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Résumé de l'article

The COVID-19 pandemic created an unprecedented disruption to education and schooling at the end of the 2019-20 school year. Operating in a context of great uncertainty, education leaders were tasked with making key decisions with potentially far-reaching impacts on the educational and mental and physical health of students and families. Drawing on 9 cross-sectoral focus groups with school board administrators, representatives from education industry partners, and K-12 educational policy research organizations, this paper provides a historical record of the evolution of decision-making and points to promising lines of inquiry and lessons that can be learned from this moment in education.

Canadian K-12 Schooling During the COVID-19 Pandemic: Lessons and Reflections

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Abstract
The COVID-19 pandemic created an unprecedented disruption to education and schooling at the end of the 2019-20 school year. Operating in a context of great uncertainty, education leaders were tasked with making key decisions with potentially far-reaching impacts on the educational and mental and physical health of students and families. Drawing on 9 cross-sectoral focus groups with school board administrators, representatives from education industry partners, and K-12 educational policy research organizations, this paper provides a historical record of the evolution of decision-making and points to promising lines of inquiry and lessons that can be learned from this moment in education.

Keywords: COVID-19, education, schooling, remote learning, equity

The COVID-19 pandemic created an unprecedented disruption to education and schooling. In the spring of 2020, educators were tasked with making several big decisions such as how to deliver remote learning, keep families and students engaged, mitigate the effects of social inequalities and learning losses that accumulate over non-school time, and develop contingency plans for future emergencies (e.g., Campbell, 2020; Downey, 2019; OECD, 2020). These initial responses were situated within a context of uncertainty about the risks and transmission of COVID-19 and other considerations such as the equitable distribution of technology, directives from unions, and the more immediate health and safety needs of students and staff. At the same time, stakeholders suggested there is an opportunity to consider what a post-COVID-19 education system will look like, and whether there are changes to teaching, learning, and administration that are worth maintaining.[1]

In response to the disruption in K-12 education, the "Education Taskforce" was established[2] to facilitate cross-sectoral conversations with education leaders from across the country. The goal was to share lessons and strategies, ensure the successful continuation of quality learning, expand current pockets of innovation, and to consider what a "new normal" might look like. This paper summarizes the main themes from 9 focus groups with 20 Taskforce members and follow up meetings about their responses to the COVID-19 in the 2020-2021 school year. Our work provides a historical record of the evolution of decision-making and points to promising lines of inquiry and lessons that can be learned

[1] For Canada's education system's response to COVID-19 see People for Education's website. https://peopleforeducation.ca/our-work/tracking-canadas-education-systems-response-to-covid-19/.

[2] Participation in the Education Taskforce is voluntary and there are no associated fees or payments. Statements about 'school boards' reflect the information provided by Taskforce members and do not necessarily reflect all school boards across Canada.

from this unprecedented moment in education. These considerations and potential impacts continue to shape public discourse about education and schooling across Canada.

Methodology

In April 2020, Equitable Learning (EL), an organization that works with education stakeholders from across Canada, [3] asked the authors to conduct a study about Canadian school board responses to COVID-19. EL created the Education Taskforce (referred to as the 'Taskforce' hereafter) and recruited members through their network. Taskforce members included Directors of Education, superintendents, representatives from major technology, communication, and software firms and non-profits that provide leadership in the area of education. Two senior administrators from a university teacher education program were also invited to join the Taskforce. We received ethics clearance to record interviews with ET members (see Table 1 below for a brief description of roles and participants). The Taskforce hailed from British Columbia, Alberta, Ontario, Nova Scotia and New Brunswick.

Table 1
Sector of Education Taskforce Participants

Industry/Non-Profit	Education	Academia
8	10	2

Given the speed and emergent nature of the inquiry, we adopted a Rapid Qualitative Inquiry (RQI) approach. RQI are "intensive, team-based qualitative inquiry with (a) a focus on the insider's or emic perspective, (b) using multiple sources and triangulation, and (c) using iterative data analysis and additional data collection to quickly develop a preliminary understanding of a situation" (Beebe, 2014, p.3). Our initial focus group and one-on-one meetings provided the Taskforce with some preliminary guiding questions about emerging responses, challenges, and promising strategies and lines of inquiry. An RQI approach allowed us to engage with education leaders and share findings in a manner that could be used to facilitate the decision-making processes and tackle topics that the participants identified as relevant and useful (see Vindrola-Padros et al., 2020).

