'Homeschooling' and the COVID-19 Crisis: The Insights of Parents on Curriculum and Remote Learning

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Abstract

The COVID-19 crisis forced schools to temporarily close from March 2020 to June 2020, producing unpredictable changes in instructional contexts and patterns. A new concept of 'homeschooling' emerged which required parents to support the implementation of the curriculum through remote learning. This article is based on a case study focusing on the perceptions of experiences of ten parents of Elementary school children during the school lockdown in Alberta, Canada. Parents argue that the schools' demands on them were unreasonable. These added to the stress of the quarantine and professional losses, and to the burden of working full-time, fulfilling household responsibilities, and having children rely mostly on parents to deliver an often brief, 'shallow' weekly lesson plan that lacked clear expectations and reliable assessment pieces. Parents also strongly cast doubts on the popular reliability of online education by suggesting the unsuitability of online tools to promote independent learning among young children. The study may provide valuable contributions to further inform how to better support learning from home during this ongoing pandemic.

Keywords COVID-19 · Schools · Teachers · Children · Parents · Remote learning · Online education

Introduction

The year 2020 has been challenging for education. The current world crisis caused by the spread of the coronavirus has impacted the lives of everyone and changed patterns of living. Education has been greatly affected by an unpredictable reality of changing the conceptualization of home education, or what we will refer to as 'homeschooling'.

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This case study is an account of the perceptions of experiences of ten parents of children in K-6 Elementary French programs in three different school boards: Calgary Catholic School District (CCSD), Calgary Board of Education (CBE), commonly known as public schools, and Francophone School Board, in Alberta, Canada. The article is divided into four different main themes as well as subsequent sub-themes emerging from the data: The perceptions of the experiences of parents with 'homeschooling'; the perceptions of the experiences of parents with language instruction; the perceptions of the experiences of parents with remote learning; and the perceptions of the experiences of parents on the importance of social interaction.

Literature Review

Parental support is an important factor in children's education. According to Amaral (2007) and Sedibe and Fourie (2018), parental support enhances children's learning and plays an essential role in their academic success. Some parents, who have the time, pedagogical skills, and resources, may choose to homeschool their children.

However, what happened in many homes in Canada is unprecedented and was a circumstantial 'homeschooling' choice imposed on parents caused by the fact schools were temporarily closed and learning moved from in-person to remote schooling from March 2020 to June 2020 in Alberta. A survey shows that the great majority of Canadian parents with children ranging between 4 years and 11 years old were extremely concerned about having to support their child's education and providing childcare at the same time as maintaining a working life (Statistics Canada 2020). It points to the fact that many children's daily activities were screen time related, perhaps not only due to schooling, but also a reflection of the struggle families had to manage a work-life without child support during this pandemic (Statistics Canada 2020).

Homeschooling, in the sense that parents educate their children in what they believe is important to pass on to new generations, has been around for centuries prior to the establishment of a formal educational system (Semali 1999). With indigenous peoples, for instance, elders have taught youngsters how to live well and survive in their environment through hunting, fishing, and supporting each other by playing a positive role in the daily welfare of their community (Bruchac 2014). In this 'informal' educational system, "the knowledge generated is passed on from one generation to the next in the oral mode" (George 1999, p. 80).

In Canada, formal or traditional homeschooling, defined as "an alternative method of learning that takes place outside the school environment, where parents deliver courses and programs of learning to their children" (Statistics Canada 2018), is legal in all provinces and territories. In other words, homeschooling is a choice made by some parents to educate their children at home following provincial educational regulations. Provinces have different regulations on the freedom parents have over the planning and implementation of the curriculum in the homeschooling program (Van Pelt 2015).

However, what happened in many households during the March–June school lockdown cannot be characterized as 'traditional homeschooling' as parents did

not choose to teach their children at home. This new 'homeschooling' process or model was created by the unexpected and urgent circumstances during this period. In Alberta, a lockdown was established to contain the spread of the new coronavirus that had impacted the lives of many worldwide. Schools were closed between March and June of 2020 (Alberta Education 2020a, b), and in this case, the education of children in Elementary schools relied on remote learning and parents becoming 'teachers' aids' who supported the lesson plans sent home.

The parents in this study opted to have their children in one of the French language-based programs in Alberta. French language programs are offered in different formats such as French Immersion Programs and Francophone (Alberta Education 2020b). According to Alberta Education (2020b), the Francophone program is mainly meant for French-speaking families. Differently, in French Immersion programs, parents are not required to have previous knowledge of the French language. Students are expected to be fluent in the French language after attending the K-12 French Immersion schools.

Parents play an important role in students' academic achievements, and their inputs are key to improve education (Amaral 2007; Chen and Harris 2009). Although, Sedibe and Fourie (2018) note that "the lack of avenues for parent involvement, inadequate parent empowerment, insufficient interaction amongst parents and ineffectual school communication" are challenges often perceived in school-parents partnership processes (p. 436).

Schools as a whole including students, teachers, and parents experienced a variety of challenges imposed by the rapid changes in learning and teaching patterns during the temporary closure of schools due to the coronavirus pandemic, and specific literature in education on this topic is still scarce. Teachers, in particular, struggled to have to quickly adapt their planning and teaching approaches to remote learning and partnership with parents to implement the curriculum.

John (2006) suggests that teachers, especially more experienced ones, do not always write daily detailed lesson plans and mostly rely on their extensive experience to improvise as pedagogical opportunities arise. Wiggins and McTighe (2005) as well as Borich (2007) point to the importance of effective lesson planning in learning outcomes. An effective lesson plan reflects a clear and well-thought learning design, which promotes engagement and favors differentiated learning opportunities, and is aligned with the curriculum standards as well as formative and summative learning responsive assessment pieces (Borich 2007; Cicek and Tok 2014; Wiggins and McTighe 2005). Borich (2007) and Cicek and Tok (2014) remind us that teachers are key to the implementation of educational policies and any goals seeking to improve education outcomes. They draw attention to teaching effectiveness and the relevance of the process of lesson planning as

a combination of lesson objective designing, teaching, modeling, checking for understanding, re-teaching, and teacher's self-reflection, lesson plan is a crucial element in the process of meeting national content standards and optimizing the outcome of classroom teaching and learning. (Cicek and Tok 2014, p. 11).

Alberta classrooms, as in other parts of Canada, have grown increasingly more diverse (Briscoe and Pollock 2017). Having an inclusive approach to teaching, which includes "all children regardless of ability level are included in classrooms with their age-matched peers" (Sokal and Sharma 2013, p. 59), is key to successful learning outcomes (McCrimmon 2015; Gray et al. 2017). However, ineffective teacher preparation and training to respond to the diverse needs of students have been a concern and contributed to the increased stress level of teachers, raising concerns of mental health issues among teachers (Gray et al. 2017).

