



The sustainability and unsustainability of teachers' and leaders' well-being

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HIGHLIGHTS

- Educator well-being prospers in environments that embody key principles of sustainability.
- These environments generate positive emotion among educators by enabling them to accomplish morally inspiring purposes.
- They benefit from the breadth of collaborative professionalism that brings teachers closer to their students.
- They enable educators to feel fulfilled when they respond to the diversity of their students.
- Threats to sustainability come from factors that create dissatisfaction among educators.

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The emphases of education in the past decades might convey the impression that K-12 policies have been exclusively concerned with increasing excellence and equity in achievement. Equity has often been interpreted as the narrowing of achievement gaps (Murphy, 2009). Even the rise of potentially promising 21st century skills and global competencies for today's knowledge societies has at times been transformed into a single-minded focus on achievement tests (Bellanca & Brandt, 2010). But K-12 education has never been solely concerned with academic achievement. Character, citizenship, and contribution to the public good have been central to public education from its historical foundations, even if they have been eclipsed recently by preoccupations with academic achievement and basic skills (Shirley, 2011; 2017).

Around the world, the push for higher achievement scores has started to cede space to a different set of concerns about young people's quality of life: their well-being (Hargreaves, Washington, & O'Connor, 2019; OECD, 2017). In the face of disturbing global trends that are evident in refugee families' experience of post-traumatic stress (Silove, Steel, Bauman, Chey, & McFarlane, 2007), in feelings

of alienation incurred by rising economic inequality and the insensitivity of political elites (Hochschild, 2016; Wilkinson & Pickett, 2011), and in the negative impact of digital technology on adolescent girls' senses of self (Twenge, 2017), educational policy makers and researchers have developed significant concerns about students' well-being and their increasing vulnerability to anxiety, depression, and feelings of not belonging (Boak et al., 2016; Khawaja, Ibrahim, & Schweitzer, 2017; OECD, 2017). Well-being—recast as “socio-emotional learning” in the United States—has therefore come into prominence in educational policy as evidenced in its appearance in international rankings by agencies like the Organization for Economic Cooperation and Development (OECD, 2017) and the United Nations' Children's Emergency Fund (UNICEF, 2007).

In comparison to student well-being, educator well-being has been relatively overlooked. Although “teacher well-being and student well-being could be linked through complex and interrelated factors,” Harding et al. (2019) conclude, “evidence for this is currently lacking” (p. 181).

Research with educators in 10 school districts in Ontario, Canada has enabled us to shed light on the importance of educator well-being, on how it influences and is influenced by student well-being, and on the challenges of improving it in a sustainable manner. The research commenced as a collaborative project with the 10 districts to see how they led “from the middle” to enhance equity and inclusion for all of their students (Hargreaves, Shirley, Wangia, Bacon, & D'Angelo, 2018). During a hiatus of teachers' industrial action, when participation with all research activities across the province was suspended for several months, the government issued a new four-pronged educational strategy in which well-being was one of the chief priorities (Ontario Ministry of Education, 2014). Working collaboratively with the school

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districts, the research team took advantage of this unexpected policy shift by examining particular projects that the districts initiated to enhance learning and well-being. Ten case studies were written to address the initial research questions concerning what these districts understood by “leading from the middle.” These were then expanded to include new questions about well-being and the sustainability of the districts’ projects in light of the policy shift expressed in the government’s new strategy.

Availability of detailed case studies collected across nine of the ten districts from a prior study led by one of the principal investigators (Hargreaves & Braun, 2011) also allowed important comparisons to be drawn in developments over time in educators’ experiences of change, professional learning and collaboration that had implications for the sustainability of educators’ well-being. A retrospective application of a framework of sustainability drawn from environmental science and organizational theory suited to circumstances of complex change, casts further light on the prospects for enhancing educator well-being in policy environments such as that which has characterized the high-performing jurisdiction of Ontario over the past decade (Campbell, Zeichner, Lieberman, & Osmond-Johnson, 2017).

In examining the sustainability and non-sustainability of educator well-being, this paper is *not* drawn from a study of the implementation of a particular policy initiative to enhance educator well-being. Rather, using qualitative research methodology that is suited to identification of emergent phenomena that are not easily predicted by quantitative methods (Glaser & Strauss, 1967), the study is framed by a collaborative and qualitative response to a complex and changing policy environment in which child well-being emerged as a concern and a priority for all the districts. Educator well-being surfaced in the interviews, in turn, as an unanticipated yet evidently essential aspect of the student well-being agenda.

This article draws on our evidence from Ontario to examine the sustainability and non-sustainability of educators’ well-being. It begins with a review of relevant literature on educator well-being and its opposite: ill-being. This literature is then combined with a framework for understanding the sustainability of educational change, including educator well-being, from an ecological/environmental perspective. We then describe the research design and methodology. The article then presents the results and a discussion of our emergent analysis of educator well-being, combined with the retrospective application of our theory of sustainability prompted by the focus of this special issue.

1. Literature review

Understanding well-being and efforts to improve it among children or adults is not a straightforward exercise. Interpretations of well-being vary, not just intellectually, but also cross-culturally. Although there is international agreement on definitions of *objective* well-being in terms of physical health, economic circumstances, and degrees of connectedness to or isolation from others (Kerényi, 2011), claims about *subjective* well-being in terms of happiness and fulfillment are prone to cultural variation. Exton, Smith, and Vandendriessche (2015) note that “more individualistic societies” such as the United States and Australia are “more likely to see positive emotions” such as happiness “as desirable and appropriate, and negative emotions as undesirable and inappropriate” (p. 14). Other elements of well-being, such as autonomy and control of the environment, may also be prone to individualistic biases (Ryff, 1995). The US Center for Disease Control and Prevention, for example, concluded a review of literature by noting that there is “general agreement” that “well-being includes the

presence of positive emotions and moods (e.g., contentment, happiness), and the absence of negative emotions (e.g., depression, anxiety), satisfaction with life, fulfillment and positive functioning”. In Confucian-heritage cultures, however, happiness is not a prime value compared to benevolence, righteousness, and wisdom (Fu, Tsui, Liu, & Li, 2010; Liu, 2017; Ng, 2017).

One of the most widely adopted frameworks for understanding well-being views it as a multidimensional construct comprising Positive emotions, Engagement, Relationships, Meaning, and a sense of Accomplishment (PERMA) (Seligman, 2011). Well-being is not just about maximizing people’s experiences in each of these categories, though. Adler and Seligman (2016) acknowledge that, “there are tradeoffs between different contributors to well-being” (p. 14). For example, individuals may be willing to forego positive emotions in the short term with the expectation of experiencing the fulfillment that comes from a sense of accomplishment. Overall, therefore, well-being is “a fluctuating state rather than a stable trait” (Headey & Wearing, 1991, p. 56), and it exhibits considerable variation among cultures.

Achieving well-being means more than alleviating the factors that cause dissatisfaction or ill-being. Frederick Herzberg (1964) proposed a two-factor hypothesis of job satisfaction and dissatisfaction in a study of accountants and engineers. He argued that job satisfaction comes from accomplishing the core purposes of work, whereas job dissatisfaction has more to do with the organizational contexts in which work is situated. Job satisfaction and dissatisfaction, then, derive from different sources.

In interviews with 99 teachers in England, Jennifer Nias (1981) found that Herzberg’s model somewhat “oversimplifies the situation” (p. 236) of teachers because they view their environment and their core tasks as continuous with one another. Nonetheless, she still found that “Herzberg’s hypothesis stands” (p. 245). While teachers’ dissatisfaction with their environments was “relatively slight” (p. 245) at the time of her study, “their expectations of satisfaction” could only “be met if school ethos and management not only enabled teachers to be with their pupils but also provided a context in which they could teach well” (p. 245).

These findings indicate that educators’ well-being will not be attained solely by removing hindrances to their work, such as poor salaries and excessive workloads. Many of the teachers studied by Nias experienced ill-being when reforms “conflicted with their principles, or their image of themselves” in terms of what they were required to do (p. 242). Educators’ well-being is improved by attending to the nature of the work itself (Pink, 2011), whereas ill-being can be reduced by eliminating low pay or decreasing workload, for example.

Increasing well-being and removing ill-being are two different things, then. Positive educator well-being will not be enhanced just by giving teachers higher status, lighter workloads, or increased rewards. Having a sense of accomplishment is also a central issue for the sustainability of educators’ well-being.

A series of articles by one of the authors of this paper analyzed factors that incurred positive and negative emotion among 50 elementary and high school teachers, in relation to their self-reported experiences of interactions with colleagues, parents, students and administrators, respectively (Hargreaves, 1998a; 1998b; 1998c, 2000; 2001a; 2001b, 2002, 2004, 2005). Positive emotion was likely to occur when educators pursued a deep sense of purpose together within a work environment that made it achievable; when there was collaborative professionalism that was founded on strong relationships with mutual respect for expertise; and when there was time and space to know people well and perform the job in a way that supported a sense of accomplishment. Well-being was a collective and not just an individual phenomenon.

