



Teaching during Times of Turmoil: Ensuring Continuity of Learning during School Closures

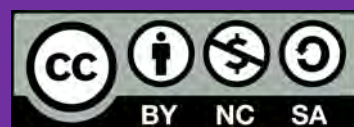
August 2022

A special report of the Canadian eLearning Network

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Previous Reports in this Series

Barbour, M. K., LaBonte, R., Kelly, K., Hodges, C., Moore, S., Lockee, B., Trust, T., Bond, A., & Hill, P. (2020). *Understanding pandemic pedagogy: Differences between emergency remote, remote, and online teaching*. Canadian eLearning Network.

While this report was published out of sequence, it was designed to be the first contribution in this series. In the spring of 2020, the term ‘emergency remote teaching’ began to emerge to describe what was occurring in education at all levels, despite the more commonly used term ‘online learning’ dominating media descriptions of the instruction offered to students forced to remain at home. This report argues the importance of avoiding equating emergency remote teaching with online learning. It is clear from most schools and teacher’s experience with emergency remote teaching that much more planning and deliberate attention be provided to teacher preparation, infrastructure, education policy, and resources to be able to maintain quality instructional continuity during a crisis. This report offers recommendations for how schools can be better prepared for future crises that incorporate both home-based and school-based learning opportunities mediated through online learning environments.

Nagle, J., Barbour, M. K., & LaBonte, R. (2020). *Documenting triage: Detailing the response of provinces and territories to emergency remote teaching*. Canadian eLearning Network.

In August 2020 the Canadian eLearning Network (CANeLearn) released a report describing how each jurisdiction managed their emergency remote teaching during Spring 2020. In the report each jurisdictional profile began with a brief summary of the online tools and online course content that were available based on existing e-learning activity, followed by a specific focus on the jurisdiction’s emergency remote teaching plan. This focus included when schools were closed and reopened (for those that did); what actions were taken; the tools, content, and devices provided, curated, and/or created; and the nature of instruction that occurred.

Nagle, J., LaBonte, R., & Barbour, M. K. (2020). *A fall like no other: Between basics and preparing for an extended transition during turmoil*. Canadian eLearning Network.

In November 2020 CANeLearn released a report describing what was announced and provided for by provincial and territorial Ministries of Education during Fall 2020. While a national view was considered, approaches varied among each jurisdiction in light of trends with the spread of the virus (often regionally within a particular jurisdiction). Some jurisdictions required students to wear masks in school buildings, others did not. Some jurisdictions announced specific plans for remote learning, others relied on existing online learning programs for students who remained at home. Finally, few jurisdictions announced or published specific plans for professional development or training for teachers new to remote learning.

Barbour, M. K., & LaBonte, R. (2020). *Stories from the field: Voices of K-12 stakeholders during pandemic*. Canadian eLearning Network.

In December 2020 CANeLearn released a report providing the stories of students, parents, school leaders, and educators. These voices provided a narrative of what actually transpired in homes, schools, communities, and districts. Students were concerned with the lack of social interaction; their parents

with their physical, emotional, wellbeing and mental health. Teachers, district and school leaders, even trustees, found the changing dynamic of the education landscape overwhelming. The report offered glimpses of success in the development of new programs and expansion of others. The stories of teachers reflected a focus on physical, social, and emotional wellbeing first, curriculum second.

Nagle, J., Barbour, M. K., & LaBonte, R. (2021). *Toggling between lockdowns: Canadian responses for continuity of learning in the 2020-21 school year*. Canadian eLearning Network.

In August 2021 CANeLearn released a report summarizing the publicly announced accommodations that were made to ensure continued pandemic schooling during the 2020-21 school year. In some instances, along with the school opening plans that were in place for Fall 2020, some jurisdictions had remote learning plans in place for the complete 2020-21 school year. In other instances, school districts and boards were left to determine individual remote learning plans with or without use of provincially or territorially provided resources. Given the lessons that could, or should, have been learned during the rapid transition to emergency remote teaching in Spring 2020, the reality was that some jurisdictions did not put in place the necessary planning or preparation to allow for uninterrupted continuation of learning.

LaBonte, R., Barbour, M. K., & Nagle, J. (2021). *Pandemic pedagogy in Canada: Lessons from the first 18 months*. Canadian eLearning Network.

In November 2021 CANeLearn released a report that went further than previous reports. While it described the face-to-face, online, remote, and hybrid learning options planned by each jurisdiction for the Fall 2021, it also offered a comparison and analysis of the different learning models used across the country. This analysis provided a glimpse at the challenges and issues beginning in the new 2021-22 school year. The report called for additional research to further understand decisions made by governments, school boards, and schools during the pandemic, the influence of those decisions on the experiences of students and teachers, and the successes and future implications of those decisions.

**All of these reports can be accessed at <https://canelearn.net/home/research/projects/>
or at <https://sites.google.com/view/canelearn-ert/>**

Foreword

Professional educators had to go into emergency mode given COVID-19 intrusion into our lives. The seventh report of this series focuses on emergency remote learning (ERT) in Canadian provinces and territories to assure the continuity of learning in the Spring of 2020 and after. As stressed in the short summary of the UNESCO's (2021) report *Reimagining our Futures Together*, the pandemic has highlighted our fragility and interconnectedness.

First, I want to recognize the collective endeavour of teachers from all over Canada in creating environments in which learners' experience is enriched given how they make use of digital networked platforms and tools. Their work has advanced the *Vision of Learners in the 21st Century* from the early days of SchoolNet Canada (1996) and TeleLearning Network of Centres of Excellence from 1995-2002. We have come a long way; at the same time our goals have greatly expanded given the competencies required to face the problems that are surfacing. As we all know, Covid variants are only one of them.

Second, I want to recognize the organizers of this series for documenting this emotional and turbulent COVID period of Canadian K-12 formal education. The distinction the authors emphasized between ERT and elearning/online learning is key. To counter the risk that ERT will influence teachers negatively (adhesion or revulsion), let's make visible, and move beyond, our best practices when it comes to the use of digital tools for learning inside and outside the brick-and-mortar classroom.

For instance, students from Ontario teamed up with a novice farmer in Nova Scotia to engage in *Knowledge for Public Good: Innovating for Sustainability Around the World*. Their work complemented that of teachers, students, and partners in China, Singapore, and USA, as elaborated in the Knowledge Building Collaboratory (2022). This provides a context for understanding students' contributions to authentic problems and design advances.

In Francophone Quebec, the Remote Networked School initiative (*École éloignée en réseau*), now the Networked School initiative (*École en réseau, ÉER*)¹, has a long practice of connecting teachers and their classrooms for learning and knowledge building purposes. When ERT became a must, ÉER's practical knowledge was put to use in a course offered to all teachers by Université TELUQ.² Moreover, it adapted its own practice to reach a much greater number of students. The ÉER is also a partner of the PERISCOPE³ network, which is currently suggesting peer tutoring along with the tutoring initiative put forward by the Ministry of Education to counter Covid's undesirable effects. In the report growing out of a Quebec-wide consensus conference⁴ conducted in 2021-2022 by CTREQ,⁵ "Equity and added value in the use of the digital for teaching and learning", the last sentence will read as follows: "For sure, digital use must foster student engagement and participation in a way that put forward thought and ideas."

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¹ See <https://eer.qc.ca/>

² See <https://www.teluq.ca/site/en/>

³ See <https://www.periscope-r.quebec/>

⁴ See <http://conference.ctreq.qc.ca/>

⁵ See <https://www.ctreq.qc.ca/>

Executive Summary

In April 2020 of the COVID-19 pandemic forced all of Canada's schools to begin emergency remote teaching for their K-12 learners. Over the past two and a half years the Canadian eLearning Network (CANeLearn) has documented the impact of the pandemic on K-12 schooling. For each of the past two school years (i.e., 2020-21 and 2021-22), most schools were forced to implement some combination of face-to-face, hybrid, and/or online instruction for students as the threat of COVID-19 continued and schools faced decisions about how to continue teaching and learning while keeping their teachers, staff, and students safe. The uncertainty of most educators in how to effectively shift instruction to be at a distance from the student(s) demonstrated clearly that schools were not 'pivoting' to online learning, most simply broadcast typical classroom instruction through an online medium.

This report, the final in the "Pandemic Pedagogy Series," provides a national overview of each phase of the K-12 educational response to the pandemic from the initial and immediate school closures in Spring 2020 through the 2020-21 and 2021-22 school years along with a summary of the pandemic pedagogical response for each province, territory, and the federal jurisdiction. It argues that we should not simply return to our teaching and learning practices prior to the virus, forgetting about remote teaching, as teaching and learning landscapes are not dichotomous, in-person learning *or* online learning. Rather, teaching and learning today requires the flexibility to navigate multiple learning landscapes simultaneously, yet few, if any, jurisdictions have taken the steps necessary to ensure that teachers and schools can toggle between in-person learning and remote learning with no loss of instructional quantity or quality.

This summary report argues that more planning and deliberate attention must be provided to teacher preparation, infrastructure, education policy, and resources to be able to maintain quality instructional continuity. The "Pandemic Pedagogy Series" reports by CANeLearn offer recommendations for how schools can be better prepared for future crises that incorporate both home-based and school-based learning opportunities mediated through online learning environments and there is a strong need to pursue this line of inquiry through continuing research beyond the confines of the seven reports in the series.

A website was created to host the report series, along with an archive of online workshop presentations based on each report.⁶

⁶ The website is available at <https://sites.google.com/view/canelearn-ert/>

Introduction

As Canada began diagnosing its first cases of COVID-19, Canada's Chief Public Health Officer, Dr. Theresa Tam, urged Canadian communities to "prepare for stronger public health measures to contain the spread of the new coronavirus, including closures of schools" (Vogel, 2020, para. 3). Two days later on March 5, 2020, New Brunswick was the first of the 13 provinces and territories to close all their schools. Within 10 days all K-12 schools across Canada were closed. However, by April 21, 2020 all of Canada had moved forward with emergency remote teaching for their K-12 learners for the remainder of the school year. As each of the past two school years began (i.e., 2020-21 and 2021-22), most schools were forced to implement some combination of face-to-face, hybrid, and/or online instruction for students. As each school year progressed, the threat of COVID-19 continued and schools faced decisions about how to continue teaching and learning while keeping their teachers, staff, and students safe from a public health emergency that continues to shift and about which we are still learning on a daily basis. The uncertainty of most educators in how to effectively shift instruction to be at a distance from the student(s) demonstrated clearly that schools were not 'pivoting' to online learning, most simply broadcast typical classroom instruction through an online medium.

Over the past two and a half years the Canadian eLearning Network (CANeLearn) has documented the impact of the pandemic on K-12 schooling. While published out of sequence, the first report in this series situated the term 'emergency remote teaching,' which began to emerge in the Spring of 2020, to describe what was occurring in education at all levels despite the more commonly used term 'online learning' dominating media descriptions of the instruction offered to students forced to remain at home (Barbour et al., 2020a). This report argued the importance of avoiding equating emergency remote teaching with online learning. It was clear from most schools and teacher's experience with emergency remote teaching that much more planning and deliberate attention be provided to teacher preparation, infrastructure, education policy, and resources to be able to maintain quality instructional continuity during a crisis. This report offered recommendations for how schools can be better prepared for future crises that incorporate both home-based and school-based learning opportunities mediated through online learning environments.

In August 2020, CANeLearn released a report describing how each jurisdiction managed their emergency remote teaching during Spring 2020 (Nagle et al., 2020a). In the report each jurisdictional profile began with a brief summary of the online tools and online course content that were available based on existing e-learning activity, followed by a specific focus on the jurisdiction's emergency remote teaching plan. This focus included when schools were closed and reopened (for those that did); what actions were taken; the tools, content, and devices provided, curated, and/or created; and the nature of instruction that occurred. In November 2020, CANeLearn released a report describing what was announced and provided for by provincial and territorial Ministries of Education during Fall 2020 (Nagle et al., 2020b). While a national view was considered, approaches varied among each jurisdiction in light of trends with the spread of the virus (often regionally within a particular jurisdiction). Some jurisdictions required students to wear masks in school buildings, others did not. Some jurisdictions announced specific plans for remote learning, others relied on existing online learning programs for students who remained at home. Finally, few jurisdictions announced or published specific plans for

professional development or training for teachers new to remote learning. In December 2020, CANeLearn released a report providing the stories of students, parents, school leaders, and educators (Barbour & LaBonte, 2020). These voices provided a narrative of what actually transpired in homes, schools, communities, and districts. Students were concerned with the lack of social interaction, their parents with their physical and emotional wellbeing and mental health. Teachers, district and school leaders, even trustees, found the changing dynamic of the education landscape overwhelming. The report offered glimpses of success in the development of new programs and expansion of others. The stories of teachers reflected a focus on physical, social, and emotional wellbeing first, curriculum second.

In August 2021, CANeLearn released a report summarising the publicly announced accommodations that were made to ensure continued pandemic schooling during the 2020-21 school year (Nagle et al., 2021). In some instances, along with the school opening plans that were in place for Fall 2020, some jurisdictions had remote learning plans in place for the complete 2020-21 school year. In other instances, school districts and boards were left to determine individual remote learning plans with or without use of provincially or territorially provided resources. Given the lessons that could, or should, have been learned during the rapid transition to emergency remote teaching in Spring 2020, the reality was that some jurisdictions did not put in place the necessary planning or preparation to allow for uninterrupted continuation of learning. Finally, in November 2021 CANeLearn released a report that consolidated details found in the previous reports that provided a summary of the publicly announced accommodations made to ensure continuity of learning during the pandemic from the Spring 2020 and throughout the 2020-21 school year (LaBonte et al., 2021). However, the report went further than previous reports by describing the face-to-face, online, remote, and hybrid learning options provided across Canada, as well as offering a comparison and analysis of the different learning models used in the provinces and territories (including the challenges and issues beginning in the new 2021-22 school year).

This current report will be the final report in the “Pandemic Pedagogy Series.” It is designed to provide a national overview of each phase of the K-12 educational response to the pandemic from the initial and immediate school closures in Spring 2020 through the 2020-21 and 2021-22 school years. The report also includes a description of some of the warning signs that suggested jurisdictions needed to prepare for this kind of potential response. This is followed by a discussion of what needs to happen next – both to be better prepared for the next time and how to leverage potential positive changes that have come out of the pandemic response. Finally, the report concludes with individual profiles for each province and territory that includes a summary of the response to each stage of the pandemic by jurisdiction.

