

If you Choose Not to Decide: A Survey of Online Field Experiences for Canadian Teacher Preparation Programs¹

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Abstract: Despite the rapid growth in online and distance learning in Canada, there does not appear to be much interest on the part of teacher education programs to evolve to meet the needs of future generations of teacher candidates. While understanding the notion that systemic change in tertiary education takes time, the steady growth of online and blended learning in Canada - and globally - combined with raised awareness of distance learning stoked by the COVID-19 pandemic, should give pause to all educators and policymakers. This paper highlights the status of distance and online field experiences provided by Canadian teacher education programs. In addition, we review program offerings to support in-service teachers, such as graduate certificate, degree, and diploma programs, as well as MOOCs offering free professional development. This study, a replication of a mixed-method study originally conducted in the U.S., found that a minority of teacher education programs had online or blended field experiences. Further, we found that programs were slow to change these deficiencies due to institutional lack of resources, a limited knowledge base, perceived lack of usefulness for

¹ An earlier manuscript reporting this study was published as a technical report by Archibald et al. (2020). This article is original, with some exceptions in the “Results” section.

their teachers' future careers, and regulatory discouraging of online field experiences.

This study highlights the dramatic need for programming in this area of distance and online education.

Introduction

Distance, online, and blended learning have become an integral part of the educational options at many institutions of higher education and in many K-12 schools. Large-scale surveys in the United States have shown the consistent growth of online education (Allen & Seaman, 2013). The Babson survey reports that for the fourteenth year in a row, online distance enrolments have increased in the US, increasing 5.6% from 2015 to 2016 (Seaman et al., 2018). Recently, the number of K-12 students engaged in distance, online, and blended learning in Canada has also increased significantly. In the past decade, Canadian students enrolled in distance and online programs grew from under 140,000 students in the 2008-2009 school year to over 310,000 students in the 2019-2020 school year (Barbour et al., 2020).² The estimated gains in enrolment have been even more dramatic for blended courses.

However, then the educational world was turned on its head with the COVID-19 pandemic. Within weeks, schools had to pivot from traditional methods to a mix of online and correspondence methods referred to as “emergency remote learning” (Barbour et al., 2020). Arguably every teacher and student across the country unfamiliar with online and blended learning experienced a trial by fire at the end of the 2019-2020 academic year, which continued for many during the 2020-2021 school year. Despite decades of growth, the pandemic exposed how unprepared and unfamiliar the majority of the K-12 ecosystem was when it came to online learning. While the initial switch to remote teaching was a patchwork endeavor, where student learning was understandably affected, effective online teaching the following year could not be achieved with a few summer workshops.

² While there are more recent estimates of the level of K-12 distance and online learning activity, we chose to compare the growth against the 2019-20 school year, as that was the last full school year not impacted by emergency remote learning and remote learning (Hodges et al., 2020).

As we emerge from the pandemic, there is a desire to return to pre-pandemic ways and means and, for many, online learning is not something they will miss. However, the trajectory of online growth will resume, and so will the need for teachers who are better equipped to teach in this medium. Hodges et al. (2022) described a vision and multi-step plan for meeting this need. The authors recommended embedding online experiences for pre-service teachers including taking online courses and participating in field experiences. In addition, they advocated for the adoption of research-based online teaching standards and metrics for measuring growth with these standards. Their vision culminated with the addition of online learning experiences as a requirement for accreditation of a teacher preparation program.

In the United States, finding online field experiences is rare. Kennedy and Archambault (2012a) found only 1.3% of U.S. teacher education programs were preparing pre-service teachers for online learning by providing field experiences in virtual schools, and a follow-up study five years later found that figure had increased to 4.1% of the responding teacher education programs (Archambault et al., 2016). The purpose of this research was to identify and describe the status of Canadian teacher education (i.e., pre-service and in-service) and their associated field experiences in K-12 distance, online, and blended learning prior to the pandemic. Using a mixed-methodology approach, we collected survey data that describes the state of field experiences based on responses from deans and directors of education faculties across Canada. The research we have undertaken will add a Canadian perspective to this American-focused literature to date (e.g., Archambault, 2011; Ferdig & Kennedy, 2014; Kennedy & Archambault, 2012a), by describing teacher preparation for K-12 online and blended learning environments and providing a much needed snapshot of the Canadian context.

