermore, the EQAO states that test results are only used to help determine the allocation of resources to schools (EQAO, 2015). While this comparison is valid, the EQAO fails to account for the unofficial high-stakes environment that Ontario teachers are working within as a consequence of widely distributed and publicized test scores. A 2015 study conducted by Ontario’s Institute for Studies in Education, examined the public’s attitude toward educational testing in the province. In this study, Hart and Kempf (2015) found that, in a survey of 753 Ontarians, 65 percent of the public and 74 percent of parents called for “about the same” or “somewhat more” testing in schools (p. 19). This is accompanied by literature, which suggests that some of the pressures on teachers to focus on test material, as presented by Strickland and Strickland (2000) and Klein, Zevenbergen and Brown (2006), are similarly felt in Canada. Among all of the Canadian-centric studies, Catherine Broom (2012) and Arlo Kempf (2015) present the only literature which link neoliberal policies to teachers’ inability to cater to all students as a consequence of test score reliance. In her work based in British Columbia, Broom (2012) states the effects of standardized tests on teacher practice when she claims “teachers become technicians whose teaching is geared to increasing test score” (p. 18). Research in Ontario demonstrates that these impacts of standardized testing on teacher instruction are reflected here in Ontario. Impacts of the EQAO testing are also negatively affecting school-wide initiatives, which have been established to improve inter and intrapersonal intelligences of students. Pollock and
Winton (2012) analyzed the implementation of a character education initiative in one Ontario school where the principal prioritized the initiative over literacy instruction. The authors attributed a significant improvement in student behavior to this new program. However, when the school’s test scores decreased, board officials intervened and insisted that teachers put more emphasis on academic goals rather than the ones embodied by the new initiative. The article points to the fact that school boards and teachers have “competing notions of success” (Pollock & Winton, 2012, p. 17). While the school board sees school success as high test results, the teachers claim that more accurate measures of student achievement reside in authentic assessment used in the classroom year-round (Pollock & Winton, 2012). This idea of success was explored further by Ross and Gray (2008) who compared students’ report card grades to their respective EQAO test scores. They noted that in both grades three and six, student report card marks were higher than their EQAO test scores. This discrepancy in grades may be attributed to the fact that more authentic assessment, which allows students to utilize their various intelligences, are more indicative of their abilities than definitive results from the EQAO assessments.

In a quantitative study Dwyer et al. (2003) analyze the obstacles that Ontario teachers believe are getting in the way of physical education instruction. One common theme emerged from the data collected through a series of focus groups involving 45 Ontario teachers. The study found that teachers felt “accountable to the government and parents” to help students do well on the EQAO tests (Dwyer et al., 2003, p. 450). To help students achieve high test scores, these teachers said they put more focus on literacy and math (which the EQAO assesses) in place of physical education. What is also significant is that teachers felt stressed by “EQAO test results appearing in the media, parents wanting to enroll their children into schools that perform well in
EQAO testing, and schools with higher enrolment receiving more provincial funding” (Dwyer et al., 2003, p. 450). This study demonstrates that, contrary to the EQAO, there are similarities between the testing scenes in the U.S. and Canada. Additionally, the publication of scores and the reliance on quantifiable data as discussed by Earl (2002) is demonstrated here. Even though there is no specific reference to Gardner’s MI theory here, it can be assumed that the students with linguistic and logical-mathematical aptitudes are benefiting more than those students who learn better through bodily/kinesthetic methods.

The findings of Dwyer et al. (2003) are cited and repeated by Strampel et al. (2014) who conducted a quantitative study exploring the hurdles encountered by Ontario teachers in incorporating Daily Physical Activity (DPA) during their school day. Survey results of 137 Ontario elementary teachers indicated found that a combined total of 80 per cent of the teachers in the study either “agreed” or “strongly agreed” that “EQAO puts pressure to focus on math and language at the expense of DPA” (p. 18). In this circumstance, MI theory would dictate that, yet again, students of higher linguistic and logical-mathematical intelligences are being recognized at the expense of those students better able to demonstrate their abilities in the six remaining multiple intelligences.

2.5 Disconnect Between Policy and Practice in Ontario?

American literature on assessment points to a disconnect between policy that encourages teachers to nurture students’ multiple intelligences, but a reality where educators feel forced to devote classroom time to prepare students for standardized tests. Stefanakis (2011) highlights this contradiction between the government’s educational aspirations and the reality for teachers in today’s American classrooms:
The current constellation of education policies is sending public schools confusing messages about whether to focus on adequate yearly progress as evaluated by test scores or to personalize teaching for individual students, many of whom are English language learners or have disabilities. (p. 21)

The work of Dwyer et al. (2003) and Strampel et al. (2014) provide valuable insights into the effects of EQAO. However, the large number of teachers they include in their studies result in their missing the subtle nuances of each teacher’s unique experience with the test. In his a recent study, Kempf (2015) examined the impacts of standardized testing on the teaching practices of educators in Ontario and locations within the United States. Kempf (2015) concluded that the focus of Ontario teachers is learning toward EQAO material. The recent release of Kempf’s (2015) comprehensive and current study indicates that this is a pressing issue in the province. As such, I will attempt to add to the admirable contributions that Kempf (2015) has made to the literature by narrowing my foci and examining the teachers I interview through a multiple intelligences lens.

Gathering detailed information about the experiences of Ontario teachers will allow for a better understanding of how teachers are meeting the aspirations outlined in the Achieving Excellence policy while simultaneously navigating the current neoliberal testing system. I will take a “social constructivist” approach, which will value what is the same and different about each experience of the teachers I interview (Schwandt, 2000, p. 197). It will also allow me to discuss how or if each teacher recognizes every one of Gardner’s eight intelligences in their classrooms – something that no Ontario studies have succeeded in doing. Using this method will help me to identify any practical strategies these educators have to help other teachers
accommodate students multiple intelligences while simultaneously preparing them for the grade 3 EQAO test.

While the Canadian and U.S. studies I have analyzed have implied that certain needs of students are overlooked due to test preparation, they have not consistently or specifically outlined what exactly teachers are omitting during instruction. I will use Gardner’s eight specific multiple intelligences to reference teacher strategies as this will provide a more precise way of identifying which student needs are being recognized most and which MIs are being placed on the back burner. Moreover, the use of Gardner’s multiple intelligence terms makes sense as Gardner’s MI theory is already recognized and understood by Ontario teachers as evidenced by its inclusion in official MOE documents and board wide mandates. In the outline of my methods in the next chapter, I explain in detail how I use Gardner’s MI terminology to categorize Ontario’s teachers’ instructional habits uniformly.

2.6 Conclusion

Literature analyzing the history of standardized assessment from the nineteenth century until today has uncovered how historical and political influence has led to conflict within Ontario’s assessment mandates. Michael Apple (2004) explains that conflict in education has been happening for many years when he claims “Today is no different than the past. A “new” set of compromises, a new alliance and new power bloc has been formed that has increasing influence in education and all things social” (p. 15). In other words, the neoliberal system we have now is firmly entrenched in our society and will likely dominate for years to come. Analyzing teachers’ experiences using a qualitative methodology with a social constructivist theoretical framework will provide a realistic view of teachers’ instructional habits in Ontario’s educational system while prescribing pragmatic solutions.
Chapter 3: Research Methodology

3.0 Introduction

As I have posited in the previous chapters, my positionality as well as the political nature of the topic of standardized testing has helped me to establish my methodological approaches and rationales for my research decisions. Within this chapter, I will be transparent about how my time as a journalist has resulted in my developing a “social constructivist” lens and the qualitative case study approach through which I conducted this research (Creswell, 2013, p. 36). A qualitative case study approach guided the research procedures, data collection and interpretation techniques within this study. I will also discuss the rationales for their use. Within this chapter, I will identify and describe the research participants, how they were located and the tools that were used to collect research evidence. The evidence referred to here was collected via one-on-one interviews, which delineated teacher experiences with the EQAO test. Furthermore, I will pinpoint the strengths and limitations of the methodological approaches I will use as well as the ethical concerns present within this study.

3.1 Research Approach and Procedures

As a journalist, I relied on statistics and numbers, but I had to humanize numerical values to give meaning to a story to help the reader relate to the individuals involved. What I learned through this process is that numbers alone cannot provide a comprehensive explanation of a social phenomenon. Through writing and interviewing, I discovered that numbers do not tell the whole story and Ontario’s standardized test results are no exception to that rule. On a superficial level, EQAO testing is entirely ranking and numbers. However, casual conversations I have had with teachers prove that the perspectives behind these digits are often varied and complicated and determined by these educators’ past interactions with the test. To adequately explore how
teachers are navigating the current neoliberal educational landscape, I welcomed the complexity of viewpoints and strategies that educators have when accommodating students’ multiple intelligences while preparing for the EQAO testing.

Creswell (2013) and Schwandt (2007) confirm that this notion of embracing the complexities of the world rather than streamlining them is the crux of a social constructivist’s research ideals. Denzin (2000) points to a link between the social constructivist predisposition and the ideology found within “intimate journalism” (p. 899). In this study, I have utilized some characteristics of intimate journalism that Denzin (2000) has identified in order to celebrate the complexity of teachers’ views. I have included elements such as “multiple points of view” of six Ontario teachers and their “real-life dialogue” collected through semi-structured interviews (p. 899). To ensure that I have multiple viewpoints, I used what Stake (2000) refers to as the “collective case study” method (p. 437). I utilized a qualitative methodology – a system which involves a comprehensive evaluation of existing literature and which corresponds to the social constructivist ideals due to its focus on “a situation from the perspective of the participants within it” rather than through surveys or numbers (Torrance, 2010, p.1).

According to Merriam & Tisdell (2015) the strength of qualitative research is its focus on “how people make sense of their lives and their experiences” (p. 77). Walker (1974) adds to this by emphasizing how qualitative research (particularly case study research) resembles “the real world” which is something that surveys and quantitative results are unable to offer (p. 262). EQAO test scores can be quantified, manipulated and interpreted in a number of different ways. What cannot be quantified however are teachers’ emotions, opinions and concerns with regard to how the test is affecting their ability to accommodate students’ multiple intelligences. In my exploration of the literature surrounding standardized testing in Ontario, I discovered that the
wide dissemination of EQAO test scores on behalf of the government, the media and private enterprise is de-professionalizing the province’s teachers by limiting the decisions they can make in their own classrooms (Broom, 2012; Dwyer et al., 2003; Strampel et al., 2014). Using the qualitative case study method shifted the focus back onto the concerns of these teachers (Walker, 1974, p. 257). Furthermore, a qualitative case study approach allowed the teachers in this study to “share their stories” and be “empowered” (Creswell, 2013, p. 48). The qualitative case study method is not just the most effective way to collect this information – in my opinion, it is the only way to uncover the reality of standardized testing for Ontario teachers.

