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Accountable to Whom?

Teacher Reflections on the Relationship Between Creativity and Standardized Testing in Ontario

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Abstract

This paper describes teachers' perceptions of the relationship between standardized testing and creativity. Using an interview guide format, eight teachers were asked to consider their perspectives on, and practices related to fostering creative behaviours in children, with regard to their own creative teaching methods in light of accountability legislation. The responses teachers provided indicated that standardized testing process often impacted their teaching by taking time away from learning material they considered to be more valuable. Teachers in this study also indicated a sense of incongruity, in that they believed creativity could not exist in a classroom focused on improving standardized achievement scores. However, many teachers also indicated that standardized testing improved students' basic and foundational skills, including math and reading, which they felt may enhance students' creativity in the future. The results of this examination are framed with reference to accountability legislation in Canada and the United States, and the potential lasting effects of a high-stakes testing environment.



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They [the government] spend millions and millions, if not billions of dollars on the marking and the testing and the writing and creating and the you know, revising and the updating of the website and the standardization of the marks, and the mailing out of the resources, it's an extraordinary amount of money that's spent on something that doesn't really matter. And, it doesn't improve achievement I think it impedes on creativity [...] there's no way I can do things in a way that I know kids are going to learn better, because I don't have time. You know, if I've got to get five strands of math done between January and early May, there's no way I can do some of the stuff I was showing you, with the interactive piece, and the collaborative piece, and all the building with the blocks and even though I know kids learn better through collaboration and creativity, and some of those pieces, those hands-on learners, and I can't do any of that, I'm going to have to do more paper and pencil tasks because I've got to get it done, and that to me is the wrong way to teach, it's the wrong philosophy, but they want someone to be accountable.

Paige, Grade 5 teacher

Both standardized testing and creativity are important topics in the field of education. Standardized testing is widely used to provide administrators and the public with a general sense of student achievement within a community and school board. Creativity is increasingly seen as an important outcome of the education system as a whole, connected to problem-solving, critical thinking, and the adaptive 21st century skills (Bellanca & Brandt, 2010; Trilling & Fadel, 2009). The purpose of this investigation was to illuminate the relationships teachers in Ontario see between standardized achievement testing and creativity. The voices of teachers are used to demonstrate their conflicted feelings and the choices they feel they have to make between increasing test scores and promoting creative thinking skills in their classrooms.

Background

The purpose of standardized achievement testing is ostensibly to help teachers and administrators identify and compare student's strengths and weaknesses so that educational resources can be appropriately directed to the benefit of student learning (Ormrod, 2012). Standardized achievement tests are aptitude assessments that are administered under controlled and uniform conditions (Ormrod, 2012). They are expected to measure learning outcomes and skills that are common to the curricula across schools and school districts (Chatterji, 2003). In Ontario, the Education Quality and Accountability Office (EQAO) conducts province-wide tests of reading, writing, and mathematics in Grades 3, 6, and 9, reporting the results to educators, parents, and the public (EQAO, 2011). The purpose of the tests, according to EQAO, includes measuring "whether students can understand what they read, clearly communicate their thoughts in writing and use grade-appropriate mathematical knowledge and skills to solve problems" (Desbiens, 2011). Although sometimes compared and presumed equivalent to No Child Left Behind testing (NCLB) in the United States (Salutin, 2011), EQAO testing differs in significant ways. NCLB testing is tied directly to school funding and teacher promotion and tenure practices in the United States (No Child Left Behind Act, 2001; Ravitch, 2010). In Ontario this is not the case.¹ The purpose of the NCLB program is to hold schools, local educational agencies, and States accountable for improving the academic achievement of all students, and identify and turn around low-performing schools that have failed to provide the mandated level of education to

¹ The explicit details of the NCLB act can be found at: <http://www.ed.gov/esea>.

their students. The program also provides supports and funding for the provision of alternatives to students in low-performing schools to enable them to receive a high-quality education. As a consequence of NCLB, teachers and schools are rewarded or punished for students who do not achieve the performance standards set by the U.S. Department of Education. The program has been widely criticised for lowering standards and creating unrealistic goals (Ravitch, 2010).