Literature Review

Teaching in online and blended environments are, on one hand, similar to traditional in-person teaching. On the other hand, it seems intuitive that one would require a set of specific skills for teaching students when you rarely see them in person, if ever. These differences became apparent in March 2020 when schools suddenly switched to online learning, and that shift was clearly not a fluid one (i.e., if online teaching required the exact same skills, the transition would not have wreaked havoc on our K-12 system).

The problem we have faced is identifying those specific skills. For example, online teachers need to master asynchronous communication skills without ever interacting with their students face to face (Friend & Johnston, 2005). They need to combat the feelings of isolation students have when they work through a course alone and establish an online environment where students feel comfortable asking them questions (Barbour et al., 2013). Online teachers also need to foster a culture of productive and meaningful online interactions between students on discussion boards and group assignments, and ensure students stay on task. These are foreign situations to freshly minted teachers, and the keys to navigating them successfully are not always evident. Polly et al. (2023) surveyed pre-service and in-service teachers on their perceived competencies with digital tools and perceived usefulness of said tools and found that both groups consistently listed learning management systems and collaborative tools - perhaps the most ubiquitous tools in online teaching - as the most important tools. In addition, the authors found that pre-service teachers rated their competencies higher than their in-service counterparts. The authors posited that because of their lack of experience in classrooms may have led to overly optimistic views of their capabilities. However, Moore-Adams et al. (2016), in their literature review of K-12 teacher preparation for online teaching, found a deficit of empirical research on the topic. The authors identified competencies based on the TPACK framework (Koehler &

Mishra, 2009), but prefaced their findings with caution since the research reviewed was so varied. Finally, while research in online learning has grown, in their systematic review of online research this century, Martin et al. (2023) found that only about eight percent of journal articles focused on teacher preparation and professional development.

Despite being dated with respect to the advancements in platforms, services, and bandwidth, early empirical work in teacher preparation for online learning provided a blueprint for future studies. Researchers at Iowa State University first developed a set of ten case studies highlighting exemplary course development as a part of a project entitled Good Practice to Inform Iowa Learning Online (Davis & Roblyer, 2005). Included in these studies were course materials, assessments, and descriptions of tools used. The followup to this project, *Teacher Education Goes Into Virtual Schooling*, was positioned to introduce pre-service educators to virtual schooling and the idea of the three different adult roles in online teaching (some of which could be served by the same person): the online teacher, the online course designer, and the in-person facilitator who acts as a liaison between the student and teacher (Davis et al., 2007). With respect to actual field experiences, there are examples for both pre-service and in-service teachers. The University of Central Florida paired with their state virtual school to provide teacher candidates with the opportunity to have a field experience in a virtual setting. Further, both Arizona State University and Wayne State University - as well as others - created graduate certificates that included virtual field experiences (see Kennedy & Archambault, 2012b; 2013 for more information). This seminal work paved the way for improvements in teacher preparation.

Once these distinct skills are identified, the next logical step is to figure out how to incorporate them into teacher preparation programs. Hodges et al. (2022) listed six events that should occur to better prepare teachers for teaching online. First, a set of research-based online

teaching standards needs to be universally adopted. While several collections of online teaching standards exist, they lack the backing of empirical research (Adelstein & Barbour, 2016).

Second, validated instruments are needed to ensure that the standards are being met (Barbour, 2020). Third, students need to have more experiences as online students in order to better understand and empathize with their future students (Zucker & Kozma, 2003). While there is a generation of students who experienced remote teaching during the pandemic, a specific experience should be codified in teacher preparation programs. Fourth, teacher candidates should have specific training in teaching online, much like the advent of standalone technology courses as technology became more ubiquitous in classrooms (Irvine et al., 2003). Fifth, teacher candidates need to have online field experiences (Davis & Rose, 2007). Finally, accrediting bodies need to include online learning preparation in their standards (Gedak et al., 2023; U.S. Department of Education, 2017). To be clear, the authors noted the significant barriers to implementing these steps, most notably the already lengthy teacher preparation process.

