

Achieving excellence: Bringing effective literacy pedagogy to scale in Ontario's publicly-funded education system

Mary Jean Gallagher¹ · John Malloy² ·
Rachel Ryerson³

Published online: 30 November 2016
© Springer Science+Business Media Dordrecht 2016

Abstract This paper offers an insiders' perspective on the large-scale, system-wide educational change undertaken in Ontario, Canada from 2003 to the present. The authors, Ministry and school system leaders intimately involved in this change process, explore how Ontario has come to be internationally recognized as an equitable, high-achieving, and continuously improving jurisdiction (Brochu et al. in Second report from the 2009 programme for international student assessment. Council of Ministers of Education, Canada, Toronto, 2011; Mourshed et al. in How the world's most improved school systems keep getting better. McKinsey & Company, New York, 2010; OECD in Strong performers and successful reformers in education: lessons from PISA for the United States. OECD, Paris, 2010). The narrative of improvement in Ontario presented here was developed out of systematic interviews with Ministry and School Board leaders' experiences of the literacy improvement strategy, and informed by document and data analyses. It addresses the historical and political context of Ontario's change efforts, the shifting understanding of teaching and learning in the province, the essential respect for the professionalism of educators, the structures that facilitated the change, and concludes with key characterizations of the present culture of education in Ontario. While the paper focuses on the elementary literacy strategy, its wider objective is to outline the collaborative approach to shifting pedagogical practice that has opened the ceiling for what a public education system is capable of achieving by fostering

✉ Rachel Ryerson
Rachel.Ryerson@ontario.ca

¹ MJ Gallagher and Associates, Lasalle, ON, Canada

² Toronto District School Board, Toronto, ON, Canada

³ Ontario Ministry of Education, 900 Bay Street, 16th Floor, Mowat Block, Toronto, ON M7A 0B1, Canada

local ownership of change while raising the floor by setting high standards for literacy achievement for all students.

Keywords Large-scale educational change · Literacy pedagogy · Professional learning · Shared ownership · Culture of learning · Participatory environment

Introduction

Understanding how Ontario, Canada has become internationally recognized as an equitable, high-achieving, and continuously improving jurisdiction (Brochu et al. 2011; Mourshed et al. 2010; OECD 2010) is critical for maintaining and sustaining the gains that have been made. This paper outlines the shifts in understanding of literacy teaching and learning, the structures and beliefs that facilitated the change, and concludes with key characterizations of the present culture of education in Ontario. The context of public education in Ontario at the outset of the literacy strategy provided the foundation and call to action for change.

Ontario context¹

In 2003, the public education system in Ontario seemed stalled. Only 54 % of Grades 3 and 6 students were meeting the standard of Level 3 (equivalent to the letter grade B) on provincial assessments for reading, writing and mathematics. In secondary schools, the rate of graduation was 68 %. Some thought that the Ontario system was in turmoil. *The Schools We Need* policy audit (Leithwood et al. 2003), for example, described a “harsh environment” for less advantaged and diverse student populations. Even though Ontario was doing fairly well by international standards, the audit identified gaps between high- and low-achieving students and schools, and called for a “new blueprint for Ontario education.” Building on constructive recommendations of the previous government’s Royal Commission on Learning (1994), including a province-wide curriculum-based test conducted by the newly established Educational Quality and Accountability Office (EQAO), the then newly elected provincial government committed to making education its number one priority. It established the following goals: (a) raising the bar for student achievement, (b) narrowing the achievement gap, and (c) building public confidence in publicly funded education.

¹ This section of the article draws on a previous unpublished manuscript for the International Seminar on Corporate Governance of Public Service Units, September 23, 2012, Beijing, China.

Policy and governance of education in Ontario

Education in Canada is the responsibility of each province and territory. There is no national or federal department or ministry responsible for governance of education. The Council of Ministers of Education Canada (CMEC), however, provides a collaborative function across the provinces and territories. For example, CMEC coordinates provincial participation in the Programme for International Student Assessment (PISA). The basic structures of provincial and territorial education systems across Canada are similar, each with three tiers—elementary, secondary and postsecondary. In most jurisdictions, education is compulsory until students reach the age of 15 or 16. Since 2006, compulsory schooling in Ontario is to the age of 18, unless otherwise having graduated from secondary school.² Ontario has a tri-level system of education governance that consists of the Ministry of Education, district school boards and schools.

Ontario is Canada's most populous province and among its most diverse, serving just over two million children in four different publicly-funded school systems (English public, English Catholic, French public and French Catholic).³ Currently, 20.7 % of Ontario students have a first language other than English or French (Canada's two official languages). Across all Ontario systems, there are approximately 73,700 elementary school teachers and 41,300 secondary school teachers, represented by four different teacher unions. In total, there are approximately 4000 elementary schools and 900 secondary schools, each under the jurisdiction of a district school board (herein referred to as "district"). There are 60 English-language and 12 French-language districts, ranging widely in size from a few hundred students in rural areas to 250,000 students in the Toronto District School Board, one of the largest urban districts in North America. The public education system in Ontario is a well-used resource with approximately 95 % of all students in the province attending publicly-funded schools. The remaining students are either home-schooled or attend private schools or federally-funded First Nations schools.

In order to teach in Ontario, teachers must be certified members of the Ontario College of Teachers. They are required to have an approved postsecondary degree and complete an accredited teacher education program that is four semesters, or 2 years, in length.⁴ Teachers are required to be members of a teachers' union. Directors of Education, superintendents and principals are all certified teachers who have additional qualifications and are members of their own professional associations.

² For the amendment to the Education Act see: http://www.e-laws.gov.on.ca/html/source/statutes/english/2006/elaws_src_s06028_e.htm.

³ For current facts about the Ontario Education system see: <https://www.edu.gov.on.ca/eng/educationFacts.html>.

⁴ The length in programs has recently changed. Prior to 2015, most accredited teacher education programs were two semesters, or 1 year, in length.

Methods

The present study takes a mixed methods approach to unravel the narrative of the changes in literacy practices in Ontario. It examines trends in the provincial large-scale assessments of reading, writing, and mathematics and reviews syntheses of the annual reports of districts on professional learning, as well as external evaluations that were conducted to identify shifts in literacy and professional learning practices. Systematic interviews with ministry and school board leaders, focused on their experiences of the literacy improvement journey were also conducted to capture and verify shifts in literacy practices and the conditions that supported these shifts. Ten key informants were identified as playing a critical role within the Ministry and district school boards in terms of the development and implementation of policy over the last 10 years. Eight were educators who brought their experiences as classroom teachers, principals, district-level staff developers as well as their current district and ministry leadership roles. The authors engaged in individual interviews about the changes in literacy practices and what they believed led to the shifts in literacy practices in Ontario.

Overview of findings

What has changed in literacy learning and pedagogy in Ontario over the last 10 years? The first section will present the evidence that student achievement has improved as a key indicator that the quality of teaching and learning in literacy has improved. It will then articulate the shifts in practices of teaching and learning literacy that have occurred. Third, the shifts in approaches to increasing teacher's capacity in literacy that supported the changes in practice are identified. Next is an exploration of the role of leadership in supporting these changes, followed by a discussion of the Ontario Focused Intervention Partnership as an example of these changes in action. The final section summarizes what has changed in literacy pedagogy and the strategies and conditions that have supported these changes.

Trends in literacy achievement in Ontario

In 2004, the provincial government of Ontario created the Literacy and Numeracy Secretariat (LNS) as a responsive body of education leaders to partner with district school boards in developing and implementing actions to meet the new commitments of (a) improving elementary literacy and numeracy outcomes and graduation rates from secondary schools, (b) closing gaps in achievement and (c) building public confidence. In the early years of implementation, there was a significant focus on improving elementary literacy outcomes, resulting in the pedagogical shifts described in this paper.

The raised expectations for achievement were set to a very high standard: 75 % of grade 6 students achieving the standard of Level 3 (equivalent to a letter grade B) on provincial assessments for reading, writing and mathematics. At the time (in 2002–2003), only 54 % of students were meeting or exceeding this standard across

elementary assessments. Of particular concern were reading results: Only 50 % of grade 3 students, and 56 % of grade 6 students, were meeting the provincial standard in reading.

Since 2002–2003, Ontario has shown substantial and sustained improvements in literacy achievement. Overall, the proportion of students meeting or exceeding the provincial standard in assessments of elementary achievement in reading, writing and mathematics has increased from 54 % in 2003 to 72 % in 2014. The only literacy assessment that has not reached the target of 75 % of students at or above the provincial standard is primary reading in English-language schools; however, results continue to rise with 70 % of students now meeting or exceeding the provincial standard in 2014, compared to 50 % in 2003.