Unlike NCLB, Ontario's province-wide tests are standards-based, which means students are compared to an expected standard of achievement based on the curriculum standards rather than directly to other students, and results are not tied to school funding or educator evaluations (Desbiens, 2011). NCLB testing has been widely criticized for forcing teachers to spend more time on test preparation and drill-and-kill exercises rather than authentic teaching and learning (Firestone, 2001; Fusarelli, 2004; Ravitch, 2010; Sacks, 1999), and EQAO testing has faced the same criticisms (Neill, 2008; Salutin, 2011; Volante, 2004). Though EQAO reports that province-wide testing cannot be considered "high-stakes" in the way that NCLB tests can (Desbiens, 2011), a culture of "naming and shaming" exists when schools are publicly listed as having high or low scores on provincial tests. The Ministry of Education, C. D. Howe Institute, and the Fraser Institute have all openly published provincial school rankings, and media outlets like CBC News have announced the names of the lowest ranked schools provincially with no context or critical analysis provided (Neill, 2008). Local newspapers may also publish assessment results, ranking schools based on Grades 3, 6, and 9 (Volante, 2004). This wide public announcement of test results without qualifying the limited curricular scope of the test presents results as important, and suggests to the public that test scores reflect the quality of teaching and leadership in a given district. This sets up a climate of competition and pressure to succeed which is reflected in consequent test practices (Neill, 2008).

In many ways, the current implementation of standardized assessment measures may work against students. Though testing can be used as a meaningful way of gauging student progress, when teaching resources are directed toward success on a test instead of authentic mastery of the curriculum, student learning may be negatively influenced (Westheimer, 2010). Although pressure on administrators, teachers, and students to meet the standards set by the EQAO can lead to productive work for many, research suggests that teachers will often skew their efforts in the direction of activities that would lead to increases in these highly public scores (Earl et al., 2003). This push for success is strengthened by the availability of sample tests and exercises on the EQAO website, providing teachers with the opportunity to tailor lessons directly to the test-taking skills required, rather than take a broader, less linear approach to tackling subject material.

Evidence of a teaching culture that highly values student success on standardized tests is also evident in the recent investigations of EQAO test cheating. In September 2010, 10 schools came under scrutiny for reports that teachers were providing students with test questions, allowing students extra time, and photocopying earlier versions of the exam for students to study from (Brown & Taylor, 2010). Ultimately, a culture that rewards success on standard tests of student knowledge encourages teachers to find better and more efficient ways of preparing students to do well on the test. The problem with this process is that teachers may begin to divert time spent engaging in creative and abstract thought and teaching methods with students, toward teaching methods that reinforce test-taking skills and material to be covered. If this is indeed happening, it is likely that teachers will not be able to provide students with the range of learning opportunities that lead to their general development, including creative thinking and innovative

behaviours. In fact, teachers interviewed in this study confirmed that time was a major consideration, and that they did feel pressure to deliver all of the required content while keeping students engaged and interested in the material. Classroom activities that foster creativity take time to plan, and require allowance for reflection time and the potential for activities that have unknown learning consequences (Amabile, Hadley & Kramer, 2002; Piirto, 2010; Richards, 2010). If time to prepare for a test is at a premium, the most time-intensive and least predictable learning activities will be removed from the classroom in favour of activities that are expected to lead to better test-taking skills.

Creativity

Creativity is an elusive concept, but a fundamental human quality. A range of definitions persist, promoting greater and lesser degrees of precision. Ultimately, what can be stated unequivocally is that creativity is a uniquely human trait that reflects our ability to adapt to changing circumstances, and our effective cognitive abilities to combine and improve upon ideas to which we are exposed (Runco, 2007). The concept of creativity in education has arisen all around the world, but is of particular interest in developed countries and industrialized nations where technology and ingenuity are of paramount importance to continued and ongoing prosperity (Aud, McCammon, & O'Farrell, 2007). Educators, parents, employers, and policy-makers realize that only by being creative will we be able to address the problems of the future, including education, health care, the environment, and the economy. Creativity is one of the key factors that drive civilization forward (Hennessey & Amabile, 2010).

Though creative potential and individuals compliment an economic and industrial need, creative environments engage students and improve student development, allowing and encouraging cross-fertilization among ideas and subject areas which promote self-initiating learners (Moran, 2010). This social and dynamic process encourages students to think of solutions to problems in applied, experiential ways, and capitalizes on learners' innate capacities to construct new ideas from past experiences. Drawing from theories of situated cognition, the creative process aligns with and promotes our natural way of engaging with the world and problem-solving. Several studies have shown that classroom teachers that encourage creativity also improve student reasoning, memory, problem-solving, and student engagement, all of which lead to improved learning and personal success in school (Guilford, 1967; Isaksen & Treffinger, 2004; Karpova, Marcketti & Barker, 2011; Moran, 2010; Torrance, 1963). It has been hypothesised that these improvements happen due to the increased number of cognitive connections and associative networks that are developed when multiple ideas and methods are combined in creativity-fostering environments (Runco, 2007).