Canada's efforts to prepare pre-service teachers for teaching online mirror those in the United States. Many teacher education programs embed content on online learning in their standalone educational technology course (Barbour, 2012; Barbour et al., 2013). They also struggled with the same barriers that Hodges et al. (2022) mentioned, namely the absence of empirically-based strategies (Barbour et al., 2013), and direction from the provincial and territorial governments in the form of standards and mandates (Barbour & LaBonte, 2017; Gedak et al., 2023). Several exemplars of online teaching preparation include Queen's University, which changed its standalone information and communications technology course to focus heavily on online teaching pedagogy (Barbour et al., 2013), and Memorial University, which housed the Centre for Telelearning and Distance Education from 1999 to 2004 that was home to an

undergraduate program that focused on rural education through distance learning (Barbour, 2012), and later the Killick Centre for E-Learning Research to study K-12 online learning across Canada (Faculty of Education at Memorial University of Newfoundland, 2011). Moreover, these programs addressed a preparation need for pre-service teachers, who may or may not have an interest in learning about online pedagogy on top of their other preparation requirements. However, they did not address the need to prepare in-service teachers.

In much the same way that the United States has attempted to address training in online teaching (Kennedy & Archambault, 2013), there are several instances of professional development opportunities for in-service teachers through graduate degree and certificate programs. Graduate certificates in online teaching were offered at Thompson Rivers University and Royal Roads University (Harrison, 2012), or in the case of Ontario training associated with the Additional Qualification for Teaching and Learning through eLearning (Smith, 2012). Athabasca University offered a broad suite of options, including graduate certificates as well as master's and doctoral programs (Barbour, 2012). Further, Athabasca had taken content from their graduate programs and created modular teacher professional development opportunities and massively open online courses (MOOCs) (Blomgren, 2017; 2018; Cleveland-Innes et al., 2017, 2018, 2019, 2020; Mishra et al., 2017; Ostashewski et al. 2019). Thus, opportunities existed for all current and prospective teachers to gain knowledge regarding online teaching, albeit on a small scale overall.

Last, there is a growing body of literature on teacher preparation and in-service professional development during the COVID-19 pandemic focused on policy changes and reimagining teacher preparation moving forward. Van Nuland et al. (2020) described the challenges teacher education faced when schools moved to remote teaching, namely, how to

account for lost field experience time and lack of face-to-face interaction, in addition to having pre-service teachers adjust to online learning themselves (i.e., as their traditional coursework moved online as well). Additionally, Johnson (2023) reported that many higher education faculty were themselves challenged with effective online instruction, which further exacerbated the problem. Hill et al. (2020) took this one step further, acknowledging the need to overhaul teacher education to address needs of students that were highlighted during the pandemic, such as mental health, anti-racism, and equity issues. Farhardi and Winton (2021) conducted focus groups with educational personnel in Alberta and concluded that the pandemic served as a tipping point for many issues with education in general, such as funding, class sizes, and teacher compensation. With respect to teaching online, even those with advanced coursework in educational technology lacked the efficacy under the duress of the aforementioned issues to teach remotely.

Finally, Woo et al. (2023), in their systematic review of online teacher preparation research, highlighted the evolution of the field experience during this century, especially during the pandemic. The authors stated that while the pandemic created more challenges for the field experience, it also created more opportunities. The pandemic exposed more issues of isolation for both teachers and students, which signaled a need for teacher preparation programs to teach students about building relationships. While teacher candidates generally expressed unhappiness over the restrictions during the pandemic, they came to appreciate the opportunities it presented to discover new technologies and techniques for instruction they would likely have never encountered had the pandemic not occurred. The authors suggested that with the uptick in research on teacher preparation during the pandemic, institutions should now apply those insights when making changes to the preparation process. Examples included preparing candidates for short-term adaptations (i.e., in the face of another pandemic or climate disasters),

shorter field experiences in different situations rather than an online experience on top of a traditional field experience, and more integration of the technology and instructional design into the field experience rather than the traditional standalone technology course. These findings were echoed in the Canadian context by Gedak et al. (2023), who explored how the regulation around teacher education in Canada prevented teacher preparation programs from implementing the kinds of experiences that Woo and her colleagues (2023) are recommending. As Al-Ansi (2022) has suggested that many of these distance/online tools and strategies will continue to be used by teachers post-pandemic, addressing the issue of preparing teachers to teach online will hopefully be part of a larger overhaul of the teacher preparation and professional learning processes.