3.2 Instruments of Data Collection

The goal of my research is to compare and contrast the specific strategies and experiences that Ontario teachers have when preparing their students for standardized tests. As such, the evidence collected within this qualitative study is anecdotal in nature and the principal tool through which data collection took place was through the semi-structured interview protocol. As dictated by the semi-structured interview protocol as outlined by Merriam & Tisdell (2015) and Bernard (2006), a list of “structured interview questions” was formulated to ensure direction for the interviews that I conducted (p. 245). The interviews were captured via an audio digital recorder during the interview process to ensure accuracy (Stake, 1995). Note taking is a less effective technique as it can be difficult to ask questions and write simultaneously. In my past experience as a reporter, I have found that writing during the interview process can distract both parties, therefore stifling the spontaneous and natural flow of dialogue. As suggested by Yin (2014), the quality of questions and the interview procedures that follow will be examined through a “pilot testing” initiative (p. 372). Here I asked teacher candidate colleagues as well as
OCT certified teachers to validate my questions and interview techniques through a re-creation of my planned interview processes.

The interviews began with a selection of background questions (e.g. “how long have you been teaching?”). Janesick (2000) states that asking these questions aids in developing “trust and rapport” (p. 384). It allows both parties to achieve maximum comfort and familiarity with each other. By getting to know the teachers being interviewed, I was able to identify more subtle “nuances and meanings” within their anecdotes which allowed me to draw out new information and investigate new lines of inquiry (Janewick, 2000, p. 384). The remainder of the interview questions paralleled my main research queries. These questions were divided into four sections to allow for smooth transitions and breaks between sections for the benefit of both parties in the interview.

The semi-structured interview was also ideal for the timeline that I worked within. Bernard (2006) explains how the semi-structured interview question format is ideal when interview subjects are under time constraints. As these interviews took place during the academic year, the teachers I interviewed were only able to meet for one 40-60 minute period. As Bernard (2006) emphasizes, the research participants were “accustomed to efficient use of their time” (p. 212). The semi-structured interview allowed me to govern the direction of the interview, but left room for further discussion of topics that were not foreseen (Bernard, 2006).

In educational research, Walker (1974) states that there are “areas of knowledge and expertise overlap” between the researcher and the interviewee (p. 275). This statement is true for my study. While I have a foundational knowledge about the theoretical aspects of standardized testing effects in Ontario, I looked to the teachers I interviewed to enrich the study with their real-world experiences and strategies. Walker (1974) emphasizes that a less structured interview
process in an educational case study is advantageous due to this type of knowledge sharing. The questions constructed in this semi-structured interview were open-ended which allowed me (the researcher) to improvise based on new information that teachers offered in their answers (Wengraf, 2001). Fontana and Frey (2000) echo these same sentiments and suggest that conducting a less structured interview such as this offers the opportunity to garner a “greater breadth of data than the other types” of interviews (p. 652). A larger pool of data available during the data analysis process allowed for the formulation of accurate conclusions about these teachers’ experiences.

3.3 Participants

Within this section, I will outline the criteria that I used in the selection of the research participants within my collective case study. In collective case study research, Stake (2000) stresses the importance of choosing participants that possess “redundancy and variety” (p. 437). Unlike quantitative studies, qualitative case study research emphasizes that traits, which are both shared and different among the cases, should be given equal weight. This allows for “balance and variety” and results in more interesting and unpredicted observations about the cases selected (Stake, 2000, p. 447). I have devised my criteria in line with these principals. Criteria 1 and 2 was a required shared trait among the cases while criteria 3 and 4 ensured variety in my participants to guarantee a spectrum of standpoints on the effects of EQAO testing and the recognition of students’ multiple intelligences. Under the subheadings below, I will define the characteristics of the ideal research participants as well as the methods I used to locate these participants. I will introduce those teachers who participated in this study and any relevant biographical information, which will help to contextualize their contributions to this research.
3.3.1 Sampling Criteria

1) *Ontario teachers with experience administering EQAO test at the grade 3 level:*

In Ontario, there are several grades required to participate in various EQAO tests that are taken through elementary and secondary school. While a study that investigates the impacts of standardized testing at these various levels would be useful, this study was conducted in a time frame that would not allow for a thorough examination of such a broad span of grades. There are three rationales for why I chose to focus on the impacts at the grade 3 level. Firstly, I have had experience both writing the EQAO test as a grade 3 student and helping to prepare grade 3 students for the EQAO period as a teacher candidate. Additionally, the grade 3 EQAO testing is typically a student’s first experience with formalized testing where a teacher’s role shifts from that of a friendly advocate to a test proctor. These interactions with older students will be affected by prior test experience. Interviews with grade 3 teachers provided more authentic anecdotes as their students were being initiated into standardized testing for likely the first time in their lives. These students’ testing experiences were untainted by past encounters. As such, their teachers saw first-hand how students of varying intelligences reacted to and solved problems within the tests’ linguistic and logical-mathematical framework.

2) *Teachers should be aware of Howard Gardner’s Theory of Multiple Intelligences as referenced in educational ministry documents:*

A knowledge base of the terminology of Howard Gardner’s eight multiple intelligences was essential. For the purpose of data analysis and coding (which I will describe in section 3.4) I used Howard Gardner’s eight multiple intelligences as a framework to categorize classroom activities. For example, an art project a teacher described was categorized under what Gardner
(2011) refers to as “spatial” intelligence (p. 209). I will explain this categorization further in the Data Analysis portion of this chapter.

3) Grade 3 teachers should have varied years of experience:

The grade 3 EQAO testing has been administered for almost two decades. I am interested in learning about how attitudes regarding testing preparation and the concept regarding accommodation of multiple intelligences have changed over time.

4) Teachers will vary based on geographical locations and schools:

According to EQAO (2008) the standardized test scores of each school has residual affects on “school and board improvement planning, classroom instruction, and the allocation of resources to support student needs” (p. 1). Furthermore, the Fraser Institute releases a ranking of Ontario schools based solely on the use of EQAO test results (Earl, 2002). Interviewing teachers from a variety of schools from different geographic areas and from schools with varying ranks allowed for a comparison of teachers’ experiences as they encountered diverse student population groups.

3.3.2 Sampling Procedures/Recruitment

According to Miles (2014), the sampling within qualitative studies is inherently “strategic” whereas quantitative rely mainly on “random” sampling where there are no criteria required of participants (p. 31). Denzin and Lincoln (2000) state that the objective qualitative researchers have is to identify individuals who are affected by a specific topic. This leads to sampling, which is “purposive” (p. 370). In order to find participants who fulfill the conditions I have stated in section 3.3.1, I used purposive sampling practice typical of the qualitative research. Specifically, I used what Merriam and Tisdell (2015) identify as “snowball” sampling (p. 226). Here I asked “key participants” (p. 226) in the study to recommend other grade 3
teachers who have administered EQAO and met the other established criteria. To locate these main participants, I contacted teachers and educational administrators in my personal network and asked them to disseminate my research goals and criteria to educators who they thought possessed the criteria outlined above. To ensure that participation on behalf of the teachers in my study was voluntary, I supplied my criteria to teachers and school administrators in place of asking for names of teachers directly. This was done to alleviate any participation that that might be the result in feelings of pressure or obligation.

The small sample size as well as the short timeframe within which I completed these interviews dictated the use of convenience sampling. According to Merriam and Tisdell (2015), “convenience sampling” is a method used to locate participants due to “time, money, location, availability of sites or respondents” etc. (p. 226). As a teacher candidate, I am immersed in a community of other teacher candidates as well as OCT certified teachers. I used the networks that I have established within practicum and volunteer placements in schools to aid with the selection of grade 3 teachers for this study.

### 3.3.3 Participant Bios

Three teachers within Ontario were chosen to characterize their experiences administering the EQAO test to their students. Each educator currently teaches or has taught grade 3 in an Ontario public school system.

Amanda is a retired teacher with over twenty years of experience. She specializes in art education and has taught a wide array of grades at both the primary and junior levels. She has administered the grade 3 EQAO test during its inaugural administration in 1997 and once since then. The majority of her career was spent in a public school located in a smaller Ontario city. Amanda has developed arts-focused programming for both children and adults and is interested
in the notion of their development and expression of creativity. Witnessing the affects of standardized testing in different countries has contributed to her view of the EQAO assessment in Ontario.

Heather currently teaches grade 3 within one of the province’s culturally diverse urban centres. She has 11 years of teaching experience, most of which she has spent at her current school. In addition to teaching grade 3, Heather also has experience in kindergarten and grade 2 classrooms. She has seen the wide array of students’ multiple intelligences that transcend the grades and has noted the benefits of catering instruction to all of them. Heather has prepared two cohorts of grade 3 students for the EQAO test.

Jodi has taught every grade from kindergarten to grade 8, but has spent the majority of her career working alongside grade 3 students in a small Ontario city. Consequently, she has administered the EQAO test over a dozen times and has extensive experience preparing her students for the test. Administering the test for so many years has made Jodi aware of testing impacts on all students, particularly those with specialized learning needs.

3.4 Data Analysis

The aim within the qualitative data analysis process was to draw meaning from the information collected and to answer the main and sub-questions formulated at the outset of this study (Stake, 1995; Yin, 2014; Merriam & Tisdell, 2015). My main research questions and sub-questions are as follows:

- Main research question: Does EQAO testing affect teachers’ abilities to accommodate the multiple intelligences of students within Ontario’s grade 3 classrooms?
  - What are some of the practical ways in which multiple intelligences can be accommodated in grade 3 classrooms today?
Do Ontario teachers believe that the EQAO tests affect their ability to accommodate multiple intelligences in their classroom activities?

How do teachers help prepare students with multiple intelligences for a standardized test?

Within this study, the data analyzed consisted of three transcripts that were generated via verbatim dialogue of the grade 3 teachers gathered during the interview process. The data was analyzed by way of what Stake (1995) identifies as “direct interpretation” (p. 78). This process involved seeking patterns within the transcripts, using the pre-determined questions above as guidelines for creating codes and themes common among all transcripts.

Throughout the previous chapters, I outlined my past interactions with EQAO testing and how these encounters have contributed to my anti-testing bias. According to Stake (2006), a cornerstone of qualitative case study research demands that the investigator “identify affiliations and ideological commitments that might influence our interpretations” (p. 87). I will employ a step-by-step coding strategy that allows for an equitable focus on self-reflection and data analysis to keep my bias in check.

The lack of uniformity among prescribed case study coding strategies suggests the flexibility inherent in the field (Stake, 2000; Yin, 2014). Therefore, I relied on the case study methods of Stake (2000) and Yin (2014), but combined their suggestions with other qualitative approaches such as Auerbach’s (2003) step-by-step data analysis system. Moving between methods and employing a more hands-on, non-linear coding approach allowed me to internalize the evidence and make a more conscious effort to assess and reassess where my biases stand amongst the data.
Co-creating data is a key practice in qualitative case study research and social constructivist thinking (Creswell, 2013; Walker, 1974). I facilitated a cooperative data analysis with my participants by sending them their transcript to assure that my interpretation of their responses was correct. Before reading the transcript, I referred back to a journal entry I created after our interview. Rereading this journal entry containing initial reactions that arose from the interview, allowed me to revisit preconceived biases before commencing the coding process. Chenail (2011) refers to this process as “interpersonal-process recall” or “journaling” (p. 259).