Background

On March 11, 2020 the World Health Organisation declared a global pandemic. Within days jurisdictions all around the world began to close schools, and Canada was no different. While many jurisdictions across Canada had existing – in some cases robust – K-12 distance, online, and blended learning programs, these were not what was implemented to provide continuity of learning for most students. Distance, online, and blended learning requires purposeful instructional planning, using a systematic model of administrative procedures, and course

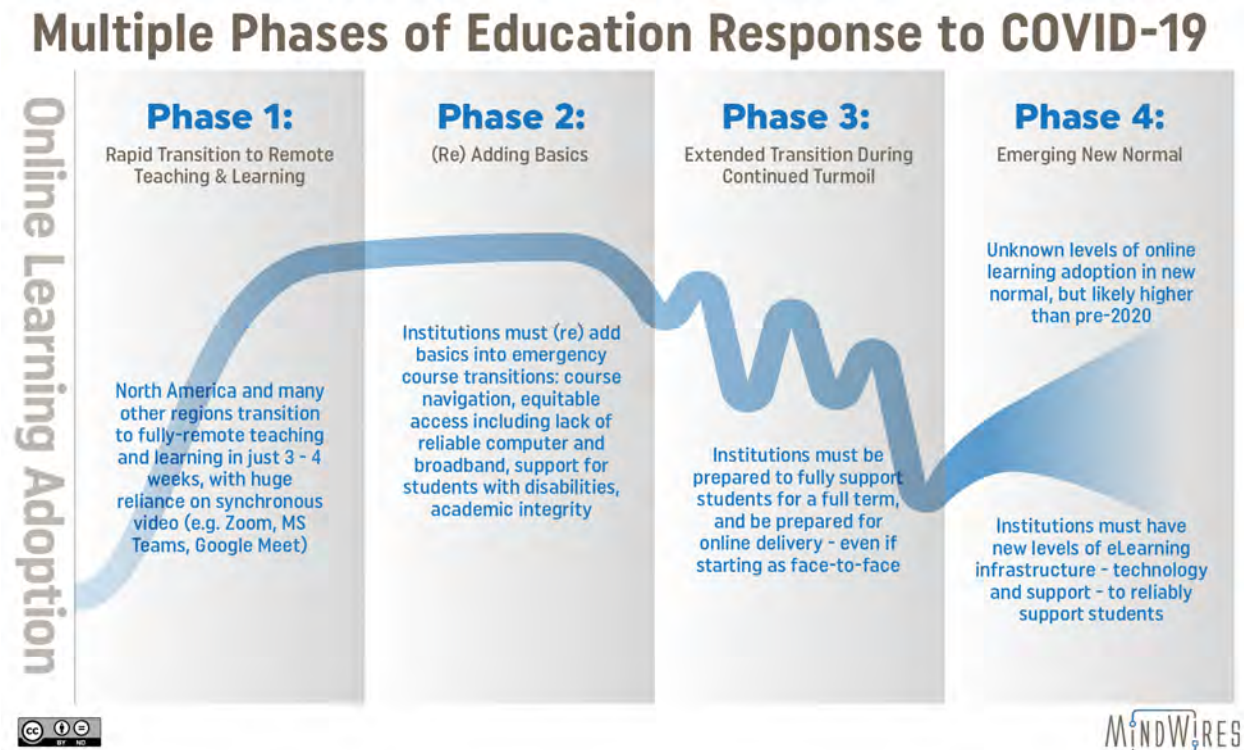
development. It also requires the careful consideration of various pedagogical strategies. These pedagogical considerations are used to determine which are best suited to the specific affordances and challenges of delivery mediums and the purposeful selection of tools based on the strengths and limitations of each one. Finally, careful planning requires that teachers be appropriately trained to be able to support the tools that are being used, and for teachers to be able to effectively use those tools to help facilitate student learning.

However, as Hodges et al. (2020) argued, “‘emergency remote teaching’ has emerged as a common alternative term used by online education researchers and professional practitioners to draw a clear contrast with what many of us know as high-quality online education” (para. 6). Hodges and his colleagues described emergency remote learning as:

a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated. The primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency or crisis. (para. 13)

Perhaps the defining feature of emergency remote learning or remote learning is that the response is temporary in nature. Given that remote learning is designed to be temporary, it is useful to consider the pandemic response in phases (see Figure 1).

Figure 1. Four phases of educational response to COVID-19 in terms of remote and online learning adoption. (Barbour et al., 2020a, p. 3).



The four phases were described by the authors as:

Phase 1: Rapid Transition to Remote Teaching and Learning – Institutions making an all hands on deck movement to remote delivery, often relying on synchronous video, with massive changes in just four weeks.

Phase 2: (Re)adding the Basics – Institutions must (re) add basics into emergency course transitions: course navigation, equitable access including reliable computer and broadband, support for students with disabilities, and academic integrity.

Phase 3: Extended Transition During Continued Turmoil – Institutions must be prepared to support students for a full term, and be prepared for online delivery – even if starting as face-to-face.

Phase 4: Emerging New Normal – This phase would see unknown levels of online learning adoption, likely higher than pre-COVID-19 days, but Institutions would have new levels of technology and support to reliably support students.

As the response of each of the individual provinces and territories are examined – both by the authors and the reader themselves – it is useful to consider these four phases.

Methodology

Data were collected by consulting a variety of existing collections of data related to the response from various provinces and territories (e.g., Bogart [2020], Borden Ladner Gervais' [2020] *Canada-wide summary of COVID-19 education updates*, Wong's [2021a] *CBC News* article "What school will look like this Fall as Canada struggles to bring COVID-19 under control," the People for Education's [2020-2021] *Tracking Canada's education systems' response to COVID-19*, and others). Each of these collections collated data for each jurisdiction as they released their educational guidelines at various stages from the beginning of the pandemic, throughout the 2020-21 and 2021-22 school years. The data found in these collections included, but was not limited to, important dates, learning models, and health and safety measures. These collections also included links to the various Ministry of Education plans and guides, which served as primary sources for much of the information provided through this report (and particularly for the jurisdictional profiles).

Additional data were gleaned from general internet searches conducted of news releases and from major news sources for each jurisdiction, many of whom were also tracking educational initiatives for COVID-19 in schools. Many of these news sources were used to corroborate or extend the above mentioned collections, and often offered quotes from Ministers and other government officials regarding information that may not have been readily available through their Ministry's websites. Finally, general internet searches – particularly of Canadian news organisations and media outlets – were regularly conducted. The authors also made use of the existing networks that had been developed by CANeLearn, as well as the longstanding *State of the Nation: K-12 e-Learning in Canada* research project (Barbour et al., 2020b; Barbour et al., 2020c).

Pandemic Pedagogy

Spring 2020 – Sudden School Closures and Emergency Remote Teaching

During the Spring 2020, schools across Canada shifted to Phase 1 (with some jurisdictions transitioning to Phase 2). While it is safe to state that most teachers were unprepared to transition to an online setting during the emergency remote teaching that occurred during Spring 2020, some jurisdictions had the potential to be better positioned to provide continuity of learning than others (see Table 1 for an overview of the state of online learning in each jurisdiction at the time of the pandemic).

Table 1. Existing e-Learning Structure Prior to the Pandemic

Jurisdiction	# of Programs	% of Students Involved	Centralised Program	Centralised LMS	Centralised Course Development	Centralised Blended Learning Access
NL	1	1.7%	✓	✓ ¹	✓	✓ ¹
NS	2	1.8%	✓	✓	✓	✓
PE	0	0.1%	✓ ²			
NB	2	3.5%	✓	✓	✓	
QC	5	3.5%	✓ ³		✓ ⁴	
ON	70	4.9%	✓ ³	✓	✓	✓
MB	38	6.6%	✓	✓	✓	✓
SK	16	6.7%				
AB	34	11.2%	✓		✓	
BC	69	10.8%				
YT	2	4.2%	✓	✓	✓	✓
NT	1	1.5%	✓	✓	✓	
NU	0	0.001%				
Federal	5	2.0%				

¹ There is a single, province-wide learning management system that teachers can access for the purposes of blended learning. However, it is undetermined how widely known that availability is among classroom teachers, and the existing content is limited to secondary courses.

² The provincial program is actually the one offered by the New Brunswick Department of Education and Early Childhood Development.

³ The only centralised program in both Quebec and Ontario is a correspondence-based model that is specifically for adult students.

⁴ Either through their correspondence program for French language students or through LEARN for English language students.

While some jurisdictions may have had a higher proportion of students and teachers with experience in distance and online learning or may have had a more substantial e-learning infrastructure, the goal of the CANeLearn report was to simply report what occurred based on published announcements, not to assess the quality of what occurred or the fidelity of what was announced.

The first consideration is the timeline of how events occurred. Table 2 outlines how New Brunswick was the first jurisdiction to close their schools and within 10 days all K-12 schools across Canada were closed.

Table 2. Key emergency remote teaching dates

Jurisdiction	School closure	Remote teaching began	End of school year
NL	March 17	April 2	Ended early on June 5
NS	March 15	April 8	
PE	March 23	April 6	
NB	March 13	April 2	A gradual return for teachers in June
QC	March 16	March 30	Some students returned on May 11
ON	March 23	April 6	
MB	March 20	March 30	Some teachers & students returned in June
SK	March 20	March 30	
AB	March 16	March 20	
BC	March 17	March 27	Returned on June 1
YT	March 18	April 16	
NT	March 16	April 14	
NU	March 17	April 21	
Federal	Followed timeline of jurisdiction where school was located		

While Alberta closed schools three days after New Brunswick (and was the fourth jurisdiction to do so), they were the first jurisdiction to release plans to allow for remote teaching to begin. Ontario was the last jurisdiction to close schools, but it only took them 15 calendar days to release plans to allow for remote teaching to occur. The average length of time it took jurisdictions from the date that schools closed to the date their remote teaching plans were released was 18 calendar days. It should be noted that the three territories all took much longer to release their plans than their provincial counterparts.

Beyond the dates of when schools closed, began emergency remote teaching, and any milestones accompanying the end of the school year, it is important to describe exactly what each jurisdiction provided to ensure the continuity of learning. For example, did teachers received professional learning on the tools and content that was provided? Were students provided access to the tools and content? In addition to digital devices and/or internet access, were offline resources provided to students? Did any jurisdictions offer specific support for Indigenous students? Table 3 provides an overview of the responses for each jurisdiction.

Table 3. Provision of remote teaching

Jurisdiction	Teacher professional development	Devices provided to students	Provision of non-digital resources	Attendance expectations	Support for Indigenous learners
NL		✓	✓		
NS	✓	✓	✓	✓	
PE			✓	✓	
NB		✓		✓	
QC	✓		✓		
ON	✓	✓		✓	
MB			✓	✓	
SK			✓		
AB				✓	
BC		✓	✓		✓
YT	✓		✓	✓	✓
NT			✓	✓	✓
NU			✓		✓
Federal	Followed guidelines of the jurisdiction where school was located				

Several jurisdictions announced the provision of professional learning for teachers in the form of webinars, university courses, ‘how to’ tutorials, virtual professional development days, toolkits, and access to resources for curriculum support. Similarly, some jurisdictions provided devices on loan to homes with limited or no technology for students (e.g., iPads or tablets, laptops, or Chromebooks), and a limited number of those jurisdictions also included the provision of additional access to internet connectivity.

Most jurisdictions provided non-digital educational packages for students with limited or no internet as a part of their announced planning (e.g., both the TVO-managed Independent Learning Centre and the Alberta Distance Learning Centre had access to significant print-based correspondence packets). Further, most jurisdictions outlined specific attendance requirements and/or teacher-student correspondence expectations to ensure continued interaction.

Finally, only British Columbia and the three territories explicitly provided considerations for Indigenous learners in the form of continued access to support staff, the inclusion of on-the-land and land-based learning approaches where family activities (e.g., motorcycle maintenance, hunting and fishing, beadwork, etc.) contributed to the successful completion of students for the 2019-20 school year.

Again, this is not to say that the jurisdictions above did not include any of these items, only that those jurisdictions did not make any reference to that fact in their public announcements.

2020-21 School Year – Extended Transition, Turmoil, and Toggling Through Lockdowns

The Summer of 2020 should have allowed jurisdictions time to prepare their schools to enter Phase 3, a period of transition. Phase 3, often referred to as a toggle term (Alexander, 2020), is when schools are able to provide in-person learning, remote learning, or some combination of the two – depending on the local epidemiology of the virus – at levels where they can provide an equivalent student experience regardless of modality. Essentially, a situation where students are able to learn just as effectively in the classroom as they can at home through remote instruction, or just as effectively with some students in the classroom and some students at home. Phase 3 is also where teachers are adequately trained in how to use the tools and teach with them so that the medium in which they are teaching is irrelevant to the quality of the learning experience they design, deliver, and support. One of the ways some jurisdictions could have made the transition to Phase 3 more seamlessly would have been to leverage the existing e-learning resources from traditional distance, online, and blended learning programs. For example, most jurisdictions had either province-wide online learning programs or a high proportion of school districts that operated online learning programs, yet only a few jurisdictions took advantage of these resources.