What underlies a creativity-fostering teacher is a classroom organizational climate that is challenging, meaningful, supportive, and trusting, and that allows for risky behaviours that contribute to the creative learning process (Ekvall & Ryhammar, 1999). Formal evaluation appears to have a negative effect on the classroom environment, leading to higher anxiety in students, heavy reliance on external motivation, and a classroom climate that punishes divergent thought (Amabile, 1990; Cropley, 2001). This is not to say that evaluation should be abandoned, nor that creativity is composed of random thought or the suspension of all judgement (Runco, 2007). Creative thinking requires significant content knowledge (Baer & Garrett, 2010; Nickerson, 1999; Runco, 2007), and thinking creatively about a topic helps deepen one's knowledge of that topic (Baer & Garrett, 2010). Unfortunately, the current focus on more

explicit content standards, as well as the public pressure for school accountability may lead teachers to associate accountability with convergent or evaluative thinking – thereby ensuring that students can answer test questions “correctly” as opposed to exploring alternate divergent thought processes or complex ideas (Baer & Garrett, 2010).

It is important to recognize, and not discount, the responsibility teachers have to make productive use of students’ time in class and ensure that the activities they do are meaningful and contribute to intellectual growth. Teachers have indicated there is little time for creative and experimental teaching methods, and significant pressure to not teach information that “isn’t on the test” (Starko, 2010, p. 17). Those who encourage teachers to foster creativity and argue for more creative classrooms tend to argue that creativity should not be comprised of simply an add-on activity, nor the addition of more work to an otherwise burdened teacher. Teaching for creativity should include providing students the opportunities to “identify and solve problems, see from multiple points of view, analyze data, and express themselves clearly in multiple genres” (Starko, 2010, p.17. See also: Amabile, 1990; Robinson, 2011; Sternberg & Lubart, 1999). These activities help students engage in their work, make meaningful connections to real life, and help students think about important content.

Ultimately, the literature shows that creativity is a topic that is complex, and relies on both teacher and student engagement. Part of this is that teachers have differing views of creativity, which leads to both positive and negative application in the classroom. Moreover, the school structure itself, by way of prioritizing standardized testing, emphasises the role of achieving content standards over and above the use of meaningful problem-solving and creative thinking exercises. If teachers feel pressure to ‘teach to the test’ then it is likely that they won’t embrace techniques which enhance or foster creativity. Though there is a wealth of literature available that provides us with a clear understanding of *how* to foster creativity, the current educational climate and structure may not allow for a means to do so.

Method

Using a qualitative research design informed by social constructionism (Patton, 2002; Schwandt, 2000), I (the researcher) assumed that the perspective of the teachers was meaningful, knowable, and able to be made explicit through questions and answers. Data collection methods used for this study included an interview, and a period of classroom observation. Classroom observation was an important element of this study and allowed me to co-reflect with the teacher on the nature of the classroom space and students, specific instances and occurrences, and to discuss the multifarious phenomena that constitute the life cycle of the classroom environment and the teaching-learning relationships between students and the teacher (Cohen, Manion, & Morrison, 2008). The observations also allowed for an element of rapport-building with each of the teachers, leading to the development of a temporary relationship between myself and the participant (Hays & Singh, 2012). Interviews were conducted using semi-structured questions, following Patton’s (2002) ‘interview guide’ approach. During the interview, teachers were asked to describe all of the environmental factors they felt influenced their ability to foster creativity in the classroom, as well as the methods they used to encourage creativity in their students. Interviews took place during the teacher’s preparation time or when the students were outside for recess.

Participants

Eight Grades 5, 6, and 7 teachers from Southwestern Ontario participated in this study between February and June 2012. Teachers were recruited from three school boards, representing both urban and rural locations. Two hundred and nineteen principals were contacted directly to invite teachers to participate in this study. It is unknown how many principals were receptive and forwarded information on to their staff. Participants were contacted based on their indication of willingness to volunteer for an interview and full-day classroom observation. All of the teachers in this study indicated a general interest in fostering creativity in their students, and many indicated during the interview that they felt they used what they considered to be creative teaching methods. No further selection criteria were used.