The OECD (2014) TALIS results also indicate that job satisfaction

among teachers is associated with positive teacher-teacher collaboration, effective teacher-student relationships, and educators' involvement in decision-making. In other words, teacher well-being prospers in work environments that are meaningful and that make educators' core work achievable.

Negative emotion, in the research cited above, arises when purposes are imposed, scattered, or unachievable; when people are in bad relationships; when they feel they have no autonomy; and when they have too many other people to interact with and insufficient time to get to know them. Negative emotions are increasing among teachers and principals in systems as disparate as the US (Sutcher, Darling-Hammond, & Carver-Thomas, 2016), the UK (Health and Safety Executive, 2017), Canada (Ontario Principals' Council, 2017), Hong Kong (Chan, Chen, & Chong, 2010) and Sweden (OECD, 2015). In these systems, educators complain of intensification of work, contradictory imposed reforms, punitive accountability systems, and stresses caused by disruptive student behavior (Day, Sammons, Stobart, Kington, & Gu, 2007; Hargreaves, 2003).

One response to demanding working conditions has been to identify ways in which educators can become more resilient or buoyant in response to them. In the words of Day (2017), "to meet the challenges of classroom interaction, teachers need to have the capacity to be resilient" (p. 2). While teachers may not be able to change their environments, they should be able to alter how they perceive them. In addition to this flexibility being a personal quality of some individuals, resilience in the face of challenging circumstances is enhanced through collaborative cultures and made possible where teachers are also supported in their personal lives (Gu & Day, 2013).

Researchers on buoyancy emphasize the skills and dispositions that help people cope with the hassles of everyday life. Planning and mastery, it is argued, can increase teachers' confidence in the quality of their work and help them feel more self-regulated and composed in pursuing their pedagogical commitments (Martin & Marsh, 2006; Parker & Martin, 2009; Smith, 2015). Buddhist-inspired concepts of mindfulness have also been used to help educators adjust to challenging environments and escape from the imminent rush of events so they can reflect better alone and with their colleagues (Jennings et al., 2017; Shirley & MacDonald, 2016).

Are individual interventions informed by mindfulness, buoyancy, and resiliency sufficient for sustaining educator well-being over time? Or, in the face of deteriorating working conditions and the demands of unwanted high-stakes testing that undermine many teachers' sense of purpose, are more systemic approaches also needed? To address these questions, we need to integrate understandings of educator well-being with a theory of sustainability.

2. Theoretical framework

The framework of sustainable improvement that we draw on for this paper is derived from a theoretical understanding of environmental sustainability and sustainable development that first emerged in the late 1980s (Suzuki, 2003; United Nations, 2015) and that, as explained earlier, is applied retrospectively to the data of our study. The selected environmental framework is especially appropriate for determining the sustainability of a system quality (educator well-being) that is not the implementation of a time-bound initiative and for doing this within a complex policy environment of multiple innovations in a rapidly changing context. In its original environmental sense, sustainability refers to an interconnected system of lasting human and natural value where survival and thriving of species depend on sustaining things of value in bio-diverse environments.

This approach to sustainability means that schools must respect and improve not only the well-being of their students, but also of their educators and their larger communities, as they are interconnected. It means that the well-being of some groups should not prosper by having a negative environmental impact on others, and that attempts to improve well-being in some parts of a system should not be undermined by allowing ill-being to persist in other parts of it.

This ecological conception of sustainability can be summed up in seven principles derived from earlier research conducted by one of us on educational change over three decades in eight secondary schools (Hargreaves & Fink, 2006). The study addressed what endured and what did not in these schools as they dealt with multiple changes over time. These seven principles of sustainable leadership and improvement that are elaborated slightly here are:

- *Depth*. Sustainable improvement is about improvements that have moral value and human worth, and that support deeper learning and well-being among students and educators alike.
- *Breadth*. Sustainable improvement spreads beyond individual teachers and schools by activating and drawing on the power of collective commitment, support and solidarity.
- *Length*. Sustainable improvement endures over time across leaders and with continued and consistent support.
- *Environmental Impact*. Sustainable improvement does not benefit only some students, teachers, and schools at the expense of others in the surrounding environment.
- *Diversity*. Sustainable improvement is not standardized. It benefits from networked diversity of learning and expertise that responds to interconnected local circumstances.
- *Energy Restraint and Renewal*. Sustainable improvement restrains the pace and scope of change so it does not overwhelm people and deplete their energy. It also renews educators' energy through positive engagement, learning and appreciation.
- *Conservation*. Sustainable improvement does not dismiss the past, but builds upon the best of the past to create a stronger future.

In contrast to environmental theories, some interpretations of sustainability in education have been linked with traditions that focus on the spread or endurance of particular changes or reforms. These conceptions have been used to document how particular interventions spread through processes of innovation diffusion (Rogers, 1962); stages of implementation of improvements (Berman & McLaughlin, 1978); stages of concern in experiencing particular changes (Loucks & Hall, 1977); and "getting to scale" in spreading good educational practice (Elmore, 1996).

Some research on sustainability has adopted a geometric analysis of length, breadth, and depth in educational reforms (Breault, 2013; Coburn, 2003). This is also the stance that one of us initially established, before adopting ecological theory as a more appropriate way to interpret complex change environments characterized by multiple innovations (Hargreaves & Fink, 2000). Elmore (2016) has also revised his own earlier exposition of the linear nature of "getting to scale" as "either very superficial or downright wrong" (p. 531) because it was characterized by "unthinkable presumptuousness and naivete" (p. 529) about the complexity of change. In view of these insights about the nature and context of educational improvement and change in terms of systems, it is time to consider the concept of sustainability in relation to its original ecological conceptualization and as it applies to the findings on educator well-being reported in this article.

Our article draws on and retrospectively applies the original environmental understanding of sustainability (and non-sustainability) as a property of systemically interconnected

interactions in a moral context of human value. It explores those principles that provide the closest fit with our new research findings in explaining what appears to make educator well-being a wider property of teaching, and what can be done to make it a sustainable feature of schools and school systems.

3. Methodology

3.1. Context

The Canadian province of Ontario is an established international leader in student achievement and equity (Campbell et al., 2017). However, Canada ranks only 25th out of 41 countries in student well-being (UNICEF, 2017) and is “not significantly different from the OECD average” (OECD, 2017, p. 39). One in eight Ontario students has had serious thoughts about suicide, more than one in five has been cyber-bullied, and one in eight has worried about being harmed at school (Boak et al., 2016).

To address these issues, the Ontario Ministry of Children and Youth Services (2012) formed a Youth Development Committee and focus groups of young people to advance a well-being agenda for the province. This was followed by an Ontario Ministry of Education (2014) report, *Achieving Excellence*, that established educational policy pillars of excellence, equity, and student well-being, while retaining public confidence.

The research presented in this article was funded by the Ontario Council of Directors of Education to document collaborative work with the consortium of 10 school districts as a follow-up to a 2011 evaluation of a government-funded project entitled “Essential for Some, Good for All” (ESGA). This project focused on improving academic results of students with special needs in all 72 of Ontario’s school districts (Council of Ontario Directors of Education, 2007). The consortium was facilitated by the Council of Directors of Education (CODE). One key outcome of the study was identification of a strategy known as “leading from the middle” (Hargreaves & Braun, 2011; Hargreaves, Shirley, & Wangia, 2018) where districts developed their own strategies to promote inclusion of all students in ways that suited the diversities of their own communities, then networked and circulated these strategies across the districts within an environment of transparent responsibility for participation and results.

3.2. Participants

The follow-up research reported in this article was developed in collaboration with the 10 CODE Consortium districts at their invitation to determine and assist further progress and specific projects in their continuing efforts to “lead from the middle.” The study was initially guided by goals developed with members of the Consortium that sought to articulate the theory of action undergirding the Consortium’s projects, to gather perceptions of the projects’ strengths and limitations, to connect findings to existing leadership literature, and to provide feedback to participating districts and to other districts outside the Consortium.

3.3. Data collection

As the project evolved, it became clear that, compared to the period when ESGA was being implemented, there was less orchestrated effort or investment on the part of the Ontario Ministry of Education to support a coordinated strategy of “leading from the middle” across the districts. In effect, our project turned into what remained of the strategy within and across 10 of the original 72 districts. This led to two developments. First, we asked participants to describe their own understandings of “leading from

the middle” as they experienced it. Second, as the province’s policy on *Achieving Excellence* began to unfold during the early months of our research, it became apparent that the districts and their projects provided a real-time experiment for examining the impact of the new government direction on almost one seventh of the districts in the province. The emergent design enabled us to study projects with different emphases across the districts, several of which had their own combinations of well-being components.