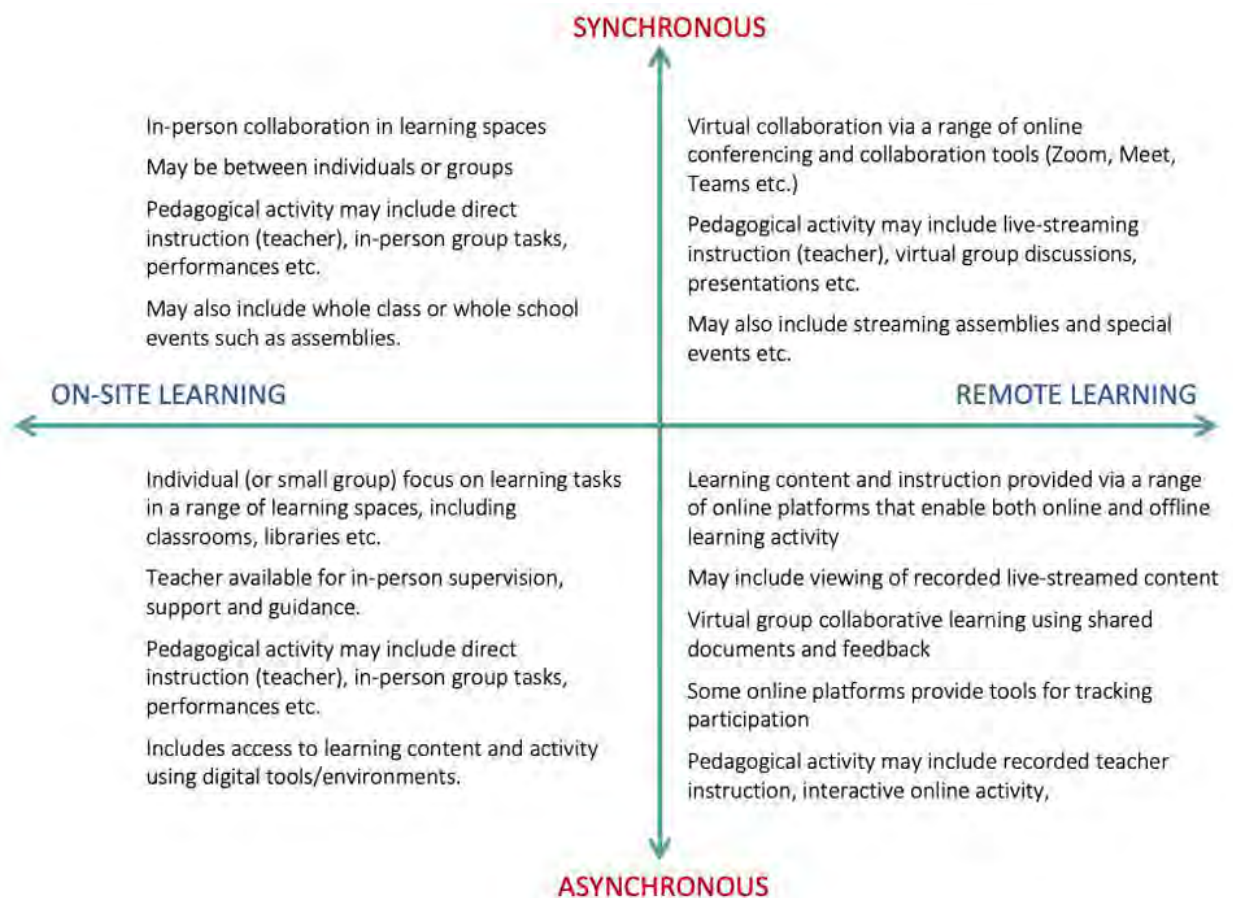
One of the challenges to providing remote learning opportunities has been the teacher's inability or lack of adequate time to create high quality asynchronous online content in advance. Instead, teachers relied on strategies designed for synchronous classroom instruction with little experience or exposure to how to design quality online instruction. Many university-based teacher preparation programs offer no programming focused on the provision of learning at a distance (Archibald et al., 2020), and, those that do, often include it under the guise of a more generalised technology integration experience. The point is, provinces and/or school districts did have the delivery tools and content to free classroom-based teachers from the responsibility of creating their own asynchronous remote learning experiences. If it had been provided, teachers could have focused on facilitating asynchronous learning with their students, something that is beyond the instructional methods many teachers use in the classroom. Asynchronous teaching methods can support teachers in building relationships with students, particularly remotely.

Another example of a challenge that was faced by many jurisdictions was the lack of technology and bandwidth in the home. Many jurisdictions still have, or recently had, correspondence-based distance learning materials that could have been utilised – had teachers been appropriately trained over the summer or during a delayed Fall opening – to help overcome this challenge. However, the reality was that few jurisdictions used the early end to the 2019-20 school year, the Summer 2020 break, or delayed Fall 2020 openings to start to really leverage their existing e-learning resources from traditional distance, online, and blended learning programs to better

prepare for remote learning during the 2020-21 school year (see Nagle et al., 2020b for a complete description of the planning for and implementation of the Fall 2020 start to the school year).

As Nagle et al. (2021a) concluded, “the reality was that some jurisdictions did not put in place the necessary planning or preparation to allow the 2020-21 school year to proceed in the expected ‘toggle term’ fashion – as envisioned by Phase 3” (p. 3). In fact, for many jurisdictions the entire 2020-21 school year was spent in varying states of Phase 2 (with some jurisdictions even reverting back to Phase 1 at times). As Phase 3 is basically a model where the medium of the instruction (i.e., in-person or at a distance) has no impact on the quality of the learning experience or environment, so it does not matter if the student is in the classroom or remote. In examining a future direction for public education in New Zealand, Wenmoth (2021) provides a useful model to envision what this toggling might look like – both during and in the absence of a crisis (see Figure 2).

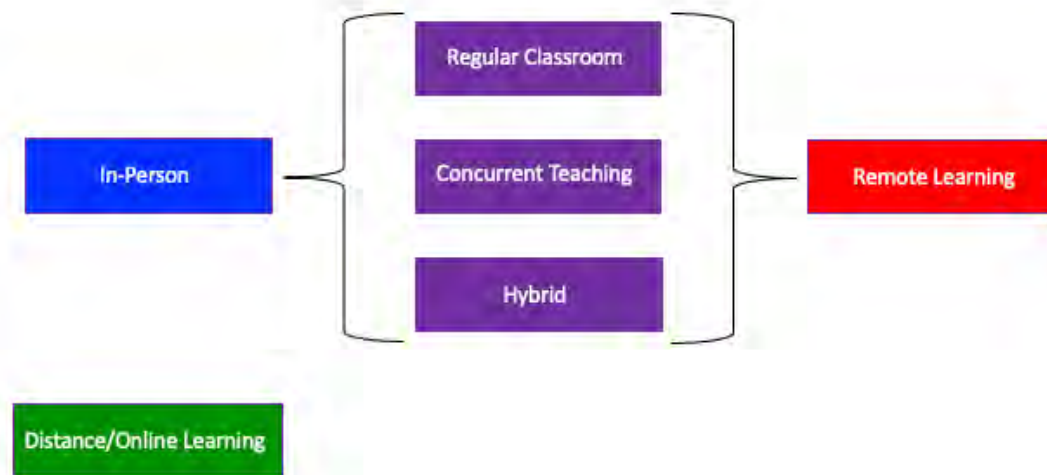
Figure 2. On-site, remote, synchronous, and asynchronous options for teachers and students to engage in their learning. (p. 15).



Inherent in this model is a system of education where teachers and students are able to toggle between in-person and remote settings, where learning is delivered in a synchronous or asynchronous fashion, with a level of fidelity that the student is not disadvantaged by the quality of instruction in any quadrant. However, what we saw across Canada during the 2020-21 school year (and even during the 2021-22 school year according to LaBonte et al. [2021]) was not a seamless transition between mediums or a consistent level of quality.

What actually occurred during the 2020-21 school year was that several new learning models were created that combined aspects of the different mediums to accommodate various public health measures (e.g., mask wearing, physical and social distancing, restricted class size, etc.). The measures related to physical distancing and restricted class size forced some schools to adopt learning models where students were only in the physical classroom a certain portion of time, or different groups of students were in the classroom while the rest of the students were at home and learning remotely. While in-person and distance/online learning existed before the pandemic and research had identified effective learning models, the remote learning models – as well as the hybrid learning and concurrent teaching – that emerged during the pandemic were not well known and had little or no research about their efficacy. Figure 3 provides a description of the five different learning models through which K-12 education was provided.

Figure 3. *Various learning models available during the 2020-21 school year*



In-person learning is the traditional model of learning where students are enrolled in a brick-and-mortar school and engage in their learning with teachers located at their school in a typical classroom setting.

Distance/online learning is also a traditional model of learning that has existed for the past two and a half decades where the student and teacher were geographically separated, often for one or two courses.

Hybrid learning was a model where one group of students, or a cohort, learned in-person in their classroom some of the time while another group of students were learning at home, both instructed by the same classroom-based teacher. In most instances the two cohort groups would alternate between in-person and at-home learning (e.g., one day in-person, the next day at a distance, etc.).

Concurrent teaching (a form of hybrid learning also called co-seating or co-locating) was a model where the classroom-based teacher taught some students who were in-person with the teacher in the physical classroom (i.e., ‘roomies’), and at the same time the teacher’s instruction was being streamed live through a web conferencing software to other students logged in at home (i.e., ‘zoomies’).

Remote learning was a model of distance/online learning designed to be temporary in nature, and was generally only used when in-person learning was not an option due to the local/regional epidemiology. (Nagle et al., 2021, pp. 5-7)

Some jurisdictions did rely on their existing online learning programs to support students and parents wishing to remain home. This resulted in an increase in enrolment in the programs, but did not necessarily negate the need for remote learning during school closures. For example, in British Columbia students were offered either in-person learning or access to one of the 69 public and independent online learning schools, and the term ‘remote learning’ was not used by government (Montreuil, et al., 2021). Interestingly, throughout the 2020-21 school year there were no province-wide school closures issued, although there were local school closures based on local epidemiology. In fact, the Deputy Minister of Education reported that British Columbia school attendance actually increased in both classroom-based and online programs during the 2020-21 school year.

However, many jurisdictions scrambled to reinvent what had already existed in successful, existing e-learning infrastructure. For example, the Centre for Distance Learning and Innovation (CDLI) in Newfoundland and Labrador had developed over 45 high school courses that were available to all provincial educators to use instead of having to develop their own asynchronous learning materials. But according to public records, those materials and the learning management system that housed them were never acknowledged or promoted as a resource for teachers and students to take advantage of. Similarly, despite having access to a full digital curriculum in a provincially-licensed learning management system, Ontario launched a synchronous hybrid learning model led by classroom teachers with limited training. Teachers live-streamed

classroom instruction to remote students watching the classroom feed on a screen at home – that is, if they had the technology, bandwidth, and persistence to pay attention to their teacher.

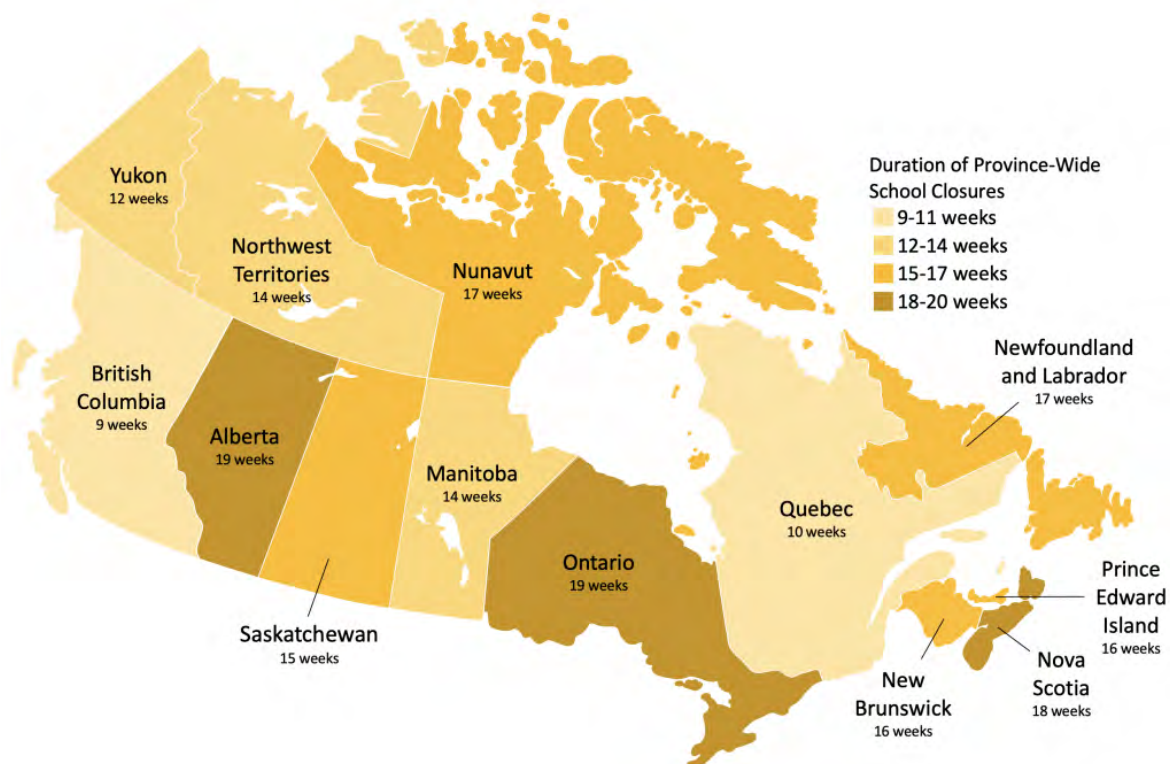
There were even jurisdictions that developed models of instructional delivery that had not previously existed (or had only existed in the most isolated cases) in the K-12 school system. Again, in examining the Ontario response in greater detail, the government’s guide to reopening schools required boards to offer remote learning for all students, whether schools were closed or if a parent chose to keep their students home (Davidson, 2021; Ontario Ministry of Education, 2021; Wilson, 2021). The need to effectively plan for and train teachers for this new and unique model of hybrid learning would seem to have been clear. The hybrid teaching model that was used required teachers to provide between 180 to 225 minutes of live, synchronous teaching for elementary and secondary students (Ontario Ministry of Education, 2020). Many boards in the province met this requirement by having classroom teachers be responsible in real time for engaging students in learning activities that were in the classroom (i.e., ‘roomies’), as well as remotely connected through the use of new technology from home (i.e., ‘zoomies’). This simultaneous teaching instruction for classroom and remote students, or hybrid learning as it was called in the province, was offered with limited planning, support, or training for teachers – technological or pedagogical. The challenges inherent in the hybrid model were immediately criticised (see Fox, 2021; Stewart, 2021; Wong, 2021b).

Interestingly, the research has suggested that jurisdictions that enacted quick, stringent, and sustained restrictions had lower case counts and death rates than jurisdictions that were slower to bring in restrictions or brought in looser restrictions (Ismail et al., 2021; Kočańcsyk & Lipniacki, 2021; Larosa et al., 2020; Organisation for Economic Co-operation and Development, 2021a), and also had fewer restricted days overall (e.g., fewer school closures). Figures 4 and 5 provide a calculation completed by the *Ontario COVID-19 Science Advisory Table* of the number of weeks schools were closed from March 14, 2020 to May 15, 2021 (Gallagher-Mackay et al., 2021), which would have included between 8 and 15 weeks from the 2019-20 school year (depending on the jurisdiction).