Auerbach’s (2003) first step advises the researcher to “explicitly state your research concerns” (p. 62). I did this by writing my main and sub-questions on brightly coloured recipe cards to refer to while reading the transcript. I began the data analysis process by reading through the transcript without making any notations. I then re-read my journal entry to reevaluate my initial thoughts and feelings about the interview in order to recheck my biases that could taint the evidence found while coding (Chenail, 2011). After making note of my observations, I re-read my interview questions to assure that any interpretations I was making were in line with my study. Stake (2000) emphasizes that these thoughtful practices involving “reflecting” and “revising meanings of what is going on” are crucial in case study investigations (p. 445).

Auerbach’s (2003) second step involves “highlighting relevant text” (p. 62). To avoid making inferences in the initial coding process, I began highlighting what Saldana (2009) refers to as “In Vivo Codes” which are verbatim quotes I deemed relevant (p. 3). After revisiting my interview questions and journal entry once more, I read the transcript again to highlight “Descriptive Codes” (p. 3) and made inferences and notes within the margins, making some initial connections between codes.
The third and fourth steps prescribed by Auerbach (2003) are “grouping together related passages of relevant text” and “grouping repeated ideas into coherent categories” (p. 62). To achieve this, I conducted a fourth examination of the transcript and transferred In Vivo Codes onto green recipe cards and Descriptive Codes onto blue recipe cards. I began to sort like codes into piles in order to adequately “conceptualize” the data and generate “categories” among them (Yin, 2014, p. 433). This organization tactic wherein the researcher engages in “play with data” is what Yin (2014) claims will aid in fully understanding the data (p. 432). Being able to physically interact with tangible data allowed me to easily compare what would otherwise be stagnant and linear codes on a page. In doing so, I was able to devise and re-work categories by constantly comparing the codes to my research questions and innate biases. This resulted in a comprehensive categorization table. This methodology allowed for an interpretation that kept me accountable in regard to my biases while simultaneously satisfying my social constructivist ideals wherein I honour the individual experiences of my participants (Schwandt, 2000). The data analysis process yielded three common themes. Firstly, all teachers identified the benefits of instruction that recognized a wide array of student intelligences. Secondly, the three participants referred to standardized assessment preparation and MI inclusive instruction as difficult to combine. Lastly, all three educators recognized that, while it requires additional effort, it is possible to merge standardized testing preparation with MI inclusive instruction.

Equally important here is the identification of null data – noticeable omissions of words or phrases that relate to standardized testing and the recognition of multiple intelligences. Noting any patterns of excluded information was essential within this study as the topic of standardized testing is inherently political and open discussion of certain elements of EQAO could potentially be discouraged. As suggested by Ryan and Bernard (2003), I first read transcripts for what was
stated and will follow with multiple re-readings of the text for what was *not* stated in order to identify null data. I pursued this step cautiously to ensure that null data I found was not identified to appease my pre-existing biases regarding standardized testing. The data analysis process generated null data; throughout the data analysis process, it became evident that certain MIs were mentioned much more than others. The absence of certain MIs within all participant interviews indicated a potential hierarchy of MI recognition within their classrooms.

Here I will also be providing my rationale for my focus on Howard Gardner’s Theory of Multiple Intelligence as this theory plays a crucial role in my coding process. I am using MI theory at the expense of other possible foci (such as differentiated instruction, creativity in teaching etc.). It could be argued that the aforementioned subjects could be used in place of MI Theory. However, I believe that their definitions are too nebulous and subjective. Additionally, I believe that the idea of accommodating all student needs is best encapsulated by categorizing classroom activities under the eight multiple intelligences. For example, any DPA (Designated Physical Activity) could be categorized under bodily/kinesthetic intelligence.

### 3.5 Ethical Review Procedures

Ethical considerations within qualitative research are key in the protection of individuals involved in the research process. This sentiment is echoed by Stake (2000) who claims that ethical standards of qualitative case study researchers need to be “strict” as we act as “guests in the private spaces of the world” (p. 447). Here I outline the ethical review procedures, which guided this study and protected the human subjects interviewed. I have used ethical guidelines outlined by the Social Sciences and Humanities Research Council of Canada as well as literature focusing on the ethical procedures within qualitative research. The following ethical criteria will guide my study:
1) **Confidentiality**

In order to protect the identities of the participants within this study, each teacher interviewed was assigned a pseudonym. Furthermore, names of schools or characteristics of classrooms, students, etc. which could identify a participant were changed. As Walker (1974) emphasizes, the effects of the research to the participant can only be assessed when the study is complete. I granted every participant “blanket confidentiality” in the form of a pseudonym so that each teacher did not feel that they have to filter what they say thus allowing me better and quicker access to their personal stories (Walker, 1974, p. 274).

2) **Consent**

According to Christians (2000), all participants involved in a study “have the right to be informed about the nature and consequences of experiments in which they are involved” (p. 138). To ensure this, a consent letter (viewable in Appendix A) containing details regarding this study, its ethical guidelines/procedures and participation expectations was provided to each participant. Each participant was required to sign this letter stating that they consented to being interviewed and recorded during the interview process.

3) **Risks of participation and the right to withdraw:**

Within the semi-structured interview, participants are able to freely voice their opinions, stories and concerns due to the “open-ended” characteristic of this process (Merriam & Tisdell, 2015, p. 557). Merriam and Tisdell (2015) add that a question might be asked which could affect a participant emotionally or cause them to contribute a statement, which they might not have otherwise. The interview could also affect a participant emotionally long after the interview and study is complete. If any participant felt discomfort about the study for any reason, they had the
right to withdraw at any stage of this study. As outlined by the Social Sciences and Humanities Research Council of Canada (2005), these rights were communicated to each participant.

4) Member checks

After each interview, every participant was sent a copy of their final transcript so that they had the opportunity to change, revise or retract any comments made before the data analysis process began. Walker (1974) emphasizes that the educational case study researcher has a duty to be in constant communication with those involved in the study. This includes a timely transfer of research data to participants (i.e. transcripts) for viewing and approval.

5) Assuring that all statements are/information is accurate

Guaranteeing the correctness of all information is essential in qualitative research and is the “cardinal principle in social science codes” (Christians, 2000, p. 140). To ensure accuracy of my participants’ anecdotes, I utilized a digital audio recorder, which captured the words of each participant exactly. Using an audio recording device is preferable to a written account as the possibility of omitting valuable pieces of information while writing are greater.

6) Data storage

The complete set of information used for this study (including digital audio recordings, transcripts etc.) was secured within password-protected laptop computer and will be terminated after five years time.

3.6 Methodological Limitations and Strengths

The data gathering process within this study consisted of an extensive literature review on the history of and political rationales for standardized testing as well as face-to-face interviews with teachers and a rigorous data analysis of those interviews. Within the qualitative
research methodology – more specifically, educational case studies, which guided this study, lay inherent benefits and shortcomings.

**3.6.1 Limitations**

For the purposes of this study, only three teachers were interviewed which limited the scope of the research. As dictated by the Master of Teaching Research Project Ethical Review Protocol, the inclusion of students, parents, surveys or classroom observation is prohibited. It is undeniable that the EQAO testing affects teachers as well as the aforementioned parties and any first hand accounts from these parties would be valuable to the findings here. Brown and Strega (2005) state that “generalizability” of a study directly correlates with its “validity” (p. 45). I realize that limiting the number and variation of the participants in this study inhibits any comparisons that the results here could have to standardized testing in a wider context. However, as I have addressed in the data analysis section of this chapter, the results in this study are intended only to enhance the opinions of those who read this study and not define their views on EQAO testing in Ontario. This is a direct objective of case study analysis as stressed by Stake (2000). Therefore I have satisfied the objective that I established at the outset of this research project.

**3.6.2 Strengths**

While the validity of this study may not be determined through generalization, the accuracy of data can be confirmed through the process of “triangulation” (Creswell, 2013; Stake, 2000; Walker, 1974). Creswell (2013) defines triangulation is a technique used to verify information by comparing several forms of data and finding any repetition of codes among them. Within this study, I have compared data found within an extensive literature review with in-
depth interviews in order to leave what Merriam and Tisdell (2015) define as an “audit trail” to ensure the legitimacy of my findings (p. 514).

Perhaps the greatest benefit of working within the qualitative case study framework is the ability to capture the real experiences of teachers and the complexities they face as a result of the EQAO testing. Interviews I conducted with educators generated in-depth data that surveys and numerical data typical of quantitative analysis cannot replicate. Miles (2014) emphasizes how qualitative data has the ability to shed light on “latent, underlying or nonobvious issues” (p. 11). After conducting an extensive literature review I discovered that the use of standardized testing is the result of a multitude of complex historical and political factors from the late 19th century until today. Contemporary Canadian literature proves that these complexities are also embedded within the EQAO testing structure today, but are not obvious to the general public. The interviews that I conducted allowed teachers the opportunity to freely voice their thoughts and opinions on how the unseen complexities of EQAO testing affected them personally. Miles (2014) argues that these kinds of thorough interviews also allow for the derivation of “meaning” one may “place on the events, processes and structures of their lives” and how these meanings are contextualized within a larger setting (p. 11). For these teachers, that could mean a reassessment of their teaching practices that might not otherwise have occurred.

3.7 Conclusion

Within this chapter, I have outlined the methodological procedures that will guide this qualitative study and my rationales for selecting this approach. In order to satisfy my social constructivist ideals and adequately investigate the practical strategies that teachers have in accommodating multiple intelligences during EQAO preparation, a qualitative case study methodology was utilized. A semi-structured interview process with in-person interviews was
carried out with three grade 3 teachers who have had experience administering and preparing students for EQAO examinations. Teachers were located using personal networks as well as purposive and convenience sampling procedures in order to locate teachers fitting the appropriate criteria. Ethical considerations for the protection of the participants in my study were outlined as well as the strengths and limitations inherent in my study. In the following chapter, I will present and analyze the data collected and will highlight the similarities and differences among educators’ shared experiences in their preparing grade 3 students for EQAO assessments.
Chapter 4: Research Findings

4.0 Introduction

Just as Howard Gardner rejects the ability of standardized test scores to capture the whole individual, I reject the notion that quantitative results would adequately capture the experiences of this study’s participants. Consequently, the views of these educators will be presented in a “collective case study” format (Stake, 2000, p. 438). A collective case study provided a better platform through which to convey the plethora of complexities behind standardized test scores. Using this case study method helped to shed light on my main question: Does EQAO testing impact teachers’ abilities to cater to the multiple intelligences of students in Ontario’s grade 3 classrooms?

The findings and opinions presented in this chapter provide a snapshot of the viewpoints of three Ontario teachers gathered through interviews conducted between October and December of 2015 and my interpretations of these interviews. The discoveries made in this chapter should be considered a small part of the existing body of literature on standardized testing and the Theory of Multiple Intelligences. Each of these teachers speaks from a unique standpoint, which contributes to their distinct and shared opinions regarding the administration of the grade 3 EQAO test. The identification of inconsistencies within Ontario’s policy, Achieving Excellence, is to be contained within this study and is not to be extrapolated to the broader picture of standardized testing in Ontario or Canada.