Data Collection and Instrumentation

Interviews were audio-recorded and transcribed into written form verbatim. Given the range of definitions that exist with regard to creativity, the starting place for the analysis of the interview data was to isolate key meanings of the participant's experience and organize the unchanged meaning into themes (Rudestam & Newton, 2001; Moustakas, 1994). The initial themes presented herein were derived in a circular fashion in that a number of themes and theories already exist with regards to both creativity and discussions of standardized testing. Themes were further developed through repeated reflection on participant responses, and married with academic literature when relevant. The names given to teachers are pseudonyms.

Findings

Through the interviews and observations teachers indicated that creativity and standardized testing were related in three predominant ways. Many teachers spoke specifically about the amount of *time* preparation for EQAO testing takes, and how preparation takes time away from classroom activities the teachers considered to be more meaningful, or that would allow students to engage in more in-depth forms of learning. Time, as a categorical theme, also refers to teachers' perceived need to support creativity by engaging students in activities that require long periods of uninterrupted time. Therefore, teachers in this study perceived time as a commodity they required in order to foster creativity, but also to prepare students for assessments, meaning that time allocation was a major concern and challenge.

A second theme that was identified in teachers' experiences was a perceived sense of *incongruity*, or a lack of fit between what they felt was important about creativity, and how EQAO testing and preparation influenced their ability to promote creativity in the classroom. Some teachers indicated that they felt this created an environment where creativity was devalued. Notably, many teachers who perceived EQAO diminished their ability to foster creativity in the classroom also stated that EQAO was an important element in ensuring that children mastered the *basic foundational skills* of literacy and numeracy. Emerging as a third theme, it was found that teachers understood that knowledge benefits creativity, and that despite holding negative views on standardized testing, they were able to find benefit in a policy they may not like overall. It is well-established in the literature that in order to be creative, individuals need to have foundational knowledge and skills that they can then build on (Nickerson, 1999; Runco 2007). Teachers recognized that the EQAO test is part of a larger system that promotes the acquisition of basic skills, which could then lead to more creative thoughts and behaviours. Interpreted using

the voices of the participants, these three relational themes are explored in more detail in the sections to follow.

Time

Research has shown that teachers who are pressured to emphasise test preparation over more exploratory types of learning may spend less time engaged in creative activities with their students (Baer & Garrett, 2010). Though no formal investigation of EQAO has taken place using this frame of reference, the American literature evaluating the role of NCLB testing suggests that Ontario teachers may experience feeling the same kinds of time-related pressure, and may not be able to fully explore a topic in order to foster creative behaviours in their students (Starko, 2010).

Teachers in this study indicated that time pressure was indeed a factor they felt limited their ability to engage children in creative activities. Many teachers indicated that they felt students needed to be engaged in activities for long periods of time in order to be creative, however the pressure to increase EQAO scores meant that the time was needed in other areas, notably to practice, drill, and demonstrate daily growth on areas covered by the achievement tests. Theresa a Grade 5/6 teacher referenced the time pressures she was feeling with regard to preparing students for EQAO regularly. When I asked her about how EQAO influenced her ability to provide students with creative or non-traditional learning opportunities, she stated that

[my lessons are] more prescriptive because you have to show that growth, and you have to do the same activity at the beginning as we do at the end, but if you had time to extend you know, you could be creative with that. I'm just trying to be creative within the means that we have. I've got the use of technology, I try to do hands-on science, I encourage many ways of thinking, lots of choice, but again I would love to have more time and more ability to do that.

Marilyn, another Grade 5/6 teacher indicated feeling similar pressure with regard to the time she was required to spend moving through pre-testing activities provided to her by her principal a few days before the interview occurred. Throughout the interview and observation, Marilyn repeated her concerns about the volume of EQAO-related material she had to get through before testing, and how that would take away from her student's time to learn in-depth and engage in activities she felt would be more relevant to them later in life, such as debating social issues and working together in groups. In reference to the preparation activities she was expected to do before EQAO testing began in her classroom, she stated the following:

EQAO sucks. It really does suck. Because I already told you before- I've had to change my last three weeks of teaching because of what was proposed to me- that I need to administer to them and so all this other stuff that would have been very beneficial I think for them, for their future, there's no time - all those hours are going to be gone. It's going to take six hours to administer. Because there's sections and you only give them one section at a time, and you need a double block for each section.