Figure 4. Time lost to provincewide elementary school closures for each province or territory across Canada for the 2019-20 and 2020-21 school years



Figure 5. Time lost to provincewide secondary school closures for each province or territory across Canada for the 2019-20 and 2020-21 school years



Both elementary and secondary school closures varied among provinces and territories, but the local impact to students varied more widely than what is summarised above. For example, in British Columbia, Nova Scotia, and Quebec schools remained mostly open with only local school closures due to COVID-19 outbreaks (Subramanian, 2021). However, in Ontario province-wide lockdowns were announced January 2021 and on April 12, 2021 all provincial schools returned to remote learning and schools remained closed for the rest of the school year (Nagle et al., 2021). As COVID transmission varied in the provinces and territories, so did health regulations. This ultimately led to, and more importantly directly influenced, decisions for school lockdowns and a return to some form of remote learning.

2021-22 School Year – Lessons Learned Largely Ignored

The 2021-22 school year saw the continuation of putting all efforts and focus to in-person instruction, again with minimal focus on preparing for the ‘toggle’ described in Phase 3. Indeed, with continuing disruptions and school closures, such as the October 2021 public employee’s strike in New Brunswick (Brown & April, 2021), the argument could be made that few jurisdictions were even thinking about a ‘new normal’ and the ability to actually pivot swiftly between in-school and remote learning with limited impact on student engagement and learning. In Ontario, in the government’s guide to reopening schools (Davidson, 2021), school boards were required to consider remote learning when schools closed due to inclement weather. In short, the need to effectively plan for and train teachers for a model of ‘toggling’ between in-person schooling and remote learning could not have been more clear.

There were several specific examples in the 2021-22 school year where jurisdictions provided detail and direction in their announced plans for the 2021-22 school year. For example, both Nunavut and the Yukon Ministries published detailed and descriptive plans, offering a variety of instructional options to accommodate all possibilities associated with a realistic understanding of the toggle nature of the 2021-22 school year. Nunavut’s 35-page document outlined a variety of strategies to prevent the introduction of COVID-19 into schools, how to respond when COVID-19 is detected in the school, how to mitigate the spread of COVID-19 once present, and how to address potential learning disruption to individual students, classes, or the entire school (Nunavut Department of Education, 2021a). Further, recognising that the 2019-20 and 2020-21 school years were both disrupted and that unequal levels of learning may have occurred, the Nunavut Department of Education (2021b) released *Learning to Be Together Again Support for Nunavut Schools in 2021-22*, which began with a focus on ‘recovery learning,’ or the “responsive process that enables students to transition back to in-class learning, while addressing mental and physical well-being and student achievement” (p. 5). The goals of recovery learning were to determine where students were in their understanding and then to offer students flexible avenues to help them achieve where they need to be. In addition to the recovery learning aspects, the document also focused on how to incorporate blended learning and remote learning – depending on the local epidemiology.

Similarly, Yukon Education (2021) in their *School during COVID-19: Guidelines for the 2021–22 School Year* provided clear guidelines for “What school looks like for ALL students” and

“What school looks like at individual schools” in the case of 100%, 50%, 20% and 0% school capacity. Essentially, there were detailed descriptions for the public health measures in place for in-person learning, how schools would operate and learning would occur when there was a need for hybrid learning with half capacity and very low capacity, and then the planning needed for remote learning to occur. Additionally, even when there was no disruption, the document outlined measures that would be undertaken to incorporate more blended learning into the classroom, which it was argued would make hybrid learning and remote learning less of an adjustment. These types of plans were much more realistic in terms of how the 2021-22 school year did progress, as compared to the perspective that “students must return to class... barring ‘only the most catastrophic of circumstances’” (CBC News, 2021a, para. 1). In fact, other than Saskatchewan, Yukon was the only jurisdiction that opened schools in January as scheduled and without any additional measures or remote learning requirement. This does suggest that the plans in the Yukon did allow the toggling between in-person learning and remote learning.

Additionally, it is also worth noting that there were some examples of specific moves to support the ability of teachers and schools to ‘toggle.’ For example, when the 2021-22 school year launched in Nova Scotia, 75% of parents surveyed reported having reliable bandwidth in their homes based on improvements made the year before (Montreuil et al., 2021) and technology was distributed in instances where it was not already available. Additionally, this connectivity was coupled with a clear direction to upskill teachers, along with the provision of provincial online tools and curriculum resources that were made available to all teachers with some designed for parents as well. In fact, Nova Scotia arguably was one of the only jurisdictions that demonstrated the ability to ‘toggle’ between learning modalities and adapt to changing circumstances as described in Phase 3 of the pandemic response.

In stark contrast, after the Ontario Ministry of Education announced that all school boards in the province would offer a remote learning option during the 2021-22 school year, the concurrent teaching or hybrid learning model that emerged in 2020-21 was the sole remote learning option planned for by many boards (Ontario Ministry of Education, 2021; Wilson, 2021). While many boards already offered optional online learning programs that were quickly doubling in size, some boards were unable to offer an online program that covered the full curriculum (King, 2021; Simcoe County District School Board, 2021). Further, many school boards lacked the necessary funding to create or offer an online or remote learning program (Wong, 2021c). In essence, the hybrid learning model was the only way that many school boards were able to meet the Ministry’s remote learning policy requirement within the board’s financial means. Even before the start of the new school year, the hybrid instructional model had fallen under criticism (Stewart, 2021) and teachers unions spoke out about its negative impact on both teachers and student learning (Fox, 2021).

Given the epidemiological realities of a pandemic, any pandemic, it should have been expected that the 2021-22 school year would be another disrupted year of year schooling. However, politicians and policymakers across the country – with only a few exceptions – continued to rely upon a framework that planned for in-person learning with few efforts to mitigate the potential for disruption. Further, when disruption inevitably occurred, politicians and policymakers relied upon the ‘sweat equity’ of school level teachers and administrators to overcome their lack of adequate planning and preparation (Bayrami, 2022; Bocking, 2022; Campbell et al., 2022;

Fédération du personnel de l'enseignement privé, 2022; Hodgson-Bautista et al., 2022; Organisation for Economic Co-operation and Development, 2020, 2021b). This failure on the part of many jurisdictions does not bode well on their ability to be in a position to toggle between various states of in-person and remote learning during the 2022-23 school year or their ability to transition into the Phase 4 or the 'Emerging New Normal.'

Were There Warning Signs?

The use of distance and online tools to provide K-12 schooling is not new (Barbour, 2018). In fact, it has even been argued on many occasions that K-12 distance and online learning could be used as an option to maintain instructional time during short term school closures such as snow days (Haugen, 2015; Hua et al., 2017; Milman, 2014; Morones, 2014; Swetlik et al., 2015). In fact, only six weeks prior to the beginning of the pandemic the capital city schools in Newfoundland and Labrador were closed for two weeks after experiencing a record-setting 76.2 centimeters of snow in one day (CBC News, 2020; Erdman, 2020). However, there have also been several calls for schools, districts, and systems to engage in planning for instructional continuity through distance and online learning to address longer school closures for the past decade. For example, Barbour (2010) illustrated the planning required for remote teaching when he wrote:

in Singapore online and blended learning was so pervasive that teaching in online and virtual environments was a required course in their teacher education programs and schools are annually closed for week-long periods to prepare the K-12 system for pandemic or natural disaster forced closures. (p. 310).

In fact, the use of distance learning to address issues of instructional continuity during a pandemic is not a new concept. McCracken (2020) described how during the Spanish flu pandemic the telephone – a technology only 40 years old at the time – was used for high school students in Long Beach. According to the author, “the fact that California students were using it as an educational device was so novel that it made the papers” (para. 2). Another example was the polio epidemic in New Zealand in 1948, which closed all of that country's schools (Germaine, 2020). At the time the Correspondence School – now *Te Aho o Te Kura Pounamu* – used traditional correspondence education to send lessons to every household, as well as using educational radio to broadcast lessons during the first semester of the school year.

More recently, Barbour et al. (2011) reported that following high levels of absenteeism during the H1N1 influenza pandemic of 2009, a number of private schools in Bolivia developed their own virtual classrooms and trained teachers on how to teach in that environment. The report specifically noted that this trend did not translate within the public school system as it had in places like Hong Kong and Singapore. With respect to Hong Kong, Alpert (2011) described how online learning helped facilitate continued access to instruction in 2003 when schools had to close due to the SARS outbreak. While the SARS closure was consistent with the emergency remote teaching we have seen in North America with the current COVID-19 pandemic, following the outbreak schools began to implement planning for a more formal use of online learning for future school disruptions. This planning was evident during the H1N1 outbreak in 2008, when

remote teaching allowed approximately 560,000 to continue learning during that pandemic-induced school closure (Latchem & Jung, 2009).

Extended school closures due to pandemics have not been the only potential source of guidance. For example, to plan for remote teaching a school or district could use the lessons learned in a case described by Mackey et al. (2012), who outlined “the immediate post-earthquake challenges of redesigning courses using different blends of face-to-face and online activities to meet the needs of on-campus, regional campus, and distance pre-service teacher education students” (p. 122). Rush et al. (2016) described many of the aspects that schools should plan for in case they found themselves in the position of having to transition to remote teaching to “sustaining school operations when a disaster makes school buildings inaccessible or inoperable for an extended period of time” (p. 188). The list of topics included issues surrounding connectivity, device distribution, teacher preparation, instructional modalities, content creation/curation, etc.. Further, Schwartz et al. (2020) described the lessons learned following the 2017 hurricane season on how distance learning could be used as “a way to continue instruction in emergencies and can support social distancing” (p. 2). Simply put, the potential to use distance and online mediums to transition remote teaching to ensure continuity of learning in both the short-term and long-term has been a key strategy, and one that researchers have studied.

It is also important to note that these lessons were not just in faraway places around the world or only in academic literature. Borja (2003) reported that the Toronto District School Board had to close four schools in 2003 due to the SARS outbreak. At the time, the “district didn’t implement a full-scale virtual-learning program. But they did gather online learning links from the... Ministry of Education on the district’s Web site for access to material supplementing students’ classwork” (para. 15). In fact, at the time the local superintendent was quoted as saying, “we had homework provisions [online] for these kids.... They need to keep up with their classwork and keep engaged” (para. 17). In the Health Canada (2003) report *Learning from SARS: Renewal of Public Health in Canada*, which was designed to provide an assessment of the response to that pandemic, the only time the word ‘school’ appeared was to describe the schools that were closed due to the outbreak and then the effect closing schools had on containing future outbreaks. Given that there was no discussion at all about how continuity of learning could be provided for K-12 students when authorities decided to close the schools or the potential impact on children of these closures, Christensen and Painter’s (2004) conclusions about the public health response could have been easily revised to read:

Whether the right structure, both *educational* and political, was in place for fighting epidemics like SARS. It questions whether the local and provincial *school authorities* had the training and the resources they needed and the proper *teaching and learning* system in place. (Barbour, 2022, p. 11)

As Reyes-Rojas and Sánchez (2022) concluded, despite these warnings, jurisdictions were “not sufficiently prepared for a change in educational modality of the magnitude with which the health emergency demanded of the educational system” (p. 3003).

Summary

The distinction between ‘emergency remote teaching’ and simply ‘remote teaching’ is the difference between what occurs when schools make a rapid transition in a matter of days and what occurs when schools plan in advance so that they can transition rapidly and seamlessly. It is important to underscore the fact that remote teaching is still temporary in nature, and those engaged in remote teaching still plan to return to classroom-based instruction. It is not the carefully planned distance and online learning traditionally experienced in the K-12 context. The reality of the past three school years is that educational authorities (a) began emergency remote teaching in Spring 2020, (b) hoped the summer heat and eventual presence of vaccines would control the virus so they failed to adequately prepare teachers, students, and parents/guardians for potential continued disruptions, and (c) were never able to achieve a state where they could seamlessly transition – or pivot (which is the phrase often used) – between in-person and remote teaching. Few, if any, jurisdictions have taken the steps necessary to ensure that teachers and schools can toggle between in-person learning and remote learning with no loss of instructional quantity or quality.

Hopefully the COVID-19 threat will soon be a memory. When it is, we should not simply return to our teaching and learning practices prior to the virus, forgetting about remote teaching. There likely will be future public health and safety concerns, and in recent years, campuses have been closed due to natural disasters such as wildfires, hurricanes, earthquakes, and the polar vortex (Baytiyeh, 2018; Mackey et al., 2012; Samson, 2020; Watkins, 2005). Thus, the possible need for remote learning – in both emergency situations and more planned contexts – must become part of a teacher’s skill set, as well as professional development programming for any personnel involved in the instructional mission of schools, colleges, and universities.

Teaching and learning landscapes are not dichotomous. It’s not in-person learning *or* online learning. Teaching and learning today requires the flexibility to navigate multiple learning landscapes simultaneously (Novak & Tucker, 2021). Standard classroom practices have been didactic, teacher-led, and assume uniformity, teaching to the middle of a broad range of abilities. This stops short of the flexible time, pacing, and pathways required for today’s learner and fails to take full advantage of existing technologies, tools, and practices that can be used to support that flexibility (Arnett, 2021). As Irvine (2021) argued, “there’s no return to pre-pandemic teaching. We must accept the reality that the need for flexibility is endemic in the K–12 education system” (para 1). However, sadly in far too many jurisdictions, the pandemic did not lead to creation of flexible learning opportunities that took advantage of multiple modalities and technologies as one would have hoped.


As COVID-19 transitions from being a pandemic to a more endemic stage, schools should begin to emerge into Phase 4 or a ‘new normal.’ What will the impact of the past two and a half years (and maybe more) will these various forms of remote learning have on how online learning will look within the K-12 system? Will online learning resemble what it looked like in the Fall of 2019 (i.e., with standalone distance learning programs and schools)? Or will the experience of remote learning lead to a greater flexibility in the system as Irvine argues? Given that traditional

online learning in Canada was rarely the live, synchronous, teacher-led instruction that we have seen during the pandemic, what impact will that particular model of hybrid learning have on the K-12 system? These questions highlight the need to pursue this line of inquiry through continuing research beyond the confines of these seven reports that form the “Pandemic Pedagogy Series” by CAneLearn.

Jurisdictional Summaries

The following sub-sections contain a summary of the pandemic pedagogical response for each province, territory, and the federal jurisdiction. Each profile begins with a numerical overview of K-12 education in that jurisdiction and the level of traditional K-12 distance and online learning activity (Barbour et al., 2021a; 2021b). This overview is followed by summaries that focus specifically on six areas.