My first participant, Amanda, a retired teacher entrenched in the arts community, administered the EQAO test to students in a small city within Ontario when the test first began in 1997. Her arts background influenced her view of MI Theory and the EQAO test and this was conveyed through a broader discussion about testing and the creativity of children. Heather
works with a diverse group of students in an urban setting in the province and is currently in her eleventh year of teaching and second year of administering the EQAO test. Her experiences led her to discuss her practices preparing a culturally diverse student body for the test. Finally, Jodi, a teacher with eighteen years experience works within a class of students with diverse learning needs located in a small city. This year will be Jodi’s fifteenth year administering the EQAO test to her grade 3 students. Her instruction directed the focus of our interview together on the experiences of students with exceptionalities with regard to MI theory and the grade 3 EQAO test.

A data analysis of the interviews with these educators revealed themes and subthemes through which I will investigate their experiences concerning the benefits of MI recognition and the impacts of MIs in the preparation and administration of the EQAO assessment. Following a description of each of these major themes will be a brief conclusion, which will describe the significance of the findings and any relationships they have to Ontario’s educational aspirations discussed in *Achieving Excellence* (MEDU, 2014a). The discussion will address how these educators are fulfilling the mandates set forth in the province’s mission statement for education. The order of the themes and subthemes are outlined below in Table 4A:

<table>
<thead>
<tr>
<th>Themes:</th>
<th>Subthemes:</th>
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<tbody>
<tr>
<td><strong>4.1 Benefits of Recognizing Students’ Multiple Intelligences</strong></td>
<td><strong>4.1.1 Recognizing Students’ Multiple Intelligences Enhances Participation and Engagement</strong>&lt;br&gt;<strong>4.1.2 MI Recognition is Essential in Helping Students with Exceptionalities Access Concepts</strong>&lt;br&gt;<strong>4.1.3 Lessons Incorporating MIs Enhance Student Creativity and Collaboration</strong></td>
</tr>
<tr>
<td><strong>4.2 Testing Preparation Versus Authentic Instruction Embracing Multiple Intelligences</strong></td>
<td><strong>4.2.1 Competing Notions of “Success” Between Teachers, Politicians, Parents and the Public</strong>&lt;br&gt;<strong>4.2.2 EQAO Testing Inhibits Students’ MI Recognition and Subsequently, Their Potential</strong></td>
</tr>
<tr>
<td><strong>4.3 Teacher Recommendations</strong></td>
<td><strong>4.3.1 How to Cater to Students’ Multiple Intelligences in a Neoliberal Test-Driven Milieu</strong></td>
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</tbody>
</table>
4.1 Benefits of Recognizing Students’ Multiple Intelligences

4.1.1 Recognizing Students’ Multiple Intelligences Enhances Participation and Engagement

The correlation between MI theory and student engagement was a recurring theme among these educators’ classroom experiences. Where there was mention of an MI teaching tactic, talk of student excitement would always follow. Each one of these teachers discussed distinct differences between students who had a mere grasp of a concept and students experiencing a “eureka moment” during a lesson. For those students who experienced the moment of insight, each teacher indicated the use of one or a number of strategies, which spoke to the students’ intelligences; to Gardner (2005a), this is a positive byproduct of multiple intelligence teaching. All of the participants agreed that catering to students’ multiple intelligences was a teaching tactic that engaged all learners. Jodi explained that catering to students’ MIs is not an option – it is an essential practice in today’s classrooms:

If you’re only teaching in one modality, in one way, you’re going to catch…roughly sixty to sixty five percent of the kids in the class. Without changing it up and teaching three different strategies, you’re going to lose anywhere from…ten to forty per cent of your students.

To draw in that other 40 per cent whom Jodi says would otherwise be “tuned out”, she utilizes a multitude of pedagogical approaches, which incorporate “manipulatives,” “singing,” “interactive computer technology” and “visual cues” which help not only to improve their engagement, but also their “the long term retention.” Jodi’s strategies are consistent with Gardner’s (2005a) MI theory, which advocates for an “individual-centred school…rich in assessment of individual abilities” (p. 50).
To Heather, “the biggest benefit” of MI recognition is enhanced student engagement. She said, “it gives them a chance to shine.” She added that, “…a child [who] struggles with writing, but who’s creative in other ways…it gives them an opportunity to get excited about learning and showing [their knowledge] in a different way.” Gardner (2005a) promoted his theory for this exact reason; he saw how accessing students’ MIs helped pupils “feel more engaged and competent” as they were able to demonstrate what they know in their own specific way (p. 50).

The prior anecdotes point to intelligences lying within the realm of the traditional eight MIs encompassing “musical,” “bodily-kinesthetic,” “visual” etc. (Armstrong, 2009; Gardner, 2005a; Stefanakis, 2011). As the majority of MI literature focuses on the conventional MIs, it was surprising to learn how Amanda utilized the lesser-known “existential” intelligence to transform her classroom in order to immerse her students into the Japanese culture (Armstrong, 2009, p. 183). During her teaching career, the World Wide Web did not exist; this led her to seek out “different religious…and ethnic groups” as a resource for creative lessons speaking to her students’ MIs. Like Jodi and Heather, Amanda saw the enhanced engagement, but also noted how pushing the boundaries of teaching and broadening the horizons of students’ MIs allowed them to expand their thinking:

The main thing is to have the children actively involved so they are happy about learning. [C]hildren appreciate doing something that is a little bit different other than just sitting all the time. In…the cultural studies I did…[students] would learn how to use chopsticks and eat noodles and get dressed up.

Elements of the above narratives are engrained in Ontario’s latest educational mission outlined in Achieving Excellence (MEDU, 2014a). The policy claims that “innovation and creativity in teaching and learning is already taking place in Ontario’s classrooms” and this is
certainly evident in the past and present careers of these three educators (MEDU, 2014a, p. 3). The recognition of students as individuals and the encouragement and utilization of learners’ MI s as a means to “spark curiosity” speaks to a congruency between educational policy and the practices of these teachers (MEDU, 2014a, p. 4).

4.1.2 MI Recognition is Essential in Helping Students with Exceptionalities Access Concepts

“I truly believe that there are more children struggling in school than there were before,” remarked Jodi who further emphasized the need for individualized education. In her eighteen years of teaching, Jodi has noticed an increase of students with special needs ranging form “anxiety” to “ADHD.” She says that within her classroom roughly “30 percent [of students] require additional strategies and support.” Jodi’s suspicions are confirmed within ministry statistics, which highlight an increase in the number of students with exceptionalities within the province’s classrooms. The province’s education ministry claims that in Ontario, “83 per cent of all students [with exceptionalities]…are placed in regular classrooms for more than half of the instructional day” (MEDU, 2014c, p. 2). To accommodate these students, Armstrong (2009), Kornhaber (2001), Stanford (2003) and Stefanakis (2011) all point to MI theory as a lens through which to view these students. Each of the teachers I interviewed recognized the value in doing so – seeing these students for what they can do rather than what they can’t (Armstrong, 2009; Stefanakis, 2011). Amanda noted that by accommodating the MIs of one student who was “gifted with learning disabilities,” she was able to “provide an outlet” for him:

[H]e was just so different in his thinking…he would come up with really strange things, like he built himself a time machine and he would get into it and…go to another planet
and he built an amazing little bonsai garden…those were the children I was really interested in because otherwise the system would just kill them.

The “system” that she refers to here is the former “deficit” lens through which students with exceptionalities used to be viewed in the education system (Armstrong, 2009, p. 151). Since then, provincial and school board policies2 including Achieving Excellence either specify or allude to MI recognition as a means to enhance “equity” for all students, especially those with special needs, by helping them “see themselves reflected in their learning” (MEDU, 2014a, p. 8).

For Heather, improving equity for these learners means providing them with the appropriate settings that best complement their MIs to fully demonstrate their knowledge. “If I speak to him in a group session, he’s great!” she explained when discussing one of her students on an Individual Education Plan (IEP). “He knows so many things, but struggles so much with getting anything down on paper.”

The advent of Interactive Computer Technologies (ICTs) has expanded the avenues for students who have an aversion to traditional paper and pencil tasks. Recent research by Gardner and Davis (2013) discuss how technology recognizes a “greater spectrum” of MIs and provides “additional forms of expression to all” (p. 181). Jodi saw a sudden burst in the confidence of a struggling student writer; she attributed this to the introduction of ICTs in schools:

I had a child who had a learning disability, had really, really good ideas, but her spelling was so poor that even when she wrote something, she did not know what she had written and she was getting incredibly frustrated. [W]hen she started to use an iPad to get her

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2 Learning for All, Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6, The Differentiated Instruction Scrapbook Finding Common Ground: Character Development in Ontario School’s, K-12 and school board initiatives such as the Toronto District School Board’s Multiple Intelligence and Leadership Program.
ideas down, she could read it back and we knew the message that she was trying to get to us [and] her writing skills just blossomed!

By presenting students with exceptionalities with platforms that align with their MIs, these teachers have witnessed shrinking “performance gaps between [these] students” and their classmates, a main objective of *Achieving Excellence* (MEDU, 2014a, p. 9). These teachers’ anecdotes point to a shifting perspective of students with exceptionalities in their classrooms where the embracing of diversities and MIs allows for heightened creativity and collaboration among all students.

**4.1.3 Lessons Incorporating MIs Enhance Student Creativity and Collaboration**

At the heart of Ontario’s *Achieving Excellence* policy is the term “twenty-first century learning,” (MEDU, 2014a, p. 4) which emphasizes the importance of “higher order thinking skills like critical thinking, communication, innovation, creativity, collaboration and entrepreneurship” in contemporary classrooms (MEDU, 2014a, p. 3). Research participants collectively recognized and discussed the value of elements within twenty-first century education. Accompanied by each teacher’s anecdote is a link to Gardner’s (1983) Multiple Intelligences Theory.

When asked what resources, Jodi found most helpful to cater to students’ MIs, she alluded to the importance of “interpersonal intelligence” when referencing peer-to-peer support. She used partnering and grouping as a way to encourage collaborative problem solving, an approach, which Armstrong (2009) claims appeals to students’ “interpersonal” intelligences (p. 166). Jodi said, “…when you watch a child teach another child, it improves their work together as peers [and] improves their abilities.” In “bouncing ideas off other people,” students utilize their “interpersonal intelligences” and build on their classmate’s ideas (Armstrong, 2009, p. 166).
In addition to problem-solving skills, Amanda has seen first-hand how student collaboration can also fuel creativity. While Amanda no longer teaches in the classroom, she runs art-focused workshops for children where kids utilize their interpersonal intelligences in a collaborative setting. She notes that children “learn from each other” when “building miniature worlds” together. She finds it interesting that “one student will have an idea and then the idea will spread quickly down the line and it may adapt and change.” Jodi and Amanda’s experiences reaffirm Beliavsky’s (2006) study, which explains that the prerequisite for student creativity is an environment where their multiple intelligences are valued and nurtured. By appealing to her class’ musical intelligences, Heather enabled two students to hone their creative skills, which brought nineteenth century Canada to life for them:

I had two kids who were very musical and not so interested in social studies [who] never participated unless forced who really did shine and probably had one of the best presentations in the class…they learnt the material because they were excited to use it in the form of a song.