The challenges imposed by the need for continuous professional growth to meet the demands of diverse learners, which certainly increased during the pandemic, are not always properly addressed by teacher preparation programs and/or professional development practices (McCrimmon 2015; Gray et al. 2017). According to McCrimmon (2015), the "majority of nascent teachers are underprepared for teaching in modern classrooms containing diverse learners without additional training or experience" (p. 235). Research suggests that "teaching efficacy is a context-specific construct" (Sokal and Sharma 2013, p. 60), which might indicate that teachers' pedagogical needs might be intrinsically connected to individualized classroom contexts. For instance, Gray et al. (2017) and Sokal and Sharma (2013) suggest that teachers, who received specific training and developed abilities to teach in inclusive environments, improved their teaching performance.

Interestingly, Oliver et al. (2012) remark that "typically when the generational gap in technology is discussed it puts students on one side of the gap and teachers on the other with a clear demarcation based on age and assumed experience" (p. 284). The use of technology for learning purposes is not a novelty to teachers in Alberta (Alberta Education 2013; CBE 2020); however, the context and needed reliance on technology for teaching purposes exercised during this pandemic was unprecedented. Alberta Education (2013) provides educators with a few recommendations on important aspects that have an impact on learning experiences when teaching in an online environment, such as providing students with clear feedback on assignments, the importance of creating a growth mindset among students, providing students "with choice within a safe learning environment that encourages measured risk-taking and innovation" (p. 20), and creating a collaborative work environment for more complex learning tasks.

The U.S. Department of Education (2017) points to the inadequate use of technology to provide learning opportunities to students outside of the school environment. It suggests that teachers might not feel they have the necessary skills to confidently pursue the use of technology for continuous learning purposes in the classroom and beyond. This factor could explain why some parents in this study noticed that teachers showed a tendency to rely heavily on pre-made materials as opposed to using technology in their lesson planning to construct authentic learning opportunities for students. Such practice may accentuate the problematic technology usage divide "between learners who are using technology in active, creative ways to support their learning and those who predominantly use technology for passive content consumption" (U.S. Department of Education 2017, p. 7).

Beyerbach et al. (2001) point to the complexity of the process of infusing technology as a tool for learning, arguing that such a process "takes time, support, and collaboration" (p. 107).

Some important aspects should be considered to improve the use of technology in classrooms, such as providing educators with practical pedagogical opportunities to gain an understanding of how technology tools could be incorporated in their teaching in an active manner, and the necessary theoretical and modeling support through professional development initiatives and/or courses focused on helping teachers to reflect on why and how the integration of technology in the classroom could and should be done (Beyerbach et al. 2001).

Oliver et al. (2012) agree that although the infusion of technology in people's daily lives has become increasingly more evident in recent years as in the case of cellphones, which are used widely not only as a mean of communication but also as a tool incorporated in daily routines such as a calendar or an alarm clock to manage time, technology has not found its niche in active and constructive instructional utilization in learning environments.

Concerns with teacher preparedness and pedagogical support reflected in the creation and implementation of lesson plans, which clearly apply technology reflectively and actively as a diverse and inclusive tool for learning, are evident (Beyerbach et al. 2001; McCrimmon 2015; Oliver et al. 2012). Another important concern would be the teachers' necessary understanding of the 'social, ethical, legal, and human' implications of the use of technology in classrooms (Oliver et al. 2012). For instance, an educational resource copyright lawsuit between publishers and provinces forced about 300 teachers to have to retroactively provide 7 years' worth of lesson plans (Stackelberg 2019). This could also have some other implications as such pre-made materials are most likely decontextualized.

Other challenges with the use of technology for educational purposes have also become evident during the coronavirus crisis. The potential excessive use of screen time by Elementary school-aged children during the lockdown was one of the most important concerns among sixty- four percent of parents surveyed by Statistics Canada (2020). The survey also shows that social interaction was a major concern as parents indicated that isolation might have a negative effect on their children's overall behavior and mental health.

The current pandemic may test the popular effectiveness attributes associated with the use of technology in education. For instance, media post claims such as "research suggests that online learning has been shown to increase retention of information, and take less time, meaning the changes coronavirus have caused might be here to stay" (Li and Lalani 2020), may influence popular views on the effectiveness of online education as we are going through this crisis.

Alberta Education (2013) supports that "technology serves as an enabler and accelerator of the type of learning that research says works best" (p. 11). However, the impact of the use of technology for educational purposes by young children, especially between the ages of 5 to 9 years old is still unclear due to the shortage of studies addressing the topic (Holloway et al. 2013).

Ultimately, some literature suggests that excessive use of screen time by young children may lead to physical and mental health issues (Martin 2011; Rosen et al.

2014). It is recommended that elementary school-aged children should not be exposed to technology for more than 2 h daily (Martin 2011). Research also suggests that parents play a key role in how much exposure to technology children have, especially young ones (Joshi and Shukla 2019; Teuwen et al. 2012). For instance, Teuwen et al. (2012) note that "preschoolers whose mother obtains a higher level of education, are more likely to have had any online experience but less likely to use the Internet frequently" (p. 17).

Methodology

As previously mentioned in Fontenelle-Tereshchuk (2020b), this case study explored the insights of ten parents of children in French language programs during the March–June 2020 school lockdown in Alberta. A case study design was chosen because it allows for an in-depth exploration of the collective and uniqueness of these parents' perceived reality of events during the school lockdown (Yin 2009). Focusing on the data to inform the findings of this study was important to address my bias as a parent, a schoolteacher, and a scholar.

The study applied mostly qualitative methods: A structured 8-question background survey meant to provide some statistical background information; a semi-structured 10-question individual questionnaire; and a focus group interview consisting of 3 open-ended questions, which prompted and guided a discussion among the parents (Creswell 2012). The focus group interview was audio-recorded via ZOOM and later transcribed.

The data was sorted and color-coded by emerging common themes in a wallmap format (Creswell 2012), facilitating the necessary recurring access to the data and the analyses. The data was collected in the beginning of the summer of 2020. The study is unfunded and received the approval from the Conjoint Faculties Research Ethics Board (CFREB) at the University of Calgary.

The participants were recruited through an online recruiting post on the University of Calgary website and networking. The study required participants to be parents or guardians of Elementary school children in one of the French language programs in Alberta. It is important to notice that parents with children in Elementary French programs in Alberta are part of a minority group. To keep the confidentiality of the participants, pseudonyms replaced the participants' real names.

Limitations

The study offers an insightful view of Elementary school parents' perspectives on the educational challenges of teaching and learning during the 2020 school lockdown in Alberta. While the experiences of these parents might resonate with many other parents in Alberta and/or around the world, the study is limited statistically due to its contextualized sample size.

Findings

The parents in this study strongly argue that remote learning does not promote independent learning and is not suitable for Elementary school-aged children. They think of technology as a tool that when/if well-utilized can be helpful to facilitate learning; however, it is not a replacement for teachers. These parents suggest that the main focus of teaching during the lockdown was the technology itself, and not the curriculum and the teaching and learning process. Teachers and schools might have mistakenly believed that if children had access to technology and knew how to mechanically use it, they would independently learn through remote learning. The perceived experiences of these parents during the schools' closure between March–June 2020 contradict this assumption.

The parents point to necessary changes in the way teachers are trained and the support they need to continue growing their skills in creating contextualized and engaging lesson plans with clear expectations and integrated assessment tailored to students' specific needs and utilizing technology in an informed and active manner. Parents also draw attention to the importance of recognizing and utilizing parental support in children's education, indicating a need for improvement of collaborative practices between parents and schools.