As she became more comfortable in the research setting, Marilyn also began to comment more on what she felt students 'really needed to know,' which was grounded in a teaching philosophy of child agency and independence. As she showed me around the school she pointed out time and labour-intensive projects she and her students had engaged in, which she felt fostered not only their creativity, but also a sense of community. She lamented the end of these projects, as

test preparation was about to begin in earnest. Several times during my visit and in the interview, Marilyn questioned rhetorically “are they going remember this when they’re 25?” For Marilyn EQAO and creativity were strongly related by time- in prioritizing EQAO, she was taking time away from creativity.

Trent, a Grade 6 teacher with a background in the dramatic arts stated that he recognized the value in EQAO testing, but was regularly discouraged by how he had to “turn off” his usually vivacious and highly-engaged class in order to get them to complete the EQAO tests. Before this response, Trent discussed his conflicting views on EQAO, and this is his response to the follow-up question in which I asked him how often he felt he had to change a lesson because of the amount of time that was required to prepare students for EQAO testing.

I would take a story, or a moment, or a conflict, and we would step into a whole-group role-play, so at different points we are different members of a town who was contemplating closing a factory that polluted but created medicine to help with itchy throats and itchy eyes and scratchy throats, from the book “Just a Dream” by Chris Van Allsburg, or we were in a tribe when Christopher Columbus first met them and he asked for 10 people to go back with him, and what should we do? And everyone's stepping into a role getting their perspective- well that's really cool, interesting stuff that you don't always take time for because we gotta be reading the text and answering the question and tracking what they're doing - rather than just exploring. So I would say it's pretty much daily. That sounds really negative and whatever, but it's true.

The pressure teachers feel to meet the preparation expectations for EQAO set for them by the school administration and Board of Education seem to influence the ways in which teachers feel they are able to run their classrooms in order to foster creativity in their students. The teachers quoted above all spoke of EQAO testing as a barrier to creativity throughout the school year, because they had to make choices about what activities were prioritized in the daily schedule. Several teachers mentioned that they needed to set aside large blocks of uninterrupted time, and adjust the regular classroom schedule in order to prepare students for the end of year EQAO tests and ensure that students were able to perform at their highest ability. Overall, teachers indicated that their time was a commodity that was strategically allocated between EQAO testing preparation, and the long periods of activity time they felt they needed to support students’ creative development.

Incongruity

Most teachers also indicated that they felt there was a ‘lack of fit’ or incongruity between the demands placed on them by EQAO and their own desire to nurture and foster student development and creativity. When asked about how creativity and EQAO are related, Allison, a Grade 6/7 teacher succinctly stated that: “I don’t really see where creativity and EQAO fit. I don’t see how they are on the same plane, actually, I just- ... totally different.” This sense of poor fit, or incongruity was evident through the observation period with Allison as well. She identified that students needed creative independent time to learn about subjects that interested them, but then set aside large sections of the day to drill test items. She indicated, and it was obvious to see when present, that EQAO preparation activities had a very different, and more formal, tone than her preferred teaching method and normally relaxed classroom management style.

Paige, the participant quoted at the start of this paper also felt a sense of incongruity, but when speaking about the Grade 6 class she would be teaching next year, resigned to run her class in the best way she saw fit, rather than bowing to administrative pressure. During the interview she reflected on the stress she saw other teachers experiencing with regards to EQAO and stated:

I just think I'm going to do my best in the time that I have with those kids, and I'm going to teach them the best way that I can, and if that means they don't do as well on [EQAO], well, maybe they'll do better in life.

This dichotomy reflects a subtle, but common perception among teachers in this study that the test is invalid, requiring skills that are not relevant to life outside of school. When other teachers echoed this sentiment, they often clarified it by identifying creativity as a life skill, one which requires academic engagement, the ability to make connections between disparate ideas, and think deeply. Cramming math and literacy skills, they felt, ultimately benefitted students on the test, but not in their daily lives.