To Amanda, offering opportunities like these are essential in today’s education. In her travels conducting art-centred workshops worldwide, she has identified why fostering student talent and creativity at a young age is important:

If you take five to eight year olds and give them…some creative thinking project, they are not inhibited by what they’ve done before or peer pressure…often you see more off the wall thinking, really creative thinking in young children than you do with any other group.

Amanda added that this creativity needs to be maintained in classrooms and Csikszentmihalyi (1971) and Saebø, McCammon and O'Farrell (2007) agree. They posited that
creative thinking is an important part of modern economies like Canada. The outsourcing of manufacturing positions has stripped our economy of repetitive assembly roles and replaced them with jobs, which require “collective brain capacity” and original thought (Saebø, McCammon & O'Farrell, 2007, p. 209). Amanda clarified why twenty-first century skills like the ones mentioned above are needed to “get ahead” explaining that “…there’s always information out there now via the internet so you can get the information you need, but what you really need to develop are creative skills to know what to do with that information.”

This is precisely why creative initiatives in Ontario’s Achieving Excellence policy have been established (MEDU, 2014a). However, what the government has deemed equally important are high scores on the grade 3 EQAO assessments. While the government sees a symbiotic relationship between test scores and MI recognition, the participants within this study thought otherwise.

4.2 Testing Preparation Versus Authentic Instruction Embracing Multiple Intelligences

4.2.1 Competing Notions of “Success” Between Teachers, Politicians, Parents and the Public

“I think it’s ironic that we’re supposed to be inquiry based learning and yet, the test itself is not inquiry based…it goes against everything we’re trying to achieve.” Jodi’s statement here alludes to Kempf’s (2015) discussion of “human capital thinking” (p. 44). It is the notion “that good tests should replace bad tests, wide-ranging tests should replace tests that are too narrow and tests that fail to measure creativity should be replaced by the ones that do” (p. 44). In essence, politicians and taxpayers believe that tests like the one administered by EQAO do have the ability to capture a complete picture of student capabilities. My participants all disagreed
with this notion and stated how only a narrow range of student talents and intelligences were adequately captured by the EQAO assessment.

Jodi stated that, “for about sixty five to seventy per cent of students [in the class], it accurately shows their skills with math, with reading, comprehension and writing.” However, she added that the test does not show what the other 30 per cent of students are capable of as the format is not one where they can demonstrate their capabilities that she sees “day after day.” Amanda felt that “students that excel with reading and writing and higher level thinking” are the students who she saw succeed on the test while Heather similarly believed that it benefited the students who demonstrate good reasoning skills and who “fit inside the box.”

These participants’ thoughts reflect the views of Howard Gardner (2005a) who would identify those students who “fit inside the box” as those who excel in linguistic and mathematical tasks. To Gardner (2005a), the students who succeed on standardized tests “are the youngsters who are good in everything” who “are going to do just fine” (p. 52). It is the students who “don’t shine in the standardized tests who, therefore, tend to be written off as not having gifts of any kind” (Gardner, 2005a, p. 57). According to Achieving Excellence, the province is aiming for a “75 per cent success rate on elementary EQAO assessments, with a particular focus on mathematics” (MEDU, 2014a, p. 7). This would indicate that 25 per cent of students are left behind. Furthermore, an emphasis on mathematics is indicative of how these tests and the educational system as a whole is not “intelligence fair” and my participants all agreed (Gardner, 2011, p. 21).

4.2.2 EQAO Testing Inhibits Students’ MI Recognition and Subsequently, Their Potential
The idea that there are some students excluded from test success is contradictory to Ontario’s other mandates in *Achieving Excellence*, which says that the classroom should be a place where students should be *able* to discover their “hidden gifts” (MEDU, 2014a, p. 20). My three participants alluded to the learners Gardner (2005a) talks about when discussing the students whose needs and MIs fail to be recognized or accommodated by the test. Jodi comprised a laundry list of students who may be the students who make up the 25 per cent who likely will not meet provincial standard:

The kids who miss out the most are your kids who have exceptionalities, kids who require that extra practice to get a skill. I’m talking about your ‘Leo the Late Bloomers’…kids who…love the arts…kids who need more breaks in a day who don’t do well with such a fast pace. It doesn’t show the kid that’s musical or artistic or has these other wonderful abilities. It’s not an indication of the great people we’re creating, the citizens that we’re building.

Amanda agreed with Jodi; while teaching grade 3, she saw how the testing atmosphere made it difficult for certain students to discover or foster their multiple intelligences. Amanda added how a lack of MI recognition can be detrimental to a student’s self-esteem. Amanda said that if students “…didn’t have the ability with reading and writing, they were stunned…they were gifted maybe with different abilities, like spatial abilities, but they were lost [on the test]…they were way behind.” She alluded to activities such as “visual presentations,” “art activities” and the like that Armstrong (2009) agrees best benefit those with spatial aptitudes (p. 58). Amanda added that the EQAO writing process is devoid of creative opportunities like these, which would otherwise allow these students to better show what they are capable of.
Echoing Jodi and further confirming Kempf’s (2015) study, Heather stated that students with IEPs and those who are still learning English are often encouraged to endure the test as any student who refrains from writing it will count as an automatic zero. She says that, “for the benefit of the scores [kids] were better off getting level 1s.” In one situation, she had to “fight tooth and nail” to have one of her students, an English Language Learner (ELL), exempted from the test. Heather agreed with Armstrong (2009), Gardner (2005a) and Stefanakis (2011) who claim that more authentic modes of assessment better correlate with these students’ intelligences and better represent their abilities. However, every participant highlighted a stark difference between the authentic activities they used which embraced the multiple intelligences of all learners versus the measures taken to prepare students for the EQAO test, which did not.

4.2.3 Impact of EQAO Preparation on Teachers’ Ability to Plan Lessons Catering to More Multiple Intelligences of Students

“Specifically preparing them for EQAO…I don’t know if I really do accommodate the multiple intelligences to be honest,” said Heather when discussing EQAO prep. She added that it is difficult to prepare them in many ways because students can have all of the ideas in the world, but the test is “separated between content and convention” – conventions that she says are difficult to teach through anything but traditional paper and pencil media:

I try to appeal to the multiple intelligences by having them do different types of things to prepare…work in a group or…read it out loud or…do a little presentation to show it. On the test…there are not a million ways to show it…there’s only one…[and] it’s either right or it’s wrong.

The duty to adequately prepare students for the test was felt by all three educators. Student stress was a greater worry for these teachers than any exterior pressures, such as career
ramifications that are known to accompany high-stakes testing in the United States (Meaghan & Casas; Strickland & Strickland, 2000). For Ontario’s third grade students, the EQAO assessment is likely their first experience writing a standardized test and, as addressed above, all students, including those with exceptionalities, are encouraged to participate.

To ease students’ minds, Jodi said she “downplay[s] [EQAO] as much as possible because [the] kids have so much anxiety about it.” Amanda reminisced about the stress she felt during EQAO’s inaugural administration in the late 1990s. She thought that “having absolutely no background information” and “no way of preparing students…was cruel to some children because they were…worried about it.” Uncertainty about test format is no longer an issue as the EQAO now posts old tests online. Heather said that practicing previous test questions with students “calms their nerves,” builds confidence and allows them to become “desensitized” to the process.

The use of old tests is also referenced in Kempf’s (2015) findings in his discussion regarding EQAO test preparation habits of Toronto teachers. While Kempf’s (2015) research alludes to a discrepancy between policy and practice, my participants point to a more specific contrast within Ontario’s overarching educational mandate in Achieving Excellence. In discussing her EQAO test prep regimen, Jodi illustrates this policy contradiction. Her need to maintain student “well-being” (MEDU, 2014a, p. 14) through easing student stress by preparing them for the test conflicts with her ability to provide activities that promote “learning across multiple subject areas” (MEDU, 2014a, p. 7). As such, a greater spectrum of students’ multiple intelligences are pushed aside:

If I didn’t have to worry about EQAO, I would do more music…more drama…I would go outside and use our outdoor classroom more. There are so many things that I would
rather be doing with my students that I don’t do because of EQAO…field trips…more
guest speakers…I would have way more of that if I didn’t feel the pressure to get the kids ready for the test.

This reiterates and expands upon the results garnered by Dwyer et al. (2003), Pollock and Winton (2012) and Strampel et al. (2014). These studies pointed to a decreased emphasis on character education (interpersonal intelligences) and Daily Physical Activity (bodily/kinesthetic intelligence) as a result of EQAO test preparation. Jodi pointed to the de-emphasis of other MIs – less music, visual/spatial (drama), naturalistic (using the outdoor classroom) and existential (field trips and guest speakers), which may mean fewer chances for more students to hone their aptitudes.

While Heather says she tries “[her] best not to do so many pencil and paper” activities, she admits that avoiding it is difficult. She adds that her students complete “a lot of math journals” where students “get used to explaining themselves…[and] showing more.” She says that the more they write, “the better chance [they] have of doing well.” Here, testing preparation points to a heavy linguistic component:

When we’re preparing [students], we say…just write it, write it, write more, write more, write more because it’s almost like [test markers] look for certain things. [I]f they’re just sort of blabbing and talking in circles, eventually they hit the points. They get marks for that kind of thing.

Amanda talked about teaching her students formulaic planning skills for story writing and problem solving. She expressed how the heavy linguistic and numeracy focus involved in test prep worries her. She believes that “if you’re teaching toward the test, there could be a loss of creativity.” This is affirmed by Beliavsky (2006) who believes that ignoring a student’s MI’s will
decrease their ability to use their “creativity and imagination” to the fullest (p. 1). Interestingly, “creativity” (MEDU, 2014a, p. 7) and “imagination” (MEDU, 2014a, p. 20) are the same skills that Achieving Excellence deems essential for students to develop.

“I’m not teaching to the test,” said Jodi. “I’m still doing what I know is best for my students…but there are realities because of the test that diminish my ability to help all of my students reach their fullest potential.” This aligns with the beliefs of MI theorist, Gardner (2005a) who condemns standardized testing because it fails recognize all human abilities which results in exactly what Jodi refers to – “untapped human potential” (p. 53).

While test scores and authentic learning harmoniously exist within the theories of Achieving Excellence, the realities of the three teacher participants in this study indicate that achieving this utopia in a neoliberal education system favouring test scores is not so simple.