A qualitative multiple-case study methodology documented the Consortium’s work (Hartley, 2004; Yin, 2014). A semi-structured interview protocol was prepared in collaboration with Consortium participants in the spirit of evolutionary planning (Louis & Miles, 1990) to elicit information on selected improvement initiatives in and across the districts. Questions were piloted during the initial collaborative meetings in the Spring of 2016 and then posed to participants during the May 2016 data collection period.

Teams of 2–3 researchers were rotated to enhance cross-validation of interpretation. Each district was visited over 1–2 days in May of 2016. Interviews and focus group discussions of roughly one hour each were conducted with 52 teachers, 46 principals or other school administrators, 52 district leaders or other central office staff, and 72 affiliated school-based support staff. Three interviews were conducted with policy makers from the Ministry of Education who played supportive roles in relationship to the Consortium. In all of these meetings artifacts such as school-based curricula and district-level and ministerial reports were collected. The sample comprised public, Catholic and Franco-Ontarian districts in 2 rural, 2 urban, and 6 suburban, areas across different geographic areas of the province. Taken together, the districts’ achievement score distributions were representative of those across the whole province.

3.4. Data analysis

Interview data were analyzed using the constant comparative method to identify salient themes in each district (Glaser & Strauss, 1967). The themes were derived from interaction between the original research questions, the four pillars of *Achieving Excellence*, the “leading from the middle” projects that the districts selected as their foci, consultation of relevant literature in emerging areas such as emotional regulation or mindfulness, and other issues that emerged from the evidence itself. After initial coding, the research team wrote individual case studies of 5000–10,000 words each based on the evolving themes and also the emerging unique narratives inherent to each case. The team then conducted a cross-case analysis to examine similarities and differences across cases, participants, and policy initiatives (Ayres, Kavanaugh, & Knafi, 2003).

During this stage, the research team assigned each district a case number and created a consistent citation format to keep track of all the supporting quotes to document exactly when and where they originated. For example, O1_Principal#1_5.14 describes the first principal interview conducted in the first (alphabetically organized) school district on May 14, 2016. An earlier version of this article, approved by reviewers, contained identifiers, to indicate that the distribution of represented data was sufficiently spread across all districts and roles. For ease of readability, we simply refer to educators’ roles when participants are quoted in this article.

Member-checking was conducted with participants at meetings of the CODE Consortium. Hence, early draft research findings were shared with participants who responded in face-to-face dialogue and via email and conference calls in ways that enabled the research team to incorporate their concerns and comments and make factual corrections (Creswell & Miller, 2000). After this, the team examined patterns, similarities, and differences across cases, participants, and policy initiatives.

At various points, the research team returned to the 2011 *Leading for All* report compiled by Hargreaves and Braun to investigate how districts had evolved in the 12 years since the original ESGA projects were launched. This enabled the team to acquire insight into the nature of educational change over time—including changes related to student and educator well-being—in Ontario. Such insights are not usually available to researchers who study implementation and sustainability of short-term projects.

4. Research findings

Educator well-being is an issue in Ontario, as it is in many other places. Some of this is inherent to a job where students arrive at school with great needs arising from poverty, post-traumatic stress in refugee families, the legacies of loss and oppression in Indigenous communities, and so on. The importance of educator well-being in student populations with increasing needs is highlighted by educators' perceptions in a district with large numbers of Indigenous students. "We recognize that our staff are stressed," one principal said. "We've learned that the more we've gotten to know our students as people, the more our stress increases, because every story is heartbreaking," one district director stated.

The greater the levels of social disadvantage, the more educators need help in attaining work-life balance. An assistant principal observed how "teaching isn't a pretty profession anymore. It's a messy profession. Our school has two teachers that are on stress leave, and there are other teachers that are on the verge of leaving. This is no longer a school where someone might start and end their career, because we don't know if they're going to last five years."

Echoing the concerns of school administrators about staff well-being, the director of this district commented that "I have staff that are burning out, and I have admin that are burning out, and I have senior admin that are burning out." In a district where around 50% of students are Indigenous and youth suicides are an ever-present risk because mental health supports outside the school are underfunded, the director worried about the well-being of his staff. "My biggest concern right now as the director, I would say, is my staff. I'm worried about my front-line staff. I'm afraid that it's not going to get better," he said. Recognizing the urgency of the situation, one superintendent pointed out:

We are trying to be as responsive as we can to the well-being of staff as we are for the well-being of students, and we know that they are interconnected. If the teacher is not well then you know what the result is going to be and the impact on the kids. We are now at that crossroads where all of the decisions that we make around supports for students, we need to be equally as cognizant of the supports and the well-being of teachers.

The scale of problems facing teachers today is not confined to this district. For instance, a special education resource teacher in another district noted how "the demands for a teacher overall from five years ago have increased immensely."

In order to understand the interconnected nature of educator and student well-being, our analysis draws on four of the seven principles of sustainability that are especially pertinent to the interpretation of our findings:

- *Depth*: Well-being as a sense of purpose and accomplishment *versus* the negative impact of standardized testing on students' and educators' accomplishment of their moral and professional purposes;
- *Breadth*: Well-being that is promoted and supported through positive relationships of collaborative professionalism *versus* individualistic well-being solutions that do not address the

systemic problems that lead to ill-being, and also *versus* the impact of negative collaborative overload;

- *Diversity*: Well-being as responsiveness to local diversities, drawing on valued differences of expertise *versus* standardized insensitivity to diversity, and reticence about acknowledging and using different levels of expertise; and
- *Restraint and renewal*: Well-being as fulfilling senses of renewal *versus* ill-being incurred by overwhelming expectations in depleting conditions.

In terms of the other three principles, *length* is the overarching meaning of sustainability in terms of persistence and endurance that encompasses all of the others and that did not appear in our data as a singular phenomenon. *Environmental impact* applies more to schools in competitive market systems that often progress at the expense of one another, and was not relevant in a system like Ontario's that has not adopted charter schools or similar innovations. Finally, *conservation* would require longitudinal data on educator well-being over much longer periods of time than are covered by this study.

4.1. Depth

The first principle of sustainable improvement is depth, understood as a "compelling sense of purpose" in relation to students' learning and well-being (Hargreaves & Fink, 2005, p. 24). Most teachers want much more for their students than academic achievement alone (Picower, 2011). They also want their students to be safe, cared for, thriving, and well. Ontario's well-being agenda often overlapped with the province's equity policy pillar since equity was interpreted not just in terms of narrowing measured achievement gaps in basic skills but also as requiring inclusion of all students' identities in the life and learning of the school. Four examples of this inclusion concern Franco-Ontarian, Catholic, Indigenous, and immigrant identities. Educator well-being occurs when teachers and administrators experience senses of fulfillment in terms of effectively addressing and incorporating these identities in the life of their schools.

In a Franco-Ontarian district during the original ESGA study, a culturally distinctive notion of childhood that included play, language preservation, and community was just as important as achievement. At that time, however, the Ministry required the same 100-min blocks of literacy units for francophone and anglophone schools alike, with identical scaffolding of reading activities. "It is really difficult for us," one educator complained. "We have to fight against a big machine" (Barber, 2014, p. 28).

By 2016, though, a Franco-Ontarian system specialist expressed how "we absolutely feel that the Ministry supports and has given us the legal background to do what we do." Educators' sense of fulfillment came from feeling supported in addressing the needs of their community instead of fighting the "big machine." The district has now extended its support beyond traditional Franco-Ontarian identity to engage the many French-speaking students who immigrate from countries such as Algeria and Lebanon to "celebrate the francophone culture and language, making it living and authentic," according to one teacher.

In a Catholic school district, speakers from homeless shelters asked students to reflect upon the Gospel teaching that, "Whatever you do to the least of my brothers, you do to me." "I think there's a lot of good, real life learning there," one of the teachers said, in terms of pursuing their moral and spiritual sense of purpose through the nature of the learning.

More of the Consortium's schools now directly critique the province's colonial oppression of Indigenous people, including how it separated children from their language, culture and communities

by forcing them to attend residential boarding schools. They engage Indigenous students with their heritage by bringing in elders to speak about their experiences and by providing more experiential learning in wilderness environments. An assistant principal in the district with the largest percentage of Indigenous students in our sample described how,

Our school has a culture room that we built a number of years ago. It has a kitchen attached to it. We have our own drum. We use that to integrate it. We've done different pow-wows, all sorts of different things. We have an elder that's in the native classroom 3 times a week. We have another one that comes and helps us with the feasts and the pow-wows ... It's revitalizing. It's come together.