Improvements in literacy achievement are evident at the school level, the unit of change for Ontario’s large-scale efforts. Elementary schools that have been open during 2002–2003 through to 2013–2014 and have more than 15 students participating in EQAO assessments in both years (n = 2546) have significantly improved on average 20.5 percentage points in Grade 6 Reading. Over the last 9 years, categories of school performance have been utilized to determine supports for schools, in a way that is intended to differentiate supports for needs, rather than rank schools. Figure 1 below illustrates the increases in achievement of schools by categories of achievement over the last 9 years.

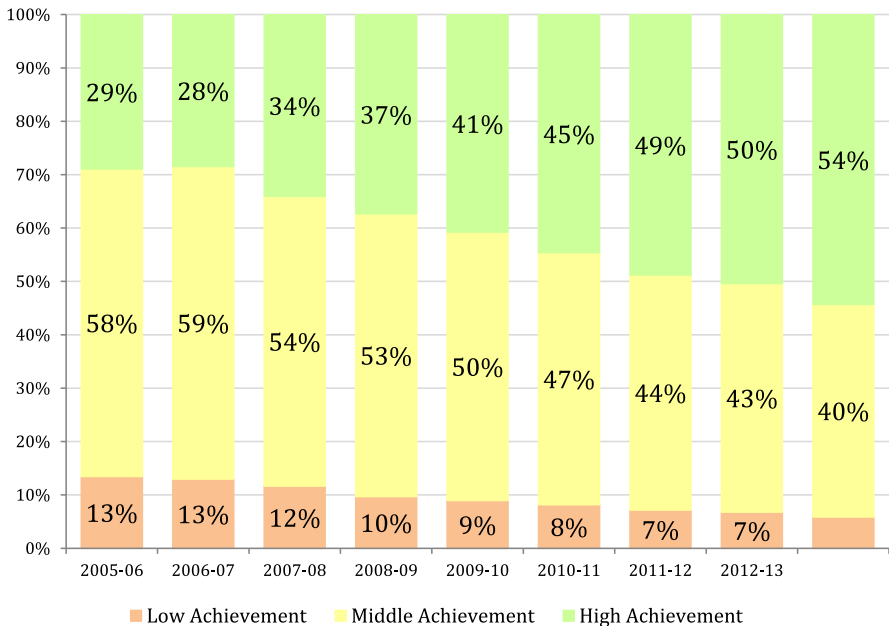


Fig. 1 All elementary schools by EQAO achievement category—2005–2006 to 2013–2014. Within high achieving schools at least 75 % of students meet or exceed provincial standard on two-thirds or more of EQAO assessments. Low achieving schools are defined as schools with fewer than 50 % of students meeting or exceeding the provincial standard on two-thirds or more of EQAO assessments. Middle achieving schools include all other schools

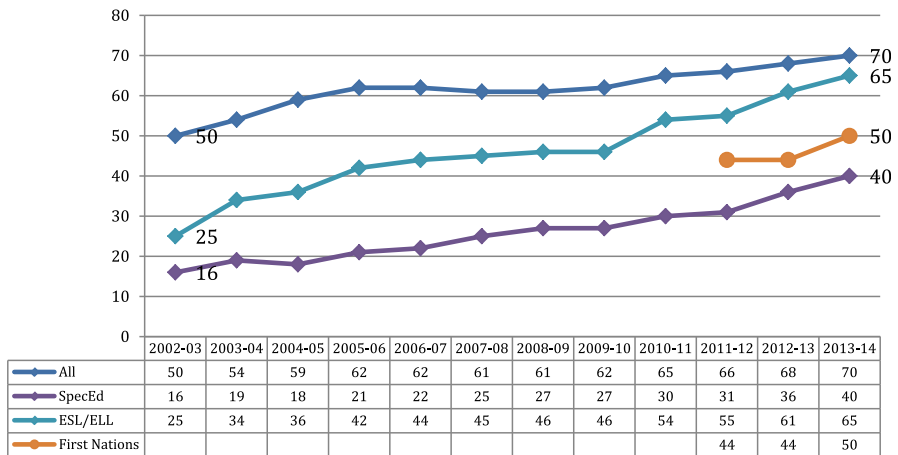


Fig. 2 Primary reading trends in English language districts from 2002–2003 to 2013–2014 by group

There has been clear progress in closing the gaps for some groups of students as well. The overall gap in student achievement between learners whose first language is not that of instruction (English or French) and the entire student population across all assessments, has narrowed from a 23 percentage point gap in 2002–2003 to only a 4 percentage point gap in 2013–2014. Figure 2 below illustrates the gaps for English Language Learners, students identified with Special Education needs, self-identified First Nations⁵ students, and all learners in grade 3 reading specifically. English Language learners and students identified with special education needs have closed the gap with all students since 2002–2003 by 80 percentage points and 12 percentage points, respectively.

Furthermore, evidence on national and international assessments indicates that Ontario has achieved system-wide change that has positively impacted student learning. For example, on Canada's 2013 *Pan Canadian Assessment Program*, Ontario was the only Canadian province performing at or above the Canadian average in all three areas of reading, math and science (CMEC 2014a, b). Similarly, Ontario, and Canada overall, performed equal to, or better than all but 7 of 44 other countries that participated in an OECD international assessment in reading (PIRLS) for Grade 4 students in 2011 (CMEC 2012a, b). On the *Programme for International Student Assessment's (PISA)* 2012 assessment of problem solving within 44 jurisdictions, Ontario students performed significantly higher than the OECD average (CMEC 2014a, b). Importantly, confidence in public education has increased (Hart 2012). Ontario has come to earn the trust and respect of the Ontario public, as well as gain an international reputation as an equitable, high-achieving, and continuously improving jurisdiction (Brochu et al. 2011).

⁵ As of 2013, all districts have established a voluntary, confidential indigenous student self-identification policy. The 2011–2012 school year is the baseline year of reported outcomes for self-identified First Nations, Inuit and/or Metis students (Ontario 2013). Although the population of First Nations, Inuit and/or Metis students who chose to self-identify is changing, this offers an indication of progress towards supporting achievement and closing achievement gaps for Aboriginal learners in Ontario.

Raising the floor and opening the ceiling for literacy

In 2002–2003, the majority of schools in Ontario were struggling to provide high quality literacy instruction. The improvements over the last decade are a result of intentional work to raise the floor of average literacy instruction. However, scaling change is not just the spread of activity structures, materials, or classroom organization. It also includes the spread of underlying beliefs, norms, and pedagogical principles. Deep change goes beyond surface structures or procedures (e.g., changes in classroom organization and materials, scheduled literacy blocks). Coburn (2003) argues how deep and lasting change is created by shifting *educators beliefs* (e.g., about how students learn, subject matter knowledge, expectations for students, and what constitutes effective instruction); *norms of social interaction* (e.g., patterns of teacher and student talk such as accountable talk and ways in which students and teachers treat one another); and in the *underlying pedagogical principles* embedded in curriculum (e.g., evidence informed approaches to effective instruction grounded in a sound theory of learning). This section will explore the evidence of five key shifts in beliefs and practices across Ontario: high expectations, ensuring adequate time was dedicated to literacy learning, establishing a common basis of effective literacy instruction, establishing common assessment practices, and shifting from effective literacy instruction to literacy pedagogy.

High expectations

The new provincial standards set very high expectations of students. Importantly, these served to re-conceptualize higher-order thinking skills as essential for all students, not just high achievers. In a sense, this raising of standards raised the floor of expectations for educators as well. Education leaders who served as informants for this paper recall the discourse of the time that supported the shift in belief that all students were capable of performing at high standards, captured in expressions such as “all students can learn”, “all excuses off the table”, and “demographics are not destiny”. It took considerable time and engagement in capacity building for teachers to understand and own these high expectations (an issue we discuss later on). Importantly, simply shifting beliefs about expectations that students can learn is not enough. They need to work in concert with changes in practice and system conditions that enable and sustain these changes. These shifts in practice and enabling conditions are discussed below.

Time for literacy instruction

Time devoted to literacy instruction was inconsistent across districts and schools at the outset of the strategy. In 2006–2007, the ministry began to collect information directly from each public elementary school regarding the institution and implementation of Literacy and Numeracy Blocks in each grade, from 1 to 8, in an attempt to establish a consistent, province-wide practice of focusing a minimum of 100 minutes of uninterrupted instruction in literacy daily. An internal analysis of the data indicated that Literacy and Numeracy Blocks were widely established by

2008–2009, and that there had been little change since. More importantly, system leaders indicated that although the structural accountability requirement of ensuring a certain amount of time was focused on literacy instruction, it did not serve, by itself, to influence the quality of instructional practices within that time. As a result, in 2012–2013 the collection of literacy and numeracy block data from schools was discontinued.