Parents, Themes, and Sub-themes

It is important to notice that none of the parents reported a lack of access to the technology students needed to learn from home, and in the context of this study, it is assumed that students had the technology needed available during this process. Parents might have other children at home, and the ones reported in this study were only those attending the Elementary schools in a French program, assumed to be 5 years to 11 years old.

The following summary of the parents' backgrounds is mostly based on the answers to the survey questions. It is intended to provide an understanding of the different contexts as well as a brief parental demographic overview.

School Boards			Education			Work		
CBE	CCSD	Francophone	Graduate	University	Diploma	Full-time	Unemployed	Stay-at-home
Nate, Gio, Karen, Ralph, Jessica, Macy, KMacB, DDM627	Anni	Carol	Karen, Carol, Anni, DDM627, Macy	Gio, Nate, Jessica, KMacB	Ralph	Karen, Nate, *DDM627, Jessica, Anni, KMacB	Gio, Macy	Carol, Ralph

* DDM627 - one of the parents was a full-time health-care worker.

Age Group			French Language		Parental Time 'Homeschooling' **		
30 – 40	40-50	50 +	Speakers	Non-speakers	4 -5 hours daily	2-3 hours daily	0-1 hour daily
Karen	Anni, Ralph, Nate, DDM627, Gio, KMacB, Carol	Macy, Jessica	Carol, Anni, Karen	Nate, Gio, Ralph, Jessica, Macy, KMacB, DDM627	Carol, Anni, KMacB, Macy, Jessica	Nate	Ralph, DDM627, Gio, Karen

**None of the parents was a single-parent or had considered formal homeschooling full-time prior to this crisis.

Parent/Children - Grades					
Kindergarten	Grade 1	Grade 2	Grade 4	Grade 5	Grade 6
Carol/daughter	DDM627/daughter KMacB/daughter	Anni/daughter Macy/son Ralph/daughter Karen/daughter Jessica/ daughter	Gio/son DDM627/daughter	Jessica/daughter KMacB/daughter	Nate/daughter

Online School Instructional Time			
School/teacher online instructional time interacting with students			
3 hours/daily	2 hours/daily	1 hour/weekly (average)	30 minutes/twice a month (every other week)
Carol	Anni	Gio, Ralph, Karen, Jessica, KMacB, Nate, DDM627	Macy

The following themes and sub-themes emerged mostly from the individual questionnaires and the focus-group interview.

The Perceptions of the Experiences of Parents with 'Homeschooling'

Many have referred to the phenomenon of teaching from home during the lockdown as home-based education or 'homeschooling', that is to say, a partnership between schools and parents to support children's continuing education while schools were temporarily closed.

In terms of teachers' instruction, parents strongly argue that there was an apparent assumption that Elementary school children would be able to manage the technology and work independently on the assignments and that the support required from parents would be minimal.

Parents as Partners: A Failed Communication Approach

Parents were asked to take on an important role as the main support of this 'homeschooling' process. What could have been a true partnership, where schools and parents would communicate well and be aware of each other needs and suggestions, establishing a clear and constructive channel of communication, did not happen. For many parents, this process was physically and mentally exhausting as well as a frustrating task.

The communication between teachers and parents was for the most part via email. Feedback on assignments was vague and often not helpful to guide parents on how well their children were doing and which areas they had to improve. As Macy explains that.

> Through these entire three and half months, we may be submitted five things to the teachers to view, [emphasizing with gesture showing 5 fingers] Five things! And there was not feedback that was of any meaningful, they [teachers] were like "Yeah, you did what you were asked to do" and that's it! And I was expecting a little more feedback because the feedback of me for my son is not as meaningful as the teacher's feedback. (data extract).

Nate also has some important remarks about the ineffective use of communication by Alberta Education and school boards with regards to parents. She says.

> I think there was a big [pause], a big part that was missing. The Alberta Education to parents and the school boards to parents as well with regards to time expectations because the Alberta government was not expecting the kids to be in schools from 9 [am] until 3 [pm] on-at-home environment. So, I think that the [lack of the] communication piece also [pause] [contributed to] coming to this. (data extract).

Balancing Work Responsibilities and 'Homeschooling'

The great majority of parents in this study felt overwhelmed trying to balance their professional obligations with their responsibility to support their children's emotional and academic needs, especially during a perceived financial crisis when many had lost their jobs and/or were trying to get back into the job market while others were afraid of losing their current jobs.

Jessica, a full-time working mother, suggests that the educational system could have provided better support for children, not relying on busy and untrained parents as the main teaching support source. As she explains that.

For math, they [her children/students] got some PowerPoints that they were supposed to read. So luckily their father [her children's father] is a math 'wiz'. So, he started to teach them every single day for an hour because after a few weeks, he realized that 'these kids are going to forget absolutely everything'. We both work full-time, and I have been in the office [ah] still every day, so it was all up to the dad to work on this. And I could help after I would get from home [work], which was too late, and the things were already done by that time. And so, I find it, it just not doable we can't be here instead of the educational system. (data extract).

Carol, a stay–at–home mother, suggests that she also had to step in and buy extra teaching supplies and rely on her teaching skills to support her Kindergarten child during this 'homeschooling' process. As she explains that.

She [her daughter] goes to Francophone school, so there were a lot of links sent to me and I used the materials quite a lot when I was 'homeschooling' her. So, it worked quite well. So, I bought lots of books on the market place. On KIJIJI, people who were selling French books, people that didn't need them. So, I would go to find the deals and, I just bought a lot of French books and worked from that as well. So, I used my own resources as well as the stuff online [provided by teachers]. (data extract).

DDM627, a full-time health-care worker, suggests that not all parents have the skills and the required time availability to take on the responsibility of 'homeschooling' their children.
He/she argues that.

My experience trying to motivate my kids and have them focus on schoolwork has proven to me that homeschooling would not be for our family. Also, working full time has made it challenging timewise. (data extract).

KMacB, a full-time working mother, also agrees that the 'homeschooling' model used by schools, which relied mainly on parents to implement the curriculum, was ineffective. KMacB says she is "not in favour of home-based education" as the one they had during the lockdown.
She seems to welcome in-person learning experiences for Elementary students with social distancing health rules in place.

Underestimated Parental Support Needed

The parents in this study strongly suggest that there was an over-reliance on parents to mainly implement the 'homeschooling' curriculum during the lockdown, disregarding the fact that many parents do not have the pedagogical skills and need to work to support their families.
This could be due to the fact that little is known of the use of technology for learning purposes among young children (Holloway et al. 2013).
Anni, a full-time working mother, explains that her Grade 2 daughter's teacher did a good job providing the students with pre-recorded videos to support a research

project in Social Studies. Even though that was helpful, it still did not lead to engagement and independent remote learning, and parental support was essential to complete the assignment. She argues that.

> And so, I think she [teacher] tried her best, but I don't think this is optimal in any way for young children. But no matter how, [frustrated gesture] we can discuss how to optimize and stuff like this but it just NOT, it is not an optimal system for learning. (data extract).