Other teachers bemoaned the limited value placed on creativity within the test itself. Ryan, a Grade 7 teacher reflected on his experiences with teaching Grade 6 and stated with reference to the EQAO testing: “- it dictates some of the things that I'm expected to do in my program because EQAO says it's got to be five lines or less.” Ryan experienced a sense of incongruity when providing students with writing and reading- response activities. Instead of letting students write to learn and explore their thoughts in as much space as they needed, he knew that he needed to constrain their writing in order to make it match the testing expectations. Similarly, Lena, a Grade 6 teacher, felt that the test did her high-achieving students a disservice, and didn't allow them to demonstrate their true potential. In one example she discusses a former Grade 3 student with what she identified as a gift for writing, whose talents would not be recognized within the EQAO testing format:

[on the test] she was supposed to write a one-page story on finding a key on an adventure, well that child's writing a fifteen chapter book at home - an adventure story, right? So how do you tell her that she's got to fit a story on one page? She can't even do her opening in there, and she's not a kid who was writing blah blah blah, and you're thinking ‘oh my God, there's no story here’. She would have written an introduction so you were sitting in the setting and you knew the character. She would have done all of that where we talked about the reader has to be able to visualize, she would have created the scene, and all she would have had down [on one page] was an opening.

Brad, a Grade 6 teacher indicated that he felt constrained with regard to creating a creative environment because of what he was expected to prepare his students for:

... you know, it's a known thing going into it, we know those are limitations, you try to encourage kids to work within the parameters, but again, are you stifling authentic expression of whatever by saying ‘no, you must write it in one line. You must write it in three lines, you must’ whatever. You can do whatever you want. It's your life, it's your thoughts, it's your abilities, right, but somebody's saying, ‘no, no you're not allowed to do that- you only get three lines’.

Brad's sense of having to constrain his students was also influenced by his strong philosophy of differentiated instruction and his own difficulty in school as a child. By recognizing his students'

unique individual strengths, he usually provides his students with multiple opportunities of expression. His frustration with the test is in response to not being able to see how students' different creativity and learning styles are recognized and rewarded.

When asked about the role EQAO plays in influencing his ability to foster creativity in his students, Ryan, the Grade 7 teacher quoted above also provided the strongest and most visceral reaction. He first asked if I would like an honest response, and once I replied affirmatively, he yelled his response directly into the audio recorder while lifting out of his chair and hitting both of his hands on the table: "I HATE IT! Standardized tests- there is no place for standardization in the world of creativity! That is an oxymoron. Standardization and creativity-GONE!" This reaction, though unexpected, spoke to his own personal beliefs about how best to teach his students. Throughout the observation period, Ryan demonstrated concerted engagement with each of his students, and fostered the learners' autonomy while working on projects and classroom activities. His teaching philosophy is grounded in both compassion and high expectations for each of his students, while allowing a great deal of space and large volume of resources for fostering self-direction. He later added during our conversation that if he ever had to teach Grade 6 and thus be responsible for preparing students for EQAO testing again, he would quit his job.

When each of the teachers spoke about the constraints of the test, or the limits the accountability measures place on what students were allowed to demonstrate, they often reflected back to their own differentiated instruction methods, indicating that students with different learning styles may be more or less naturally capable of writing answers that met the testing criteria. Every teacher that was interviewed discussed the importance they themselves placed on recognizing student learning styles, and how they encourage students to find their own successful ways of working within those styles. Many teachers indicated that children were most creative when they were working on an activity that reflected one of their dominant styles, whereas they struggled when faced with an activity that was not one of their 'natural' capabilities. Teachers in this study saw a strong relationship between creativity and standardized testing-most of them indicating that the two could not peacefully co-exist.

Foundational Skills

The last theme that emerged through the observations and interviews with the participants was a positive recognition that EQAO served an important purpose in helping students build and develop their foundational skills in literacy and numeracy. The previous research on the topics of innovation and creativity are clear in presenting the importance that basic skills and knowledge play in the development of creative adults. Thinking creatively depends heavily on having strong content knowledge, and higher-level thinking requires students to have not only a great deal of factual content knowledge, but also a variety of domain-specific cognitive skills (Baer & Garrett, 2010). Though teachers reported that they felt constrained in some ways by EQAO testing, they also understood that students derive benefit from focussing on preparation tasks, and the practice that went along with regularly reading, analyzing text, and completing mathematics exercises. Interestingly, many of the teachers indicated that they felt conflicted between developing content knowledge in students through test preparation and more authentic and engaging activities that prompted students to learn deeply and become engaged with the material.

Trent indicated that his thoughts on EQAO testing had evolved over the course of his teaching career. He explained how and why he experienced a change in his beliefs about EQAO from those he held as a novice teacher to his experience now ten years in.