To summarize, while research into online teaching and learning has grown, teacher preparation continues to lag behind in preparing future and current educators for this medium. The pandemic made this deficit very apparent, and it gives us the opportunity to look at how teacher educators and policymakers can adjust programs to improve instruction online, whether there is a continued growth in K-12 online learning, or for the next major catastrophe that forces students to learn remotely once again. This paper serves as a first step in the process, a current snapshot of what the nation currently offers with respect to teacher preparation for teaching online.

Methodology

The purpose of this study was to replicate a mixed method study originally conducted in the US in order to examine the provision and support of K-12 e-learning field experiences in teacher education programs (Archambault et al. 2016; Kennedy & Archambault, 2012a). As a mixed method approach with an embedded design, we asked the participants to respond to both quantitative and qualitative questions in the survey (Creswell, 2014) . In this case, the focus of

the embedded design was the quantitative questions which told us about how widespread the adoption of field experiences was at different kinds of institutions in different places. However, the qualitative responses were necessary to flesh out the story regarding why faculty and administrators either embraced or avoided offering the field experiences as well as to understand the nature of the field experiences offered.

The instrument was adapted from one used in a similar study in the United States (see Appendix A), making revisions where necessary to adjust for the unique aspects of higher education in Canada and any other cultural differences. The survey was then loaded into a web-based questionnaire format that consisted of 31 questions (i.e. 27 quantitative questions and four qualitative questions). Potential participants were identified by a search of the Faculty of Education websites at each Canadian university and college for the Dean or Director of the Faculty of Education. A total of 72 potential participants were found at 67 institutions (see Appendix B for list of institutions).

Each of the respondents were sent an email describing the study and requesting they complete the survey, followed by six reminders over the next seven weeks. Of the 72 individuals that were contacted, there were 32 responses that were received from 30 different institutions. This represented a 42% response rate, which was considered acceptable for web-based instruments (Manfreda et al., 2008; Shih & Fan, 2008). In comparison, Kennedy and Archambault (2012a) reported a 34% response rate, while Archambault et al. (2016) indicated a 37% response rate. It should be noted that Fan and Yan (2010) suggested that online surveys generally have an 11% lower response rate than surveys conducted in other mediums.

We acknowledge that the data was collected prior to the pandemic. However, at the end of the 2019-20 school year teachers were forced to manage emergency home-based or remote

teaching, and many continued to have to teach in a remote and/or hybrid fashion throughout the 2020-21 and 2021-22 school year (Barbour & LaBonte, 2020; Barbour et al., 2020; LaBonte et al., 2021, 2022; Nagel et al., 2020a, 2020b, 2021). Given these realities, we felt the results of this study were still an important assessment of how well those individuals were formally prepared by their teacher education programs to meet the challenge of designing and/or curating, delivering and/or facilitating, and supporting e-learning experiences for their students.

We analyzed the data by first connecting the location, institution, and background information to the corresponding responses. We were then able to build a picture or case of how different institutions in different locations ran their online and blended preservice and inservice field experiences if they had them (Monk & Howard, 1998). Next, we used descriptive statistics to create simple summaries of the key features of those field experiences (Mishra et al., 2019), and compared them to other experiences to find any similarities. Finally, we looked at the reasons for the different programs having or not having and wanting or not wanting a pre-service or in-service program. We found that the respondents' answers often shared common reasoning, and so we were able to categorize these into two to four trends. However, some responses corresponded to multiple trends of reasoning, and so those were counted as responses in each trend they referenced. Finally, we then compared these trends in Canadian programs' reasoning to the United States trends (Archambault et al. 2016; Kennedy & Archambault, 2012a).

Results

As this study represented a “current state” of teacher education and K-12 virtual field experiences across Canada, and we anticipated the dissemination of this study to be of significant value to participants and their institutions, we made efforts to compile as complete a picture as

possible from the sample of participants. Below we describe the representative findings from the data.

Respondent Description

Of the 30 responses to the survey, 25 reported their locations throughout Canada (see Figure 1).