KMacB speaks to the struggles parents faced keeping the continuing pace of school learning without the necessary pedagogic knowledge. It is important to notice that when parents enroll their children in the French Immersion program, they are not required to be French speakers (Alberta Education 2020b).

> My youngest daughter [Grade 1] was doing very well. At the moment, we are struggling to continue with her learning and her reading skills are not progressing nearly as well as I would have expected them to in school. She simply isn't exposed to the language enough and that is a big concern for us. I believe she is losing interest in reading in French because her progress is so slow. The fact that I am trying to teach a 7-year-old to read in a language that I don't speak or understand is crazy. (data extract).

Ralph, a stay–at–home father, notes that the challenges of 'homeschooling' during the lockdown for stay–at–home parents were also evident. He explains that "I found it hard to balance homework with other household chores especially since I do not speak French" (data extract).

Macy, a currently unemployed mother, "agree[s] [that] the amount of help that grade two students need from parents is really big in this curriculum" (data extract).

Jessica, a home-office commuting full-time working mother, speaks of her hopes for Fall 2020. She says that.

> I really hope that in the Fall, we will do the best as a society to put them [children/students] back in school because this is bad! [pause] just…[pause] for the rest of us as adults it's bad to be isolated, it is bad for the kids as well. And I feel that brings a [deep breath followed by a pause] spring is going deteriorate by [students/her children] doing absolutely nothing and, I will try to give them books to read. But I am not an expert to give them [her children] all the online tools, and quite frankly, I come home tired from work and I am expecting the educational system to do it [to teach]. (data extract).

Myths About Remote Learning: "The Older Children Versus Younger Children"

There has also been an apparent assumption that older students, in the case of this study perhaps students in Grade 5–6, or 10 to 11 years old, would be more independent learning remotely and not require as much support from teachers and/or parents compared to younger children in Grades K-4, or 5 to 9 years old. The parents in this study suggest that this is not always the case, as many factors come into play

in the context of Elementary school children, such as subjects, emotional conditions, special needs, etc..

DDM627 argues that depending on the subject, her two daughters experienced different learning challenges and outcomes with remote learning. She notes that.

> Between my 2 girls, I would say they were average, above average. [pause] [They are] still in early grades so this isn't really a focus. But I would say my younger one is doing worse when it comes to speaking French…the older one, reading…. But math probably did not change. (data extract).

Jessica refers to the potentially complex individual household contexts, and how that might also have influenced remote learning. She notes that.

> I feel that there were so many different combinations of the family situations, there were no families that would not face[d] challenges. And yet, somebody would be in the office; like somebody in some families, both parents were working at home; and some [ah] both parents lost [their] jobs. So, small kids, big kids, and everybody had it difficult in [ah] different ways. (data extract).

KMacB has an older child in Grade 5 with special needs who required significant parental support for academic and emotional matters during this 'homeschooling' process. She explains that.

> Our eldest daughter (grade 5) was an average student. She has required far more parent support than we expected, and the content provided by her teacher has FAR exceeded the government's recommended 1 h/day. I definitely see a loss of confidence since moving to online learning. It also took MANY weeks for her to adapt to receiving a weeks' worth of content all at once.

Carol, a Kindergarten mother, believes remote learning is not ideal for young children as her child could not focus during the remote learning classes. She argues that, for example, learning about animals by visiting a 'virtual' zoo video did not seem to engage her daughter in learning, and that she needed hands-on experiences. Carol also explains that her child was still getting used to the school environment and routines, so the fostered learning parental support she received during this process played a positive role in improving her academic skills.

The Perceptions of the Experiences of Parents with Language Instruction

The Parents' Language Role

French is one of the two official languages in Canada. Many programs are available to foster students' interest in learning the French language and culture (Alberta Education 2020b). One of these programs is the Francophone program that is mainly intended to support minority Francophone families, but also other members of the community with a French language background.

Most parents of students in the Francophone program can speak French as in the case of Carol, who argued that her Kindergarten child improved her language

skills during the lockdown. Carol, a stay–at–home mother, used her teaching skills to teach and also her own money to purchase appropriate extra teaching materials to support her child's learning. She argues that her child was too young and shy as she had just started attending school for a few months before the school closure. Carol says.

> I speak French, so I was able to help her [her kindergarten daughter] learn the language and ah [pause] when she went to kindergarten, she didn't know anything in French and by the end of being 'homeschooled', she started reading in French and learning words and vocabulary. So, she [her daughter] was learning quite quickly at home as opposed to a classroom setting where the teacher per se 20 kid or so; when here I am just [for] her, of course my little 3-year-old [presumed other child] doesn't do any 'schooling' now, which [pause] so I was focused pretty much on her. (data extract).

All the other parents had children in the French Immersion program, where parents are not required to speak French. One of these parents was Anni, who spoke French and whose child is a second-grader in a Calgary Catholic School District school. She noticed that her child struggled and needed support to finish school assignments. Anni believes that remote learning is not ideal and supported the safe return to in-person classes as she and her partner work full-time and finding the extra-time to mainly support their children at home was overwhelmingly difficult.

Gio argues that "the main challenge was not knowing French to teach and help my 10-year- old son and finding the time to do that between all the other things I do at home" (data extract). Her words might summarise the feelings of many parents during this 'homeschooling' process.

DDM627, another parent who did not speak French, notes that "educationally, I'm sure their French language skills are suffering…[pause] it's like an extra-long summer vacation where French is minimal" (data extract).

The Lack of Language Support

Another issue identified by these parents was the lack of effective language support as most of their children are in the French Immersion program, which does not necessarily require parents to speak French (Alberta Education 2020b). KMacB, for instance, remarks that.

> With only one 'weak' French-speaking adult in the home, we struggled to both help the children with their schoolwork, as well as to expose them to French. Balancing working from home and helping our 2 elementary children with their schoolwork was very challenging. There were simply not enough hours in the day for us to parent, teach, submit their work, and do our career work. This model is unsustainable. (data extract) Nate, a full-time working mother, suggests that expecting parents, especially in non-French-speaking households, to mainly support 'homeschooling' during the lockdown was one of the biggest challenges.

She remarks that.

> I will just say that ahh [pause] that 'one' [pause] the biggest challenges is that we do not speak French ourselves at our house, so having our kids speaking French and hearing French during COVID has been a big challenge. (data extract).

The great majority of the eight parents in this same program whose children attend public schools did not speak French. Overall, they felt overwhelmed to be in the position of being the main provider of instruction in a language most of them did not speak. Teachers provided an average of an hour weekly of remote learning instruction, and asked parents to support the daily activities sent home in French, and sometimes in English in the weekly lesson plan.

For instance, Karen, a full-time working mother and one of the three parents in the study that could speak French, argues that as a full-time worker, she found it challenging to attend to the degree of parental teaching support required by the remote learning in her child's school.

She believes her child will be fine academically as she is still in the initial grades, but she agrees that the average of an hour weekly of provided remote teacher instruction was not ideal and should be reconsidered in the future. Karen remarks.

> I was personally working that time-period during the pandemic, so I was the only one who speaks French in our house, so I had to help our daughter during that time. I found that quite difficult [nervous smile] help her during the day, so becomes the time really to do it at night and, growing frustration in both her and myself. (data extract).