Our role included leading focus groups, structured conversations, and 'break out' sessions that centred on specific topics identified by the Taskforce members. While the research team's insights evolved over the year of engagement with the Taskforce, in this paper we primarily report findings from the 9 online focus groups with 20 Taskforce members. Two of these meetings were with the entire group and the remaining focus groups were comprised of groups of four or five members to manage more in-depth conversations productively in a remote format. These conversations explored participants' responses to COVID-19, the shift to remote-learning, return-to-school planning for Fall 2020 and beyond, and promising changes to teaching, learning, and administration. The key questions that guided our discussions include: What strategies have been implemented across participating school boards in response to the COVID-19 pandemic? What challenges are boards facing in responding to the pandemic and shifting to remote learning? What kinds of data have school boards gathered? How can a broader understanding of school board responses better inform practices for the upcoming school year and future emergency situations? The Taskforce also reflected on short- and long-term implications including the future of teaching and learning, and the emergence of unforeseen opportunities and benefits. Meetings occurred regularly every 2-4 weeks via Microsoft Teams. All meetings were recorded and transcribed.

What follows is an examination of the major themes and considerations that emerged through these conversations with the Taskforce members. Given the speed of the inquiry, focus groups were immediately transcribed and summarized in reports that were shared with the Taskforce. Feedback from the Taskforce members ensured we were fairly and accurately capturing our ongoing conversations and reflections.

While we acknowledge that there has been a great deal of change since these early conversations (provinces for instance fluctuated between in-person, online, and hybrid learning forms) the core issues described below have remained constant throughout the pandemic and continue to inform public and

[3] To protect the confidentiality of participants, we changed the name of the organization and taskforce and refer to participants by their professional title.

policy debates about schooling in a COVID-19 teaching and learning environment.

Balancing Competing Risks

Over the spring and summer of 2020, Ministries across Canada considered a wide range of delivery models. These models were informed by government and public health guidelines and varied from province to province and regionally. Proposed delivery models included modifications to class sizes, cohorting, staggering timetables, and offering blended options to support continued social distancing and enhanced cleaning protocols. A handful of school boards committed early to offering at least some in-person schooling (e.g., Manitoba, British Columbia, Quebec, New Brunswick), while other boards left these decisions quite late (e.g., Ontario, Alberta) resulting in increased uncertainty for teachers and parents in those provinces (People for Education 2020).

There were three basic scenarios that school boards across the country were asked to consider. The first approach was a complete reopening of schools in a way that aligned with pre-COVID-19 regulations (e.g., class sizes) and practices (e.g., regular social interactions). The second approach was a modified school-day routine including smaller class sizes, adjusted timetables (e.g., one day on, one day off), with hybrid delivery models that enable students to continue to learn at home during non-school days. In both scenario one and two, attendance either full or part-time was voluntary and school boards continued to offer remote learning options. The third approach was to keep school closed and to continue to offer all schooling remotely. School boards also considered a staggered restart that would include prioritizing certain groups of students (e.g., younger grades) and subjects (e.g., math). Taskforce members expressed skepticism about the likelihood of the first approach being acceptable from a public health perspective, and asked their school leaders to focus their attention on approaches two and three. This unprecedented and complex administrative planning task was undertaken in a constantly evolving political climate. Government directives varied geographically and changed frequently in response to balancing restarting economic activities and pressure from various special interest and stakeholder groups.

Each proposed option demanded a wide range of strategies and resources to mitigate competing risks in consideration of "how learning and wellbeing can be best supported within each context" (UNESCO, UNICEF, The World Bank, and the World Food Programme, 2020, p. 2). These concerns continue to be at the forefront of discussions as school boards across Canada remain in a constant state of flux—switching back and forth between remote and in-person learning, or some combination of the two, as they continue to monitor the rise and fall of COVID-19. At the time of writing this paper, uncertainty about the long-term effectiveness of the vaccine and variants left many wondering about whether disruptions to teaching and learning will continue well into the foreseeable future (e.g., Tasker, 2021; Tencer, 2021).