1. *Pre-Pandemic E-Learning Environment* – a description of the e-learning resources and systems in place prior to the pandemic, including some comment around the participation rates.
2. *Spring 2020 Closure* – a description of the immediate response by jurisdictions to the complete closure of K-12 schools.
3. *Fall 2020 Reopening* – a description of the planning and preparation made to re-open schools for Fall 2020.
4. *2020-21 School Year* – a description of the ongoing response during the full school year by jurisdictions based on the epidemiology of the pandemic in their jurisdiction.
5. *Fall 2021 Reopening* – a description of the planning and preparation made to re-open schools for Fall 2021.
6. *2021-22 School Year* – a description of the ongoing response during the full school year by jurisdictions based on the epidemiology of the pandemic in their jurisdiction.

	<p>Newfoundland and Labrador (NL)</p> <p>Population: 521,758 Number of K-12 Schools: 259 Number of K-12 Students: 63,510</p> <p>Number of K-12 Distance & Online Learning Programs: 2 Number of K-12 Distance & Online Learning: 1,029</p>
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Pre-Pandemic E-Learning Environment

The Centre for Distance Learning and Innovation (CDLI) is the sole provider of K-12 online learning in the province. During the 2018-19 school year it offered registration in 44 different courses using a combination of synchronous instruction and asynchronous course content housed in a learning management system. The CDLI also offered online course reviews for students in both online and blended contexts for a variety of courses throughout the secondary level (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Newfoundland closed on March 17, 2020. The Ministry of Education and Early Childhood Development, through the Newfoundland and Labrador English School District (NLESD), launched the *Learning at Home: Good at Learning Good at Life* website as a resource for students and parents during the remote teaching that began on April 2, 2020. While students and teachers used a variety of *Google* tools, there were no specified expectations for attendance or requirements for synchronous or asynchronous learning – although teachers were required to check in with students weekly. The NLESD did provide some technology and internet access, as well as non-digital learning packages. The school year ended early on June 5, 2020, and, with the cancelation of public exams, report card grades reflected work assessed before the school closure (Nagle et al., 2020a).

Fall 2020 Reopening

The 2020-21 school year began with in-person learning under near-normal conditions. Public health measures included cohort groupings, physical distancing (i.e., two meters), and, due to the limitations of physical distancing in classrooms, signage to control the flow of student traffic. Additionally, to limit student movement schools had subject-specific teachers transition between classrooms and students remained in a single room. Masks were only mandatory where physical distancing was not possible. Virtual learning that included the provision of technology and

connectivity remained an option for students who needed to learn at home. Public examinations were cancelled, but all other provincial exams were planned to be administered. There were no publicly announced plans for hybrid or remote learning (Nagle et al., 2020b).

2020-21 School Year

Schools were open to in-person learning until February 18, 2021, when provincial schools returned to remote learning due to an increased spike in COVID-19 cases. The instructional model included a mandatory minimum three-hour day for kindergarten to grade 3, 90-minutes per day for grades 4-6, and a full day for grades 7-12 using a combination of *Google* tools. However, the NELSD was delayed in providing digital devices and connectivity in some instances. Around mid-April, most high schools in at-risk regions implemented a learning model that had students spending a portion of their time learning in-person at school and the remainder of their time learning at home through a streamed feed of the live classroom instruction (Nagle et al., 2021).


Fall 2021 Reopening

In this planning for the Fall 2021 re-opening, the government removed most of the restrictions that had been in place in schools (e.g., no vaccination requirement, masking mandate, no cohorts or physical distancing requirements, resumption of co-curricular and extracurricular activities, etc.). The goal was a return to full-time in-person learning, with remote learning as an option only for students who could not attend due to medical reasons. The Department of Education did offer teachers professional learning opportunities in the use of digital tools for online learning (e.g., *Google Docs*, *Google Meet*, and *Google Classroom*). The government planned that if the pandemic conditions changed schools could be determined as ‘high-risk transmission’ or ‘scenario 2 or 3,’ and stricter health restrictions would again be implemented. In scenario 2, blended or hybrid learning would begin, with a staggered schedule of in-person and remote learning. Scenario 3 would include fully remote learning. For fully remote learning, a sample schedule was released by the English School District which outlined the requirements for both synchronous and asynchronous learning activities. Students who needed digital devices were able to receive a Chromebook on loan from their school district (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, school closures for COVID outbreaks continued with scenario 2 and the teacher ‘s union began calling for community use reductions, increased cleaning, and a return to required masking (CBC News, 2021b). Schools remained open to in-person learning until the return to school from December holidays when, due to increasing community spread of the Omicron variant of COVID-19, schools were closed and students

returned to remote learning. The return to in-person was delayed until January 25, 2022 to allow time for the distribution of rapid test kits (Government of Newfoundland and Labrador, 2022a). All school staff and students were required to take two tests at home approximately 72 hours apart and to self-isolate if they tested positive. Although some parents continued to demand an option for remote learning, all announced efforts were focused on a return to in-person learning with government citing poor past experiences with hybrid learning and challenges for teachers. Instead, the government announced the hiring of additional teachers to create new junior and senior high school resources to support learning during intermittent school closures (Government of Newfoundland and Labrador, 2022b). February saw the gradual release of community restrictions across Canada and the Newfoundland-Labrador government's gradual release included a return to team sports for K-12 students in late February followed by a full relaxation of all restrictions through the remaining part of the school year (Government of Newfoundland and Labrador, 2022c).

	<p>Nova Scotia (NS)</p> <p>Population: 998 832</p> <p>Number of K-12 Schools: 370</p> <p>Number of K-12 Students: 125,124</p> <p>Number of K-12 Distance & Online Learning Programs: 2</p> <p>Number of K-12 Distance & Online Learning Students: 3,319</p>
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Pre-Pandemic E-Learning Environment

The Nova Scotia Virtual School provided access to a learning management system and online content for courses at the secondary level, in addition to courses provided through the government's traditional correspondence studies program. Additionally, there were a number of blended learning initiatives, including a *Google Apps for Education (G-Suite)* available to all students, teachers, and administrators (where approximately 81% of all students had accounts as of the end of 2018-19 school year) (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Nova Scotia closed on March 15, 2020. The Ministry of Education and Early Childhood Development provided literacy, numeracy, and mental health resources for students, parents, and guardians. Additionally, five learning packages were provided between April 8 and June 3, 2020. *Google Classroom* and *Learn360* platforms were used to connect with students, share content, and assess learning. Chromebooks were distributed to students and those with no or limited internet were provided with learning packages via a province-wide newspaper. Attendance expectations for remote learning were five hours per week for kindergarten to grade 6, ten hours for grades 7-9, and three hours per course per week for grades 10-12. All provincial standardised tests were cancelled and final grades issued on report cards were based on work assigned and completed (Nagle et al., 2020a).

Fall 2020 Reopening

The Fall 2020-21 school year began without delays with a full reopening that included health measures that included cohort groupings, physical distancing, outdoor classes used as much as possible, a reconfiguration of classroom space, and signage to regulate student movement. No large school gatherings (i.e., assemblies and cafeterias) were permitted. Masks were mandatory for grades 4-12. Diagnostic assessments were planned for the start of the year to gauge student

learning and to assist teachers to better understand the learning needs of their students, but provincial assessments were cancelled (Nagle et al., 2020b).

2020-21 School Year

Schools were open to in-person learning until April 28, 2021, when schools closed due to rising COVID-19 cases. On May 19th the province decided to keep schools closed for the rest of the year, but in-school learning began again for some areas starting June 3. The remote learning instructional model was a mix of asynchronous and synchronous with a minimum set of one hour synchronous and two hours asynchronous for kindergarten to grade 3 per day, increasing by 30-minute increments for each of grades 4-6 and 7-9. For grades 10-12, there was up to 50% of their school day as synchronous. All assessments and reporting continued as per a regular school year and teachers had access to an eLearning site developed by the Nova Scotia Government. Students who needed assistive technology were provided with devices with a priority given to marginalised and racialised communities. Students without internet access were offered other options such as the delivery of USB with learning materials (Nagle et al., 2021).

Fall 2021 Reopening

All public schools returned to in-person learning for the 2021-22 school year, with full capacity class sizes and no cohort grouping. Extracurricular activities, school assemblies, and music continued as normal, with an emphasis on learning outdoors as much as possible. In the case of rising COVID-19 cases, schools could return to ‘at-home’ learning consisting of a blend of synchronous and asynchronous learning, with the amount dependent on grade level. For example, the pre-primary grade packages would focus on play-based learning materials; primary to grade 3 would include two hours of work per day with one hour online; grades 4-6 would include three hours of work daily with one and half hours online; grades 7-9 would include four hours of work daily with two hours online; and grades 10-12 would have 50% of their time online. Reporting and provincial assessments would continue (LaBonte et al., 2021).

2021-22 School Year

Schools remained open to in-person learning until the return to school from December holidays when, due to increasing community spread of the Omicron variant of COVID-19, schools were closed and students returned to remote learning with students and parents relying on the resources posted at the government’s *Learning from Home 2021-22* website (see <https://backtoschool.ednet.ns.ca/learning-from-home>). School reopening was delayed until January 10, 2022 “to build confidence by purchasing HEPA filtration systems for schools and classrooms with passive ventilation systems, and by ensuring a good supply of 3-ply masks for all children and staff, including medical masks for staff” (Government of Nova Scotia, 2022a,

para. 2). However, on January 10 in-person learning was further delayed until January 17 with students returning to remote learning using the province's model of 'at-home' learning consisting of a blend of synchronous and asynchronous learning, with the amount dependent on grade level. As February saw the gradual release of community restrictions across Canada, the Nova Scotia government began Phase 2 of its gradual release March 7, 2022 that included increasing gathering and capacity limits combined with the use of rapid tests (Government of Nova Scotia, 2022b). Mask requirements were lifted in public spaces March 21, but not in schools until May 24 (Government of Nova Scotia, 2022c).



Prince Edward Island (PE)

Population: 159,249

Number of K-12 Schools: 63

Number of K-12 Students: 20,131

Number of K-12 Distance & Online Learning Programs: 1

Number of K-12 Distance & Online Learning Students: ~175

Pre-Pandemic E-Learning Environment

There were no distance, online, or blended learning programs in operation in the province during the 2018-19 school year. A small number of Prince Edward Island students enrolled in distance learning courses offered by both New Brunswick (i.e., online) and Nova Scotia (i.e., correspondence) (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools on Prince Edward Island closed on March 23, 2020. The Ministry of Education and Life Long Learning created a webpage from their Ministry website that contained home learning resources to support remote teaching for each grade level. The curricular focus was on literacy, numeracy, and mental health and well-being. Educational activities for students were posted on websites and printed resources were offered to students with limited access to the internet. Attendance for remote teaching included kindergarten with 30 minutes per day of holistic learning, primary 45 minutes per day, elementary 60 minutes, intermediate 90 minutes per day, and secondary grades two hours per course per week. Provincial standardised testing was cancelled, and report cards were delivered. In June, teachers were required to contact their students and parents either by telephone, video, or in-person to review student progress and provide feedback (Nagle et al., 2020a).

Fall 2020 Reopening

There were no delays to the start of the Fall 2020-21 school year with a full re-opening and added health measures that included cohorts, physical distancing, staggered entry/exits and student breaks along with signage to direct the flow of student traffic. Masks were mandatory for grades 7-12 and voluntary for grades K-6. The curriculum was revised to address learning gaps and outcomes that could not be addressed in the Spring while schools were closed and learning assessments were planned to continue as usual with priority on missed outcomes for language arts and math (Nagle et al., 2020b).

2020-21 School Year

Schools were open to in-person learning throughout the 2020-21 school year, however, some schools closed based on case numbers, and at the beginning of May there was a province-wide lockdown with schools closed, however, in-school learning returned May 9. Students who could not attend in-school learning due to illness or self-isolation were expected to complete online and offline work prepared by their teacher. Expectations for synchronous and asynchronous learning included 60-80 minutes daily for kindergarten, two and one-half hours per day for grades 1-6, and in grades 7-12 class time remained the same as during a regular school day. The province adopted *Google Classroom* as its provincial learning management system and devices were delivered to students in need. Assessment and reporting continued as per a regular school year, but provincial assessments were cancelled for the 2020-21 school year (Nagle et al., 2021).

Fall 2021 Reopening

All schools began the 2021-22 school year in-school with ‘low-risk’ measures that included health and safety precautions (e.g., masks, physical distancing, and cohorts). Assemblies, extra-curricular activities, and sports also continued. If cases of COVID-19 rose and remote learning resumed, the platform used across the province, *Google Classroom*, would include a blend of synchronous and asynchronous learning time. If all children within a class or a school were forced to remain home, the expectations for remote learning would include: Kindergarten will have 60-80 minutes of instruction per day in increments of 15-20 minutes at a time; for grades 1-6 would have two and a half hours per day; for grades 7-12 would follow their regular class schedules. ‘Considerations and support’ are offered to students with limited access to the internet or learning devices. Assessments and reporting would continue (LaBonte et al., 2021).

2021-22 School Year

Schools remained open to in-person learning, with some local school closures despite the government moving to an ‘elevated risk’ status. Prior to the return to school from December holidays, due to increasing community spread of the Omicron variant of COVID-19, it was decided to close schools to in-person learning in January with students returning to remote learning. The reopening of schools was delayed until January 17, 2022 to allow time for schools and parents to prepare for new measures including cohorts of students, distribution of new HEPA air filters, removal of excess furniture to allow for greater physical distancing, and the requirement for students to take two rapid antigen tests 48 hours apart prior to returning to school (Government of Prince Edward Island, 2022). February saw the gradual release of community restrictions across Canada with some relaxation regarding sport and recreational activities in PE, but it was not until April 5, 2022 when the Prince Edward Island government lifted the limit on sports teams while rescinding the provincial State of Emergency. The mask mandate remained in

effect until May 24 when the requirement for students to conduct regular antigen tests at home for school students prior to a return to school was relaxed.