The Perceptions of the Experiences of Parents with Curriculum and Remote Learning

Teachers and Curriculum: Misunderstandings of Technology Purpose

Parents' perceptions of what approaches worked best are of key importance in moving forward. The parents suggest that technology alone, without strong teaching, social and emotional support, does not work well with Elementary school-aged children. That is to say, technology is a teaching tool that if well-utilized, can facilitate learning.

KMacB notes that there was an apparent overreliance on technology for teaching purposes, and also an assumption that students could independently manage and self-teach themselves through technology. She remarks.

> Neither of our children was as independent as their teachers seemed to think they should be. Likely partly stress-related, but also unrealistic expectations around what they [children] could and could not do. There simply wasn't enough instructional time with their teachers. (data extract).

Nate notes that technology itself seemed to have been the main focus during this process.

She suggests that teachers did not seem very well-prepared to technically utilize the different types of online platforms available and struggled to manage to teach using technology as a tool. Nate says.

> Another big challenge for us has been the diverse forms of presentations that the students [hum correcting] that their teachers are giving. It's been a lot of technical challenges as opposed to the language challenges, not a lot of focus on the language but more on the technical. So that would be my thoughts. (data extract).

Gio points to the need to better utilize technology as a tool for teaching and learning in a pedagogically organized manner as opposed to relying on technology to 'replace' the instructional role of teachers, which could potentially affect the differentiated need of catering teaching to the unique classroom contexts. Gio remarks.

> I do really believe the schools tried to come up with good technology solutions to help with the learning but to have a teacher supervise and be there to explain subjects it is the best way to teach and learn. (data extract).

Nate argues that assignment timing flexibility was also a factor missing in the lesson plans that impacted learning in her household. As she explains that.

> And the quiz times were very specific, and they didn't have a lot of flexibility given our family needed a lot of flexibility. So, that would have been nice if they could have used more of the flexibility and had more resources. (data extract).

Carol sees the benefits of using online resources, but she argues that even when such resources are useful, they are still limited when it comes to the value associated with personal learning interactions, especially among Kindergarteners. Carol explains that.

> The online stuff [resources] was quite useful but moving forward I would recommend using more the online tools. I think the best way they learn is hearing the language, being with their friends and their teachers, hearing it absorbing the sounds, the phrases, and being involved, having them communicate with their friends. (data extract).

DDM627 believes that one–on–one conversations are important even in the 'online' or virtual classroom. As he/she argues that.

> The more video calls, especially 1:1 conversation, the better with my kids. Forces them to listen to and speak French, in a non-intimidating environment. Neither of my kids tend to speak up in groups naturally. (data extract).

Karen agrees that children need more interaction with teachers. She says that.

> The time they [teachers] did [interact with the kids] was good because it was reading for the most part. They [teachers] had each student with groups, small

groups of four or five children, and then they would be reading from a book, and they would each take turns, but just [short pause] it wasn't enough for [in] my opinion. (data extract).

Nate suggests that schools when using remote learning should focus more "maybe it have been better to focus on math and literacy" (data extract). She also adds that her oldest daughter responded well to her teacher's efforts to interact using technology when it was used more interactively. She says that.

And [the teacher] really made an effort to make a connection with the kids and they were doing sort of things like 'her [daughter's] favorite thing'… and [ah] that they [children/students] had around the house and bring their favorite stuffy to class' and those kids' kind of things. (data extract).

Curriculum Design: Disconnected 'Chunks' as Opposed to a Wholly Integrated Learning Plan

After mental health (Fontenelle-Tereshchuk 2020b), the ineffective use of peda-gogical approaches to teaching and learning during the lockdown was one of the main issues for these parents.

The parents in this study suggest that the curriculum was mainly delivered as 'chunks' according to the available pre-made 'one-size-fits-all' online resources that not always had a clear learning purpose. The lesson planning often resem-bled 'instructional notes' style format, missing important connecting pieces, such as clear curriculum learning objectives and an associated assessment piece. Such overall lesson planning was usually sent all together at the beginning of the week.

KMacB speaks of the challenges that she faced trying to manage the large amounts of content sent all at once. She suggests that it was up to the parents to re-plan or personalize the implementation of the curriculum according to their children's differentiated needs timewise. She explains that.

Receiving the content weekly was challenging as the kids were unable to break the work down into manageable daily "chunks" and we had to spend time at the start of each week figuring out how to break the assignments down into reasonable daily accomplishments. (data extracts).

Nate argues that such disconnection and lack of effective planning could easily be felt in the online assignments. She explains that her children were receiving pre-made 'one-size-fits-all' online materials, sometimes in English but were being assessed in French for these assignments. She remarks that.

I do not think that [teachers] really utilized the D2L platform, in terms of giving students quizzes or having them to submit assignments. And I was also a little frustrated at times when the students [corrects herself] my chil-dren were receiving videos in English to learn the concepts in English, the videos were in English! [suggesting the students were assessed in French]. (data extract).

Another issue was the weekly instructional time, which in most public schools varied from 1 h weekly to 30 min every other week, leaving it up to parents to make up for the extra needed instructional support children required. Occasionally, instructional videos were made by some teachers and sent home. In these rare opportunities, parents found that it worked well and alleviated some of the pressure on them.

Jessica was critical of what she perceived as the difference among schools, and perhaps school boards' teaching and learning approach during the lockdown. She claims that some school boards were more effective than others. Jessica remarks.

> I chose the public [school] system because I think that the public system is as capable as the private and we should not settle for less. Our teachers are as equals and educated as to the teachers from the private sector and I would like them to step up and show us what they can do. Just like in the other schools, where the teachers could figure it out. I hope they [students] will go to school; I hope we don't ever have to learn this [again]. And we can silver line back and forth but it the end they [students] didn't learn what they were supposed to learn. (data extract).

Nate points to the lack of consistency and contextualization as well as differentiated learning approaches felt throughout this process, impacting students' engagement in learning. KMacB and Nate suggest that the responsibility of the ineffective learning outcomes of this lockdown process can not solely be bestowed on teachers, but a combined responsibility of levels of education bodies such as Alberta Education, school boards, and schools. KMacB explains that.

> I think the school boards have to make a much bigger commitment to providing "real", teacher-led learning opportunities for the students most of the time. Perhaps that means consistent delivery of curriculum during the pandemic. So that if we need to move back to remote learning, a centralized team can curate the content and the classroom teachers can spend more time with the students. (data extract).

The 'Disconnection' in the Use of Technology Tools for Teaching and Learning Purposes

Another important point in this study was the utilization of technology available to teach and most importantly to interact with children. The parents claim that teachers' planning was often 'shallow' and missed the potential offered by technology to provide more interactive learning opportunities for students. For example, KMacB argues that "the instructions were in the Google Classroom for the kid/parents to read and that just does not align with the learning styles of children" (data extract).

The technology tools used during the pandemic were not a novelty for many teachers as many of these tools may have been available to teachers and students to support learning prior to this pandemic, but not every teacher chooses or knows how to utilize them for teaching purposes. As Jessica explains.