4.2.4 A Hierarchy of Intelligences in the Classroom Beyond Those Favoured by EQAO Testing

While these teachers discussed the difficulties in fostering students’ MIs due to standardized testing, comments they made point to a potential pecking order of intelligence as seen by Ontario’s educational system as a whole. Before conducting this research, I had visualized the concept of intelligence (as it relates to standardized testing) as a binary (see figure 1). In essence, I thought of mathematical/logical and verbal/linguistic as the haves of intelligences, which received the most attention in the classroom while the other seven as a collective were, by default, the have-nots of the intelligence world. This belief was shaped by the MI literature of authors such as Armstrong (2009), Beliaovsky (2006) and Gardner (2005a) who often presented multiple intelligences in this adversarial way. After conducting my interviews, I formed a much different idea about how teachers and the educational system as a whole may
perceive the different intelligences of students. Upon being asked which intelligences were neglected by EQAO, my participants most often pointed to the intelligences in the second tier of figure 2. Beyond EQAO preparation, I noticed a distinct lack or absence of mention of some of the intelligences. The most noticeable was the absence of “intrapersonal intelligence,” or one’s ability to enact “self-discipline” and “self-understanding” and contemplate one’s own “intentions” and “motivations” (Armstrong, 2009, p. 7). Amanda was the only participant who referred to this intelligence. She expressed concern over the lack of opportunities offered to students who are more withdrawn and explained how “we have to acknowledge the very creative introverts in our world.”

Further comments made by the participants pointed to a potential hierarchy of MIs in Ontario’s educational system. When asked to discuss which intelligences were most apparent in her classroom, Heather discussed how some MIs (such as mathematical/logical, musical and artistic) were talents that were easily identifiable while others were more “peripheral” and “not easy to spot.” Similarly, Jodi expressed that she does not see a lot of children expressing “artistic,” “drama” or “musical aptitudes” adding that she did not think “the program lends itself to that…really shining and coming through.” Amanda alluded to a possible cause of an MI hierarchy while talking about contributing to the provincial arts curriculum in prior years. She was discouraged about the fact that “so much of the curriculum was based on writing about art” rather than doing art and how “so much is based on being able to read and write.” This could be attributed to the neoliberal nature of the current education system (Basu, 2004; Bedard & Lawton, 2000; Sattler, 2012) which advocates for more tangible evidence of learning like the EQAO assessment. The potential existence of a multiple intelligences hierarchy entrenched in
Ontario’s curriculum may point to further contradictions in *Achieving Excellence* and may serve as a potential avenue for further research.

**4.3 Teacher Recommendations**

**4.3.1 How to Cater to Students’ Multiple Intelligences in a Neoliberal Test-Driven Milieu**

A significant body of standardized testing literature recommends either changes to or the complete removal of standardized testing. My exploration into the history of testing and society’s dependency on quantitative data combined with our solid neoliberal roots indicate that the EQAO tests have staying power. In our interview, Jodi reaffirmed the permanence of the test when talking about a discussion with a colleague. “I had a principal tell me EQAO is here to stay,” she said. “It will never leave.”

Rather than advocating for drastic alterations to the educational system itself, I took a pragmatic approach similar to Hammerman (2005) and Longo (2010) and asked Heather, Amanda and Jodi how they would cater to students’ MIs within the current system. Infusing standardized test preparation with a wider variety of MI teaching tactics is a relatively new concept that has not been addressed within standardized testing literature. It would be interesting to study this concept whereby teachers might achieve a better balance in the classroom; ideally, teachers would combine the authentic learning advocated by *Achieving Excellence* with the EQAO preparation needed to properly prepare students for the EQAO test.

When asked how to work within the current system, Heather emphasized that teachers should “try to give them as many opportunities as you can to use [students’] multiple intelligences…and to use their strengths to show different areas of the curriculum and hopefully that will translate when they write the test.”
Jodi would like to see the test split into smaller chunks, a more realistic explanation of scores to the public and she would like the ability to help students during the test. However, she urges teachers working within the current system to recognize students’ abilities as much as possible when preparing for the test. “Your students will learn better and be prepared more for EQAO if you address their learning style,” she urged. She added that teachers should “…try to teach according to their learning styles as best you can with the unfortunate tasks that you’ve been given.”

Amanda took a more macro view of Ontario’s education system as a whole. She spoke about the importance of fostering creativity and how open-ended tasks and student inquiry projects are needed to hone their talents: 

I think…regular school are very, very structured and when the bell rings…you have to drop everything…the children can’t continue with an idea…I think people need time, a block of time, and often a time of play where they can develop ideas and also time to develop them with other students.

During these interviews, the educators revealed several MI teaching strategies that they were able to successfully fuse with EQAO preparation. I have taken the MI-focused instructional strategies that include and go beyond paper and pencil tasks and have listed them in figure 3. I have noted which intelligence(s) correspond to the activity and I note whether or not they are a tactic that could be realistically adapted in order to help teach EQAO concepts.

4.4 Conclusion

As evidenced in the works of Armstrong (2009), Gardner (2005a), Stefanakis (2011) and the like, the body of literature discussing the potential applications of MI theory in the classroom is abundant. However, the success of its actual implementation, particularly in Ontario
classrooms, is lacking. The views of this study’s three participants add to the existing research by demonstrating practical applications of MI theory and how it benefits all students. The anecdotes of these teachers demonstrate how catering to learners’ MIs helps to improve the academic achievement, innovation and creativity of a diverse population of students. This revealed a consistency between these teachers’ practices and several elements of Ontario’s educational vision outlined in the policy, Achieving Excellence (MEDU, 2014a). However, the policy’s emphasis on increasing EQAO test scores made catering to students’ MIs more difficult for these teachers.

In theory, the co-existence of EQAO and authentic assessments within classrooms is not a problem. However, in practice, the inflated importance of test scores on behalf of several educational stakeholders impacted the instruction of these teachers. Impacts on instruction occurred despite the fact that these educators believed that not all aptitudes are adequately reflected on the EQAO test, pointing to a conflict between theory and practical application. Unlike the findings in U.S. testing literature, it was not necessarily the scores themselves or potential career ramifications that caused teachers to focus on the test. Instead, high levels of student anxiety surrounding EQAO caused by the perceived importance of test results drove these teachers toward more preparation for the test in-class. As such, curricula were expedited and certain activities jettisoned to help their students get comfortable with the testing format. This pointed to an inconsistency within Achieving Excellence – a perspective lacking within the current research. While these teachers recognized benefits of lessons embracing many MIs and thus bolstering student “excellence,” their need to enhance student “well-being” led to test preparation benefiting only mathematical and linguistic intelligences (MEDU, 2014a, p. 3). Here
I also discussed the lack of mention of certain intelligences indicating a possible hierarchy of intelligences within the educational system as a whole.

I wanted to see if there was a possibility of forming a better balance between the elements of *Achieving Excellence* versus our current neoliberal education system. Therefore, to further differentiate my research from the current standardized testing literature, I took a more realistic approach while formulating recommendations. While much of the literature demands alterations to, or the elimination of testing altogether, I examined teacher strategies and offered suggestions on how to work *within* the current system. The results here were twofold; the teachers offered both attitudinal approaches with which to approach the EQAO test as well as instructional strategies that fused more MIs and EQAO test preparation. The former was discussed under this study’s final theme heading while the teachers’ practical strategies were listed in chart form at the end of this chapter.

Employing a social constructivist theoretical framework allowed some of the more intricate teacher realities behind the EQAO test scores to be revealed. The complexity of these findings suggests that it is not any one person or organization at fault for the under-recognition of students’ MIs in my participant teachers’ classrooms. A complex series of battling interests on behalf of educational stakeholders results in the public’s need for tangible numerical evidence of success in Ontario’s classrooms. Numerical evidence, like EQAO, is simply disseminated, while authentic forms of assessment are not easily quantified. In the final chapter, I will discuss the effect that this ongoing EQAO/MI research has on the educational community as a whole and will make recommendations regarding MI recognition and standardized testing practices in the province.
Figure 1:

**Recognized MIs**
- Logical/Mathematical
- Verbal/Linguistic

**MIs Not Recognized**
- Musical
- Intrapersonal
- Interpersonal
- Bodily/Kinesthetic
- Visual/Spatial
- Naturalistic

Figure 2:

Verbal/Linguistic

Logical/Mathematical

Interpersonal

Bodily/Kinesthetic

Visual/Spatial

Musical

Naturalistic

Existential

Intrapersonal
# Figure 3:

<table>
<thead>
<tr>
<th>MI Strategies for day to day classroom activities</th>
<th>Bod/Kin</th>
<th>Ex</th>
<th>Inter.</th>
<th>Intra.</th>
<th>Log/Math</th>
<th>Mus.</th>
<th>Nat.</th>
<th>Verb/Ling</th>
<th>Vis/Spat.</th>
<th>Adaptable for EQAO concepts?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Using an MI flipbook (diagnostic)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
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<tr>
<td>- Conducting MI survey at the beginning of the year (diagnostic)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>- Display information in a graphic organizer</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Present information to the class</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Create a jingle/song to present information</td>
<td>✓</td>
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<td>✓</td>
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<td>- Write out information</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>- Draw a picture to convey information</td>
<td>✓</td>
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<tr>
<td>- Tell a story through pictures</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td>✓</td>
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<tr>
<td>- Read a story about different clouds while students work as a group to form that cloud</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Students visualize a historical setting as the teacher or student reads a passage</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>- Give students tasks cards with a topic to discuss/problem solve (could be adapted for all subject areas)</td>
<td>✓</td>
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<tr>
<td>- Student read-aloud</td>
<td>✓</td>
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<tr>
<td>- Working as a small group</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>- Working with physical clock to practice time</td>
<td>✓</td>
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<tr>
<td>- Problem solving in a math journal (could be done using words or pictures)</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>- Have a student recount their thoughts orally and scribe for them</td>
<td>✓</td>
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<tr>
<td>- Teach a 3-part lesson and have students show what they know in a Bansho format</td>
<td>✓</td>
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<tr>
<td>- Use manipulatives (i.e. base 10 blocks)</td>
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<td>✓</td>
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<tr>
<td>- Use simple, clapping patterns, chants or songs while teaching a concept</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Use visuals like rulers/metre sticks to discuss number lines/patterns etc.</td>
<td>✓</td>
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<tr>
<td>- Use an iPad/computer to write rather than paper/pencil</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>- Assign learning partners to work discuss/work on concepts</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Provide open-ended tasks</td>
<td>✓</td>
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</table>

3 Guidance for this chart provided by Armstrong (2009)
Chapter 5: Implications

5.0 Introduction

The preceding chapter will examine the efforts of three Ontario educators in their attempts to balance demands for higher standardized test scores with assessment that recognizes a wider range of students’ multiple intelligences (MIs). This chapter will revisit these findings by looking at an overview of the main themes discovered in the data analysis process. This will be followed by a breakdown of the implications that explain what these findings mean for both educational researchers and practitioners. Along with these implications, recommendations will be put forth that suggest improvements that allow for a better balance and recognition of the goals within Ontario’s educational policy, Achieving Excellence. This research study includes suggestions for future research and concluding remarks.