Health, Well-being, and Safety. *How do we balance the risks of COVID-19 with the more immediate physical health, mental and emotional wellbeing, and safety needs of students?* When schools closed in March 2020 (see People for Education, 2020; UNESCO, 2020), Taskforce members noted that continuity of learning was not their initial priority.[4] Instead, responses focused on the broader "conditions for learning" including students' mental health, safety, and food insecurity. One Director, for example, described distributing gift certificates for food, while another partnered with community organizations to provide a breakfast programme and other services for families. Directors also cited the importance of attending to the mental health needs of students, particularly as a few weeks of school closure turned into months. Directors remarked on the challenges of finding the right balance between supporting children's learning and recognizing that some families were "dealing with all sorts of stressors" including job losses or ongoing work demands outside the home (e.g., essential workers). As one Director posed "[h]ow do we keep on measuring whether every student is safe, supported and connected"? Taskforce members also questioned "how do we find the joy in a school with 6-inch taped-off marks on the floor, Plexiglas everywhere, and masked up teachers and students"?

Against the backdrop of these conversations, health and education leaders also considered whether the dangers of *not* re-opening schools outweighed harms and risks due to COVID-19. As the Centre for Disease Control and Prevention (2020) noted "while opening schools – like opening any

[4] By the end of March 2020, 191 countries reported closing schools, impacting just 1,581,173, 934 students worldwide. At the end of June, UNESCO reported that 111 countries had remained closed (UNESCO 2020).

building or facility—does pose a risk for the spread of COVID-19, there are many reasons why opening schools in the fall of 2020 for in-person instruction is important." A report by Sick Kids (2020, p. 2) summarized the adverse impact of school closures on children's health, safety, and wellbeing:

> Some of these unintended consequences include decreased vaccination coverage, delayed diagnosis and care for non-COVID-19 related medical conditions, and adverse impact on children's behaviour and mental health. Increased rates of depression, trauma, drug abuse and addiction and even suicide can be anticipated. Several organizations … have highlighted concerns about the potential impact of lockdown on family discord, exposure to domestic violence, child abuse and neglect. Thus, the impetus to reopening schools is to optimize the health and welfare of children, not for the purposes of allowing parents to get back into the workforce or to facilitate the economy.

These challenges were overlaid with concerns about the reduction of oversight related to child welfare. School closures greatly limited the ability of teachers and other school staff (e.g., social workers) to detect child abuse. In southern Ontario for instance, there was a 60 % to 73 % decline in calls to the Children's Aid Society and local police in the month following school closures. As one police officer stated, "[w]e normally receive concerns from schools, friends, other parents, coaches, and daycare providers…with social distancing measures in place and increased stress on families, there is little opportunity for children to interact with or reach out to those they trust" (City News, 2020). These concerns are not isolated to Canada, and organizations around the world have posed questions about the "increased risks of domestic violence and sexual exploitation against boys and girls" in the context of school closures (UNESCO, UNICEF, The World Bank, and the World Food Programme, 2020). Child safety and wellbeing, not the economy or labour market, continue to be cited as the primary reasons for keeping children in school. At the same time, health care leaders emphasized that appropriate measures should be proactively put in place to mitigate the risks associated with schools re-opening.

Providing Equitable and Rich Learning Opportunities. *How do we balance the challenges and benefits associated with different education delivery models and provide equitable learning opportunities for students?* As Campbell (2020) summarized, "most of the debate about the plans for the 2020-21 school year have focused on the health and hygiene needed," however "important larger questions concerning the core of schooling – including curriculum, assessment and instruction" need to be addressed (p. 10). Not all students have parents/guardians who are able to support learning at home and, importantly, "[t]hey are not teachers and nor should they be expected to be" (ibid, p. 13; see also Alberta Teachers Association, 2020; Rizk & Hillier, 2021). This sentiment was echoed by Taskforce members; they were acutely aware of the added burden placed on parents. Parents not only struggled with the learning platforms and tools, but they were anxious about not having access to good measures of their child's learning. The reliance on parent- or guardian-led instruction and students' varying ability and motivation to learn independently are likely "exacerbat[ing] already existing opportunity gaps" (OECD 2020, p. 4):

> …differences among students in support from parents who can provide for them educational opportunities directly at home or accessing them privately, differences in the capacity of different types of schools to support the learning of their students remotely, and differences among students in their resilience, motivation, and skills to learn independently and online, are likely to exacerbate already existing opportunity gaps. It is imperative, for this reason, that education leaders take immediate steps to develop and implement strategies which mitigate the educational impact of the Pandemic.