In this same district, one teacher spoke about the virtues of their outdoor learning program, "I was thinking back to the explorer program ... and the outdoor ed. There are kids in there and you can't get them to do stuff like writing and reading. Then you take them outside and they are the first ones to know how to build a fire and shelter."

Finally, teachers engaged their students with the lives and languages of newcomer populations. In one case, for example, students focused a project on the Syrian refugee crisis and worked with their teachers, their entire district, local community agencies, and immigrant authorities, to raise funds for a family to come to their community. It wasn't just that "student empowerment increased experientially," one district director said, but that their core purpose of "actually trying to make a difference in the lives of others with the help of everybody" was accomplished.

Educators were enthusiastic when they saw their students speaking up to address "all kinds of world issues," a teacher said, whether these had to do with local issues like poor water quality on an Indigenous reservation or global injustices such as the refugee crisis. "This very much came from the students," the district's director pointed out, after a Syrian family of seven arrived in the community. "I think there's a lot of good, real life learning there," a teacher added, "and the chance to share authentically with the kids."

Students do not always fall into single categories or cultures. Their identities and any associated issues are complex. Ministry documents refer to students who struggle with their learning as "students of mystery." In one district, teams of educators place a picture of a "student of wonder" in the middle of a table, one special education consultant said. She said the educators then asked themselves questions like, "What are things like their spoken languages? When are they most joyful? When are they most engaged?" "It was up to us to choose a student of wonder." "It's for our learning," one teacher said. "I want to become a better teacher." This is education with meaning and purpose, where, "for all your students and for all your staff, everybody just loves coming into their learning (environment) and feeling that every day, things are getting better," in the words of one district director.

However, some aspects of Ontario's current assessment system militate against students' and teachers' capacity to achieve well-being by accomplishing purposes that are important to them. Ontario's Education Quality and Accountability Office (EQAO) tests all students at grades 3, 6, and 9. The EQAO test enables the Ministry to track and monitor difference in progress between schools and to make interventions in response. A few educators were supportive of the test, although, as a previous survey in the 2011 study of nine of the districts also discovered, these were almost always educators in administrative and learning support roles, rather than ones who had full-time classroom teaching responsibilities (Hargreaves & Braun, 2011). For instance, a director in

the current study stated that the EQAO has "helped with teacher accountability" and "helped drive standards." A learning support and special education teacher in the same district also indicated that it has a "place in terms of accountability."

The test has come in for considerable criticism from classroom teachers and many administrators, though. In the past, for example, academically challenged students were not described as "students of wonder" but were identified as "marker students" who were falling short of proficiency standards. As a case study from the previous study reported, this led to a detailed "case management system" that made "systematic use of diagnostic assessments and a strategy of tiered interventions" to prepare students for the tests (District 10 - case study for Hargreaves & Braun, 2011). Educators in the same district now found that this approach was "very impersonal," a principal said. "They really didn't capture the need to know your learner deeply."

While some of these difficulties arising from the testing system have therefore been overcome, other problems have persisted that are especially salient for students such as those with severe special needs or who are growing up in poverty. "I have Grade 3 and Grade 6 students that are non-verbal and autistic. There's no way, shape, or form, they can write that test," one teacher explained. "It doesn't take into consideration the poverty in my school. It's hugely detrimental to my kids when we get into those scenarios. It's very stressful for them. It's very stressful for the teachers. And, quite frankly, it seems to be unfair." The demoralizing dilemma for teachers was that either they exempted students such as these from the test, in which case the students would receive a zero and depress the school's overall score, or they had them sit for the test they were unable to take, and experience anxiety as a result.

When teachers know they are creating ill-being among their students, it undermines well-being in themselves. The teacher above recalled how she "spent so much time all year long trying to build the confidence of these children, that they were learners, that they were good at what they were able to do, and then this test would roll around and I would have to then give these kids things that they weren't able to do. I couldn't support them." A principal in the same district concurred, "Kids feel a lot of stress about it. Even though they're not going to be punished for it."

The impact of testing on students' and educators' well-being became evident when circumstances released them from the constraints of the test. For example, when teachers moved out of Grades 3 or 6, levels in which students take the EQAO, they felt liberated. "Last year, I was in grade 6 when I did my 'New Pedagogy' project [part of Fullan, Quinn and McEachen's (2018) network for school innovation], I was like, 'Come on, I've got to get it done. EQAO is coming,'" one teacher remarked. But "this year," in a different grade, "it was like, 'Let's fly with this!' It's a big difference. The kids are engaged." Compared to teachers in other grades, educators who taught in the tested grades of 3, 6, and 9 reported few of the satisfactions entailed in teaching for depth (see also Owston, Wideman, Thumlert, & Malhotra, 2016).

Ontario has been endeavoring to create a 21st century vision of student and educator well-being, but its efforts have been at odds with a 20th system of high-stakes assessment that perpetuates an interconnected vicious circle where student and teacher ill-being reinforce one another. One teacher said, "I feel like the EQAO is preparing students for a very antiquated version of education." The province's practices of standardized testing create stress among teachers who feel they are placed in impossible positions of being unable to support their own students effectively. Sustainable well-being for students and educators cannot therefore be confined to monitoring particular well-being reforms or interventions over time. It must also acknowledge and engage with how students' and teachers' well-being is affected by the whole system's approach to

learning and assessment, including those parts of it that create ill-being.

4.2. Breadth

According to the OECD (2014, p. 200) TALIS results, “teachers who report that they participate in decision making at school also report greater job satisfaction.” Collaboration is associated with positive emotionality in teaching and with teacher well-being (Hargreaves, 2001a; 2001b). In 2016, the Ontario Ministry of Education produced a memorandum to establish

a vision for *collaborative professionalism* that is defined as professionals – at all levels of the education system – working together, sharing knowledge, skills and experience to improve student achievement, and the well-being of both students and staff. Collaborative Professionalism values the voices of all and reflects an approach in support of our shared responsibility to provide equitable access to learning for all. (Ontario Ministry of Education, 2016, p. 1)

Compared to our earlier research results in 2011, the nature of collaborative professionalism and the breadth of learning to which it aspires in Ontario has progressed even further than this policy memorandum outlined. For example, the 2011 report acknowledged how professional learning communities (PLCs) had been defined in terms that involved nurturing, celebrating, and sharing. By 2016, a new level of collaborative professionalism was more rigorous, challenging and evidence-informed. Educators remarked how their conversations had become more focused and action-oriented.

Educators described how these new forms of collaboration were different from and better than what they had experienced previously. Many teachers in one district concurred with one teacher’s belief that “a true PLC is supposed to be driven by the teachers.” Another teacher in the district said that professional learning communities (PLCs), for example, had previously been a “very top down kind of thing as opposed to collaborative, and did not support best practices.” This teacher explained how an “advocacy group” in the district created a new space for teachers themselves to select their topics of discussion in their PLCs.

In one district, back in 2011, PLCs had been driven by administrators to get teachers to identify shortfalls in achievement through analysis of performance results, and compare examples of students’ work from their respective classes. By 2016, though, a group of hockey coaches had noticed that some Indigenous students who struggled with their academic learning were star athletes on the hockey rink. The coaches wondered how their students’ skills might transfer to the regular classroom setting. They told their principal that they would like to take over the running of their PLC and, with classroom teachers, they developed innovative rubrics of interdisciplinary skills, including emotional self-regulation, based on the students’ success on the hockey rink. “We’re linking hockey to other areas of the curriculum,” one of the teachers explained. “So, in science and math, we’re able to study how the skate and stick are made, how the puck comes off the stick with such velocity. We’re taking hockey, we’re connecting it to the curriculum, which is engaging the students, as well.” Teacher-driven inquiry rather than top-down, teacher-led PLCs is now the norm across the district.

In another district, a teacher-led PLC used technology to spur student engagement and situate learning in the real world. “What I loved is that it was different from all the other PD that we’ve done,” one of the teachers said. “It was science-specific. It allowed us to meet with other science teachers from other schools and see what worked for them that may not have worked for us.” “We’ve made

friends, we’re closer, and that, to me, is what’s really important. Then we take it back to the class and the kids are just eating it up.”

In Ontario, district leaders also undertake collaborative inquiry as part of their own pursuit of organizational learning (Donohoo, 2013). A superintendent in one team described what this shift had meant for her:

I would want to avoid bringing things to the table, because I was worried that my colleagues were judging me, or being critical of my ideas. Now, I feel comfortable bringing stuff to the table. We can’t move a system forward if we feel that we can’t trust people to value the lens that we bring. The visibility of that shows the vulnerability that I’m a learner, too.

The development of collaborative professionalism, then, is spreading well-being amongst the breadth of educators by engaging them together in the most rewarding parts of their work. They take charge, make friends, get closer, and feel they are moving their work forward together. This kind of collaborative inquiry is integral both to educators’ sense of moral purpose and also to its sustainability.