Five years ago even, I would have been this is ridiculous, we're pigeon-holing kids, and we're stifling creativity, and now I kind of look at it, no, we're giving them a framework to succeed, and then they can be more creative.

Allison echoed Trent's evolution in thought, and now sees EQAO as able to provide a starting point for her students with regards to both their creativity and future potential for innovation:

One thing that my students have that they didn't used to have, and I'll say this is probably because of EQAO, is they have very good basic skills, most of them coming in, and so I guess that is a launching place for creativity, if you know that your students coming in, mostly know their times tables, and mostly know how to sit down and do seatwork, that does give you a place - it does give you a launching pad, because when I sit my kids down with a sheet of integers or whatever to work on, they have no trouble understanding what sit down and do independent seat work looks like. So when I ask for that I can usually get it.

When Allison was prompted to expand on her answer by asking if this referred to her seeing EQAO as having utility, she responded:

Right, you have to have the underpinnings, think of a people who research - like Stephen Hawking, people like that, they have to have underlying understanding of the principles of physics in order to be able to say to themselves, 'test this against my understanding of this is, and know whether what my pursuit is reasonable', and if it's not- abandon it, instead of getting locked into an approach that's not going to get you anywhere.

Lena was also able to find some utility in EQAO testing, in that it she felt it accomplished its goal of keeping her accountable. She stated: "I mean it keeps you in check, it makes you go back and make sure that this is what we're doing, some of the math problem-solving questions I like".

From these discussions, it is clear that teachers have mixed feelings and experiences regarding how creativity can foster a creative classroom environment. Though there is benefit to be had from helping students learn the basic skills and develop strong literacy and numeracy abilities, teachers feel constrained in the types of activities and depth of learning they can foster within their students.

Discussion

The use of standardized testing is a hot topic in education, used by parents and teachers as a key example when arguing that the school system fails children and drives independent thought and creativity out of the classroom. This qualitative research study aimed to explore the points of view of classroom teachers with regard to their perceptions of the role of standardized testing, the influence it has on teaching and learning, and ultimately the ways in which it influences teachers' abilities to use creative teaching methods and foster innovation in students.

The results of this study are illuminating, and point to a series of interesting relationships between creativity and standardized testing practices. Many teachers indicated that they felt that

there wasn't enough time to do both well. Either they had to prepare students for EQAO assessments, or they could promote their students' creative talents and abilities. Teachers also stated that they felt pressure to concurrently foster the individuality of students while ensuring that they were performing to the best of their ability when approaching testing time. On top of this, teachers expressed mixed feelings about how EQAO testing 'fit' into their vision of the idealized classroom. For these teachers who view creativity as something important, it is not surprising to hear that any activity that constrains the expression of individual ideals and pushes everyone to a common standard is antithetical to creativity. As stated earlier, every teacher interviewed discussed the importance they placed on differentiating instruction within their classroom based on the students' self-identified learning styles. They indicated that they were usually cautious when doing lesson planning to ensure that activities and lessons within the classroom reflected the unique preferences and abilities of their students, and that the pupils were recognized as experts in their own abilities regarding learning. This was often reflected in teachers' desire to engage students in experiential learning and reflects an understanding of situated cognition.

The interviews and time spent with teachers casts light on the similar perspectives many teachers hold about EQAO testing. Though this study has only eight participants, and cannot be generalized to wider populations, it brings to light the complicated, and sometimes fraught, relationship that teachers see between maintaining a creative classroom and the need to prepare students for standardized testing. The main benefit of this research is that it provides context for a relatively new area of inquiry, and allows the authentic and honest voices of teachers to be heard. No prior research has explicitly investigated the relation of creativity to standardized testing in Ontario. Teachers who participated in this study came from a variety of backgrounds and were located in a wide variety of communities from across Southern Ontario.

Future research must further examine the issue of creativity in schools, especially as related to the nature of standardized achievement testing and formal evaluation generally. As the Province of Ontario continues to encourage improvement on EQAO scores and hold them as a marker of school success, educators and administrators need to understand what costs to developing creativity may be involved in intensifying student preparation, and think of ways the test preparation can better reflect the goals and values of the teachers who are involved. Students, ultimately, must be a priority and we as a society need to ensure that the lengths we go to in order to make schools and teachers accountable for student progress won't tie the hands of the knowledge experts working with our children each day.

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