Establishing effective literacy instruction

Prior to 2003, there were no common approaches to literacy instruction and assessment in Ontario, both within and between districts. Some school districts relied on commercial programs for instruction, while others encouraged teaching from the provincial curriculum. Further, divergent approaches to literacy instruction, from explicit phonics instruction to whole language approaches could be found across and within Ontario schools. The inconsistency in approaches to literacy instruction constrained collective efforts to improve results for all students.

At the outset of the Ontario literacy strategy, there were a plethora of resources about effective literacy instruction available and used by educators across the province (e.g., Fountas and Pinnell 1996; Marzano et al. 2001; Allington and Cunningham 2002; Harvey and Goudvis 2000; Clay 1993; Miller 2002). Amidst this cacophony of resources and perspectives on effective literacy instruction, the Ontario Ministry of Education engaged leaders in literacy instruction and partners across the sector, including teacher unions, to produce two reports that set out to describe high quality literacy instruction: the *Early Reading Strategy* in 2003 and the *Expert Panel on Literacy in Grades 4 to 6 in Ontario* in 2004.

The expert panel reports served as a guide to effective literacy instruction in Ontario, and subsequently were followed up with the development of teacher resources that operationalized effective literacy instruction (e.g., *Guides to Effective Instruction* 2005). These resources drew from research, as well as the knowledge and experience of expert literacy instructors in the province. The 2004 report defined literacy as follows:

Literacy is defined ... as the ability to use language and images in rich and varied forms to read, write, listen, speak, view, represent, and think critically about ideas. It enables us to share information, to interact with others, and to make meaning. Literacy is a complex process that involves building on prior knowledge, culture, and experiences in order to develop new knowledge and deeper understanding. It connects individuals and communities, and is an essential tool for personal growth and active participation in a democratic society.

These reports were a critical turning point in the role of the government in education, as up until then the ministry had set direction for curriculum, or *what* was to be taught, but not *how* curriculum ought to be delivered. The reports outline components of effective literacy instruction aimed at developing critical literacy skills as composed of:

- Use of assessment to guide instruction.
- Differentiating instruction.
- Gradual release of responsibility.
- Instructional approaches to building vocabulary, comprehension and higher-order skills.
- Uninterrupted blocks of time devoted to literacy instruction that offered a comprehensive integration of a variety of instructional strategies (e.g., read aloud, shared reading, and guided reading using flexible groupings).
- Integrating literacy instruction across curriculum areas.

Since the release of the Expert Panel reports, there were many tensions in implementing these components at scale. Adoption of “high-yield” practices such as literacy blocks or guided reading at times became confused as the goal rather than as a means for improved student learning. A more nuanced understanding of high-yield strategies is currently developing among educators. As Marzano’s (2009) paper indicates, high-yield strategies by definition are only high-yield if students are learning. Effective instruction in literacy requires the knowledge and expertise of individual teachers of their learners to select the approaches that will be the most effective in each context. Implementing new teaching strategies requires practice and refinement, directly informed by evidence of student learning. This type of evidence of effectiveness in practice is what Bryk (2015) refers to as practice-based evidence, to differentiate from evidence-based practices identified by academic research.

Capturing the practice-based evidence and making it accessible to other educators across the province has been a core part of Ontario’s approach to literacy improvement. New knowledge and numerous resources have been generated and created by Ontario educators for Ontario educators over the last decade. The Capacity Building Series of the Literacy and Numeracy Secretariat (LNS) is one vehicle to mobilize the learning from Ontario educators to support leadership and pedagogical effectiveness. This series of short written reports captures shifts in thinking from Ontario educators in areas such as the learning environment, assessment practices, professional learning, culturally responsive pedagogy, and student voice.⁶

Assessment for, as and of learning

In addition to setting a common basis of effective literacy instruction, the Ministry funded each district school board to purchase and implement a reading assessment tool, such as the Developmental Reading Assessment (DRA), Comprehension Attitude Strategy Interest (CASI), or other publisher created leveled text assessments. Up until this time, common assessment practices in reading were not in place across Ontario. This investment has been crucial in initiating changes in practice based on local evidence of teaching effectiveness on student learning outcomes.

⁶ Some of these resources can be found here: <http://www.edu.gov.on.ca/eng/literacynumeracy/publications.html> and here: <http://learnteachlead.com/>.

Shifting assessment practices by engaging in use of common assessments, collaborative teacher marking of student work, and data-based decision making at a school level became central aspects of the shift in literacy instruction in the province. So much so that by 2010 a provincial policy for assessment practice in Grades 1 to 12 called *Growing Success* (Ontario Ministry of Education 2010c) was created.

However, implementing common assessment practices was not a simple process. The central direction to incorporate diagnostic assessments in reading instruction did in some instances create misunderstanding of the best use of this practice. The primary purpose in the Ministry providing funds for diagnostic assessment tools was to enable teachers to use student data to enhance learning and student success. In practice, the tools provided a common means for assessment; however, district collection and analysis of diagnostic assessment data in some cases caused a backlash among teachers, and reduced the potential to make the best use of the data. In some cases, administering the assessment was perceived as an exercise of monitoring student learning by the district, rather than an opportunity for teachers to analyse the results to identify next steps in student learning within the classroom once submitted to the district. This is an example of an ongoing challenge in system wide change efforts of determining the appropriate granularity and type of data to inform decisions across different contexts within the system, and ensuring that all partners are engaged in using evidence of learning to inform decision making within their respective contexts.

Shifting from effective literacy instruction to effective literacy pedagogy

Building on the foundational instructional tools available in resources such as the Expert Panel reports, together with a large-scale shift in assessment practices, effective literacy instruction is coming to be understood as effective literacy pedagogical practice, as both learning and teaching are essential to determining effectiveness. Pedagogy is defined in current Ministry documents as: “the understanding of how learning takes place and the philosophy and practice that supports that understanding of learning” (Ontario Ministry of Education 2014a, b, c, d). This is a fundamental shift from focusing on perfecting instruction, or teaching practices, to a focus on learning. Pedagogy is inclusive of instructional practices (e.g., teacher moves), however the focus is primarily on what learning is taking place and how. This shift in understanding mirrors the insight of Muijs et al. (2014) in their review of the international literature on teacher effectiveness research, that there has been a substantial gap in the teaching effectiveness literature regarding the processes that students engage in while learning. It is no longer considered sufficient for teachers to practice and perfect instructional practices, regardless of how much research has gone into demonstrating that these are effective. Learning and assessment are shifting from being thought of as a set of practices that teachers do, to pedagogical processes that engages both learners and teachers.

Current efforts in refining literacy pedagogy in Ontario include integrated learning across subject areas (arts, humanities, social sciences, sciences and mathematics) with a focus on creative thinking and higher order skills, including the

effective use of information technology to support learning. Ideally, literacy learning is integrated across the school day. Ongoing efforts to improve literacy focus on how students are active in all aspects of the program from self-assessment, to co-developing learning opportunities.

This section has articulated the observed shifts in beliefs and practices across Ontario with regards to literacy from high expectations, time dedicated to literacy learning, defining effective literacy instruction, establishing common assessment practices, and finally shifting from effective literacy instruction to literacy pedagogy. Ontario's literacy strategy increasingly promoted teacher risk taking to bring more creativity to literacy teaching and learning. In order to achieve this shift in understanding, to both open the ceiling and raise the floor of expectations of effective classroom practice, Ontario made extensive investments in building educator capacity through professional learning. This is discussed in the next section.

Ontario's evolving approach to professional learning

Internationally, professional learning is recognized as a key lever in school change and improvement (Mourshed et al. 2010; Muijs et al. 2014). Effectiveness in professional learning is defined in terms of its impact on classroom practice and student learning. Consistent with this perspective, directly engaging classroom educators became central to Ontario's story of educational change. The LNS, now within the Student Achievement Division of the Ministry of Education, initiated and supported capacity building through initiatives and programs across the education system. It provided funding for time for teachers to collaboratively engage in building capacity. Simultaneously, the province made major investments in personnel to support capacity building across all levels of the system including provincial level staff, district school board leaders, and school level staff (e.g., Student Success Teachers in secondary schools and, beginning in 2010, teacher-researchers working directly in classrooms and schools).

Over the course of engaging in this work, Ontario has drawn upon insights from both the international literature and evidence from Ontario initiatives. Capacity building programs and initiatives evolved based on evidence of impact. This cycle of continuous learning and support from the Ministry has fostered an approach to system change that is grounded in reciprocal learning. The ownership of learning has come to rest upon the individuals who are closest to the learning, be it student learning, professional learning, or system learning. The *School Effectiveness Framework* (2013) provides guidelines for evidence use for ongoing school improvement for school and system leaders. Further, evaluative thinking to meaningfully use evidence is essential to the development, refinement and removal of policies and programs within the Ministry of Education (e.g., as informed by the Yarbough, Shulha, Hopson & Carthers's *Program Evaluation Standards*).