However, collaboration can work against well-being if it is badly managed. In one district, a new director “moved people around,” she said, so that everyone was engaged in writing “the district improvement plan together.” The plan created a new Learning Disability Steering Committee, linked it to the district’s Mathematics Task Force, established a “results-focused” agenda with extensive testing and attitudinal data bases, promoted collaborative inquiry about mathematics in all schools, and launched a new emphasis on “classroom teachers being responsible for the IEPs [Individual Educational Plans] of their students,” a teacher said.

This surge of initiatives requiring additional collaboration left some teachers wondering where they would find the time for all the other aspects of their work, such as lesson planning, grading, and meetings with parents. One teacher complained that there were now simply “too many meetings.” Another wondered if the effort expended on so many reforms was worth it, commenting that “I’m just not sold on the whole thing yet.” It is only when collaborative professionalism occurs in relation to a clear and agreed moral purpose, within a deliberately interconnected, evolving and empowered system, that its contribution to sustainability is secured. As Susan Moore Johnson and her colleagues discovered in their analysis of teacher retention, teachers are more likely to sustain their commitment to teaching if they feel sustained by each other as trusted colleagues (Johnson, Berg, & Donaldson, 2005).

In addition to adopting particular kinds of collaborative approaches that were not always supportive for educators’ well-being, some districts also developed deliberate strategies to support teachers’ well-being that were individual rather than collaborative in nature. “We’ve been talking more and more about mental health with our staff and they’re starting to take care of themselves now,” one assistant principal said. “They’ve got the yoga going. They’ve got after-school class where they’re doing a lot of fitness.” Although these strategies to support teachers’ individual well-being were welcomed, in many cases, a teacher also pointed out that, “There’s this belief that, now that you’ve yoga-ed and meditated, you should be good to go. ‘Get to work! Let’s go!’”

One of the districts provided financial support for its teachers to do an online course in mindfulness that yielded hundreds of subscribers. Yet, when districts in a joint working session drew plans of the initiatives they were undertaking, this district’s diagram was by far the most complicated – an indicator of the sheer number and complexity of initiatives it had launched in a short period to respond to pressing problems arising from a high-poverty environment. Ironically, although the teacher well-being initiatives in

this district largely took the form of programs of individual mindfulness, the district's director said the thing she found most supportive for her own well-being was positive relationships with colleagues.

These patterns of devising individualistic solutions drawn from positive psychology and mindfulness to collective or systemic problems are discussed in some of the critical literature on well-being which finds that getting people to feel good about themselves is driven, at least partially, by a corporate agenda of increasing workers' productivity in an era of intense global competitiveness (Burkeman, 2012; Cederström & Spicer, 2015; Davies, 2015). This literature also points out that positive psychology solutions such as growth mindsets (Dweck, 2007) can be used to divert attention from the reluctance of governments to tackle problems of poverty and inequality outside their schools (Kohn, 2015). These individualistic ways of approaching well-being avoid the social origins of ill-being, leaving some educators to feel they are being left to resolve "heartbreaking" situations such as risks of student suicide all alone, without support from outside the school.

The sustainability of educators' well-being is supported by well-constructed teacher-led learning communities and processes of collaborative inquiry that provide educators with practical solutions to the many challenges that face them. But when meetings proliferate in response to escalating top-down demands, or strategies for promoting well-being are individualistic rather than collective, efforts to promote educator well-being become precarious and unsustainable.

4.3. Diversity

According to Hargreaves (2005), sustainable change "avoids standardization" and "fosters and learns from diversity in teaching and practice" (p. 19). Strong eco-systems are bio-diverse in ways that enable them to recover from damage, and strong organizations embody and embrace diversity also so they are not vulnerable to collapse when a single, standardized strategy is shown to be ineffective or is abandoned in favor of something else. More and more of Ontario's as well as other educational systems are also diverse in the abilities, identities, and languages of students and in how educators respond to and capitalize on these diversities in positive ways. Strong educational systems view their diversity as an asset and seek to harness it through processes of inclusive and continuous learning (Senge, 2006).

Ontario's educators recognize and respond to the diversity of their students. Our 2011 report documented how educators in a Mennonite community used the agricultural products of the community for the schools' cafeteria services. Other educators provided programs of family literacy for parents of newcomers to the province. Still others introduced new assistive technologies for students with special educational needs that improved their writing performance.

By 2016, following the new agenda of *Achieving Excellence*, the promotion of diversity and of equity now concentrate on what Franco-Ontarians call "identity-building" experiences (Ontario Ministry of Education, 2005, p. 32). This approach is manifested in a range of inclusive practices. In one case, a Syrian refugee's Arabic language was incorporated as part of the class's "word of the day" that led the rest of the class to ask if they could learn five words in Arabic the next day. "It levels the playing field, even if just for one minute," this class's teacher stated proudly. "For just a minute of the day, that kid is the leader, instead of the one who can't do it."

Another district worked hard to get students more involved in reading and writing their individual education plans (IEPs) to build

self-advocacy among the students and also spread responsibility for the IEPs to more and more classroom teachers, not just those with special education expertise. "Even with my little guys," one teacher reflected, "I'll tell them – 'Some kids are best at what they hear and what they say, and some with their eyes and with their hands. This is how you learn best.'"

There was a concerted effort throughout the districts to combat the long history of colonial oppression of Indigenous peoples. "The curriculum needs to catch up with the idea of historical narratives and whose voices are missing as part of the curriculum," one superintendent said. One district with a limited population of Indigenous students nonetheless connected teachers and students with a national "Red Feather Project" to raise awareness about missing or murdered Indigenous women in Canada (Native Women's Association of Canada, 2017). Students each researched the lives of one of these women and "would take a red feather and on each red feather, they would write the name" of that woman before putting "that feather on a tree" in the village green, a district leader commented. Another district administrator expressed how inspiring this project was for their educators as well as for the students.

The beautiful thing is that everybody was involved in this. In the English classes, they were writing essays about it. In drama, they were doing plays. To be there that day was beautiful, because there were so many members of the community there. There were members from the First Nations community and the pastor of the parish really took an interest in the project and what the kids were doing. It was a real coming together of the community.

Engaging with diversity is not just a matter of empathy, caring or goodwill. One example of deliberately structured engagement with diversity is the use of "multidisciplinary" or "interdisciplinary teams." The Franco-Ontarian district's teams, for example, regularly included a cultural consultant, a curriculum consultant, and a "safe and accepting schools" consultant. At the early childhood level, districts often included teams of special educators, bilingual consultants, speech and language specialists, and the students' parents. Educators valued these teams because, in the words of one director, they were about "concrete practice and making a positive difference." One principal described the new level of interdisciplinary collaboration as truly "revolutionary" because it was successfully "breaking down those silos" that keep professionals isolated and disempowered. Especially for classroom teachers who want specific kinds of recommendations, she said, "it's paid off hugely," creating a "significant shift in our department" in which teachers were viewed as genuinely equals with specialists and coaches. "The most valuable part has been the face-to-face, the human interaction," another principal in the same district affirmed. "Getting everybody together and giving them that time to really speak to each other. That was a very, very valuable piece."

The use of professional teams with diverse expertise to engage more effectively with student diversity creates a sustainable ecosystem of educational improvement where educators are able to stay close and responsive to the students and communities they know best. However, these engagements with diversity are threatened by the impact of the EQAO standardized test. Not all educators discussed the test and its impact on them as the test was not always relevant to the projects they were sharing with the research team – for instance, ones that focused on early childhood. But where the tests were relevant, educators voiced several concerns. For example, teachers criticized the test for questions that contained cultural bias against recent immigrants, indigenous students in remote communities, or students in poverty, such as in

items about famous Canadian hockey stars, metropolitan subways, appetizers on a menu, and holidays in Florida.

Students were not the only ones experiencing ill-being because of the EQAO. One principal stated, “I can picture one of my Grade 3 teachers. She’s carrying the weight of things she can’t control. There’s a lot of pressure.” Teachers who empathized with their students were especially impacted by the tests. “I have kids that suffer from anxiety,” one teacher in the same district said, “so putting them into a testing situation like this seems totally wrong.” Another teacher observed that the public nature of posting test scores created a special stressor for educators: “the teachers feel badly when it’s ranked in the paper and it’s in *Maclean’s* magazine and the school is going to be reflected poorly.”

Ontario’s teachers experience fulfillment when they are able to respond effectively to the diversities of their students, but experience ill-being when they have to spend long periods of time in certain grades, preparing their diverse student body for standardized assessments they regard as being unkind, unfair and exclusionary. The sustainability of educator well-being and student well-being depends, in part, on continuing to address and support Ontario’s diverse student population while minimizing the threats to equity and diversity posed by standardized testing.