While we currently lack the type of data that would allow us to directly examine the impacts of COVID-19 school closures, a series of papers have emerged to predict learning losses stemming from COVID-19 school closures. Canadian researchers predict learning losses of 3.5 to 7 months among typical- and lower-performing students respectively, and achievement gaps that grow up to 1.5 years among same grade peers (Aurini and Davies, 2021; Davies and Aurini, 2021). American research has found similar learning losses. On average, these studies predict that the 2020 cohort is two months behind in

reading and 3 months behind in math (e.g., Kuhfeld et al., 2020b; Renaissance Learning, 2020). Indeed, there is a substantial amount of research suggesting that in the absence of good schooling and teacher-led instruction, learning gaps will widen between higher- and lower-SES children[5](e.g., see also Hanushek & Woessmann, 2020; Kuhfeld et al., 2020a; Kuhfeld et al., 2020b; Renaissance Learning, 2020).

By September of 2020, children already had been out of school for 5 months. While initially school boards were "just trying to get content out" without worrying about whether it was "good or bad," Ministries and school boards had a 5-month window to plan for September 2020. Taskforce members noted the importance of ensuring that students and families not only have equitable learning opportunities but also access to resources and supports to help them move successfully into the 2020-2021 school year. As the Education Endowment Foundation argued (2020) "school closures are likely to reverse the progress made to narrow the gap in the last decade," even if the "strongest possible mitigatory steps are put in place" (p. 4).

Taskforce members reflected on how to develop a "continuity of learning plan," even if meeting curriculum and assessment requirements are no longer possible given varied models of education delivery, reduced contact with students, and students' circumstances. As one Taskforce member reasoned:

> …there is a broader societal policy conversation that needs to take place, which is where we now have new demands on parents. We have new demands on teachers, and how do our traditional public policy levers and funding mechanisms align to that?

This mission requires Ministries and school boards to transition from a temporary emergency response to developing sustainable longer-term solutions that are informed by feedback from parents/guardians and students. Taskforce members noted that this feedback primarily suggested (i) building more structure into remote and blended options, (ii) standardizing platforms and communications, and (iii) increased opportunities for synchronous student-teacher interaction. However, Taskforce members expressed concern that regardless of which delivery model or supports were adopted, keeping children engaged and learning would continue to be a struggle for teachers and parents. As one Director summarized:

> I do worry about parent fatigue and I think all of us who are educators [can relate], even with our own children. For me it was fatiguing, trying to keep them involved. And I can't even imagine someone who did not have any sort of understanding of the education system or online platforms trying to help their kids. So I think it's going to be very challenging.

At the time this paper was written, there was still little end in sight. Rises in Covid-19 cases, the emergence of new variants, and periodical school or classroom closures have done little to ease these concerns.

The Role of Digital Technology

Questions about digital technology continue to inform discussions about education delivery models and the need to provide equitable learning opportunities. Digital technology is often touted as a tool needed to support new competencies and student success (e.g., Ontario Ministry of Education, 2016; Toh et al., 2016). In-class experiences with technology such as robotics (e.g., Toh et al., 2016) and attempts to 'gamify' the curriculum (e.g. Dicheva et al., 2015) are just a few examples of efforts to integrate technology.