The shift in Ontario's approach to educator capacity building can be characterized as one from professional development to professional learning, similar to the shifts in understanding identified in the literature (see for example Webster-Wright 2009). Professional development approaches to building capacity typically assume

that the purpose is to top-up knowledge deficits of teachers (Webster-Wright 2009) or master decontextualized teaching practices (Muijs et al. 2014). Professional learning, in contrast, is an approach to educational change that places reflection on student learning as the predominant motivation of and for teacher action, learning and change (Ravitch 2014). Professional learning is understood to be most effective when educators direct their own learning about pedagogical content embedded in action and inquiry into practice, in connection with school and jurisdictional visions and policies (Van Veen et al. 2012). Table 1 below outlines the shifts in Ontario's approach from professional development to professional learning. As the table outlines, there have been significant shifts in terms of the focus, processes, contexts and supports, as well as the means for sustainability.

Initially, professional development was seen as a mechanism for delivering information about effective instruction to teachers, with the intention that they would then incorporate this learning in practice. As such, one-time sessions were delivered in an undifferentiated way on a large scale with consistent messaging about specific practices. For example, the Ministry led train-the-trainer scripted sessions on shared reading for junior teachers and differentiated instruction for primary teachers that were then implemented on a broad scale by district school board staff. This form of professional development created conditions for a common basis of conversation across districts and schools, but at times also constrained conceptions of effective literacy. For example, when district school board staff visited schools to monitor implementation, practice indicators such as allocated instruction time for shared and guided reading were the focus of monitoring, rather than monitoring what the students were actually learning.

Through explicit partnership with educators and school boards in gathering and reflecting on evidence, approaches to professional development gradually evolved. Teachers were engaged as professionals with adaptive expertise, based on the assumption that they are best able to direct their own learning to better serve their students (Timperley and Alton-Lee 2008). As a result, models of professional learning emerged that enabled teachers to articulate their learning drawn out of the focus on their students' learning. Annual reports on implementation of professional learning to the Ministry indicate that this approach to professional learning has taken hold in Ontario. In 2013–2014, district leaders reported a staggering majority of schools, over 90 % of elementary schools in Ontario, engaged in professional learning grounded in the collaborative study of their students' learning.

As previously discussed, discourse on literacy instruction has shifted to focus on literacy pedagogy. Internal and external evaluations of professional learning efforts within Ontario have captured some of the shifts in beliefs about teaching and learning practices in the province. Campbell's (2014) synthesis of the evidence drawn from internal and external evaluations carried out on LNS initiatives concludes that there is "evidence of substantial impact for professional practices, including: school self-assessment and improvement planning processes; principals' instructional leadership; and important shifts in teachers' confidence and capacity with increased use and improvement in a wide range of learning and teaching practices."

Table 1 Evolution of professional learning in Ontario elementary and secondary education—early 2000s to the present

Dimensions of professional learning	Evolving from professional development	To professional learning
Explicitly valued outcomes	Student learning and achievement	Student learning and achievement coupled with professional learning and efficacy
Focus	Effective instructional practices (e.g., mobilizing high-yield, evidence-based, instructional strategies) and knowing the subject content	Identified through studying and responding to student learning and experience (e.g., formative assessment) building on a solid base of knowledge of subject content and teaching strategies
Process	Delivery of prescriptive or traditional professional development based on school, school board, and ministry goals and policies, where teachers are recipients of workshops and professional development sessions, generally delivered in isolation of the context of teaching and learning	Professional learning connected to school, school board, and ministry goals and policies, where educators construct new knowledge and skill relevant to context and students’ learning strengths and needs through teacher-led, active and inquiry-based learning (e.g., collaborative inquiry)
	Frequently single “one size fits all” sessions with a limited range of predetermined, prescheduled professional learning options (e.g. workshops, book studies)	Ongoing and long-term facilitation of teacher learning, differentiated by context, student and educator strengths and needs with choice in learning options (e.g., webinars or workshops; coaching and feedback; collaborative inquiry)
	Evidence of effectiveness determined primarily by existing external research	Evidence of effectiveness is determined by both local evidence and external research
Context	Primarily outside of the school	Primarily within classrooms and schools
	Principal as school manager	Principal as instructional leader
	Application of new knowledge and skills occurs in closed classrooms	Application of new knowledge and skills occurs with colleagues and/or is debriefed among colleagues
Sustainability	Learning among specific levels of the system is disconnected as individual teachers focus on practice and development (e.g. through individual learning plans for teachers)	Classroom, school and board leaders’ learning is aligned and coherent with goals of student achievement and well-being, through collective participation in planning professional learning actions among colleagues
	Ongoing professional learning and application in practice are the result of individual motivation and/or external requirements	Ongoing professional learning and its application are the result of whole school and board commitments to and plans for improvement

Re-conceptualizing collaboration and leadership for learning

Deep and lasting change requires that the learning and ownership of the change be internal to districts, schools, and educators. Change cannot just be introduced and supported externally; rather, it must be internally owned, understood, and put into action (Little 2012). As Earl and Hannay (2011) argue, change must become integrated into the tacit understandings of practice for schools and teachers. In order to achieve this degree of ownership within system change efforts, a shift in authority needs to take place in terms of who directs and leads the change efforts. This section explores the shifts in leadership practices that have supported the shifts in literacy practice in Ontario schools. These shifts are reflected in the evolution of the Ontario Leadership Framework.⁷

Organizational structures, routines, and norms both enable and constrain professional learning work (Spillane 2012). In the past, leaders set ministry goals and district plans prior to considering the specific local needs of students and teachers in schools. Board improvement plans tended to be very long and detailed in terms of actions to engage schools in learning a district identified teaching practice such as guided reading, which constrained possibilities for schools. Now improvement plans tend to emphasize processes for schools and districts to engage in ongoing, cyclical learning about student learning. Local evidence from schools in many cases is analysed collaboratively with district leaders to determine system supports and direction that is responsive to the local needs of schools. Effective leadership requires the ability to negotiate organizational limitations and constraints, while being strategic in finding opportunities to engage with and support teachers in ways that are responsive to their everyday work within their specific context (Woulfin 2013). Essential to this shift has been the fostering of authentic interactions and collective leadership amongst all actors about evidence of student learning. Leaders can and do play an important role as educators collaborate to examine and analyze student data to inform practice (e.g., Honig and Venkateswaran 2012), as well as conceptualize data use for improvement (Spillane 2012).

However, the ways in which leadership and expertise inform and support collaborative groups of educators can either hinder or promote teacher learning and innovation (Little 2012). Ontario district and school leaders are increasingly reporting adopting a shift in stance of listening and learning, rather than exerting authority and imposing expertise over the practice of others. For example, one district leader described how the shift in leadership approach fostered a culture of collaborative problem solving that was less about getting the “right” answer of practice, but rather about inquiry and collaboration that fostered risk-taking and learning from mistakes. Part of fostering that shift was admitting as a leader, one does not know the “right” approach, but rather modeling asking questions about what works, for whom, and why. Participatory leadership is critical for this kind of collaborative professional learning to impact practice (Volante 2012). A shift to a

⁷ The Ontario Leadership Framework is available online here: <https://www.education-leadership-ontario.ca/content/framework>.

more participatory approach characterizes distributive leadership practices that enable coherence through interaction and collaboration across learning communities (Young and Kim 2010).

A recent study of collaborative inquiry practices in Ontario (Bolden et al. 2014) identified a set of common tensions within this type of professional learning work that must be continuously negotiated. When both student and professional learning are communicated as important, educators can experience these as competing priorities, rather than reciprocally related objectives. Structures such as protocols for analyzing evidence that clearly connect student and professional learning, and facilitation of professional learning conversations grounded in evidence of student learning serve to mitigate these tensions (Little 2012). In Ontario, those in formal leadership roles have played an important role in ensuring that collaborative professional learning remains a priority. They have done so by building in consistent time for professional learning, minimizing distractors, increasing transparency of processes to access resources and pedagogical expertise, and clearly communicating evidence of how interconnected efforts are leading to progress towards achieving a small number of shared goals.

An example of this shift in leadership is documented by Hargreaves and Braun's (2012) review of the Essential for Some, Good for All project, designed to support capacity building and improving outcomes for students with special education needs. Ten district school boards participated in the study, between 2009 and 2012, which documented the architecture and impact of the project. The study documented greater collaboration among staff, more joint planning, broader acceptance of collective responsibility and increased attention devoted to examining samples of student's work for all students. Middle-level district leaders implemented processes of coaching, mentoring, cross-pollination and communication of key ideas to lead instructional improvement to close gaps for students with special education needs. There was a critical mass of professional capacity among district leaders, acting as an influential and province-wide community. The impact and success of this network points to the power of the collective rather than the individual as a force for positive educational change. Change led from the middle, where schools work with schools and districts with districts, demonstrated the collective initiative and responsibility for success.