> I guess for us, for three weeks there was no online learning. First week was like "oh, we have to figure it out what to do". Next [second] week was like "oh, we have spring break, so [parents] do not contact us [teachers]". Third week, we're asked a few times to figure it out what to do. And I find it unacceptable. (data extract).

There seems to have been an assumption on the part of teachers and/or schools that children, especially in this case young children, could learn through technology without much support from teachers or parents. Parents in this study wondered if any potential similar homeschooling situation could be improved by investigating how much teachers understand and are trained to utilize technology in their lesson planning without mainly relying on pre-made 'one-size-fits-all' online lessons, assignments, and assessment pieces available. KMacB argues that

> in the early days, she [her daughter] really struggled with seeing a weekly math assignment that consisted of 20 pages in the Google Classroom + assignments in Netmath… it was overwhelming. She has ADHD, so that also contributed to her challenges and we had to work closely with her to chunk the work down into manageable amounts, but this is an ongoing challenge. (data extract).

The parents suggest that schools/teachers underestimated the need for parental support in managing technology during the 'homeschooling' process. There was a misunderstanding of students' abilities to independently manage the weekly plan and self-teach themselves through technology. As DDM627 notes, the difficulties her Grade 1 daughter had in working on her own, even if the plan "was clear enough" to follow "[but] getting her to sit down and focus on it has been VERY challenging" (data extract).

The Inadequacy of Supporting Resources

The parents in this study also argue that perhaps associated with the noticeable scattered lesson plans, there was an overreliance on available pre-made online teaching resources that not always adequately addressed the differentiated needs of students and/or the specific curriculum focuses.

Nate suggests that perhaps teachers did not have adequate materials available, especially in French. She notes that.

> It seems that there was a lack of resources for those teachers to be using to present to the children, to the students. So, I found that a kind of frustrating cause they would have videos in English and then the quizzes in French. Macy also agrees with Nate's remarks and adds that.
>
> I was thinking that in French immersion this is not really acceptable [emotional sarcastic laugh] because they were doing pretty much the learning in English in our house. So that was a big challenge, and I agree with [that] the amount of help that grade two students need from parents is really big in this curriculum. (data extract).

Jessica adds that lack of access and/or the mechanical skills to manage technology were not a problem in her household. The challenge lays in how technology was apparently misunderstood and not utilized as much as it could have been by teachers/schools to convey contextualized learning. As Jessica explains.

> there was no technical issue for us as we ah [pause] my husband is an IT specialist, so (ah) he set up everybody with everything and we were helping each other because we have two kids and the grade five is easier than the grade two. However, we do not speak French, so that the one hour per week interaction in French is completely inadequate. (data extract).

The Perceptions of the Experiences of Parents on the Importance of Social Interaction

Mental Health

Another concern the parents in this study had was the mental health of their children and the possible ramifications of the lockdown. This was discussed extensively in the Fontenelle-Tereshchuk (2020b) article "Mental health and the COVID-19 crisis: The hopes and concerns for children as schools re-open" based on this same study.

Overall, Fontenelle-Tereshchuk (2020b), the American Academy of Pediatrics (2020), and Sick Kids Foundation (2020) highlight the possible impact of the lack of social interaction among children during the lockdown on children's mental and physical health. Fontenelle-Tereshchuk (2020b) suggests that it is fundamentally important to address potential mental health challenges among Elementary school children when they return to school to help them to develop mechanisms to cope with the drastic rapid changes that affected lives during schools' lockdown.

Discussions and Recommendations

The circumstances of this crisis were unprecedented in recent times. Education is striving to respond quickly and adequately to the sudden changes in patterns of teaching and learning, and parental support is a topic center-stage in this process. Research suggests that parental support is an important factor in students' academic success (Amaral 2007; Chen and Harris 2009; Sedibe and Fourie 2018). However, parents who enroll their children in in-person programs in schools are usually not expected to be the main educational support provider.

In terms of the context of this study, even though parents could afford to provide their children with the technology they needed to support remote learning, there were other challenges. The pandemic affected the economy worldwide and many parents, particularly the parents in this study, had to deal with the uncertainty of the labor market that may have caused some of them to lose their jobs. Nine out of ten parents in this study had a minimum of a University degree and did not report the ability to manage technology or the accessibility to computers being an issue during

this remote learning process. However, the majority of these parents were working full-time, while some were currently unemployed and/or perhaps concerned about how to get back into the uncertain job market.

The reality was that many parents felt that the main responsibility for their children's continuing learning from home during this period was on their shoulders. Parents were 'forced' to juggle their own personal and professional struggles and needs with the needs of their children for continuity of receiving an education during this stressful crisis. The perceived experiences of these parents might point to gaps in research and teachers' training on how young children learn through technology (Holloway et al. 2013), especially regarding independent learning. That is to say, the fact that many children can easily use the functions of electronic devices, and perhaps play video games and use social media for entertainment purposes, does not necessarily mean that they can use these devices independently for academic purposes.

One of the problems associated with remote learning during the lockdown was that the role of parents was not clearly defined and, the communication between schools and parents was deficient. Parents were 'forced' to take on a new and challenging role as 'co' teachers (World Bank Group 2020). Apparently, parental support was meant to be complementary to the online instruction and interactions between the schoolteachers and the students, but such parental-required support time was inconsistent as instructional remote learning offered to students was often ineffective and varied depending on schools, teachers, and/or school boards.

Parents also suggest that the 'formal' weekly home lesson plan was easy to follow, but vague and lacked an integrated and effective assessment piece. The parents in this study point to an apparent disconnection in the different parts that compose a 'whole' unit and lesson plans. They suggest that little attention was given to curriculum design as a harmonious and purposely catered teaching and learning plan suggested by research, which includes interconnected learning objectives, activities, and assessment aligned with the Alberta Program of Study (Alberta Education 2020c; Borich 2007; Cicek and Tok 2014; Wiggins and McTighe 2005). Such curriculum design should respond to the students' context and differentiated learning needs, which should be clearly reflected in the lesson plan, allowing teachers to make necessary adjustments in the course of implementation guided by integrated ongoing and purposely designed assessment (Borich 2007; Cicek and Tok 2014; Wiggins and McTighe 2005).

The issues related to curriculum design and implementation discussed in this study bring attention to two common problems in teacher education (Fontenelle-Tereshchuk 2019): (1) The often-suggested disconnection between theory and practice, or generally speaking, the disconnection between teacher education and the classroom reality of teachers. I agree with McDonough (2012) that "teacher educators require a theoretically and practically helpful model for situating their work" (p. 8); (2) Professional development initiatives that do not always succeed in addressing teachers' specific reflective and skillset needs to support students' learning (Broad and Evans 2006; Fontenelle-Tereshchuk 2019; Villegas-Reimers 2003).

The remote learning process due to this pandemic might have exacerbated the problem and have made the challenges of teachers teaching without the appropriate

training and/or support to respond to the wide range of students' needs more evident to parents. This phenomenon could be described as 'bursting the bubble' to rethink how we are supporting the professional growth of teachers. In the current educational scenario, a review of the effectiveness of curriculum design practices among classroom teachers should be addressed by professional development initiatives, teacher preparation programs, and further studies.