New Brunswick (NB)

Population: 781,024

Number of K-12 Schools: 307

Number of K-12 Students: 98,906

Number of K-12 Distance & Online Learning Programs: 2

Number of K-12 Distance & Online Learning Students: 4,754

Pre-Pandemic E-Learning Environment

The province maintained centralised online learning programs in both English and French that provided access to a learning management system and online content for approximately 50 English language courses and 28 French language courses at the secondary level. In addition to teachers and students involved in the online learning programs, there was extensive use of the learning management system and online course content by brick-and-mortar teachers with their classroom-based students (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in New Brunswick closed on March 13, 2020. The Department of Education launched their *Learning at Home* website for remote teaching support offering literacy, numeracy, and mental and physical health resources. Specific course materials for science, social science, history, technology, second language supports were posted for most grades. The technologies and digital tools to support remote learning were not specified, but devices such as 1,000 iPads, 500 laptops, and 300 mobile internet hubs were loaned to students. The expected attendance for remote learning was five hours per week for grades K-5, ten hours for grades 6-8, and 12.5 hours for grades 9-12. Students were also encouraged to spend at least 30 minutes per day engaged in physical activity. Final report cards were suspended and provincial standardised testing was cancelled. Between June 1-5, teachers were back in schools to complete school closing requirements and to start planning for the Fall while students continued with remote learning (Nagle et al., 2020a).

Fall 2020 Reopening

Elementary schools created cohort groupings or ‘bubbles’ for their students. In grades K-2, class sizes were a maximum of 15 students, in grades 3-5 a maximum of 22 students, and in grades 6-8 there were regular class sizes. Cohort groups in secondary students had alternate schedules for in-school attendance and in-home remote learning as well as staggered breaks between classes to maintain physical distancing. Masks were recommended in the classroom, but not required,

however secondary students were required to mask when outside the classroom. Technology and resources, both paper and digital, were provided and most remote learning was asynchronous with regular live online teaching for grades 6-8. A blended model of learning for secondary students was announced by the Department of Education and Early Childhood Development that relied on project-based and experiential learning opportunities (Nagle et al., 2020b).

2020-21 School Year

Schools were mostly open throughout the 2020-21 school year but shifted to remote learning based on areas of risk within specific communities and regions. During “orange and yellow zone” alerts, only students at-risk were shifted to remote learning, but during “red zone” alerts, high school students moved to the blended learning model. Absences throughout the K-12 system were high during red zone alerts, as remote learning was no longer mandated under this level of alert. Teachers were responsible for continued child learning if they needed to remain at home, and were asked to maintain a balance between synchronous and asynchronous learning to minimise screen time. Students were responsible for their own devices, but if in need, families could apply to the ‘Laptop Assistance Program’ to obtain any needed devices for their child’s learning (Nagle et al., 2021).

Fall 2021 Reopening

Schools returned to in-person learning for the 2021-22 school year. Class size returned to full capacity for K-5 with no ‘bubbles’ or cohorts in grades 6-8. High school students returned with full time, in-person attendance, and music programs and extracurricular activities continued without restrictions, though masks were required indoors and assemblies were still not permitted. Should students return to remote learning due to an outbreak, K-8 students would engage in a mix of ‘virtual and paper-based learning’ or learning kits, while high school students would have a blend of synchronous and project-based learning (LaBonte et al., 2021).

2021-22 School Year

The Fall reopening plan remained in place and for the most part in-person learning continued, with the exceptions of a Canadian Union of Public Employees strike in November and/or local community outbreaks when students returned to remote learning. The reopening of schools after the December holidays was delayed until January 10, and schools returned to home learning due to increasing community spread of the Omicron variant of COVID-19 (New Brunswick Ministry of Education and Early Childhood Development, 2021). The return to in-person was further delayed until January 31 to allow time for purchase and installation of 2,000 portable HEPA filters for classrooms along with a supply of KN95 masks as all students were required to wear masks while in school as well as outdoors for grade 9-12 students. February saw the gradual

release of community restrictions across Canada and the New Brunswick government lifted mandatory restrictions March 14 that included a return to full physical education and music classes and no requirement to wear a mask while in school (New Brunswick Ministry of Education and Early Childhood Development, 2022a; 2022b).



Quebec (QC)

Population: 8,572,054

Number of K-12 Schools: 3,102

Number of K-12 Students: 1,003,322

Number of K-12 Distance & Online Learning Programs: 5+

Number of K-12 Distance & Online Learning Students: ~39,400

Pre-Pandemic E-Learning Environment

While participation in distance and online learning is quite low in Quebec, the various distance and online programs – such as LEARN and *Société de formation à distance des commissions scolaires du Québec* – have developed significant amounts of course content in both online and traditional print formats (primarily, although not exclusively, at the secondary level).

Additionally, the significant penetration of programs such as the *Écoles en réseau* (i.e., Networked Schools) have provided classroom teachers and students access to online learning tools and pedagogies (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Quebec closed on March 16, 2020. The Ministry of Education launched their remote teaching website, *Open School/L'École Ouverte*, as a resource for students, parents, and guardians. The curricular focus was on literacy, numeracy, the arts, and physical and mental health. Education kits were available to students who had limited access to the internet.

Anglophone teachers were offered professional learning through the LEARN website and the site offered teachers access to webinars. There was no specified expectation for attendance and report cards were delivered based on the first two reporting periods of the 2019-2020 school year.

Provincial standardised exams were also cancelled. On May 11 there was a non-compulsory return to school (with the exception of the Montreal area, which remained closed) but secondary students continued with remote learning (Nagle et al., 2020a).

Fall 2020 Reopening

There were no delays to the start of the 2020-21 school year with all students attending in-class learning. Enhanced health measures included cohort groups while students remained in the same classroom and teachers moved for subject-specific teaching. Masks were mandatory for grades 5-12 but not required to be worn in an elementary classroom. The curriculum included an added focus on assisting students to identify learning gaps from the Spring (Nagle et al., 2020b).

2020-21 School Year

Much of the 2020-21 school year proceeded with in-person learning, but on Dec. 17, 2020, all provincial schools closed and resumed ‘virtual teaching’. Regular classes resumed after the winter holiday for elementary students, but secondary students continued virtual learning for one more week and opened on Jan. 11, 2021. The province did not issue a province-wide shutdown of schools, instead, school closures were on a region by region basis. Only children who were at-risk medically were allowed to continue with full-time distance education. Boards were required to offer LTE devices to students to access the internet and each school prepared emergency protocols that included educational services during distance learning and managed them ‘locally.’ The only alternative for parents who wished their children not to attend in-school learning was to remove them from their school and homeschool (Nagle et al., 2021).

Fall 2021 Reopening

Quebec schools returned to in-person learning for the 2021-22 school year and all extracurricular activities resumed with secondary students required to have a vaccine passport to play in some sporting events, such as competitions. To ‘avoid’ online learning, masks in schools was made mandatory. Students with medical exemptions in the six English school boards were allowed the option to attend remote learning via LEARN Québec – a distance learning non-profit educational service that was established before the pandemic. As of the Fall 2021, when schools closed due to a COVID-19 outbreak, a ‘virtual-classwork system’ had not been fully implemented. However, students who needed learning devices were able to receive them from their schools (LaBonte et al., 2021).

2021-22 School Year

On October 1, 2021 the government increased masking requirements in some regions for students in elementary grades, but schools remained open to in-person learning with only local closures based on COVID case numbers (People for Education, 2021). On December 31, 2021 the Quebec government put new measures in place to curb the spread of the Omicron variant of COVID-19 that included curfews between 10:00 pm and 5 am. Scheduled school return January 5, 2022 saw schools closed for face-to-face instruction until January 17, 2022 without specific mention of remote learning options by the government, only that “if possible, online learning will continue until face-to-face instruction resumes” (Government of Quebec, 2021, para. 5). The January 17 return included mandatory masking requirements for staff and students, which were later lifted March 7. Many educators and parents reported increasing concern for in-person learning as cases of the Omicron variant continued to rise, however, the government remained adamant that schools were safe and additional closure would lead to greater consequences with loss of learning for students. As an additional measure, on May 5 the government announced

additional funding for tutoring services to mitigate the loss of learning due to school closure (Henriquez, 2021).



Ontario (ON)

Population: 14,723,497

Number of K-12 Schools: 4850

Number of K-12 Students: 2,020,245

Number of K-12 Distance & Online Learning Programs: ~70

Number of K-12 Distance & Online Learning Students: ~122,000

Pre-Pandemic E-Learning Environment

For approximately the past decade, Ontario has provided teachers with access to a province-wide learning management system and online content through the Ontario Educational Resource Bank. Additionally, the Ministry of Education has funded human resources at the school board level designed to encourage classroom teachers to incorporate blended learning practices and content into their teaching. Finally, the individual e-learning consortiums in the province have been active in providing professional learning for online and blended learning to teachers in the boards represented within their consortium (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Ontario closed on March 23, 2020. The Ministry of Education launched their remote teaching website, *Learn at Home*, which offered a curated list of resources across grades and disciplines to support students, parents, and guardians with a curricular focus on literacy and numeracy. The Ministry already provided a Virtual Learning Environment with digital courses and resources that also provided free webinars, resources, and training for teachers and resources for parents. The Ministry partnered with Rogers Communications and Apple to allow school boards to distribute iPad devices pre-equipped with free Rogers LTE wireless data up to June 2020. The attendance expectations for students in grades K-6 were five hours of engagement in remote teaching, grades 7-8 ten hours, and grades 9-12 three hours per course per week for students on a semester system, 90 minutes for students in a non-semester system. Reports cards were delivered, however, grades were frozen from March 13, 2020. Students were allowed to improve their grades only, and all provincial standardised testing was cancelled.

Fall 2020 Reopening

Most school boards chose to delay the start of in-class learning by one week with staggered start dates by grade level and remote learning was delayed by two weeks. Elementary students had the option to attend class full-time or continue with remote learning while secondary students used cohort groupings to limit class size to 15. Blended learning was used for students who were not

able to attend in-school due to COVID-19 and for secondary cohort groups to attend school on alternate days. Enhanced health measures were put in place including, physical distancing, signage to control student movement, staggering of lunches, recesses, and bell times, and mandatory masks for grades 4-12 students. For remote learning students, a daily schedule was to be provided based on a five-hour instructional day for students. For those with limited access to the internet, the Ministry suggested boards open school spaces to accommodate students in a supervised 'study hall'.

2020-21 School Year

The 2020-21 school year proceeded with in-person learning, but on January 4, 2021, emergency remote learning began again due to a provincial lockdown. Various regions across Ontario reopened at different times based on COVID-19 cases: elementary school students in most regions returned to in-class learning on February 1, 2021, with mandatory masks for all students in grades one to three who had previously been exempt. By February 8, 2021, most southwestern Ontario students returned to in-school learning, with students in all regions returning to class by February 16, 2021. The March Break was postponed for all public schools until the week of April 12, 2021, and all provincial schools returned to remote learning on April 19 with schools remaining closed to students for the remainder of the school year.

Fall 2021 Reopening

All of Ontario's public schools from K-12 returned to full in-person learning in the Fall of 2021 with masks mandatory and social distancing as much as possible, including staggered schedules to limit student numbers in hallways and cafeterias. Secondary students still worked in quadesters, taking two courses at a time, and several school boards opted for hybrid learning for secondary schools. Caregivers had the option to keep their child in remote learning via each board's virtual school, which was mandated by the province as an option within all public school boards. In case of active COVID-19 within schools, boards were required to provide students the opportunity for remote learning with 300 minutes of learning using both synchronous and asynchronous activities and have plans in place so they could move to remote learning quickly to ensure continuity of learning for students. Extra-curricular activities and sports were encouraged by the Ministry to continue and all student assessments and standardised testing resumed as normal (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed amidst school closures for COVID local outbreaks, the number of children choosing to learn remotely increased. Local school closures resulted from staff shortages and student absenteeism due to the spread of the virus in many communities across the province. As a result, the Government of Ontario (2022a) signed an agreement with

the Ontario Teachers' Federation to temporarily increase the number of days a retired teacher could work to expand the pool of supply teachers available to address rising teacher absenteeism due to illness and self-isolation. Provincially, schools remained open to in-person learning but masking was required. Just prior to the return to school from December holidays, due to increasing community spread of the Omicron variant of COVID-19 school opening was delayed for two days. Later it was decided to close schools to in-person learning with students returning to remote learning until January 17, 2022. That return saw some limited student cohort grouping, reduction of 'high contact' sports, and the requirement for students to self-isolate if they had symptoms. Interestingly, schools in the Greater Toronto area did not open until the next day due to heavy snow. February saw the gradual release of community restrictions across Canada and the Ontario government release included relaxing school masking and increasing indoor event capacities. Further plans announced February 17 were to address learning loss during prior school closures that included tutoring support (Government of Ontario, 2022b). On April 14 the government passed legislation designed to improve capacity to keep buildings open, particularly schools, and the mask requirement for school students and staff was removed, followed by a removal of all restrictions on June 11 (Government of Ontario, 2022c).



Manitoba (MB)

Population: 1,380,000

Number of K-12 Schools: 914

Number of K-12 Students: 186,372

Number of K-12 Distance & Online Learning Programs: ~38

Number of K-12 Distance & Online Learning Students: ~8,173

Pre-Pandemic E-Learning Environment

At the beginning of the 2019-20 school year, the province provided distance learning opportunities in three different modalities: Independent Study Option (i.e., a correspondence delivery model that provided at least 58 courses in English and 12 courses in French for grades 9-12), Teacher Mediated Option (i.e., an audio teleconference system that provided at least 21 English courses for grades 9-12) and Web-Based Course Option (i.e., an online program that provided at least 44 courses in English and 4 courses in French). There were also two provincial virtual collegiates (i.e., province-wide online secondary schools). Additionally, Manitoba Education licensed a provincial learning management system to encourage blended learning (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Manitoba closed on March 20, 2020. The Ministry of Education launched their remote teaching website, *My Learning at Home*, which offered connections to curriculum activities for each grade with a focus on literacy and numeracy as well as mental and physical health to support students, parents, and guardians. For those students who had limited access to online learning, printed materials were provided and outreach for at-risk students was encouraged. Teachers were asked to provide daily communication with students via telephone, online platforms, email, or regular post. The attendance expectation for students included grades K-4 with five hours of engagement in remote teaching per week, grades 5-8 ten hours per week, and grades 9-12 a minimum of three hours per course per week. Report cards were delivered and reflected at minimum the progress of the student before March 23, 2020, however, students were provided the opportunity to improve their marks. All provincial standardised testing was cancelled (Nagle et al., 2020a).