Ontario Focused Intervention Partnership: An example of raising the floor and opening the ceiling of student learning

The Ontario Focused Intervention Partnership (OFIP) provided a significant shift in taking a coordinated approach to aligning ministry and district school board resources to support lower performing schools. This partnership approach emerged in response to evidence of effectiveness of a Turnaround program that began in the early 2000s. Turnaround involved the direct support to a small number of lower performing schools (14–57 schools per year) by an external diagnostician with expertise in literacy instruction. Diagnosticians worked directly with schools to assess students' literacy skills, analyse the results, and determine goals and actions for improving the literacy learning in schools. Although initial gains in student

achievement were made in most Turnaround schools, including shifts in leadership practices (e.g., Leithwood et al. 2010), there was a deep concern about the sustainability of the model that relied on external experts to continually support change. Direct support of an expert diagnostician would not be possible to implement across hundreds of schools. Further, the embodiment of expertise in an outside expert, rather than promoting the collective efficacy of educators necessary to sustain changes in practice, reinforced a belief in some cases amongst educators that they were not capable of analyzing data to determine their own effectiveness independently.

As a result, OFIP dramatically shifted the approach to school change to be driven by targeted professional learning identified by local school self-assessment and improvement planning, supported rather than directed by district and provincial staff. The shift in the locus of ownership for identifying areas of improvement to the school occurred gradually, as district and provincial staff shifted mindsets to take on supporting roles rather than continuing to attempt to direct local school change. The *School Effectiveness Framework*, a tool to support school improvement, was simultaneously developed in collaboration with educators across the province to identify the key features of effective schools to support school self-assessment. The transition from Turnaround to OFIP required an initial increase in the central coordination with schools to ensure that feedback and support from the ministry did not compromise the agency of schools to lead local change. At the heart of the success of this strategy was the cultivation of authentic positive relationships that fostered the capability of schools to lead the change that was appropriate for their contexts.

Initially in 2006–2007, schools were selected to participate wherein 33 % or fewer students met or exceeded the provincial standard on the provincial grades 3 and 6 reading assessments for 2 of the past 3 years. However, by 2009–2010, the criteria for determining low-performing status represented performance across *all* reading, writing and mathematics assessments while also raising the bar of low achievement from less than 34 % to less than 50 % of students meeting or exceeding the provincial standard. From 2009 to 2010 to the present, schools were identified for intervention when 50 % or fewer students met the provincial standard in two-thirds or more of the provincial assessments, for two consecutive years. The success of the partnership is illustrated by the fact that the number of elementary schools eligible for OFIP has consistently and dramatically declined over time (see Table 2). Based on the current criteria, the number of eligible schools has declined by 54 %, from 137 schools in 2009–2010 to 63 schools in 2014–2015.

Consistent with findings and experiences of school improvement in challenging circumstances from other jurisdictions (Harris 2010; Bryk 2010; Chenoweth and Theokas 2013), setting high expectations within the learning environment and establishing a whole school vision that all children can learn is evident among OFIP schools that have sustained improvements. All schools with sustained improvements engaged in relevant professional learning to build instructional capacity based on data that informed learning needs. Most importantly, all of the efforts involved school staff working collaboratively through various forms of professional learning. Consequently, a sense of shared leadership for learning was also identified as a

common factor among successful schools. School leaders were found to be consistently involved in the learning of students and staff in the school.

Collaborative work necessarily encountered challenges. The environment and organizational structures within schools, including hierarchical roles, and limited time for collaborative work, can constrain possibilities for generative collaboration (e.g., Woulfin 2013). OFIP school teams often mentioned time, intensity and buy-in of all educators as key challenges in maintaining momentum across the year. School teams often referenced student behaviour or classroom management as barriers to their success. Others discussed the tensions in collaborative work to shift teacher practice in a way that is authentic and not perceived as contrived or imposed.

Summary: How has Ontario shifted literacy pedagogy?

So far we have described the improvement in literacy achievement, the changes in literacy pedagogy and the structures and supports that enabled this change to happen, namely professional learning and leadership, while highlighting the OFIP initiative as an example. The evolution of Ontario's approach to improving literacy pedagogy is characterized by an iterative approach to using evidence to drive refinements in practice across all levels of the system. Sustainability is fostered through shared ownership of the goals and the change within Ontario. The Ontario literacy journey illustrates what Mourshed et al. (2010) identified as the common improvement journeys of improving jurisdictions internationally. The story began with achieving the basics in literacy by establishing an externally led common vision for effective instruction (poor to fair); then established the practice of using evidence to guide instruction and improvement (fair to good); fostering school self-assessment and educator-led improvement (good to great); and currently taking system wide approach to collaboration and educator-student led innovation (great to excellent).

To summarize, Ontario's approach to literacy improvement has been grounded in a theory of change, articulated by Fullan (2008), that successful change efforts happen through: people and relationship building; knowledge building and innovation; and transparency of accountability throughout the system. It is a collaborative approach of adapting practice across the system informed by evidence to transparently articulate the basis of adaptations. All leadership, professional learning, and policy supports and initiatives within the Ontario literacy strategy have been anchored within these three key areas. In operationalizing this theory of change, eight strategies and conditions have been identified as key to supporting leading the change efforts across Ontario. These eight interrelated components are described in Table 2.⁸

⁸ These eight components were originally reported in an Ontario Case Study available online here: http://www.edu.gov.on.ca/bb4e/ontario_casestudy2010.pdf, as well as in an unpublished manuscript prepared for the International Seminar on Corporate Governance of Public Service Units, September 23, 2012, Beijing, China. More recently, the eight components were presented in a recent chapter by Fullan and Rincón-Gallardo (2016).

Table 2 Eight strategies and conditions to support system-wide change in Ontario

	Description
A small number of ambitious goals	Achieving Excellence (2014) offers a new articulation of the goals set out in 2003: achieving excellence, ensuring equity, promoting well-being, and enhancing public confidence
A guiding coalition at the top	Strong central leadership from the Premier and Ministry Distributed leadership with a focus on learning and teaching
High standards and expectations	Standards based curriculum with high provincial standards of literacy and numeracy including creative thinking, problem solving, higher-order thinking skills Transparent standard of performance of 75 % of students with high level of literacy and numeracy skill (baseline of 54 % in 2002–2003) and 85 % of students graduating from high school within 5 years (baseline of 68 % 2003–2004) High expectations that the system supports students to become personally successful, economically productive, and actively engaged citizens
Investment in leadership and capacity building related to literacy pedagogy	Student achievement division initiates, supports, and coordinates capacity building initiatives and programs across the education system Developed and refined professional learning strategies to improve learning Development and implementation of the <i>School Effectiveness Framework</i> Development and implementation of the <i>Ontario Leadership Framework</i> and the Board Leadership Development Strategy Making major investments in personnel to support capacity building across all contexts of the system including provincial leaders, district school board leaders, and school leaders
Mobilizing data and effective practices as a strategy for improvement	Independent and transparent assessments of student achievement through EQAO Capacity building for district school boards in data management, data analysis and evidence-informed decision-making through initiatives such as Managing Information for Student Achievement (MISA) System-wide collection of high quality data to inform policy and practice Building a culture of evidence that connects practice and research

Table 2 continued

	Description
Intervention in a non-punitive manner	<p>Schools are identified for interventions when a significant number of students are not performing to the provincial standard</p> <p>Intense support for improvement provided to specific schools and districts with human and financial resources and professional learning opportunities</p> <p>Interventions encourage experimentation, learning and sharing of successful practices, not punitive approaches to intervention such as closing lower performing schools or dismissing staff</p>
Being vigilant about distractors	<p>Acknowledge distractors are inevitable, including ad hoc priorities and excessive bureaucracy that takes energy away from the core priorities</p> <p>Although distractors cannot always be eliminated, protecting the focus on core priorities is crucial</p>
Being transparent, relentless and increasingly challenging	<p>Increased accountability that all children and students can and do learn</p> <p>More recently, new legislation strengthens the expectation that district school boards have a responsibility to focus on student achievement and well-being</p> <p>Sustaining and extending system changes to foster innovation in pedagogical practices</p>

Discussion: Opportunities and challenges to sustainability of shifts in literacy pedagogy

Ontario has witnessed a decade of improvement in educational outcomes in literacy that has impacted the entire public education system. All large-scale change efforts must negotiate competing dimensions of scale—namely, depth, scope, ownership, and sustainability (Coburn 2003). When considering the scale of change within the Ontario story, the present paper has considered questions of scope and depth of the changes that have occurred in teachers' literacy practices and beliefs. Tensions and successes around who 'owns' the changes were explored in how leadership practices have shifted to support the changes in literacy pedagogy. The locus of change extends far beyond setting provincial policies and practices, or district leaders directing change, to incorporate the processes in which teachers and school leaders have owned and directed the change as well, with OFIP schools as an example. The relative stability of provincial political leadership over the past decade has allowed the key education priorities to remain despite the turnover of senior leadership within the Ministry of Education and school and system leaders. However, will these efforts and improved outcomes remain sustainable? If sustainability can be operationalized by the degree to which activities and programs become ongoing habits of teacher and school practices, what mechanisms ensure sustainability of the changes? This section will discuss the opportunities and challenges to the sustainability of the literacy pedagogical practices.