4.4. Resourcefulness

In natural and human systems alike, sustainability is ultimately about energy and whether it runs out or not. When educators are exhausted, even the best reforms are unsustainable. Excessive stress leads to things breaking, like bridges. But the metaphor of stress implies that the answer is to have less of it. Burnout, by contrast, occurs when energy is depleted. The answer is not just to restrain the use of energy, but also to renew it. There can be no satisfactory theory of sustainability without a theoretically informed explanation of energy depletion and renewal. In this sense, “sustainable leadership develops and does not deplete human resources. It renews people’s energy”.

The most obvious failure to develop well-being is suicide. One of the school districts served a high proportion of Indigenous students and had “one of the highest suicide rate areas in all of Canada,” a teacher said. Students and their families suffered from the tarnished legacy of residential schools that manifested itself in families with substance abuse issues, instability due to being raised in foster care, and shortfalls of mental health services. Insufficient funding for mental health services meant that high suicide risk students eventually took their own lives after having been on waiting lists for such services for many months without being seen.

Such policy-related failures damage the well-being of everyone—students and teachers alike. The director of education in one district explained,

We’ve got one public school, they’ve lost two students since January. How does that impact the class for the rest of the year? How does that impact the teacher? One of the children up there last year was deemed high suicide risk, was on a waiting list for eight months, didn’t even get seen. High risk. Ended up taking their own life, except the kid was 10 years old. How does that impact the classroom? Why are we waiting? If you’re deemed high risk suicide, and you don’t go to the top of the list as a 10-year old, then what gets you to the top of the list? Does that impact the classroom? I think it does.

These kinds of tragic situations placed extra emotional and workload pressure on principals, one of whom found himself “writing letters on behalf of the parents for the mental health facility or family physicians because the parents don’t feel articulate

enough to be able to convey the concerns.”

One of the greatest causes of ill-being among teachers is the severity and frequency of behavioral problems among students (Day et al., 2007; Schleicher, 2018). Many educators reported that their schools now teach programs of emotional self-regulation including meditation so that students are able to decompress until they are ready to learn. One teacher said that she taught “the students about full body listening with your mind: your ears, your eyes, just your whole body. We have many new teachers who are very interested. They see the kids that are “up here” one minute, and put that mindfulness practice into place, and they can come right back down.” “We can get back into teaching, then,” she said.

Educators have seen and welcomed significant improvements among students in their ability to self-regulate. One teacher in the district with high numbers of Indigenous students explained that it now took far less time to calm students down before they could rejoin a class: half the number of students were being sent away half as often to calm down for less than half the amount of time compared to the past, the teachers said. According to a principal, who had adopted a program on *Zones of Regulation* in her school, teachers were “seeing some gains.” Suspension numbers had dropped. “Kids are able to take responsibility for behavior a little more easily than they used to,” the principal said. “They’re able to articulate what went wrong.” “Teachers are actually loving it as well,” one teacher added, as it helped them reflect about why the students had not remembered what had been taught in their lessons.

Teachers feel renewed in their motivation to succeed when their students’ behavior and learning improve and they can get back to teaching and learning. When they have assistance from staff, such as occupational therapists and Indigenous support workers, they experience the rewards of professional collegiality too.

These patterns of support and renewal were also evident in a district serving a high-poverty, manufacturing community. A sense of civic responsibility for this community is evident among charities, community groups such as City Pride, and unionized labor. Partnerships between the schools and United Way, with the local community college, and with industries, are strong. These fund heavily subscribed mental health seminars for educators and parents. They also organize a popular “Run for Well-being” fundraiser to help everyone in the community to promote healthy bodies and minds.

Educators expressed gratitude for the commitment of trade unions and philanthropic organizations to students’ well-being. “It’s a part of the culture here,” one teacher said. “There’s huge care around mental health, huge care around the partnerships, huge care around poverty,” another teacher observed. “I think that’s a huge strength because there’s this belief in helping others. When I came here, philanthropy is a cultural value in this community, and so people help.”

Sustainable energy conservation can come about by eliminating overload and providing support that reduces pressure and stress on teachers. Energy renewal occurs when teachers learn strategies that make them more competent in caring for students with challenging behavior, and when they have the positive relationships with other professionals and community members that enable them to achieve their purposes more effectively. Energy conservation reduces stress, dissatisfaction and ill-being. Energy renewal is about the active creation of well-being.

5. Concluding discussion

This paper has described and analyzed factors affecting the sustainability and unsustainability of educators’ well-being. It is located in a policy environment in which educators’ well-being had

been situated within a largely self-sustaining system of interconnected multiple improvements. These brought educators closer to their students and each other in pursuing fulfilling purposes of educational transformation that were responsive to and inclusive of the diverse learners of Ontario. A district leader said he had learned that education really is ultimately about an ethic of care. “Well-being is first,” he said. “Take care of people. Take care of everything.”

Educators’ well-being is likely to prosper in environments that embody the principles of sustainability that form the framework of this paper. First, our results suggest that these environments generate positive emotion and satisfaction among educators by enabling them to accomplish deep and morally inspiring purposes over which they exert shared professional control. Second, educators appear to benefit from the breadth of collaborative professionalism in systems that bring them closer to each other and to their students in taking responsibility for and achieving these transformational purposes. Third, in many of the schools and districts in the Consortium, educators stated that they felt fulfilled when they brought together their diverse expertise in multi-disciplinary teams to respond to the multiple diversities of their students. Finally, educators’ well-being is more likely to be sustainable when there is external support from government and civil society organizations to reduce poverty and address mental health issues outside the school, alongside the internal expectation for teachers to overcome these challenges. It is also more likely to be sustainable when teachers are given the supports that enable them to be inspiring and effective teachers for all their students.

These findings indicate that sustainable change in regard to educators’ well-being must address and transform the core aspects of their work in ways that draw on their aspirations for moral purpose and their quest for collaborative professionalism with their colleagues. Add-ons like meditation or yoga classes outside of schools are popular amongst educators, but they are incomplete without redesigning the everyday ways that their work is organized and supported. These findings support the original ecological framing of sustainability as a moral and social obligation that was advanced in the late 1980s by the United Nations (Suzuki, 2003; United Nations, 2015).

Threats to sustainability, on the other hand, seem to come from factors that create dissatisfaction among educators by undermining their depth of purpose, breadth of engagement, diversity of contribution, and renewal of energy (Hargreaves & Fink, 2006). First, large-scale standardized testing can lead educators to teach things they do not believe in, using assessment processes that increase student anxiety and that are sometimes culturally biased. Second, sustainability threats appear to derive from systems that approach educators’ well-being mainly through individualistic interventions such as meditation or mindfulness in response to environments that are characterized by excessive overload of policy initiatives that overwhelm educators with increasing demands. Third, sustainability threats emerge from feelings among some educators that they alone are responsible for improving students’ learning and well-being in the face of immense social problems that receive insufficient support from other social services. Last, teachers’ valued commitment and capacity to address the diversity of their student body is also undermined by the persistence of large-scale standardized testing practices that are more than two decades old.

5.1. *Scientific and practical implications*

Educational changes are often implemented with little consideration given to either how they relate to pre-existing cultures and structures of schools or to the long-term sustainability of reforms

within complex systems (Borko, 2004; Hargreaves & Fink, 2006; Kennedy, 2010). Our data indicate that genuine progress seemed to be made in the ten school districts of Ontario in ways that promoted greater depth of professional fulfilment, breadth of participation, diversity of approaches, and renewal of human energy. These are genuine achievements in a large and diverse provincial system, at a time when many other systems have been struggling to innovate.

At the same time, the persistence of questionable practices from a previous reform era, most notably excessive testing, along with the continued underfunding of mental health supports for students’ lives outside the school, as well as some tendencies to respond to systemic and socially driven threats to educator well-being with individualistic, psychological solutions, all deserve policy attention. Such practices are in many ways incompatible with the normative and ecological foundations of sustainable change that support teachers’ and leaders’ well-being. Previous research (McLaughlin & Mitra, 2001), as well as our new findings reported here, indicate that transforming these prior practices is a matter of policy urgency if the promise of well-being in Ontario’s schools is to be sustained.

No matter how energetic school and district leaders may be, then, there is no gainsaying that “Leading from the Middle” to transform learning for all students and increase equity among them is an incomplete change strategy for promoting educators’ and students’ well-being in the absence of sufficient, consistent and coherent support from the top of the system. It is noteworthy that one result of this research in terms of its findings concerning the negative side-effects of large-scale standardized testing for students’ well-being prompted Ontario’s Premier at the time to initiate and subsequently accept the findings of a review of the Ministry’s assessment strategies. This review’s recommendations included the proposed abolition of all large-scale standardized testing throughout the province before Grade 6 (Campbell et al., 2018). One of the authors of this paper was a member of that 6-person review team and drew directly on this research to advance the recommendation.