Fall 2020 Reopening

Cohort grouping for students as a class was implemented with a cap at 75 students maximum for other activities, with physical distancing (i.e., two meters) between groups, staggering lunch and

breaks, entry, and exits. Learning from home could be an option where physical distancing was not a challenge and schools could engage in a blended model of learning, both synchronous and asynchronous. Full attendance was required for the in-school or blended learning model. Grade 12 provincial assessments continued for the 2020-21 school year. School divisions and teachers were responsible for identifying student needs regarding technology, and Manitoba Education supported the availability of devices as well as access to alternative options for students with limited access to the internet (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning, but on January 4, 2021, students in grades seven to 12 were required to return to remote learning for two weeks which was optional for students in kindergarten to grade six. The province did not issue a province-wide shutdown of schools, instead, it was on a region by region basis. Depending on the level of risk due to COVID-19, there were three stages offered: level one in school, level two a blended model, and level three fully remote. Blended learning prioritised students with special needs for in-school learning. Fully remote students were still expected to engage in full participation during the day with regular assessments. Parents who wanted their child to remain at home were required to decide by January 30, 2021, which then remained in effect for the rest of the 2020-21 school year. Students in grades one to four within the remote learning model were expected to engage in five to six hours of synchronous learning per week and two and a half hours of asynchronous work each week, grades five to eight seven to eight hours of synchronous learning per week with three hours of asynchronous work per day. A further requirement was for teachers to meet individually with their students for at least 20 minutes per week and each school division and individual schools were responsible for students having access to digital devices (Nagle et al., 2021).

Fall 2021 Reopening

Schools in Manitoba returned to in-person learning for the 2021-22 school year. Online learning continued for students (or other household members) who were immunocompromised, and they could access online learning materials through the Manitoba Remote Learning Center. Remote learning in any other instances would be used as a ‘last resort’ should COVID-19 cases increase and requirements included a mix of synchronous and asynchronous learning. The province released *Manitoba Education Standards for Remote Learning* with guidelines to be followed by schools in instances where temporary remote learning was necessary and all schools would be responsible for making technology accessible to students, but if technology was not available print-based materials would be provided. All student assessments and reporting continue as normal (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, masks were required in school and on buses and there were local school closures for COVID outbreaks. Limits for indoor gathering in rural communities with lower vaccination rates were introduced to curb spread of the virus in those areas. With the spread of the Omicron variant of COVID-19 in December, school reopening was a phased-in approach with high risk students and those of critical service personnel returning January 10, 2022 and all other students returning January 17. Staff were required to wear medical masks and only local school closures continued (Government of Manitoba, 2022). February saw the gradual release of community restrictions across Canada and the Manitoba government lifted all public health orders and restrictions on March 15.



Saskatchewan (SK)

Population: 1,178,681

Number of K-12 Schools: 780

Number of K-12 Students: 184,472

Number of K-12 Distance & Online Learning Programs: 27

Number of K-12 Distance & Online Learning Students: 22,510

Pre-Pandemic E-Learning Environment

While there was no provincially managed programs, there were online schools operated by 14 provincial school divisions, one independent school, and one First Nation educational authority. Prior to the 2009-10 school year, the Ministry of Education did manage three distance learning programs (i.e., print-based courses, instructional television via satellite, and online); although the status and currency of these resources and content is unknown. Since 2013-14, the Saskatchewan Technology in Education Framework has guided the use of technology in the province in the areas of teaching and learning, administrative operations and infrastructure which has encouraged blended learning to grow in the province (Barbour et al., 2020b; 2020c)

Spring 2020 Closure

Schools in Saskatchewan closed on March 20, 2020. The Ministry of Education did not mandate remote teaching during the Spring of 2020 and any remote learning opportunities that teachers provided remained optional for students. The Ministry provided online resources that made curricular connections to health education, science, and social science as well as a resource page to support mental health and tips for remote teaching for parents and guardians. Teachers continued to create lessons to support individual students and the types of technologies used by teachers and students were listed as a school-by-school determination and no details were given as to what types were used. School divisions were encouraged by the Ministry to use multiple modes of delivery, which included delivering packets and books if needed for those students with limited online access. Grades for students were frozen from March 13, 2020, with the opportunity for students to improve their grades only. The mandate was to pass all students with at least a 50% grade, and no report cards were issued (Nagle et al., 2020a).

Fall 2020 Reopening

Saskatchewan schools had a one-week delayed start to the 2020-21 school year with enhanced health measures in place which included: classroom cohorts, physical distancing, and staggered start, end, and break times, dedicated entries and exits with signage to control student movement,

outdoor activities whenever possible, no sharing of materials, spaced out desks, and alternatives to large assemblies, such as virtual gatherings. Technology was deployed to limit sharing and masks were not mandatory but recommended in grades 4-12, particularly where physical distancing was not possible. Grades K-8 used *Google Classroom* as their learning management system (LMS), grades 9-12 *Blackboard*. Remote learning consisted of both asynchronous and synchronous activities, and assessment and reporting continued as usual. For students working under a remote learning model, the *Online Learning Center* offered a curriculum for both English and French Immersion (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning, but on November 12, 2020, Regina high schools moved to alternative days of learning to reduce their capacity by 50% and by mid-November several of Regina and Saskatoon high schools went partially online and in-person. By mid-December, all public schools in Regina closed until January 11, 2021, and other schools closed on a by-need basis. In March 2021, the province closed all public schools and students returned to remote learning, but no specific guidelines regarding synchronous and asynchronous learning, nor any remote learning supports, were found on Ministry of Education websites (Nagle et al., 2021).

Fall 2021 Reopening

Schools across Saskatchewan returned to in-person learning for the 2021-22 school year with a curricular focus on learning loss and without any COVID-19 restrictions. Students who did not return to in-person learning were able to attend Saskatchewan's *Flex Ed* online virtual school. The *Flex Ed* program was in place in the province before the pandemic and is funded by the government. All sports, extra-curricular activities, and drama and music continued but mandatory masking was required in all indoor spaces, including schools. Provincial exams were made optional for this school year (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, schools remained open to in-person learning with local closures for COVID outbreaks. Interestingly, the government announced November 22, 2021 amendments to its Education Act “introducing legislation to protect teachers, staff and students while accessing schools... to ensure families can access schools harassment free while vaccines are rolled out for kids 5-11” (Government of Saskatchewan, 2021, para. 1). With the increasing spread of the Omicron variant across Canada and the province, no separate measures were made regarding school reopening in January as in other provinces and in-person returned as planned earlier. February saw the gradual release of community restrictions across Canada and the

Saskatchewan government released the requirement for mandatory masking indoors on February 28, 2022 just after the proof of vaccination requirement expired February 14.



Alberta (AB)

Population: 4,436,258

Number of K-12 Schools: 2,518

Number of K-12 Students: 733,599

Number of K-12 Distance & Online Learning Programs: 36

Number of K-12 Distance & Online Learning Students: 97,527

Pre-Pandemic E-Learning Environment

Alberta Education listed 33 different distance learning programs as a part of their online directory, and also had the highest proportion of students engaged in distance learning in Canada during the 2018-19. While much of this activity was online in nature, both the Alberta Distance Learning Centre and the *Centre francophone d'éducation à distance* continued to maintain print-based course content. Additionally, over the past five years there had been an increased emphasis on blended learning (as evidenced by the introduction of the Alberta blendED Symposium in 2015). Finally, in recent years, Alberta released several online learning guides for various stakeholders (e.g., parents, school leaders, etc.) (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Alberta closed on March 16, 2020. The province launched its *LearnAlberta* website to support remote teaching for students and parents with a curricular focus on literacy and numeracy. Teachers were mandated to continue evaluating student learning while focusing on learning standards that were not yet covered and those that could be covered in a manageable way. While there were no specifications for particular digital tools used by teachers or details regarding the deployment of technology for students to access remote teaching online, accommodations included the delivery of learning packets and telephone check-ins by teachers. Attendance expectations for students outlined by the Ministry included grades K-6 to engage in five hours of remote teaching per week, grades 7-9 with 10 hours per week, and grades 10-12 with three hours per course per week. The expectation was that students would work with their parents to complete assigned work. Report cards were distributed and all provincial standardised tests were cancelled (Nagle et al., 2020a).

Fall 2020 Reopening

There were no delays to the start of the Fall 2020-21 school year. Alberta returned to school under scenario one, which included full in-class learning with near-normal operations within the school for grades K-12. The inclusion of added health measures, cohorts, and physical distancing

(i.e., two meters where possible) were added. Staggered lunch and breaks were also included to assist with physical distancing. Masks were mandatory for grades 4-12 where physical distancing was not possible, but masks were not mandatory while children were sitting at their desks or where physical distancing was possible. Class sizes were not limited with the exception of a 20-student cap in Kindergarten. Distance learning was an option for students (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning, however, parents had the option to keep their students in remote learning for the 2020-21 school year while some district schools used a blended model of learning with cohorts for in-school students. In a remote learning model, a minimum number of hours per day online was required: kindergarten five hours per week, grades 1-3 ten hours, grades 4-6 12.5 hours, grades 7-9 fifteen hours, and grades 10-12 three hours per course per week. Students were expected to attend most of these hours synchronously. On November 30, 2020, junior and high schools (grades 7-12) moved to remote learning with elementary schools closing shortly after as well. All schools returned to in-school learning on January 11, 2021, only to shift back to remote learning sometime between April 21 and May 3, 2021. In-school learning resumed in late May but schools and/or specific classes required to quarantine for two weeks continued learning remotely. Platforms used for remote learning included *Google Meet* and *Zoom*. Assessment, evaluation, and reporting continued as usual, but the provincial achievement tests were optional for school authorities (Nagle et al., 2021).

Fall 2021 Reopening

Alberta public and Catholic schools returned to in-person learning for the 2021-22 school year with masking and physical distancing not required in schools. Should the need to return to remote learning arise, the decision would be made by individual school authorities (with the approval from the Ministry of Education for short-term shifts or entire schools). However, as COVID-19 numbers began to rise at the end of the summer some school boards, such as Edmonton Public Schools and Edmonton Catholic Schools, offered online learning as an option. Similarly, Calgary offered online learning through their online school CBe-learn. Alberta Education also made its online learning directory, established before the pandemic, available to parents. The hourly requirements for remote learning, when schools need to pivot to online learning, were discretionary in grades K-6 and equivalent school hours for grades 7-12. All student assessments and standardised testing resumed as normal; except for grade three testing, which was an option for school authorities. In case of a return to remote learning, these tests could be cancelled at the discretion of school authorities. School authorities also had the option of continuing with extra-curricular activities (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, local school closures for COVID outbreaks continued with students shifting to remote learning. With the increasing spread of the Delta variant of COVID-19, on September 15 the Alberta government announced a mask requirement for all school staff and for students on buses and while in school, but not while in class, along with recommendations that students in K-6 remain in cohorts where possible (Government of Alberta, 2021). Schools continued to be open to in-person learning and public reporting of school outbreaks resumed October 6 with over 50 schools reporting outbreaks and 700 on alert due to clusters of infection (Snowdon, 2021). Prior to the return to school from December holidays, due to increasing community spread of the Omicron variant, school reopening was delayed one week until January 10, 2022 to allow time for delivery of rapid test kits and quality medical masks. Throughout the month of January, many schools were closed to in-person learning with students returning to remote learning due to outbreaks. February saw the gradual release of community restrictions across Canada and the Alberta government gradual release included lifting of mask requirements in schools on February 14 and all other restrictions were lifted on June 14.



British Columbia (BC)

Population: 5,200,000

Number of K-12 Schools: 1,942

Number of K-12 Students: ~673,000

• Number of K-12 Distance & Online Learning Programs: 68

Number of K-12 Distance & Online Learning Students: ~85,000

Pre-Pandemic E-Learning Environment

Historically, British Columbia has had the highest proportion of students enrolled in online learning in Canada. In 2018-19 there were 57 district-level public distance learning schools and 16 independent distance learning schools. While most recent activity has shifted to an online delivery model, there was still extensive print-based distance education occurring. The province has also had the highest proliferation of distance learning beyond the secondary grades, with many of the schools offering services from K through 12. Finally, most of these public and independent distance learning schools also offered blended learning opportunities (Barbour et al., 2020b; 2020c)

Spring 2020 Closure

Schools in British Columbia (BC) closed on March 17, 2020. The province published the *Continuity of Learning: Planning Guide for Teachers* which provided guidance and links to resource sites and online webinars highlighting the use of technology tools, and the *Keep Learning BC* website which offered activities, resources, and health advice with a focus on literacy, numeracy, core competencies, and the *First Peoples Principles of Learning*. The distribution of physical equipment was left to school districts, however, the Ministry noted that more than 23,000 computers and devices had been loaned out to students. At a minimum teachers were required to contact each student at least weekly with more frequent contact encouraged and attendance requirements for students were left to be determined at the local level. Formal examinations were not required however teachers were required to provide formal weekly reports for each student with summary reports consolidated by each district and sent to the Ministry. In-school learning began June 1, 2020, using a hybrid model of online and classroom learning with alternating cohorts of students to ensure physical distancing. All boards were required to implement strict health and safety protocols as defined and monitored by provincial health authorities and WorkSafeBC (Nagle et al., 2020a).

Fall 2020 Reopening

The start of the 2020-21 school year was delayed by two days and opened with in-school learning however students could choose online or distributed learning options. Added health measures included physical distancing, staggering breaks and transition times, and signage to direct the flow of student traffic. Elementary cohorts were between 20 and 30 students and learning groups were capped at 60 students, which limited the number of students who could interact. Secondary school learning groups were capped at 120 students. Masks were not mandatory and the curriculum included an added focus on mental health and well-being for grades K-12 (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning but there remained remote learning options for students across the province in many school districts as well as the online or distributed learning options. Students continued with cohorts or ‘learning groups’ in-school, with 20-30 students in each group with the maximum number per group was 60 in elementary and 120 for secondary. Full curriculum expectations, assessments, and reporting were in place during this school year. The provincial government allocated \$8.2 million to specifically support Indigenous learners to address learning loss, mental health, and technology for remote learning (Nagle et al., 2021).

Fall 2021 Reopening

Schools in British Columbia went back in-person for the 2021-22 school year. This plan did not include cohort learning groups or physical distancing, but did include mandatory masking. A distance learning model (or homeschooling option), either through the public school districts or independent online schools, was available to students who chose to stay home. However, these students would no longer be affiliated with their neighbourhood school. Students in grades 8-12 could still enrol in a school for in-person learning while taking some distance courses. Any actions due to health orders that might affect schools or school districts was left to the individual schools and districts, in conjunction with health officials, to implement any further health and safety restrictions (e.g., a return to remote learning). School programs (e.g., music and physical education, assemblies, and sports) continued with extra health and safety precautions (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, school closures for COVID outbreaks continued and the province maintained its mask mandate for all indoor spaces for grade 4-12 students (Government of British Columbia, 2021a), later expanded to grades 1-3 October 4. The province relaxed capacity limits in most regions other than those with low vaccination and higher transmission

rates. Schools remained open to in-person learning until the return to school from December holidays when, due to increasing community spread of the Omicron variant of COVID-19, school reopening was delayed until January 10, 2022, however schools were open January 4 as planned for children of essential workers and children with special needs (Government of British Columbia, 2021b). Schools used the time to implement enhanced safety plans and prepare for a possible return to remote learning given the community spread of the virus and potential staff shortages. February saw the gradual release of community restrictions across Canada and the BC government allowed the resumption of sport tournaments for children and youth while beginning the distribution of rapid antigen test kits on February 1 (Government of British Columbia, 2022a). The mask requirement for everyone, including school students and staff, was relaxed on March 11 (Government of British Columbia, 2022b).