Opportunities and challenges to sustainability

Implementing a provincial vision ⇔ honouring professional decision-making

Supporting a provincial vision while honouring the professional decision-making of educators requires system leaders to understand how policies and practices are being interpreted and enacted at local levels. This understanding, ideally, is used to refine district and ministry priorities and goals. Gathering and responding to evidence of change, including educators' understandings, is central to coherently integrating system direction within local contexts. However, the very act of collecting evidence can constrain actions taken locally to improve the conditions for student learning. Examples discussed include the ministry collection of literacy blocks and district collection of teacher's diagnostic assessment data. A critical lesson learned is that monitoring a broader set of practices and outcomes to ensure the system is making progress towards the vision must happen in ways that allow locally formulated evidence of change. Maintaining respect for professional decision-making is critical for mediating the tensions that arise with regards to local implementation of system-wide change efforts. School self-assessment continues to drive local efforts, as districts explore new ways of using school actions to inform district goals and supports. Evidence from external evaluations suggests that time and continued provincial support for collaboration is essential for these practices to continue (Campbell 2014; Bolden et al. 2014; Kane et al. 2013). It is unclear how sustainable the processes of inquiry, improvement, and professional learning for student learning are without continued resources from the Ministry of Education.

Maintaining gains in literacy ⇔ addressing new priorities

Ontario's renewed vision *Achieving Excellence* (2014) expands the definition of success of schools to include well-being and broader measures of achievement than literacy and mathematics. This includes skills such as creativity, collaboration, entrepreneurship, and citizenship. Ensuring equity remains a key priority, particularly for historically marginalized groups, including children and youth in the child welfare system, First Nations, Inuit and Métis learners, students taking applied courses, and students with special education needs (see Fig. 2 above). Continuing to provide targeted supports for relevant learning for students is necessary to achieving equity of opportunities and outcomes in the focal areas, including literacy. This also requires building cultural awareness of discriminatory practices and historical barriers within public education, including the intergenerational impact of residential schooling for First Nations, Inuit and Metis peoples and all Canadians.⁹ Further, although the literacy trends and results are highly positive overall, Ontario is not without systemic challenges to improving student achievement. Achievement results for elementary EQAO mathematics assessments have declined since

⁹ See the *Ontario First Nation, Metis and Inuit Education Policy Framework* (2007) and progress reports for more details. In May 2015, the Truth and Reconciliation commission released its final report regarding the legacy of residential schooling in Canada, identifying the barriers and opportunities for constructive reconciliation. Ontario's Ministry of Education is dedicated to partnering in the process of reconciliation.

2008–2009 in English-language school boards. Secondary students, particularly a large group of students taking the grade 9 applied mathematics course, continue to struggle to achieve the provincial standard. Supporting effective teaching and learning in mathematics was articulated in 2011–2012 as the first student achievement priority in Ontario with the release of *Paying Attention to Mathematics Education* to every school in the province. Provincial efforts, resources and supports were increasingly directed towards supporting mathematics professional learning, yet literacy results continued to rise. Such continued improvement in literacy outcomes could indicate that schools' use of evidence to drive improvement in literacy continue to be owned deeply across the system. The present implementation question is how to develop the skills and knowledge in mathematics across the entire system. The journey of improving literacy pedagogy outlined in the present paper signals the challenges ahead. A lingering question remains: With new priorities and student well-being identified as central goals, will initial gains in achievement in literacy be compromised?

Mobilizing practices ⇔ initiative structures

Throughout the literacy journey, schools and districts would share their learning through project or initiative specific mechanisms (e.g., provincial gatherings of participating educators, initiative reports). More and more frequently professional learning and improvement work is described as “part of the culture”, rather than part of an initiative or project. The momentum of efforts to mobilize local evidence is growing at a substantial pace. Several ministry and district-led online platforms and collaboration spaces have been created for educators across the province to collaborate and share applied research and practice-based evidence.¹⁰ Social networking tools are becoming embedded within professional learning and opening possibilities for collaboration. Thus sharing insights about pedagogical practices is becoming a way of doing business, not a requirement for participating in a “project” or “initiative”. However, in order to operationalize this shift, creative reallocation of existing implementation funding may be required, as well as flexibility in offering supports for implementation activities. Removing “initiative” based structures provides additional complexity and challenges for monitoring the practices in order to continue to be able to differentiate supports for district and school strength and needs. A question that remains is: How can schools and districts navigate the tension between prompting and sharing practices beyond initiative-based structures to ensure the sustainability of literacy pedagogical practices?

Fostering ownership ⇔ expanding partnerships

Sustainability requires transitioning from practices supported by initiatives to practices owned and incorporated at each and every school and district. This paper has outlined some shifts in ownership that have occurred; however, local ownership

¹⁰ See for example TeachOntario.ca, LearnTeachLead.com, knaer-recrea.ca and for a district led example see www.yrdsb.ca/Programs/PLT/Quest/Pages/Quest-Journal.aspx.

of practices may require expanding partnerships, in essence extending the sense of shared ownership to be inclusive of additional partners. Although parents and guardians have always been seen as essential partners in education, there has been a significant shift in understanding the depth of shared ownership required to enhance the quality of education (Auerbach 2012). Engaging parents as partners is critical for sustaining positive gains. Transparency of outcomes in terms of student achievement data was the first step in engaging parents in jointly owning the efforts to improve education. Transparency of the process is now also essential to authentically engage parents and guardians as contributing partners. Perhaps most importantly, there is a growing shift in educators' understanding of sharing ownership of learning with students themselves. Muijs et al. (2014) argue that the role of students in their own learning has been understudied in the international literature on effective classroom practices. Ontario educators are increasingly experimenting and exploring the possibilities of partnering with students, for example through assessment as learning (Ontario Ministry of Education 2010a, b), pedagogical documentation that originated in early childhood contexts to enable young children voice in their own learning (Ontario Ministry of Education 2015) and through student voice initiatives. Teacher-researchers using pedagogical documentation are finding it is a process that allows educators to see how thinking, learning, curriculum and assessment are intertwined by closely examining the process of student learning. Importantly, educators are more deeply engaging students in owning their learning at all ages. At a provincial level, the establishment of the Minister's Student Advisory Council has also created a means for students to have a voice in the development of new policies and practices. As partnerships expand and deepen the degrees of shared ownership of learning, how do the ways in which all stakeholders collaborate need to be transformed?

As described above, Ontario has made significant investments to support the professional growth of educators and leaders across the system to support improvement in literacy. These efforts have developed the capacity of a new generation of leaders, critical to sustaining the continual drive for excellence in public education. The way of engaging in the business of teaching and learning has shifted. Using evidence to inform decision-making in classrooms, schools, districts, and the ministry is now a given. However, it is not guaranteed that such extensive supports for continual capacity building will remain. How embedded are the practices of collaboratively setting goals and determining actions using evidence? Will these practices remain if the funding supporting them disappears? The final section will discuss the key contributions to the international literature on educational change, by articulating the three primary cultural shifts in Ontario.

Contribution

This paper outlined the system-wide approach to changing literacy education in Ontario since 2003. These efforts were undertaken in a society with broad support for public education, and in a manner that respects the professionalism of educators. Elementary literacy results on provincial assessments have steadily improved. Despite its international reputation as a successful education system, understanding

the Ontario context and challenges inherent in large-scale change is critical for understanding the nuance of Ontario's story. As Luke (2011) aptly warns, there are dangers of over-generalizing changes in education across contexts. History, culture, and context matter for understanding applicability, if any, of one educational innovation over another. Diversity of approaches can be an asset, not a deficit. Similarly, Coffield (2012) identified limitations of studies of successful systems internationally, such as the McKinsey reports, for disregarding important cultural and contextual aspects of education. To advance knowledge of large-scale change in education, identifying the defining features of a cultural shift in public education is a way to synthesize the impact of the particular set of actions taken. At the centre of this change is a shared narrative of a system that has significantly transformed from a culture of external accountability to a self-sustaining and generative system supported by a culture of learning in pursuit of excellence in public education. Three key defining features of this culture shift described below are: a culture of learning; participatory environment; and shared responsibility and success.