Taskforce members noted that the response to remote or other alternative delivery models of

[5] Similar 'seasonal learning' research has also found that children's BMI increases much faster when children are out of school (e.g., von Hippel & Workman, 2016). In the context of the COVID-19 social distancing measures, one survey of 9–15-year-olds living in Toronto found that the "majority of respondents reported spending more time with technology (73 %), going outside less than once a day (72 %), spending less time being physically active (61 %), and not spending enough time outside (58 %) or connecting with nature (56 %)" (Campbell, 2020, p. 8 summarizing the Maximum City, 2020 study). Other research has found that students who received "one year less of instructional time (they were born just after the school entry cut-off date) achieved, on average, a score that was 6 % lower on standardized reading test…5.9 % lower in mathematics, and 4 % lower in science" than their counterparts with one additional year of schooling (Frenette, 2008).

teaching and learning varied both between and within provinces. In particular, school boards varied widely in their ability to 'pivot' to an online platform. These variations were a function of their current online infrastructure, the availability of students' resources (e.g., devices), and school and teacher philosophy. For example, one Director of Education noted that having a "massive online learning platform" in place and staff who were already "fairly comfortable" with tools such as D2L and Google Classroom allowed his board to transition more easily to remote learning. While this board had to problem-solve access to resources, the deployment of devices, and connectivity, he noted the way his board responded was "overwhelmingly positive."

Interestingly, this Director estimated that only 300 students required alternative accommodations because of the lack of connectivity or parental preference (a board that has just under 20,000 students and is located in a 'cottage country'). Another Director noted that only 2 % of their student population required assistance with internet connectivity. These estimates align with the latest Statistics Canada research showing that only 1.2 % of households do not have access to internet at home. Even among the lowest income quartiles, more than 95% have internet access. There are larger discrepancies, however, in terms of access to internet-enabled devices. Almost 25 % of students in the lowest income quartile only have a mobile device to access the internet, and 63 % of low-income households have less than one internet-enabled device per member (see Frenette et al., 2020). To shore up discrepancies, several Taskforce members noted delivering thousands of devices to students in their school boards with little to no expectation of receiving them back when in-person schooling resumes.

Similarly, another large school board in western Canada benefited from having had an online delivery learning system in place for several years. The challenge for this board was not to "start from scratch" but rather to scale up from approximately 8000 students to offering remote learning to every student in the school board. As one Taskforce Member explained:

> The wide variation that we are seeing between individual educators is really problematic for us and like the other folks have already shared, we've undertaken a significant amount of very quick professional learning for those folks to try to level the playing field. But the grim reality of this is, that's a very difficult thing to achieve, very much like it's a difficult thing to achieve in a regular classroom setting. We see this variation from classroom to classroom, from one end of the hallway in a school to another. I think that is only enhanced when we are not able to be there, to experience, participate, see, feel what's going on in our classrooms and so that does continue to be an issue for us...

The challenges noted above illustrate some of the challenges associated with 'scaling up' digital learning technologies quickly. During the early stages of school closures, most school boards and staff had limited experience with the range of models that were being contemplated (e.g., online, synchronous, and non-synchronous learning, hybrid or blended models). Fortunately, many teachers took advantage of online training opportunities. One Director reported that within a short time period of time, they had trained 7000 teachers to use D2L, Google Classroom and other online learning platforms. Moving forward, Directors recognized the need to standardize their digital tools to increase continuity and consistency and provide their staff with more online professional development opportunities. In short, Taskforce members noted that "technology in and of itself is not a solution to the problem in teaching and learning unless it's accompanied with a very significant effort to enable, train, and support teachers." These resources, according to Taskforce members, should extend to teacher training programs. As one member stated:

> As we're looking at our teacher education program, we are, as I am sure are the other deans of education across Ontario, scrambling a little bit to try to make sure that our teacher candidates get the experience that they need in the classroom, but recognizing again that the classroom is no longer just face to face, that the classroom is also a virtual classroom. Now, it's been that way for a while, but most of us haven't really recognized that a whole bunch, and so we're looking at how we do that effectively.

Similarly, some industry partners also witnessed a sharp increase in demand for training for their platforms, and for rolling out more online classrooms for summer learning. A Canadian company that provides a learning management platform noted "50 % to 300 %" increases in demand for summer learning programs they are involved in. In saying so, they noted however, "we are not staffed to support [this unplanned growth] that quickly..." and that their biggest challenge is to "create really scalable training resources" to support their clients' success in the absence of the "hand holding" that they normally would be able to provide.