A second, potential result of the research is that researchers themselves should consider the impact of their policy recommendations on teachers’ and leaders’ well-being. Researchers can work with educators in relationships of “sustained intersubjectivity” (Huberman, 1999, p. 291) that include them in their writing and advocacy (Nieto, 2003; Shirley & MacDonald, 2016). There are many ways in which research can inform policy, especially when researchers are not detached from efforts to bring about improvement and then only think about dissemination strategies after the completion of the research. Research can inform practice best when researchers are engaged in the creation of knowledge and improvement with practitioners at the point where they first emerge (Hargreaves, 1996).

At the same time, these research and policy relationships are not possible in all systems, especially ones that are hostile towards or dismissive of research and other forms of professional expertise. This is evident in the current political context of Ontario, in which a new populist and Conservative government was elected in May 2019. The present government has decided to persist with prior testing arrangements, is not following through on the previous Premier’s acceptance of the findings of the research review, and has removed the review and its findings from the Ministry of Education’s website. The current government has also made policy changes that are likely to increase the threats to educators’ well-being – especially the announcement of an increase in class sizes in high schools and in kindergarten as a way of implementing an austerity budget. In these circumstances, scholars should act as public intellectuals who, where necessary, will contest policies that are at odds with relevant research evidence in order to stimulate

and inform wider public, professional and political debates in Ontario and beyond about the probable impact of those policies on students' and educators' well-being.

5.2. Limitations

Although the 10 districts studied here are demographically and geographically representative of the province, they could have been unusually motivated to pursue the Ministry's *Achieving Excellence* agenda and to sustain it into the future. This could have led to findings that tended to be supportive of government policies and strategies, as a result of the self-selective nature of Consortium participation.

The election of a new government in Ontario in May 2018, after the conclusion of this research, means that the provincial system of education is now assuming different directions than the ones reported here. Under the aegis of economic austerity, funding has been removed from a range of educator-driven innovations. Opportunities to allocate resources for collaboration across schools and districts and develop breadth of participation as well as build solidarity of mutual support have been severely curtailed. Interpretations about the overall nature of educational change in Ontario based on this research should therefore only be made in the light of these most recent developments.

6. Future research

Complex changes in school systems demand studies of how multiple changes affect educators and students in interrelationship with one another over time. Such studies will assist in developing deeper understandings of sustainability than have been attained previously, even in relation to apparently more simple innovations and interventions. They will draw attention to how those changes are embedded in interrelated systems of parallel change and non-change too. Only then will it be possible to develop an interconnected theory and system of the sustainability of educator and student well-being.

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Appendix A. Supplementary data

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References

- Adler, A., & Seligman, M. E. (2016). Using wellbeing for public policy: Theory, measurement, and recommendations. *International Journal of Wellbeing*, 6(1), 1–35.
- Ayres, L., Kavanaugh, K., & Knaff, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13(6), 871–883.
- Barber, K. (2014). *Ontario francophone immigrant profile: Immigration trends and labor outcomes*. Ryerson Centre for Immigration and Settlement. Retrieved from: https://www.ryerson.ca/content/dam/rcis/documents/RCIS_MCI_PC_Fellowship_Report_Barber_2014.pdf.
- Bellanca, J. A., & Brandt, R. (Eds.). (2010). *21st century skills: Rethinking how students learn*. Bloomington: Solution Tree Press.
- Berman, P., & McLaughlin, M. W. (1978). *Federal programs supporting educational change: Implementing and sustaining innovations* (Vol. III). Santa Monica, CA: RAND Corporation.
- Boak, A., Hamilton, H. A., Adlaf, E. M., Henderson, J. L., Wolfe, D., & Mann, R. E. (2016). *The mental health and well-being of Ontario students, 1991–2015: Detailed OSDUHS findings*. Toronto, Ontario: Centre for Addiction and Mental Health.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3–15.
- Breault, D. A. (2013). The challenges of scaling-up and sustaining professional development school partnerships. *Teaching and Teacher Education*, 36, 92–100.
- Burkeman, O. (2012). *The antidote: Happiness for people who can't stand positive thinking*. New York: Faber & Faber.
- Campbell, C., Clinton, J., Fullan, M., Hargreaves, A., James, C., & Longboat, K. D. (2018). *Ontario: A learning province*. Toronto: Queen's Printer for Ontario.
- Campbell, C., Zeichner, K., Lieberman, A., & Osmond-Johnson, P. (2017). *Empowered educators in Canada: How high-performing systems shape teaching quality*. Marblehead, MA: John Wiley & Sons.
- Cederstrom, C., & Spicer, A. (2015). *The wellness syndrome*. Malden, MA: Polity.
- Center for Disease Control and Prevention (Vol. 2017). Health-related quality of life. Retrieved from <https://www.cdc.gov/hrqol/wellbeing.htm>.
- Chan, A., Chen, K., & Chong, E. Y. L. (2010, March). Work stress of teachers from primary and secondary schools in Hong Kong. In *Proceedings of the international MultiConference of engineers and computer scientist, Hong Kong* (Vol. 2182). Retrieved from http://www.iaeng.org/publication/IMECS2010/IMECS2010_pp1903-1906.pdf.
- Coburn, C. E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, 32(6), 3–12.
- Council of Ontario Directors of Education. (2007). *Special education leadership project*. http://www.ontariodirectors.ca/ED_Services/index.html.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124–130.
- Davies, W. (2015). *The happiness industry: How the government and big business sold us well-being*. London: Verso.
- Day, C. (2017). *Teachers' worlds and work: Understanding complexity, building quality*. New York, NY: Routledge.
- Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers matter: Connecting lives, work and effectiveness*. Maidenhead, England: Open University Press.
- Donohoo, J. (2013). *Collaborative inquiry for educators: A facilitator's guide to school improvement*. Thousand Oaks, CA: Corwin.
- Dweck, C. S. (2007). *Mindset: The new psychology of success*. New York: Ballantine.
- Elmore, R. (1996). Getting to scale with good educational practice. *Harvard Educational Review*, 66(1), 1–27.
- Elmore, R. (2016). "Getting to scale..." it seemed like a good idea at the time. *Journal of Educational Change*, 17(4), 529–537.
- Exton, C., Smith, C., & Vandendriessche, D. (2015). *Comparing happiness across the world: Does culture matter? OECD statistics working papers 2015/04*. Paris, France: OECD Publishing.
- Fullan, M., Quinn, J., & McEachen, J. (2018). *Deep learning: Engage the world change the world*. Thousand Oaks, CA: Corwin Press.
- Fu, P. P., Tsui, A. S., Liu, J., & Li, L. (2010). Pursuit of whose happiness? Executive leaders' transformational behaviors and personal values. *Administrative Science Quarterly*, 55(2), 222–254.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative theory*. New Brunswick, NJ: Aldine Transaction.
- Gu, Q., & Day, C. (2013). Challenges to teacher resilience: Conditions count. *British Educational Research Journal*, 39(1), 22–44.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., et al. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders*, 242, 180–187.
- Hargreaves, A. (1996). Transforming knowledge: Blurring the boundaries between research, policy and practice. *Educational Evaluation and Policy Analysis*, 18(2), 161–178.
- Hargreaves, A. (1998a). The emotional politics of teaching and teacher development: With implications for educational leadership. *International Journal of Leadership in Education*, 1(4), 315–336.
- Hargreaves, A. (1998b). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835–854.
- Hargreaves, A. (1998c). The emotions of teaching and educational change. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *The international handbook of educational change* (pp. 558–570). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education*, 16(8), 811–826.
- Hargreaves, A. (2001a). Emotional geographies of teaching. *Teachers College Record*, 103(6), 1056–1080.
- Hargreaves, A. (2001b). The emotional geographies of teachers' relations with colleagues. *International Journal of Educational Research*, 35(5), 503–527.
- Hargreaves, A. (2002). Teaching and betrayal. *Teachers and Teaching*, 8(3), 393–407.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Teachers College Press.
- Hargreaves, A. (2004). Inclusive and exclusive educational change: Emotional responses of teachers and implications for leadership. *School Leadership & Management*, 24(3), 287–309.
- Hargreaves, A. (2005). Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change. *Teaching and Teacher Education*, 21(8), 967–983.
- Hargreaves, A., & Braun, H. (2011). *Leading for all: A research report of the development, design, implementation and impact of Ontario's "essential for some, good for all" initiative*. Toronto, Ontario: Council of Ontario Directors of Education.
- Hargreaves, A., & Fink, D. (2000). The three dimensions of reform. *Educational Leadership*, 57(7), 30–33.