Culture of learning

Intentionally building a solid foundation of professional capital (Hargreaves and Fullan 2012) makes Ontario's narrative relevant and a valuable contribution to the field of educational change. The initial years of the strategy primarily focused on instructional improvements. As such, the system could be defined at the time as engaging in a *culture of teaching*. Although the central goal was always about improving student learning, professional resources and dialogue centred on discussing effective teaching practices. With the evolution of professional learning, the centrality of discussing the processes of student learning brought an intermediate shift to a *culture of teaching and learning*. However, as practice continued to become more and more de-privatized across classrooms, schools, and district school boards, taking evidence-informed action through professional learning became the norm. Increasingly, the orientation towards change became a *culture of learning*—including student learning, professional learning, and system learning. Supporting this culture shift is a growing appreciation for qualitative evidence. Although provincial assessments were essential for a provincial approach to improvement, it is now widely believed that evidence for improvement must include and extend beyond performance on provincial assessments. At classroom and school levels, this includes documentation of the processes of student learning through pedagogical documentation (Ontario Ministry of Education 2015). District school board plans for improvement increasingly reference additional qualitative measures for monitoring improvement. Drawing on Little's (2012) argument for the expansion on the body of evidence that documents educators and facilitators practices in using data to inform action (micro-process studies), greater attention and effort are being paid to attending to evidence of the cultural contexts of schools as embedded in the collective values and beliefs of educators, the quality of professional discourse about student learning and well-being, as well as increasing attention to the “web of relationships” that are the medium of ongoing change efforts. Such inclusion and valuing of broader evidence across all contexts (schools, districts, and ministry) is

raising questions of the trustworthiness and authenticity of such interpretation of evidence to guide action. Educators are building professional capacity in qualitative research methods (e.g., informed by the work of methodologists Lincoln and Guba 2007). In essence, the culture of learning in Ontario is fostering a culture where evidence of student, professional, and system learning is simultaneously increasing in sophistication. Challenges encountered by researchers selecting and designing mixed-methods to tackle research questions (e.g., Creswell et al. 2003) are increasingly becoming relevant for practitioners engaged in evidence driven decision making and cycles of inquiry into action. As applied researchers, education practitioners' knowledge of research methods may also be required to increase in sophistication in order to navigate the proliferating knowledge claims that are emerging. As we continue to embrace the value of practice-based evidence and evidence-based practice (Bryk 2015), increased collaboration and partnership amongst practitioners and researchers may be required.

Participatory environment

Education is essential for preparing children and youth for participation in democratic society. However, educational institutions are traditionally hierarchical and can serve to perpetuate unequal power dynamics in society (Apple 2013). Although setting central direction through a small number of goals has been essential, leadership development at all levels has been critical for establishing a culture of learning across the system. Although the literature has established a relation between trust and the reciprocal exchange of effective practices amongst districts (e.g., Daly and Finnigan 2012), scaling this level of trust and partnership across a system of approximately 4000 schools is a significant challenge. Similar to the shifts documented by Honig and Venkateswaran (2012), the ability of the district and ministry leaders to shift leadership styles to create a culture of trust through interactions with local staff as they continually build capacity for evidence use has been essential to fostering authentic partnerships across the system. Respect for the expertise and professionalism of everyone was necessary for change to happen. This shift was not simply a delegation of authority, but rather the result of continuously fostering genuine distributive leadership practices across all contexts of the system. This form of school and system leadership emphasizes the informal, participatory dimensions of leadership, which Woods (2011) defines as engaging in democratic processes of power sharing and transformative dialogue within collaborative relationships across the system. Essential to the changes in Ontario is the participatory environment that actively engages the voice and partnership of all across the system. The process of renewing the vision for public education epitomizes this approach, as diverse groups within and outside education were consulted about renewing the priorities. In a similar vein of open government initiatives internationally, addressing the challenges outlined above in terms of expanding the conceptions of partnerships to include students, parents and the broader community in the improvement of public education will build the sustainability of pursuing this vision of excellence.

Shared responsibility and success

The Ontario approach to change acknowledges that each educator in the system must own the change. More importantly, deep pedagogical practices acknowledge that students themselves learn best when they direct and own their learning. With the focus on evidence, each individual articulates why they are doing what they are doing and how they think it is working, or not. As such, effectiveness is continually contextually bound. With this approach there is a risk of supporting a plethora of discordant autonomous choices. However, the clear goals connected to implementing a common curriculum enabled the system to see that all are working to contribute to the same outcomes and moral purpose. These goals were essential to fostering a sense of shared ownership over change processes. Throughout the Ontario journey, the paradox of a government's role in supporting change while acknowledging the real ownership of the change exists with students and educators who engage in the day-to-day realities of learning and teaching has been apparent. Initially, the culture of accountability in Ontario was viewed as external. Provincial assessment of student learning was the core driver of accountability. However, as the culture of educators shifted to a culture of learning described above, this simultaneously fostered a culture of shared accountability and responsibility for learning. Importantly, the political leaders in Ontario have been open and supportive of not only sharing responsibility for improved learning and teaching, but also of sharing successes. Learning from successful practices has been instrumental in authentically sharing responsibility across the education system.

This approach of shared responsibility provides the opportunity for policy makers and practitioners to learn and adapt policy and programs that are responsive to the diverse contexts of schools and districts. Ultimately this approach fosters innovation in providing Ontario's students with the excellent public education that they deserve.

Acknowledgments This paper is grounded in the dedicated efforts of Ontario principals, teachers and students who, supported by the Literacy and Numeracy Secretariat (LNS), have changed the landscape of Ontario education. We would like to thank all participants in the process for sharing their insights, challenges, and practices. These have served to inform our provincial understanding about better serving the students of Ontario. We would like to acknowledge in particular the work of education leaders within the ministry and district school boards for enabling deep professional learning for positive change for learners of all ages.

References

- Allington, R. L., & Cunningham, P. M. (2002). *Schools that work: Where all children read and write*. Boston, MA: Allyn and Bacon.
- Apple, M. W. (2013). *Education and power*. New York, NY: Routledge.
- Auerbach, S. (2012). Conceptualizing leadership for authentic partnerships. In S. Auerbach (Ed.), *School leadership for authentic family and community partnerships: Research perspectives for transforming practice* (2nd ed., pp. 29–51). New York, NY: Routledge.
- Bolden, B., Christou, T., DeLuca, C., Klinger, D., Kutsyuruba, B., Pyper, J., Shulha, L., & Wade-Woolley, L. (2014). *Professional learning cultures: An evaluation of collaborative inquiry in ontario elementary schools*. Kingston, Canada: Queen's University. <http://edu.gov.on.ca/eng/research/queensReport.pdf>.

- Brochu, P., Gluszynski, T., & Cartwright, F. (2011). *Second report from the 2009 Programme for International Student Assessment*. Toronto: Council of Ministers of Education, Canada (CMEC).
- Bryk, A. S. (2010). Organizing schools for improvement. *Phi Delta Kappan*, 91(7), 23–30.
- Bryk, A. S. (2015). Accelerating how we learn to improve. *Educational Researcher*, 44(9), 467–477.
- Campbell, C. (2014). *Student achievement division literacy and numeracy strategy: Evidence of improvement study*. In Report prepared for Literacy and Numeracy Secretariat, Ontario Ministry of Education.
- Chenoweth, K., & Theokas, C. (2013). How high-poverty schools are getting it done. *Educational Leadership*, 70(7), 56–59.
- Clay, M. M. (1993). *An observation survey of early literacy achievement*. Portsmouth, NH: Heinemann.
- CMEC (2012). *Measuring up: Canadian results of the OECD PISA study: The performance of Canada's youth in mathematics, reading and science*. http://cmec.ca/Publications/Lists/Publications/Attachments/318/PISA2012_CanadianReport_EN_Web.pdf.
- CMEC (2012). *PIRLS 2011: Canada in context: Canadian results from the progress in international reading literacy study*. Toronto, Canada. http://www.cmec.ca/Publications/Lists/Publications/Attachments/294/PIRLS_2011_EN.pdf.
- CMEC (2014b). How good are Canadian 15-year-olds at solving problems? Further results from PISA 2012. *Assessment Matters! No. 6*. http://cmec.ca/Publications/Lists/Publications/Attachments/324/AMatters_No6_EN_Web.pdf.
- CMEC (Council of Ministers of Education Canada) (2014a). *PCAP 2013: Report on the pan-Canadian assessment of science, reading, and mathematics*. <http://www.cmec.ca/Publications/Lists/Publications/Attachments/337/PCAP-2013-Public-Report-EN.pdf>.
- Coburn, C. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, 32(6), 3–12.
- Coffield, F. (2012). Why the McKinsey reports will not improve school systems. *Journal of Education Policy*, 27(1), 131–149.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209–240.
- Daly, A. J., & Finnigan, K. (2012). Exploring the space between: Social networks, trust, and urban school district leaders. *Journal of School Leadership*, 22(3), 493–530.
- Earl, L., & Hannay, L. (2011). Educators as knowledge leaders. In J. Robertson & H. Timperley (Eds.), *Leadership and learning* (pp. 186–202). London: Sage.
- Education Act, R.S.O. (1990). Province of Ontario, Canada. http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e02_e.htm.
- Education Quality and Accountability Office (2012). *International association for the evaluation of educational achievement: Progress in international reading literacy study (2011) Ontario Report*. <http://www.eqao.com/en/assessments/national-international-assessments/PIRLS/Assessment%20Documents/PIRLS-ontario-report-2011.pdf>.
- Fountas, I. C., & Pinnell, G. S. (1996). *Guided reading: Good first teaching for all children*. Portsmouth, NH: Heinemann.
- Fullan, M. (2008). *Six secrets of change: What the best leaders do to help their organizations survive and thrive*. San Francisco, CA: Jossey-Bass.
- Fullan, M., & Rincón-Gallardo, S. (2016). Developing high quality public education in Canada: The case of Ontario. In F. Adamson, B. Astrand, & L. Darling-Hammond (Eds.), *Global education reform: How privatization and public investment influence education outcomes* (pp. 169–193). New York: Routledge.
- Hargreaves, A., & Braun, H. (2012). *Leading for all: A research report of the development, design, implementation and impact of Ontario's "Essential for Some, Good for All" initiative*. Boston, MA: Boston College.
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York: Teachers College Press.
- Harris, A. (2010). Improving schools in challenging contexts. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *Second international handbook of educational change* (pp. 693–706). Dordrecht: Springer.
- Hart, D. (2012). *Public attitudes towards education in Ontario: 18th OISE Survey of Educational Issues*. Toronto, Canada: OISE/UT. http://www.oise.utoronto.ca/oise/UserFiles/File/OISE%20Survey%2018th_OISE_Survey/OISE%20SURVEY%2018.pdf.