Another interesting challenge the parents highlighted about remote learning was that schools/teachers may have underestimated the support students needed to use technology for educational purposes. Parents remarked that most teachers did not fully utilize the technology available to provide enough and/or proper quality instructional time with students and that learning resources were scarce and often disengaging during this remote learning process.Although there is no intention of making a comparative examination of the remote learning effectiveness among the three school boards represented in this case study, there are some important observations to be made. The eight parents, whose children attend public schools, seemed to be very frustrated with the time dedicated to remote learning interactions between teachers and students as well as the utilization of this time to establish effective learning opportunities. For instance, Macy argues that her son had as low as 30 min of teacher-student interactional instruction every other week, and such interactions were student-group based which would provide her child with five to ten minutes of remote learning interaction with his teacher every two weeks. The other seven parents in the public system argue that their children had an average of an hour of student-group based teacher-student interaction instruction a week, which they felt was not enough to support learning remotely and may have had an impact on the mental health of children and parents due to the increase in the level of stress. Even though these parents also noticed a slight difference among teachers' approaches and effectiveness, they felt that some teachers put more effort into interacting with students and providing extra materials, but that such materials were often not catered to address the students' specific learning needs and the time interacting with students was not nearly enough.

In contrast, Anni, a parent in the Calgary Catholic School District, argued that her child was offered two hours daily of teacher–student interaction, and sometimes the teacher would record videos explaining the content and send them to students. It is important to notice that even though this parent seemed to suggest that her child's teacher did her best teaching remotely, she adds that her child still required significant parental support in addition to the support offered by the school.

Carol, a parent in a Francophone school argues that her Kindergarten daughter had 3 h of remote learning daily which was good, but not always very engaging. She felt that her child did well and improved academically. However, such learning improvement could be circumstantial as the parent also indicates that in addition to the three hours of daily teacher and student instruction interaction provided by the school, this parent had teaching experience, spoke French, and spent money on extra-resources and extra instructional time working with her Kindergarten child.

The possible differences in school remote learning practices might indicate that Alberta Education, school boards, and schools failed to provide adequate support to teachers and parents with clear and consistent guidelines for the implementation of

remote learning throughout the province. A review of the overall COVID-19 educational response plan to improve pedagogically, organizational, and implementational support to the school community should have a positive impact on future learning outcomes.

Overall, parents strongly agree that remote learning is not as effective as in-class learning for Elementary school children. After all, for the majority of parents, who worked full-time or were looking for employment as well as busy stay–at–home parents attending to household chores, some of them with children in different grades, it was difficult to provide the students with the extra parental support needed to use technology for educational purposes.

This study seems to also cast doubt on the popular excitement over the efficiency of online education on students' autonomy and academic learning outcomes, especially commonly seen in social media posts. For instance, this post titled "The COVID-19 pandemic has changed education forever: This is how" might suggest online learning to be 'the solution' for the lockdown woes in education (Li and Lalani 2020). This study, however, points to the uncertainty of technology effectiveness use in online learning education, especially among young children (Holloway et al. 2013). The study indicates that technology can be utilized for teaching and learning purposes, but teachers are still essential to instrument learning in online environments, especially in Elementary school contexts. Such findings may contribute to expanding the narrative of remote learning and the effectiveness of online tools discourses beyond the assumption that 'children might not learn because they do not have access to the technology needed, or perhaps the 'mechanical training'.

In this study specifically, children had access to the required technology to learn in a remote learning format, yet parents still strongly suggested that remote learning is not ideal for young children. These parents suggest two main reasons why remote learning is not ideal for young children: Firstly, even in the best-case scenario when students have and can mechanically use the technology, they still need in-person support to stay focused and to answer 'the often many' questions about the content. And secondly, these young students strongly need hands-on experiences and interaction with their peers. The study also seems to indicate that older children in Grades 5–6 might be more susceptible to anxiety, most likely due to possible changes and the overall uncertainty of the near future, and social isolation.

Obviously, what is happening due to this global crisis could never be anticipated by previous research, but some questions could help us to reflect on the impact of this pandemic in education. Questions, such as 'Are we being overly confident and reliant on the premises of the self-learning effectiveness of the use of technology for learning purposes?', 'Indeed, is perhaps more research needed to further understand how Elementary school children respond to remote learning and how effective it actually is?', and 'How can we rethink teacher education and reflect on what professional growth means to teachers?'.

This study recommends that independently of the different approaches to teaching and curriculum choices, the ability to design a lesson plan that is effective in attending to the differentiated needs of students is of key importance. A meaningful approach to curriculum design in its interconnected wholesomeness is essential to support the needs of teachers for professional growth in in-person and/or online

teaching environments. Another recommendation is to think of schools as a community of human-diverse learners (Fontenelle-Tereshchuk 2020a), improving the supportive learning relationships developed between school and community, especially parents. More attention has to be given to the importance of developing constructive relationships with parents to continue to support learning from home. These inclusive relationships are key to building a bridge between homes and schools. The last recommendation would come from research efforts to support education in finding a balance between including technology as a vehicle to communicate learning, well-utilized to support learning and understanding that technology does not replace the key instructional role of well-prepared teachers.

In conclusion, I would agree with Earl (2013) as she argues that "schools reflect the changes that are occurring more broadly in the society, and there seems to be no end to changes (economic, cultural and political) that schools are expected to keep up with and even lead" (p. 2). Recent changes due to this health, economic and social crisis ignited by the coronavirus pandemic in schools have been dramatic, and it might take time, research, and practical implementation to support the necessary adjustments to address the current complex educational challenges. Parents' insights on remote learning might be key to reflect on the overall aspects that need to be improved in terms of teacher instructional growth support, school–parent relationships, and leadership policies to support learning whether in-person and/or online environments moving forward.

Compliance with Ethical Standards

References

Alberta Education. (2013). *Learning and technology policy framework 2013*. Edmonton, AB, Canada: Alberta. Retrieved from https://education.alberta.ca/media/1046/learning-and-technology-policy-framework-web.pdf

Alberta Education (2020). Retrieved from https://www.alberta.ca/k-to-12-school-re-entry-2020-21-school-year.aspx

Alberta Education (2020b). French Language Education in Alberta. Retrieved from https://www.alberta.ca/french-language-education-in-alberta.aspx#toc-0

Alberta Education (2020c). Retrieved from https://www.alberta.ca/k-12-curriculum-programs-of-study.aspx

Amaral, D. M. (2007). Parents' perspectives: The role of parents in the education of children. Retrieved open.library.ubc.ca/ubc_2007-317280

American Academy of Pediatrics (2020). Retrieved from https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-   considerations-return-to-in-person-education-in-schools/#.XwyRyIKm27M.email

Beyerbach, B., Walsh, C., & Vannatta, R. (2001). From teaching technology to using technology to enhance student learning: Preservice teachers' changing perceptions of technology infusion. *Journal of Technology and Teacher Education, 9*(1), 105–127.

Borich, G. D. (2007). *Effective teaching methods: Research-based practice* (6th ed.). Merrill Prentice-Hall, OH: Pearson.