5.1 Overview of Key Findings and Their Significance

While the school locations, years of teaching experience and familiarity with EQAO of the study’s participants differed, their views about how EQAO affects MI recognition yielded common themes. A breakdown of these themes and how they diverge and adhere to the existing literature is addressed as follows:

1. **Benefits associated with multiple intelligence recognition.** American educational researchers such as Armstrong (2009), Kornhaber (2001) and Stefanakis (2011) have contributed to and expanded upon literature discussing the benefits of Gardner’s (1983) MI theory. However, there is a distinct lack of discussion pointing to the theory’s success in Ontario classrooms – this despite the acclaim it sees in many provincial and board-wide education documents.\(^4\) The three

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\(^4\) Learning for All, Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6, The Differentiated Instruction Scrapbook Finding Common Ground: Character Development in Ontario School’s, K-12 and school board initiatives such as the Toronto District School Board’s Multiple Intelligence and Leadership Program.
participants in this study addressed this gap in the literature by attributing an increase in student motivation, engagement, achievement and creativity to activities and technologies that embody MI theory. The educators added that all students, particularly those with special education needs, felt these positive effects. This reinforces the work of Armstrong (2009), Csikszentmihalyi (1971), Gardner (1983), Kornhaber (2001) and Stefanakis (2011), who all highlight the importance of MI recognition to student creativity – a key element in Achieving Excellence, Ontario’s educational mission statement (MEDU, 2014a). The fact that the same skills enhanced by MI theory are mentioned as key foci in Ontario’s latest educational mandate, Achieving Excellence, indicates that educational mandates are adjusting to meet the needs of a changing society.

(2) The difficulties of balancing authentic assessment and standardized testing preparation. Despite the low-stakes nature of Ontario’s EQAO assessment, the student stress and anxiety around it pressured the grade 3 teachers in my study to change their classroom instruction; activities benefiting a wider range of students’ MIs were scaled back or replaced with explicit test preparation mainly to calm students’ nerves before the testing period. This reaffirms Kempf’s (2015) Ontario-specific findings while providing a more specific analysis of EQAO’s affects on MI infusion into the province’s classrooms. Expedited curricula and increased testing preparation done through reviewing old paper and pencil EQAO tests benefitted mainly those students who learned best through mathematic and linguistic learning opportunities. This echoes the studies of Dwyer et al. (2003), Pollock and Winton (2012) and Strampel et al. (2014) who pointed to EQAO tests as the cause for decreased bodily/kinesthetic and inter/intrapersonal activities in Ontario classrooms. My study adds that test preparation impacted an even wider array of students’ MIs. Utilizing old tests robbed the student majority of
opportunities to demonstrate their knowledge in ways that Gardner (2005a) would say embodied “naturalistic,” “musical,” “bodily/kinesthetic,” “visual/spatial,” and “interpersonal/intrapersonal” intelligences (p. 49). To these teachers, less MI recognition means depriving all students, especially those with special education needs, of their creativity and potential; many authors including Armstrong (2009), Beliavsky (2006), Kornhaber (2001), Gardner (1983) and Stefanakis (2011) would agree. This implies a potential imbalance within the main tenets in Ontario’s current educational mandate; while educational insiders see the authentic and standardized assessment as equal, the public only sees value in the latter. This is a subject unexamined in Ontario’s testing literature.

(3) Teachers indicate that both test preparation and authentic assessment can happen simultaneously. My study does not suggest radical changes to Ontario’s standardized testing practices. Historical reliance on standardized testing (Gallagher, 2003; Scott, 2004) accompanied by present-day dependency on numerical data (Earl, 2002) entrenched in our neoliberal system (Basu, 2004; Broom, 2012; Klinger & Rogers, 2011; Sattler, 2012) indicates the permanence of the EQAO test; suggesting drastic overhauls (as many standardized testing studies have done) is impractical. Instead, this study follows the lead of American authors Hammerman (2005) and Longo (2010) who focus on how teachers can work within the system to meet the needs of students’ MIs in a neoliberal climate. By doing so, this study provides a new Canada-centric perspective on how teachers can combine MIs with standardized test preparation. The three teachers in this study note the importance of differentiating instruction and catering to students MIs above all else, regardless of testing pressures. Even when an educator has to teach testing conventions, the teachers cited several alterations that they had made to pencil and paper tasks, which made the practice tests more MI inclusive. A chart detailing these teachers’ strategies can
be found in the previous chapter. An analysis of null data also revealed a potential MI hierarchy in the educational system beyond the EQAO test.

5.2 Implications

5.2.1 Broad: The Educational Research Community

As was mentioned previously in this study, the coexistence of standardized and authentic assessment does not present any obvious problems. EQAO scores are an easy and simplistic way to measure student achievement in the province. As such, it is easy to understand why the public relies on EQAO scores. It should also be noted that, as emphasized by Hargreaves (2012), the public tends to be more critical of the teaching profession rather than the legal or medical professions because members of the public have all had their own experiences as students. The “memories and feelings” one may have developed as a student “profoundly influence [their] views about teaching today and what they want from it” (Hargreaves, 2012, p. 97). Thus, even though all professions change and develop over time, education will be the most criticized due to the public’s personal experiences in the system (Hargreaves, 2012). Older populations may gravitate toward standardized test results because they were effective modes of assessment when they were students; to them authentic assessment and MI theory are foreign concepts. The end result is an overreliance on the EQAO test scores, the implications of which are twofold: (1) The efforts made to gratify the public are slowing the modernization of Ontario’s teaching practices (2) A greater focus on public opinion is causing the suppression of teacher voices and their valuable strategies that could make standardized testing preparation more MI inclusive. Each of these will be discussed in more detail below.

Firstly, public opinion is stunting the growth of Ontario’s educational system and consequently, the growth of students’ potential. The voices of the public are drowning out those
of the teachers who have valuable first-hand information about their students’ potential and the impacts of testing on that potential. The teachers I interviewed clearly stated the value of multiple intelligences teaching, but the pressure they felt to revert back to rote teaching trumped a lot of progressive MI inclusive instruction. The problem that arises is this – while standardized testing is valuable, these tests no longer equip students with the skills they need in the twenty first century work force. Students feel stressed by the test format because of how different it is to twenty first century teaching practices. Teachers try to alleviate student stress by preparing more, which creates a cyclical pattern whereby teachers revert back to outdated rote teaching methods which are more in line with the “traditional” and “highly teacher-centred” practice (Hargreaves, 2012, p. 509).

Herein lies the divide between policy and practice, which inhibits the advancement of the teaching profession. The ministry’s educational vision outlined in *Achieving Excellence* is calling for “excellence,” “equity,” “well-being” and “public confidence” (MEDU, 2014a, p. 3). Through MI inclusive instruction, teachers fulfill the “excellence,” “equity,” and “well-being” parts of this mandate. However, because public confidence can only be satisfied through tangible test scores, these Ontario teachers feel pressured to change their instruction to prepare students for EQAO. In essence, this inflated importance attributed to public confidence is stunting the growth of the province’s progressive educational goals. While the world outside of school will progresses, students will be forced to prepare for outdated tests. The public is not privy to the fact that authentic assessment better captures the abilities of students with multiple intelligences. Instead, tax payers continue to rely on what they do know – standardized test scores.

To Hargreaves (2012), teachers cannot “mystify parents and mesmerize the public who will resort to test scores when they feel there is no other kind of transparency” (p. 402). This is
substantiated by Hart and Kempf’s (2015) survey, which focused on public perceptions of education where the majority of students’ parents called for “about the same” or “somewhat more” testing in schools (p. 19). If this is what parents believe, it can be presumed that the rest of the taxpaying public, with no children, will have even fewer insights into the contemporary education system and would therefore also be even more likely to support the EQAO testing. Essentially, evidence of authentic learning is not as quantifiable as test scores and the public will neglect any discussions about the value of MI activities because it is not what they grew up with. As the number of students requiring differentiation and MI recognition increases, the achievement gap will grow. What will result is the perpetual intelligence hierarchy that Gardner discusses in his work; students whose intelligences line up with the EQAO tests, will progress which will result in a lot of “untapped…potential” of their colleagues (Gardner, 2005a, p. 53).

Secondly, this over-amplification of public opinion takes away from the valuable opinions teachers have about how to effectively meld these two seemingly juxtaposed methods of assessment. Because there is so much discussion about the fact that the test exists, there is little attention being paid to how it can exist and progress along with twenty first century teaching methods. Interestingly, every teacher in this study either implicitly or explicitly identified how testing preparation could infuse all of Gardner’s (1983) multiple intelligences. However, their various injections of MI into test prep were done entirely at their discretion and without any guidance. They did it on their own volition because they all thought this is what good teachers should do. However, what resulted were haphazard “ad hoc” injections of MIs in test preparation activities and overall confusion about their effectiveness.
5.2.2 Narrow: Your Professional Identity and Practice

This research process and the findings I gleaned while conducting it has “re-energized” me and enhanced my “creativity” as a teacher in the classroom (Saunders, 2006, p. 140). I initially approached this research with the firm belief that the educational system must jettison standardized testing in order to allow for the most effective teaching to take place. However, realizing that there are socio-political variables outside of the educational system keeping the EQAO test in place has made me a more pragmatic person and consequently, a more down-to-earth teacher. Being aware of the politics of education means that I will not be blindsided by them in future classroom pursuits. By evaluating my biases around standardized testing and learning how to view the test through a more optimistic social constructivist lens, my view of the EQAO testing has changed in that I now see it as an educational opportunity rather than an obstacle. As such, I have been able to take humdrum questions on EQAO tests and translate them into practical lessons that cater to all eight multiple intelligences that Howard Gardner (2005a) claims we all possess to a varying degree. Offering differentiated instruction in a neoliberal system, which typically favours select aptitudes, has inspired me to reach more students.

5.3 Recommendations

5.3.1 For Ontario’s Ministry of Education and Ontario Teacher Unions

As was evidenced by the first implication of this study, there is a clear discrepancy between what the public thinks teachers should be doing in classrooms and what they are actually mandated to do in the twenty first century. It would be impractical to ask the public to change their opinion on their own volition because of what Hargreaves (2012) believes – that memories of one’s own educational experiences will forever taint the public’s opinion about what good teaching should look like. Thus, if test results continue to take precedence in the mind
of the public with regard to what “good teaching” is, authentic assessment and multiple intelligences teaching in classrooms will continue to suffer.

To break this cyclical education and teacher stereotype where standardized test scores are valued above multiple intelligences teaching, the Ontario Ministry of Education should team up with Ontario’s teacher unions to educate the public about how the profession is changing. Both bodies have active YouTube, and social media presence and the ministry has even created video content discussing the aims of the *Achieving Excellence* mandate (MEDU, 2014b). While the video alludes to educational changes for the twenty first century, it fails to discuss any specifics of what twenty first century education entails (i.e. multiple intelligences recognition, authentic assessment etc.). The shortcomings of standardized testing are ignored altogether in the video. Instead, the ministry or teacher unions should create an edgy information package for the public, which discusses contemporary teaching more explicitly while emphasizing that test scores are only one piece of a student’s ability. Public opinion will always be a reality in education; the more it aligns with policy, the more likely the profession will progress.