- Harvey, S., & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding*. Portland, ME: Stenhouse.
- Honig, M. I., & Venkateswaran, N. (2012). School-central office relationships in evidence use: Understanding evidence use as a systems problem. *American Journal of Education*, 118(2), 199–222.
- Kane, R. G., Jones, A., Rottmann, J., & Trumppower, D. (2013). *Evaluation of the Student Work Study Teachers (SWST) initiative*. Report prepared for the Ontario Ministry of Education.
- Leithwood, K., Fullan, M., & Watson, N. (2003). *The schools we need: Recent education policy in Ontario and recommendations for moving forward*. Toronto: OISE/UT.
- Leithwood, K., Harris, A., & Strauss, T. (2010). *Leading school turnaround: How successful leaders transform low-performing schools*. San Francisco, CA: Jossey-Bass.
- Lincoln, Y. S., & Guba, E. G. (2007). Judging interpretations: But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New directions for evaluation*, 114, 11–25.
- Little, J. (2012). Understanding data use practice among teachers: The contribution of micro process studies. *American Journal of Education*, 118(2), 143–166.
- Luke, A. (2011). Generalizing across borders policy and the limits of educational science. *Educational Researcher*, 40(8), 367–377.
- Marzano, R. J. (2009). Setting the record straight on” high-yield” strategies. *Phi Delta Kappan*, 91(1), 30–37.
- Marzano, R. J., Pickering, D., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Miller, D. (2002). *Reading with meaning: Teaching comprehension in the primary grades*. Portland, ME: Stenhouse.
- Mourshed, M., Chijiokwe, C., & Barber, M. (2010). *How the world’s most improved school systems keep getting better*. McKinsey & Company. http://mckinseysociety.com/downloads/reports/Education/How-the-Worlds-Most-Improved-School-Systems-Keep-Getting-Better_Download-version_Final.pdf.
- Muijs, D., Kyriakides, L., van der Werf, G., Creemers, B., Timperley, H., & Earl, L. (2014). State of the art—teacher effectiveness and professional learning. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 25(2), 231–256.
- OECD (Organisation for Economic and Co-operative Development) (2010). *Strong performers and successful reformers in education: Lessons from PISA for the United States*. OECD, Paris, <http://dx.doi.org/10.1787/9789264096660-en>.
- Ontario Ministry of Education (2003). *Early reading strategy: The report of the expert panel on early reading in Ontario*. Toronto, Canada. http://eworkshop.on.ca/edu/resources/guides/ExpPanel_K-3_Reading.pdf.
- Ontario Ministry of Education (2004). *Literacy for learning: The report of the expert panel on literacy in Grades 4 to 6 in Ontario*. Toronto, Canada. <http://edu.gov.on.ca/eng/document/reports/literacy/panel/index.html>.
- Ontario Ministry of Education (2007). *Ontario first nation, métis and inuit education policy framework*. Toronto, Canada. <https://www.edu.gov.on.ca/eng/aboriginal/fnmiFramework.pdf>.
- Ontario Ministry of Education (2010a). *Capacity building series: collaborative teacher inquiry*. Toronto, Canada. https://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/CBS_Collaborative_Teacher_Inquiry.pdf.
- Ontario Ministry of Education (2010). *Growing success: Evaluation, assessment and reporting in Ontario schools*. Toronto, Canada. <https://www.edu.gov.on.ca/eng/policyfunding/growSuccess.pdf>.
- Ontario Ministry of Education (2010b). *System on the move: Story of the Ontario education strategy*. Toronto, Canada. http://www.edu.gov.on.ca/bb4e/ontario_casestudy2010.pdf.
- Ontario Ministry of Education (2011). *Paying attention to mathematics education (K-12)*. Toronto, Canada. <https://www.edu.gov.on.ca/eng/teachers/studentssuccess/FoundationPrincipals.pdf>.
- Ontario Ministry of Education (2013). *School effectiveness framework: A support for school improvement and student success*. Toronto, Canada. <http://www.edu.gov.on.ca/eng/literacynumeracy/SEF2013.pdf>.
- Ontario Ministry of Education (2014a). *How does learning happen?* Toronto, Canada. <https://www.edu.gov.on.ca/childcare/HowLearningHappens.pdf>.
- Ontario Ministry of Education (2014b). *Foundations for a healthy school: Promoting well-being is part of Ontario’s achieving excellence vision*. Toronto, Canada. <https://www.edu.gov.on.ca/eng/healthyschools/resourceF4HS.pdf>.

- Ontario Ministry of Education (2014c). *Achieving excellence: A renewed vision for education in Ontario*. Toronto, Canada. <http://www.edu.gov.on.ca/eng/about/renewedVision.pdf>.
- Ontario Ministry of Education (2014d). *A solid foundation: Second progress report on the implementation of the Ontario first nation, metis, and inuit education policy framework*. Toronto, Canada. <https://www.edu.gov.on.ca/eng/aboriginal/ASolidFoundation.pdf>.
- Ontario Ministry of Education (2015). *Capacity building series: Pedagogical documentation revisited*. Toronto, Canada. https://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/CBS_Pedagogical Document.pdf.
- Ravitch, S. M. (2014). The transformative power of taking an inquiry stance on practice: Practitioner research as narrative and counter-narrative. *Perspectives on Urban Education*, 11(1), 5–10.
- Royal Commission on Learning (1994). *For the love of learning*. Ministry of Education, Ontario. <http://www.edu.gov.on.ca/eng/general/abcs/rcom/full/royalcommission.pdf>.
- Spillane, J. P. (2012). Data in practice: Conceptualizing the data-based decision-making phenomena. *American Journal of Education*, 118(2), 113–141.
- Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. *Review of Research in Education*, 32(1), 328–369.
- Truth and Reconciliation Commission of Canada (2015). *What we have learned: Principles of truth and reconciliation*. Ottawa, Canada. <http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Principles%20of%20Truth%20and%20Reconciliation.pdf>.
- Van Veen, K., Zwart, R., & Meirink, J. (2012). What makes teacher professional development effective? A literature review. In M. Kooy & K. van Veen (Eds.), *Teacher learning that matters: International perspectives* (pp. 3–21). New York, NY: Routledge.
- Volante, L. (2012). Educational reform, standards, and school leadership. In L. Volante (Ed.), *School leadership in the context of standards-based reform: International perspectives* (pp. 3–20). Dordrecht: Springer.
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research*, 79(2), 702–739.
- Woods, P. A. (2011). *Transforming education policy: Shaping a democratic future*. Bristol: Policy Press.
- Woulfin, S. (2013). *From logics to practice: Using framing theory to analyze the relationship between structure and agency*. Paper presented at the 2013 American Educational Research Association, San Francisco, CA.
- Yarbrough, D. B., Shulha, L. M., Hopson, R. K., & Caruthers, F. A. (2011). *The program evaluation standards: A guide for evaluators and evaluation users* (3rd ed.). Sage: Thousands Oaks.
- Young, V. M. & Kim, D. H. (2010). Using assessments for instructional improvement: A literature review. *Education policy analysis archives*, 18. <http://epaa.asu.edu/ojs/article/view/809>.