- Hargreaves, A., & Fink, D. (2005). The road to sustainable leadership: The seven principles. *Australian Educational Leader*, 27(1), 10–13.
- Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: John Wiley & Sons.
- Hargreaves, A., Shirley, D., Wangia, S., Bacon, C., & D'Angelo, M. (2018). *Leading from the middle: Spreading learning, well-being, and identity across Ontario*. CODE Consortium. Retrieved from: http://ccsli.ca/downloads/2018-Leading_From_the_Middle_Final-EN.pdf.
- Hargreaves, A., Washington, S., & O'Connor, M. (2019). Flipping their lids: Teachers' wellbeing in crisis. In D. M. Netolicky, J. Andrews, & C. Paterson (Eds.), *Flip the system Australia: What matters in education* (pp. 93–104). New York, NY: Routledge.
- Hartley, J. (2004). Case study research. In C. Cassel, & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 323–333). Thousand Oaks, CA: Sage Publications Ltd.
- Headey, B., & Wearing, A. (1991). Subjective well-being: A stocks and flows framework. In F. Strack, M. Argyle, & N. Schwarz (Eds.), *Subjective well-being: An interdisciplinary perspective* (pp. 49–73). Oxford, UK: Pergamon Press.
- Health and Safety Executive. (2017). *Health and safety at work summary statistics for Great Britain 2017*. Retrieved from <http://www.hse.gov.uk/statistics/overall/hssh1617.pdf>.
- Herzberg, F. (1964). The motivation-hygiene concept and theories of manpower. *Personnel Administrator*, 27(1), 3–7.
- Hochschild, A. R. (2016). *Strangers in their own land: Anger and mourning on the American right*. New York: New Press.
- Huberman, M. (1999). The mind is its own place: The influence of sustained interactivity with practitioners on educational researchers. *Harvard Educational Review*, 69(3), 289–319.
- Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., et al. (2017). Impacts of the CARE for Teachers program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology*, 109(7), 1010.
- Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). *Who stays in teaching and why: A review of the literature on teacher retention*. Cambridge: Harvard University, NRTA's Educator Support Network.
- Kennedy, M. M. (2010). Attribution error and the quest for teacher quality. *Educational Researcher*, 39(8), 591–598.
- Kerényi, Á. (2011). The better life index of the organization for economic cooperation and development. *Public Finance Quarterly*, 56(4), 518–538.
- Khawaja, N. G., Ibrahim, O., & Schweitzer, R. D. (2017). Mental wellbeing of students from refugee and migrant backgrounds: The mediating role of resilience. *School Mental Health*, 9(3), 284–293.
- Kohn, A. (2015). *The perils of "Growth Mindset" education: Why we're trying to fix our kids when we should be fixing the system*. Retrieved from https://www.salon.com/2015/08/16/the_education_fad_thats_hurting_our_kids_what_you_need_to_know_about_growth_mindset_theory_and_the_harmful_lessons_it_imparts/. (Accessed 22 January 2019).
- Liu, P. (2017). A framework for understanding Chinese leadership: A cultural approach. *International Journal of Leadership in Education*, 20(6), 749–761.
- Loucks, S. F., & Hall, G. E. (1977). Assessing and facilitating the implementation of innovations: A new approach. *Educational Technology*, 17(2), 18–21.
- Louis, K. S., & Miles, M. B. (1990). *Improving the urban high school*. New York: Teachers College Press.
- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43(3), 267–281.
- McLaughlin, M., & Mitra, D. (2001). Theory-based change and change-based theory: Going deeper, going broader. *Journal of Educational Change*, 2(4), 301–323.
- Murphy, J. (2009). Closing achievement gaps: Lessons from the last 15 years. *Phi Delta Kappan*, 91(3), 8–12.
- Native Women's Association of Canada. (2017). *Welcome to NWAC: A national voice of Indigenous women in Canada since 1974*. Retrieved from <https://www.nwac.ca/>.
- Ng, P. T. (2017). *Learning from Singapore: The power of paradoxes*. New York, NY: Routledge.
- Nias, J. (1981). Teacher satisfaction and dissatisfaction: Herzberg's "two-factor" hypothesis revisited. *British Journal of Sociology of Education*, 2(3), 235–246.
- Nieto, S. (2003). *What keeps teachers going?* New York: Teachers College Press.
- OECD. (2014). *TALIS 2013 results: An international perspective on teaching and learning*. Paris, France: OECD Publishing.
- OECD [The Organization for Economic Cooperation and Development]. (2015). *Improving schools in Sweden: An OECD perspective*. Paris, France: OECD. Retrieved from <http://www.oecd.org/education/school/Improving-Schools-in-Sweden.pdf>.
- OECD [The Organization for Economic Cooperation and Development]. (2017). *PISA 2015 results (Volume III): Students' well-being*. Paris, France: OECD. <https://doi.org/10.1787/9789264273856-en>. Retrieved from.
- Ontario Ministry of Children and Youth Services, Youth Development Committee. (2012). *Stepping stones: A resource on youth development* (Toronto, Ontario).
- Ontario Ministry of Education. (2005). *Ontario's aménagement linguistique policy for French-language education*. Retrieved from <http://www.edu.gov.on.ca/eng/document/policy/linguistique/linguistique.pdf>.
- Ontario Ministry of Education. (2014). *Achieving excellence: A renewed vision for education in Ontario*. Retrieved from: <http://www.edu.gov.on.ca/eng/about/great.html>.
- Ontario Ministry of Education. (2016). *Collaborative professionalism. Policy/Program memorandum No. 159*. Retrieved from: <http://www.edu.gov.on.ca/extra/eng/ppm/ppm159.pdf>.
- Ontario Principals' Council. (2017). In *International symposium white paper: Principal work—life balance and well-being matters*. Toronto, Ontario.
- Owston, R., Wideman, H., Thumlert, K., & Malhotra, T. (2016). *Transforming learning everywhere: A study of the second year of implementation*. Toronto, Ontario: York University.
- Parker, P. D., & Martin, A. J. (2009). Coping and buoyancy in the workplace: Understanding their effects on teachers' work-related well-being and engagement. *Teaching and Teacher Education*, 25(1), 68–75.
- Picower, B. (2011). Resisting compliance: Learning to teach for social justice in a neoliberal context. *Teachers College Record*, 113(5), 1105–1134.
- Pink, D. H. (2011). *Drive: The surprising truth about what motivates us*. London, United Kingdom: Penguin.
- Rogers, E. M. (1962). *Diffusion of innovations*. New York, NY: The Free Press.
- Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4(4), 99–104.
- Schleicher, A. (2018). *Valuing our teachers and raising their status: How communities can help*. Paris, France: OECD.
- Seligman, M. E. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Free Press.
- Senge, P. M. (2006). *The fifth discipline: The art and science of the learning organization*. New York, NY: Doubleday.
- Shirley, D. (2011). A brief history of public engagement in American public education. In M. Orr, & J. Rogers (Eds.), *Public engagement for public education: Joining forces to revitalize democracy and equalize schools* (pp. 27–51). Palo Alto, CA: Stanford University Press.
- Shirley, D. (2017). *The new imperatives of educational change: Achievement with integrity*. New York: Routledge.
- Shirley, D., & MacDonald, E. A. (2016). *The mindful teacher*. New York, NY: Teachers College Press.
- Silove, D., Steel, Z., Baum, A., Chey, T., & McFarlane, A. (2007). Trauma, PTSD, and the longer-term mental health burden amongst Vietnamese refugees. *Social Psychiatry and Psychiatric Epidemiology*, 42(6), 467–476.
- Smith, M. (2015). From adversity to buoyancy: Marc Smith reconceptualizes academic resilience in schools. *The Psychologist*, 28, 690–695. Retrieved from: <https://thepsychologist.bps.org.uk/volume-28/september-2015/adversity-buoyancy>.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the US*. Learning Policy Institute. Retrieved from <https://learningpolicyinstitute.org/product/coming-crisis-teaching>.
- Suzuki, D. (2003). *The David Suzuki reader: A lifetime of ideas from a leading activist and thinker*. Vancouver, Canada: Greystone Press.
- Twenge, J. M. (2017). *I-gen*. New York: Simon & Schuster.
- UNICEF [United Nations Children's Fund]. (2007). *Child poverty in perspective: An overview of child well-being in rich countries*. Retrieved from: https://www.unicef-irc.org/publications/pdf/rc7_eng.pdf.
- UNICEF [United Nations Children's Fund]. (2017). *Building the future: Children and the sustainable development goals in rich countries. Innocenti report card (Vol. 14)*. Retrieved from: https://www.unicef-irc.org/publications/pdf/RC14_eng.pdf.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development. Sustainable Development Knowledge Platform*. Retrieved from: <https://sustainabledevelopment.un.org/post2015/transformingourworld>.
- Wilkinson, R., & Pickett, K. (2011). *The spirit level: Why greater equality makes societies stronger*. New York, NY: Bloomsbury Publishing.
- Yin, R. (2014). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.