Teachers' ability to 'pivot' to an online learning environment is very promising. However, even if teachers have effective training and resources, Taskforce members expressed concern about student engagement and learning. As Frenette and Frank (2020, p.5) pointed out, "it is not known if activities will be effective at fostering learning." Taskforce members admitted that "the level of engagement [in the spring] was so low." They acknowledged the importance of increasing student engagement moving into the 2020-2021 school year and beyond. As one Director noted:

> I'll be honest, right now students are not worried about security cyber things, they're just trying to be engaged like they enjoy school. They want to get that love of going to school and learning back. Then again, for students that were not successful pre-COVID—those students are just totally disengaged. I can see it's addressed in a number of different topics [of discussion], but I'm not certain I'm hearing that voice in some of the conversations that we're having, and that should be more at the at the forefront.

There were also concerns of individuals living in remote communities. At the time of the meetings, remote areas like Nunavut had a mandatory 14 days of quarantine before travelling to and from their communities and there were questions about whether teachers would return after schools re-opened if the quarantine was still in effect. As one industry member who is part of an organization that provides educational and technology support to remote Indigenous communities said, the challenge is to ensure the continued success of programmes. He estimated close to 10,000 family interactions within the first three months of COVID-19 school closures related to the delivery of online resources, including students who were unable to connect because they were "running out of [data]" within the first week of the month. On top of this, there were also added pressures of trying to help parents in the community navigate the "right balance" between screen time and "kid time."

These mixed results continue to inform discussions about digital technology and schooling. On one hand, the speed and uptake of training demonstrated not only the capacity of teachers to shift to an online environment and incorporate a variety of platforms but also the potential scalability of such efforts. On the other hand, critical questions remain about the degree to which students can remain engaged in an online environment (e.g., Goldberg, McCromick & Virginia, 2021; Khlaif, Salha & Kouraichi, 2021, Rizk, 2020, Rizk & Davies, 2021).

Unanticipated Benefits and Seizing Opportunity for Positive Change And Innovation

In addition to discussing balancing pandemic-associated risks to education, health and wellbeing, the Taskforce noted the pandemic provided an ideal time for reflection. Taskforce members were excited about the opportunity to think about the possibility of continued remote work for staff, for example, or how they might improve student experience by re-purposing positions that may not be needed in an online and remote environment. In short, the pandemic shone a light on educational practices that may need attention and reconsideration.

Administration/Business practices. *How can we understand efficiency in the time of the pandemic?* Despite the obvious challenges that COVID-19 presented, Taskforce members acknowledged opportunities, efficiencies, and innovations that were previously not considered or practiced. For instance, the increased use of remote training saved time and money. The pandemic has essentially turned professional development "on its head" – allowing thousands of teachers to access professional development through on-demand or live sessions. These benefits have encouraged administrators to rethink the cost of older models of professional development that are expensive and limited to a handful of educators at

a time (e.g., 'teach-the-teacher' model).

Others considered the environmental benefits of digital tools, including cutting down on paper costs and the environmental impact associated with commuting and other travel. As one member asked, "does it make sense to drive for an hour each way for a one-hour meeting?" Directors and industry members also noted that previous concerns about how productive staff may be working from home were shown to be unfounded.

Innovation accelerated. *How do we frame institutional growth and sustain innovation?* Another advantage that Taskforce members witnessed across the educator sector is an increase in innovational practices. As one member expressed in June 2020, "we have seen two years of innovation in a period of 2 months." Members of the education community have continued to reflect on what has been working and consider how "we can make sure that we keep what's good," rather than falling back into old habits/practices (e.g., possibility of allowing staff to work from home; online meetings). The Taskforce felt that as a profession, they were experiencing a real call to action to change more traditional and outdated instructional models. Members expressed optimism; the pandemic brought an opportunity for rebirth—a time to recognize that while some areas may go back to normal, there are others which should not. As one Taskforce member said:

> ...this is an opportunity to shift from what we've learned into a new reality for education...and not going back to the way things were but building it out. So, the example of staff development is a beautiful possibility because we have heard wonderful, wonderful, feedback on these new models of professional learning. All kinds of staff have been telling us that this probably the best model they've ever had in their professional careers.