Yukon (YT)

Population: 35,874

Number of K-12 Schools: 33

Number of K-12 Students: 5,456

Number of K-12 Distance & Online Learning Programs: 2

Number of K-12 Distance & Online Learning Students: 389

Pre-Pandemic E-Learning Environment

Yukon Education operates both an online learning program and a blended learning program. While the online learning program is still small and under development, the territory continues to rely upon some distance learning services from programs in both British Columbia and Alberta. However, the blended learning program proliferated to approximately two thirds of all schools in the territory and approximately three of out of every 20 students in grades 5-12 had engaged in blended learning (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in the Yukon closed on March 18, 2020. The Ministry of Education added a webpage to their Ministry site that was dedicated to continuing student learning at home. This page offered resources for each grade level as well as for mental health and well-being. For students with limited internet access, printed resources were provided. Specific considerations for First Nations students were provided by the Ministry, in partnership with local communities. The Ministry provided educators with toolkits and advice on digital tools as well as offering online professional development. Teachers were responsible for providing students with learning materials, resources, and supports to complete the learning standards. Teachers were also required to maintain regular communication with students and families to assure learning needs were being met. Teachers assessed learning and report cards were delivered. The attendance expectation for students to engage in remote teaching included K-6 with five hours engaged in assigned work, grades 7-9 with 10 hours of assigned work, and grades 10-12 with three hours of work assigned per course per week (Nagle et al., 2020a).

Fall 2020 Reopening

Elementary schools re-opened as usual for grades K-8 and students in grade 9 continued with a fully in-class model of learning while grades 10-12 in Whitehorse used a blended learning model where students were half in-class and half online five days per week. Enhanced health measures ensuring physical distancing were implemented, including smaller classes and groups. Masks

were recommended for ages 10 and older, but not mandatory. Digital tools that could be utilised were: *Moodle*, *Microsoft 365 with Teams*, *Google Classroom*, and *FreshGrade*. A focus on literacy and numeracy as part of the core competencies continued, as well as a learning recovery model prioritising formative and benchmarking assessments for both language arts and math (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning but school closures occurred in larger cities and rural areas throughout the 2020-21 school year. The province used a low (i.e., fully in-school) to high (i.e., fully remote) scale, and between fully in-school and fully remote a flexible learning model was put in place. When moving from low to high, initially only essential groups (i.e., students with diverse needs) would attend in-school full-time, while the rest of the students would engage in a part-time rotating schedule with blended learning. Moving toward the high-end of the scale (i.e., before fully remote) only students with significant needs, such as students with disabilities and diverse learning needs attended in-school full-time while most of the students were remote learning. Digital tools were used at varying degrees dependent on grade level to support instruction and learning (Nagle et al., 2021).

Fall 2021 Reopening

Schools opened to in-person learning for the 2021-22 school year with no mandatory physical distancing requirements but mandatory masking for students on buses and outside of classrooms. Even though students were in school full-time, a technology-enabled blended learning approach was adopted. This choice of mode was put in place so that teachers could combine in-person instruction with digitally managed instruction. With a bring your own device (BYOD) policy, if students needed a digital device school administrators were asked to loan the needed technology or find alternative solutions for students without internet connectivity. If caregivers chose not to have their child attend in-person learning, they also had the opportunity to enrol their child in the Aurora Virtual School or home education. To assist with a teaching focus of a ‘trauma-informed leadership lens’ for working with students and their ‘recovery learning’, a website was offered as a source for professional learning for teachers, which included pre-recorded videos (e.g., how to use assistive technology) (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, school closures for COVID outbreaks began with affected staff and students required to self-isolate at home and a mandatory mask requirement was reinstated November 13. Schools remained open to in-person learning and the planned return to school after December holidays on January 4, 2022 was not altered as in other jurisdictions.

However, due to increasing community spread of the Omicron variant of COVID-19, new public health measures came into effect January 7, 2022 limiting personal gatherings, indoor and outdoor, a limit of 25 for recreational team sports practice with no games or travel allowed (Government of Yukon, 2022a). The Yukon government began distributing rapid tests to schools and communities January 21. February saw the gradual release of community restrictions across Canada and the government increased capacities for indoor team sports for youth age 18 or under to 25 or fifty percent, whichever is less, February 5, later (February 11) for adults. However, mandatory masking remained in place in indoor and outdoor settings where physical distancing was not possible and limits on gatherings continued. Effective March 4 only the mandatory masking requirement remained in effect which was later lifted on March 18 (Government of Yukon, 2022b).



Northwest Territories (NT)

Population: 44,826

Number of K-12 Schools: 49

Number of K-12 Students: 8,700

Number of K-12 Distance & Online Learning Programs: 1

Number of K-12 Distance & Online Learning Students: 92

Pre-Pandemic E-Learning Environment

The Northwest Territories has recently concluded a three-year pilot of their Northern Distance Learning program, which saw students from approximately a third of schools participate in these online, secondary level courses. The territory also has agreements with the Alberta Distance Learning Centre and the *Centre francophone d'éducation à distance* to provide both online learning and print-based distance learning (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in the Northwest Territories closed on March 16, 2020. The government created a *Continuity of Learning* document to support teachers through planning for remote teaching and learning that included a curated list of resources for each age and grade level. A government webpage offered information for parents and guardians to assist their children with remote teaching. Students with limited access to the internet had paper-based assignments and for homes with access to the internet, suggested technologies were *Google Classroom*, *Moodle*, *Facebook Live*, *GoToMeeting*, *Skype*, and *Zoom*. Communication also consisted of local radio stations or telephone, and radio stations were made available to provide lessons through storytelling. The attendance expectation for students to engage in remote teaching included K-3 with three hours per week, grades 4-6 with five hours per week, grades 7-9 with seven hours per week, and grades 10-12 with three hours per course per week. All achievement testing was cancelled and report cards were distributed (Nagle et al., 2020a).

Fall 2020 Reopening

There was no delay to the start of the 2020-21 school year which started with in-school learning. Increased health measures included regular classes with learning 'bubbles' for grades K-6 with no physical distancing within the bubble and physical distancing for grades 7-9 of one meter and two meters for school staff as well as grades 8-12 students. There were controlled entries and exits for student traffic flow, staggered lunches and recess, spacing of desks and furniture, no large assemblies or gatherings, and outdoor activities as much as possible. Masks were not

mandatory for in-class and masks were used when physical distancing could not be achieved. The curriculum was to be delivered as usual, and learning shifts were a possibility, where secondary students attended in the morning or afternoons on alternating days (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning but the provincial capital of Yellowknife closed schools and returned to emergency remote learning on May 3, 2021, which was lifted May 17. Both in-school, blended, and remote learning (i.e., for students needing to self-isolate) were options for the 2020-2021 school year. During blended learning, students attend in-school in the morning and then remotely in the afternoon to complete schoolwork online or with paper learning packages. Working on the land was also an option during remote learning. Assessments and reporting continued as usual regardless of the learning model and students who needed assistive technologies had access to these supports (Nagle et al., 2021).

Fall 2021 Reopening

Schools opened for in-person learning for the 2021-22 school year with masks required on school buses and no drama, music, physical education programs, high contact extra-curricular activities, or school assemblies. Only students with medical exemptions continued with remote learning. Safety measures, such as physical distancing remained in place for Kindergarten to grade 6, with cohort 'bubbles' and outdoor learning as much as possible (i.e., no indoor activities such as choir, drama, assemblies, or sports continued). Any student that needed to self-isolate or was sick with COVID-19 returned to remote learning, while healthy students who did not want to attend in-person learning had to follow the Home Schooling Regulations. All student assessments returned to normal pre-pandemic practices (LaBonte et al., 2021).

2021-22 School Year

As the new school year progressed, and community spread of the virus increased causing school closures, the Department of Education launched a COVID-19 at-home screening program, conducting random sampling of 10% of classroom students (Government of Northwest Territories, 2021). Schools remained open to in-person learning and, unlike in most provinces, school reopening in January after December holidays continued as planned. However, due to rapid community spread of the Omicron variant, on January 6 a public health advisory was issued urging schools to return to remote learning for two weeks and school closures caused many students to return to remote learning (Zingel, 2022). The Government of the Northwest Territories began to ease restrictions March 1 beginning with the release of self-isolation

requirements after travel and finally ending all restrictions April 1 (Government of Northwest Territories, 2022).



Nunavut (NV)

Population: 39,407

Number of K-12 Schools: 45

Number of K-12 Students: 10,902

Number of K-12 Distance & Online Learning Programs: 0

Number of K-12 Distance & Online Learning Students: ~15

Pre-Pandemic E-Learning Environment

The territory of Nunavut did not have any internal distance, online, and/or blended learning programs. Students that learned at a distance did so through the Alberta Distance Learning Centre or Contact North in Ontario. As such, the territory did not have any existing internal capacity to support remote teaching (Barbour et al., 2020b; 2020c).

Spring 2020 Closure

Schools in Nunavut closed on March 17, 2020. The Department of Education created their remote teaching website called *Angirrami ilnniarniq (Learning from Home)* which offered resources for teachers to print and prepare packages to be sent out to students with limited internet access. The website included downloadable books, ebooks, audiobooks, videos, learning activities, and Inuktitut language apps made available to students. The curricular focus was on literacy, numeracy, and health, and well-being. Community and family-based learning activities, such as hunting and fishing, were encouraged, particularly if these communities and families were on the land and not able to receive at-home learning packages. Teachers were asked to check in on families via telephone, text, or email on a weekly basis to offer students support. Reports were distributed, but they were based on the progress already met before school closure. All high school exams were cancelled and student progress was assessed on an individual basis for credit requirements (Nagle et al., 2020a).

Fall 2020 Reopening

As there were no cases of COVID-19 in the territory of Nunavut, schools fully re-opened as usual for grades K-12. However, added health measures were put in place, which included enhanced cleaning, physical distancing, and limited group activities. Masks were not required (Nagle et al., 2020b).

2020-21 School Year

The 2020-21 school year proceeded with in-person learning but on November 18th, 2020, Nunavut went into a two-week provincial lockdown. After schools in Iqaluit closed again in mid-March 2021 as a preventative measure to combat COVID, the government closed all schools across the province for a three-week period. The learning models varied from fully in-school, to partial in-school and remote home-based learning with student cohorts in staggered schedules of attending in-school, to fully remote. Remote learning supports during blended and fully remote learning included learning packages, ‘supplemental learning tools’ (not specified), ‘enhanced land-based’ learning, and daily check-ins with teachers and students (Nagle et al., 2021).

Fall 2021 Reopening

All students in Nunavut returned to in-person learning for the 2021-22 school year, with land-based learning and outdoor education continuing. The focus for the beginning of the year was on ‘recovery learning’ as a transition for curriculum and achievement as well as mental health and well-being. Should a return to remote learning occur, schools used *Edsby* as their online platform. Daily learning would be adjusted to age and grade level and accommodations for diverse needs of students. A blended model of learning could also be put in place where students were in-school 50% of the time and then in online cohorts. Devices would be delivered to students in need as well as learning packages and supplies to support remote learning. Finally, assessments and reporting also continued (LaBonte et al., 2021).

2021-22 School Year

Schools remained open to in-person learning until the return to school from December holidays when, due to increasing community spread of the Omicron variant of COVID-19, school reopening was delayed until January 17, 2022 with a return to remote learning. School safety plans were put in place for student return to in-person learning January 24 at either 100 percent or 50 percent capacity depending on the COVID-19 situation (e.g., schools in Iqaluit, Kinngait, Arviat, Rankin Inlet, and Cambridge Bay opened at 50 per cent capacity) (Nunavut Department of Education, 2022). Masks were required on school buses and in schools until April 11 when the government lifted all mandatory restrictions other than masking restrictions at government workplaces and health facilities.



Federal

Population: 1,008,955¹

Number of K-12 Schools: 487²

Number of K-12 Students: ~108,995²

Number of K-12 Distance & Online Learning Programs: 4

Number of K-12 Distance & Online Learning Students: ~3,000

¹ 2016 Census data

² refers to those reporting a 2020-21 nominal roll directly to ISC.

Pre-Pandemic E-Learning Environment

While there were four K-12 distance/online learning programs designated as First Nations, Métis and/or Inuit programs identified as operating during the 2018-19 school year (i.e., Keewatinook Internet High School and Wahsa Distance Education Centre [Ontario], Wapaskwa Virtual Collegiate [Manitoba], and SCcyber E-learning Community [Alberta]), in each instance the program was largely focused on the First Nation(s) that operated it. As such, these programs weren't designed to necessarily provide access to online tools or content for other brick-and-mortar schools. Additionally, as each was focused on the curriculum of the province in which it was located, these programs had limited capacity to be able to provide these resources across provincial/territorial lines (Barbour et al., 2020b; 2020c).

Remote Learning

First Nations schools do not fall under provincial jurisdiction. While many schools may have followed the mandates and guidelines in the respective provinces in which the school is located, Indigenous Services Canada supported First Nations control of First Nations Education and, as such, the First Nation communities made their own choices regarding their protocols and delivery methods.

Federal guidance for K-12 school re-opening was based on the most current scientific information as outlined in *Community-based Measures to Mitigate the Spread of Coronavirus Disease (COVID-19) in Canada*. The Federal Government also outlined considerations for reducing risk through the use of cafeterias and libraries, as well as specific school activities such as music and physical education. The use of masks for risk reduction was encouraged, specifically for children over ten years of age and particularly where physical distancing could not be achieved. Extra considerations for students with disabilities included continued access to supports and services with extra accommodations made where necessary. Supports were also outlined for Indigenous communities who were “remote” or “isolated” specifically regarding

health measures for First Nations, Inuit and Métis communities to mitigate risk (Nagle et al., 2020a; 2020b; 2021).

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