**5.3.2 For Ontario Teachers and the Education Quality and Accountability Office:**

The individual initiatives taken by the teachers in this study to make EQAO preparation more MI inclusive indicates that authentic and standardized assessment have the potential to harmoniously exist. However, as it stands now, this infusion of MI instruction, which moves beyond the typical mathematical/linguistic preparation is at the discretion of educators, resulting in arbitrary MI inclusion. This could be remedied by creating a better line of communication between Ontario teachers and EQAO test makers. Teachers could help test makers create test preparation packets that speak to a wider range of student multiple intelligences and learning styles.
Instead of encouraging teachers to download, catalogue and distribute old paper and pencil tests to students, these new preparation packets would provide better guidance detailing how to infuse MIs into preparation and, most importantly, how to treat all MIs equally. This would help to avoid what Hargreaves (2012) identifies as “traditional” and “teacher-centred” (p. 509) pedagogy while simultaneously discouraging any hierarchies of intelligences upon which teachers might unconsciously and inadvertently rely. Furthermore, this would foster a testing practice that aligns with the “equity,” “excellence,” and “well-being” goals of the Achieving Excellence mandate while still meeting the policy’s need for “public accountability” (MEDU, 2014a, p. 3). EQAO could create an extra committee immediately to allow for the formation and distribution of the packets within the next two years. The “untapped human potential” for which Gardner (2005a) condemns standardized testing could be alleviated by this test preparation method (p. 53).

5.4 Areas for Further Research

This study’s findings derive from the experiences of three Ontario teachers attained through convenience sampling. It would be unreasonable to suggest that their experiences mirror those of the majority of Ontario’s third grade teachers. Moreover, this study did not include interviews with students or with their parents nor did it include surveys or classroom observation, all of which would are rich sources of information regarding the effects of standardized testing on MI instruction. The admirable effort by Kempf (2015) in his Ontario-specific research examining EQAO’s affects demonstrates the advantage of a large-scale survey. I would suggest taking the lead of Kempf (2015) to conduct a similar study that focuses on how EQAO impacts MI instruction more specifically across the province. Moreover, an “ethnography” allowing a researcher “extended time in the field” and access to “other sources”
such as students, parents and classroom observation would garner a more holistic picture of this issue (Creswell, 2013, p. 105).

Secondly, an analysis of null data uncovered a potential hierarchy of multiple intelligences in Ontario classrooms beyond standardized testing. Discussions focusing on standardized testing and multiple intelligences typically present MIs as a binary with mathematical and linguistic intelligences against all others. Authors such as Gardner (2011) perpetuate this notion by offering visualizations that describe “linguistic and logical-mathematical intelligences…on a pedestal” (p. 49). As I explained in the last chapter, I thought of mathematical/logical and verbal/linguistic as the haves of intelligences, which received the most attention in the classroom while the other seven as a collective were, by default, the have-nots of the intelligence world. Authors such as Armstrong (2009) and Beliavsky (2006) who have continued the multiple intelligences discussion have perpetuated this notion of the adversarial nature of the intelligences. However, in discussions about multiple intelligences and the school system beyond testing, participants in this study alluded to another scenario – a possible hierarchy of intelligences embedded in the system. For example, they suggested that the structure of the school system favours kinesthetic types of activities over those that suit the classroom existentialists or intrapersonal students. A case study examining a potential hierarchy of intelligences across multiple schools is crucial as it could point to the exclusion of students spanning all grade levels across the province.

Lastly, provincial policies such as Achieving Excellence emphasize the importance of the notion of “twenty first century teaching” without providing any concrete definitions as to what this actually entails (MEDU, 2014a, p. 7). Similar policies and research cited in this study rely on equally nebulous terms such as “creativity” (MEDU, 2014a, p. 5) and “imagination” (MEDU,
2014a, p. 20) to describe the skills students will need in the future workforce. Rather than muse about what students will need to be successful in twenty first century occupations, a “phenomenological” comparison of a day in the life of a public school student versus that of a modern day worker would be more practical (Creswell, 2013 p. 76). The skills used in the workforce could be compared to those being taught. Educators could then assess cohesion of the two settings in order to define tasks involving “creativity” and “imagination” more tangibly as they relate to the workaday world.

5.5 Concluding Comments

This research study explored the impacts of standardized testing preparation on teachers’ abilities to cater to the multiple intelligences of their third grade students in Ontario classrooms. An examination of the history of standardized testing exposed a complex and interwoven set of socio-political variables working together to keep the test in place. This study was a pragmatic examination of how teachers can work within the current system rather than advocating for radical changes to it.

An analysis of three interviews conducted with Ontario third grade teachers revealed three common themes. Firstly, teachers saw benefits of multiple intelligences activities for all students, especially those with special education needs. Secondly, all teachers stated that student anxiety and the public’s dependency on EQAO scores drove teachers to schedule rote instruction to help prepare students for the test. This resulted in an increase in lessons benefitting mathematically and linguistically inclined students at the expense of those whose talents lie in the other intelligences. Finally, all three of the interviewees in this study agreed that a variety of MIs could be addressed in EQAO preparation, although none of their MI implementation
experiences were cohesive or pre-planned, resulting in haphazard injections of students’ MI preparation.

The implications of these findings derive directly from the public’s overreliance on EQAO test scores, a reality in an educational system where few other tangible accountability measures exist. The public’s relationship with the educational system is unlike any other profession; because many adults were once a student, they believe that they have the authority to comment on teacher practices (Hargreaves, 2012). Therefore, public opinion trumps teacher voices resulting in disconnect between policy and practice. While Ontario’s educational vision outlined in *Achieving Excellence* embodies progressive tenets such as “excellence,” “equity” and “well-being,” the need for “public accountability” (MEDU, 2014a, p. 3) vis-a-vis EQAO testing will perpetuate traditional “teacher-centred” practices devoid of any of the first three principles (Hargreaves, 2012, p. 509). The second implication resulting from the public’s influence on the educational system distracts from teachers’ voices about how authentic learning (including MI instruction) and EQAO test preparation can coexist. A lack of guidance about how teachers can infuse MIs in test preparation results in teacher focus on the MIs with which they are most comfortable. The findings of this study have changed the way I view my own teaching practice – I now view EQAO as more of an opportunity than an obstacle. I will strive to meet every student’s MI needs and to help them to realize their potential.

I put forth two recommendations to ameliorate the implications revealed by this study. First, educational bodies must address regressive attitudes head-on. They must use their considerable clout to influence public opinion which hold onto the outdated typecast of teachers as purveyors of pencil and paper tests. The Ontario Ministry of Education and teacher unions can do just this by using their active social media presence as a platform for edgy content, which
describes how the education system must change to keep up with twenty first century advancements. My second recommendation puts the onus on EQAO to create better communication with teachers in order to create teaching packets that provide structured lessons that prepare their students for the test while simultaneously catering to their MIs. Students’ abilities are there to be harnessed and, as Gardner (2005a) emphasizes, societal advancement depends on our ability to do so.
References


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Appendix A: Consent Letter

Date:

Dear _______________________________,

My Name is Stephanie Lowe and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on EQAO testing – specifically if test preparation impacts teachers’ ability to accommodate the multiple intelligences of students within Ontario’s grade 3 classrooms.

I am interested in interviewing teachers who have had experience administering the grade 3 EQAO tests and who are familiar with Howard Gardner’s Theory of Multiple Intelligences. To ensure a variety of perspectives, I am seeking teachers who have varied levels of teaching experience and who work within public school boards spanning Ontario. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one interview approximately 45-60 minutes in length. During the interview, you will be asked questions that address your thoughts regarding the administration of the EQAO test and its potential impacts on your teaching practices. I will also ask questions pertaining to the Theory of Multiple Intelligences and how you accommodate the various intelligences within your classroom. The interview will be audio-recorded and transcribed. After the interview, you will have the opportunity to review and revise your transcript if necessary. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a research conference or publication. This study will also be made publically viewable on the University of Toronto’s T-Space database. This data will be stored on my password-protected computer and the only people who will have access to the research data will be my course instructor, Ken McNeilly.

You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential.

You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. The only known risk in this study is possible discomfort, which could be experienced during the interview as
questions could evoke emotional responses. I will share with you a copy of the transcript to ensure accuracy and so that you can make any changes or retractions before I analyze the data.

I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,
Stephanie Lowe

Name: Stephanie Lowe
Phone Number: 647-406-4452
Email: steph.lowe@mail.utoronto.ca

Course Instructor’s Name: Ken McNeilly
Contact Info: kenneth.mcneilly@utoronto.ca

Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty.
I have read the letter provided to me by Stephanie Lowe and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ______________________________

Name: (printed) ______________________________

Date: ______________________________
Appendix B: Interview Protocol

Thank you for participating in this interview today. The aim of this research is to analyze the potential impacts of EQAO testing on teachers’ ability to accommodate the multiple intelligences of students within Ontario’s grade 3 classrooms. The interview should take approximately 45-60 minutes. I will ask you a series of questions, which focus on your thoughts regarding the administration of the EQAO test and its potential impacts on your teaching practices. I will also ask questions pertaining to the Theory of Multiple Intelligences and how you accommodate the various intelligences within your classroom. I want to remind you of your right to choose not to answer any question. Do you have any questions before we begin?

Interview Part I: Teacher Background and Experience
1) How many years have you been teaching?
2) What do you teach? Where do you teach?
3) How many years have you been teaching at this school?

Multiple Intelligences
4) So that I can get a better picture of your class, what can you tell me about the learning styles/intelligences of your students? Do you notice that some intelligences are more dominant than others?
5) How do you identify the learning styles/dominant intelligences of a student?
6) Do you accommodate students’ multiple intelligences in your classroom? If so, how? If you don’t mind sharing some examples.
7) What are some of the benefits in formulating activities that speak to individual intelligences? What are some of the challenges?
8) What are some of the resources you find most helpful in providing activities that are suitable for all intelligences?

Multiple Intelligences Transitioning to EQAO:
9) Tell me what student skills and abilities you think are adequately tested by EQAO.
10) What kinds of students excel at this kind of standardized test?
11) How do you accommodate students’ multiple intelligences while preparing for the EQAO? Is it difficult to do this?

EQAO Focused:
12) How many times have you administered the EQAO test to grade 3 students?
13) What methods do you use to assess students in your classrooms? Do they differ from EQAO assessments? If so, how?
14) Have you had any past or current PD on EQAO? If so, what was it like?
15) What are your thoughts about professional development for teachers regarding EQAO preparation?
16) What are your general thoughts about the EQAO testing?
17) What measures do you take (if any) to prepare your students for the EQAO test?
18) What are some of the initial student reactions you have seen when introducing them to the EQAO test for the first time?
19) Are there any professional ramifications for you resulting from EQAO stores (either high, low, raised, lowered)?
20) What are some general thoughts about how test scores are disseminated to the public? Does it impact your teaching practices during the year?
21) What are your thoughts about how EQAO affects your testing schedule? Daily/weekly/monthly?
22) Do you use EQAO to generate non-EQAO assessments?

Future Developments:
23) What advice would you give to a beginning teacher about identifying and/or accommodating multiple intelligences in the context of EQAO?
24) Should EQAO be used in the future as an assessment tool for grade 3 students?
25) Is there anything you would like to add that I have not addressed?

If time...
26) How do you deal with the pressures of preparing your students for the EQAO test?
27) What advice would you give to a teacher who might be feeling pressure to teach to the test?