In essence, teachers and Directors will still need to accomplish core teaching, learning and administrative objectives, but that does not necessarily mean they need to do it the *same way.* As one Taskforce member put it, "what's the function we need to accomplish...and don't try to force fit a function into a [old] structure." Using technology has not only made it possible for staff to work from home, but digital technology has also made it possible to directly communicate with parents in ways that were often not possible (or considered) before the pandemic. Taskforce members noted that there is now a lot more buy-in from parents to participate in virtual sessions and workshops (e.g., workshops on online bullying) than ever before, and this may mark a promising way to connect with more parents moving forward.

Discussion

Our initial conversations with Taskforce members sought to understand, synthesize, and share information about *what* schooling and community organizations were doing in response to the rapid transition online, *how* they were doing it, *why* they were responding in some ways and not others, and *how* they and their stakeholders (e.g., parents, students, teachers) perceived these responses. The Taskforce also considered the challenges and opportunities education leaders saw moving forward, including *how to sustain promising changes to teaching, learning, and administration* and the *role of industry and community partners.* Taskforce members stressed the need to move past temporary emergency responses to instead thinking about more long-term solutions for education delivery, including how to best adapt pedagogy from face to face to online mediums in a way that ensures that the pedagogy and instruction remains dynamic, high quality, effective, and equitable.

Taskforce members unanimously agreed that uncertainty around the pandemic made it very difficult to prepare and plan for the 2020-21 school year and beyond. Taskforce members were acutely aware that many students and parents would not feel comfortable with return to in-person schooling in the Fall of 2020, no matter what precautions are in place, and that students may find it difficult to return with radically different safety protocols in place. On the other hand, a few highlighted that some students benefitted from this new model of schooling. These realizations have encouraged discussions about why some children may fare better outside of the 'brick and mortar' school. At the same time, many acknowledged the problems reproducing the social elements of education (e.g., student interactions, play, recess) in the online environment, and the fatigue and isolation associated with too much time spent online. In the long term, how do we balance public health and safety protocols with students' need for human contact?

In brief, there continues to be a level of uncertainty. While Directors identified ongoing communication with a wide variety of stakeholders as a strength, it has also presented many challenges. As one Director noted, "there's mixed messages coming from so many places, including the board's direction and what the unions may be communicating…" Despite the changes that have unfolded over the months after our conversations with stakeholders, one thing has remained constant: educators will likely continue to wrestle with many of the issues outlined in this paper for many years.

To remain vigilant in our response to COVID-19 we offer the following additional considerations. First, Ministries can benefit from an emerging body of Canadian and international literature that is documenting the short- and long-term impacts of COVID-19 school disruptions. This research suggests that the COVID-19 pandemic has worsened inequalities in learning opportunities (Jaeger & Blaabaek, 2020), test scores and academic achievement (Haeck & Lefebvre, 2020; Kuhfeld et al., 2020a), digital learning gaps (Stelitano et al., 2020, Weeden & Kelly, 2020), and lifetime earnings (Hanushek & Woessmann, 2020). While Ministries need to be careful about extrapolating from one context to another, most research suggest that many students will require various learning recovery strategies including but not limited to summer (e.g., Aurini and Davies, 2021) and afterschool programmes.

Second, the development of effective curriculum and policy solutions that are sensitive to the needs of teachers, students and families requires the continued collection and access to high quality data (quantitative and qualitative). These data include not only student learning, but also other indicators of student success (e.g., absenteeism).

Third, while it is important to document the negative impacts of COVID-19 school disruptions, it is also important to also consider how this unprecedented moment in education gave Ministries and school boards 'permission' to alter several processes and practices. Some of these changes have been received positively by staff, students, and parents, and appear to generate a variety of efficiencies (Osmond-Johnson & Fuhrmann, 2021). Armed with this knowledge, teacher education and school boards should continue to develop training opportunities, resources, and processes and practices that improve teaching, learning and administration (rather than going back to the 'old ways' for the sake of it).

Fourth, and related, the pandemic accelerated training, resources in the areas of digital technology and various online platforms. Importantly, it provided staff and students an opportunity to experience both the possibility (e.g., ability to train teachers on a massive scale) and limitations (e.g., lower student engagement) of technology and online education resources. Policy-makers would be wise to draw on the wisdom of teachers, parents, and students to consider the appropriate 'dose' of technology and digital or remote applications that generate efficiencies, engagement and most importantly, learning.

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