Briscoe, P., & Pollock, K. (2017). Principals' understandings of student difference and/or student diversity. *Canadian Association of Principals – CAP Journal*, spring 2017. Retrieved from http://marketzone.ca/ebooks/CAP/2017/CAP-T0217_EMAG/html5forpc.html?page=0

Broad, K., & Evans, M. (2006). A review of literature on professional development content and delivery modes for experienced teachers. Ontario Ministry of Education. Toronto, Canada: University of Toronto. Retrieved from http://www.oise.utoronto.ca/ite/UserFiles/File/AReviewofLiteratureonPD.pdf

Bruchac, M. M. (2014). Indigenous knowledge and traditional knowledge. In C. Smith (Ed.), *Encyclopedia of Global Archaeology* (pp. 3814–3824). New York, NY: Springer Science and Business Media.

Calgary Board of Education - CBE (2020). Technology for Learning. Retrieved from https://cbe.ab.ca/programs/technology-for-learning/Pages/default.aspx

Chen, H., & Harris, P. (2009). Becoming school literate parents: An ESL perspective. *Australian Journal of Language and Literacy, 32*(2), 118–135.

Cicek, V., & Tok, H. (2014). Effective use of lesson plans to enhance education in U.S. and Turkish Kindergarten thru 12th Grade Public School System: A Comparative study. *International Journal of Teaching and Education, Vol. II, 2,* 10–20.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson.

Earl, L. M. (2013). *The promise and challenge of classroom assessment. In Assessment as learning: Using classroom assessment to maximize student learning*. Thousand Oaks, CA: Corwin Publisher.

Fontenelle-Tereshchuk, D. (2019). Exploring teachers' insights into their professional growth and other experiences in diverse classrooms in Alberta. *Doctoral thesis*. University of Alberta, Edmonton, AB, Canada. https://doi.org/https://doi.org/10.7939/r3-j3kb-0y82

Fontenelle-Tereshchuk, D. (2020). Diversity in the classrooms: A human approach to schools. *Interchange, 51,* 429–439. https://doi.org/10.1007/s10780-020-09402-4.

Fontenelle-Tereshchuk, D. (2020). Mental health and the COVID-19 crisis: The hopes and concerns for children as schools re-open. *Interchange*. https://doi.org/10.1007/s10780-020-09413-1.

George, M. J. (1999). Indigenous knowledge as a component of the school curriculum. In Semali, L. M., & Semali, L. M. *What is indigenous knowledge?: Voices from the academy*. Retrieved from https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca

Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education, and student learning: A review. *Canadian Psychological Association, 58*(3), 203–210.

Holloway, D., Green, L., & Livingstone, S. (2013). Zero to eight: Young children and their Internet use. London, England: EU Kids Online. Retrieved from http://eprints.lse.ac.uk/52630

John, D. P. (2006). Lesson planning and the student-teacher: Re-thinking the dominant model. *Journal of Curriculum Studies, 38*(4), 483–498. https://doi.org/10.1080/00220270500363620.

Joshi, P., Shukla, S. (2019). Children's development in the digital age. In: Child development and education in the twenty-first century. Springer Nature Singapore. https://doi.org/https://doi.org/10.1007/978-981-13-9258-0_8

Li, C. & Lalani, F. (2020). World Economic Forum. Retrieved from https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Martin, K. (2011). *Electronic overload: The impact of excessive screen use on child and adolescent health and wellbeing*. Perth, WA: Department of Sport and Recreation.

McCrimmon, A. W. (2015). Inclusive education in Canada: Issues in teacher preparation. *Intervention in School and Clinic, 50,* 234–237. https://doi.org/10.1177/1053451214546402.

McDonough, G. (2012). Teaching practitioners about theory and practice: A proposal to recover aristotle in teacher education. *Journal of Thought, 47*(4), 7–22. https://doi.org/10.2307/jthought.47.4.7.

Oliver, A., Justina, O. O., & Walker, M. T. (2012). Using instructional technologies to enhance teaching and learning for the 21st century PreK-12 students: The case of a professional education programs unit. *International Journal of Instructional Media, 39*(4), 283–295.

Rosen, L. D., Lim, A. F., Felt, J., Carrier, L. M., Cheever, N. A., Lara-Ruiz, J. M., et al. (2014). Media and technology use predicts ill-being among children, preteens and teenagers independent of the negative health impacts of exercise and eating habits. *Computers in Human Behavior, 35,* 364–375. https://doi.org/10.1016/j.chb.2014.01.036.

Sedibe, M., & Fourie, J. (2018). Exploring Opportunities and challenges in parent-school partnerships in special needs schools in the Gauteng Province, South Africa. *Interchange, 49,* 433–444. https://doi.org/10.1007/s10780-018-9334-5.

Semali, L. M. (1999). Community as classroom: (Re)valuing indigenous literacy. In Semali, L. M., & Semali, L. M. What is indigenous knowledge?: Voices from the academy. Retrieved from https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca

Sick Kids Foundation (2020). COVID-19: Recommendations for school reopening. Retrieved from http://www.sickkids.ca/PDFs/About-SickKids/81497-COVID19-Recommendations-for-School-Reopening-SickKids-JUNE.pdf

Sokal, L., & Sharma, U. (2013). Canadian in-service teachers' concerns, efficacy, and attitudes about inclusive teaching. *Exceptionality Education International, 23 (1)*, 59–71. Retrieved from https://ojs.lib.uwo.ca/index.php/eei/article/view/7704/6320

Stackelberg, V. M. (2019). A logistical nightmare': Teachers at 300 Canadian schools ordered to provide 7 years of lesson plans. Retrieved from https://www.cbc.ca/news/canada/manitoba/school-lesson-plans-1.5393384

Statistics Canada (2018). Elementary–secondary education survey for Canada, the provinces and territories, 2016/2017. Retrieved from https://www150.statcan.gc.ca/n1/daily-quotidien/181102/dq181102c-eng.htm

Statistics Canada (2020). The impact of the COVID-19 pandemic on Canadian families and children. Retrieved from https://www150.statcan.gc.ca/n1/en/pub/11-627-m/11-627-m2020043-eng.pdf?st=P7OcpY3s

Teuwen, J., De Groff, D., & Zaman, B. (2012). Flemish Preschoolers Online: A mixed-method approach to explore online use, preferences and the role of parents and siblings. Paper presented at the Etmaal van de Communicatiewetenschap, Leuven, Belgium. Retrieved from:https://lirias.kuleuven.be/bitstream/123456789/350708/1/Flemish+Preschoolers+Online_English+version.pdf

U.S. Department of Education (2017). Office of educational technology, reimagining the role of technology in education: 2017 national education technology plan update, Washington, DC. Retrieved from http://tech.ed.gov

Van Pelt, D. N. (2015). Home schooling in Canada: The current picture (2015 Ed.). Fraser Institute. Retrieved from https://www.fraserinstitute.org/sites/default/files/home-schooling-in-canada-2015-rev2.pdf

Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. International Institute for Educational Planning Publisher: UNESCO.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Wiggins, M., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

World Bank Group (2020). EdTech Knowledge pack on remote learning response to COVID-19. Retrieved from http://pubdocs.worldbank.org/en/925611587160522864/KnoweldgePack-COVID19-RemoteLearning-LowResource-EdTech.pdf