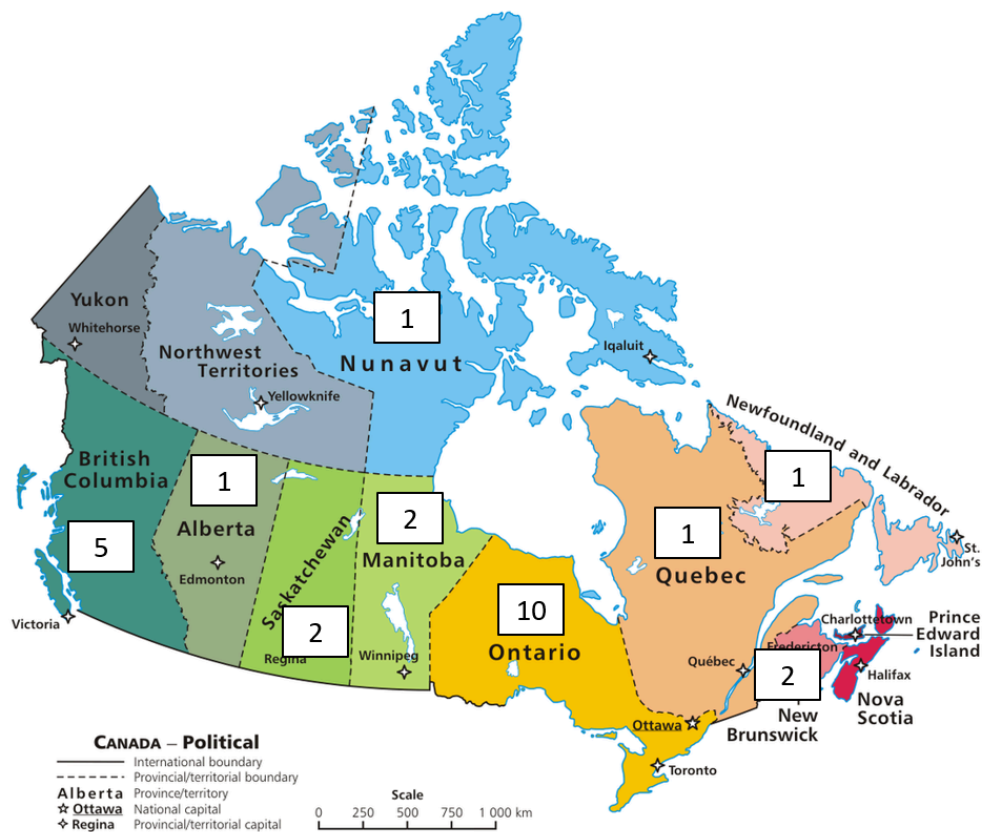


Figure 1. The number of respondents per jurisdiction

The provinces and territories with the highest number of responses were Ontario ($n=10$), and British Columbia ($n=5$). All but four provinces and territories were represented (i.e., Nova Scotia, Prince Edward Island, the Yukon, and the Northwest Territories).

Similar to how Kennedy and Archambault's (2012a) survey in the US presented university size by student enrolment, Figure 2 reports the percentages of respondent universities

by student enrolment size (i.e., small, medium, large). The universities most represented in this survey were the small institutions (i.e., 46%). Thirty-three percent of respondents represented medium-sized institutions with between 5,000 and 20,000 students. Twenty-one percent represented large institutions with more than 20,000 students.

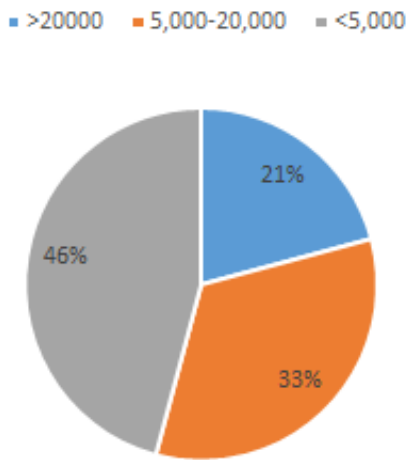


Figure 2. Percentage of respondent universities within small, medium, and large student enrollments.

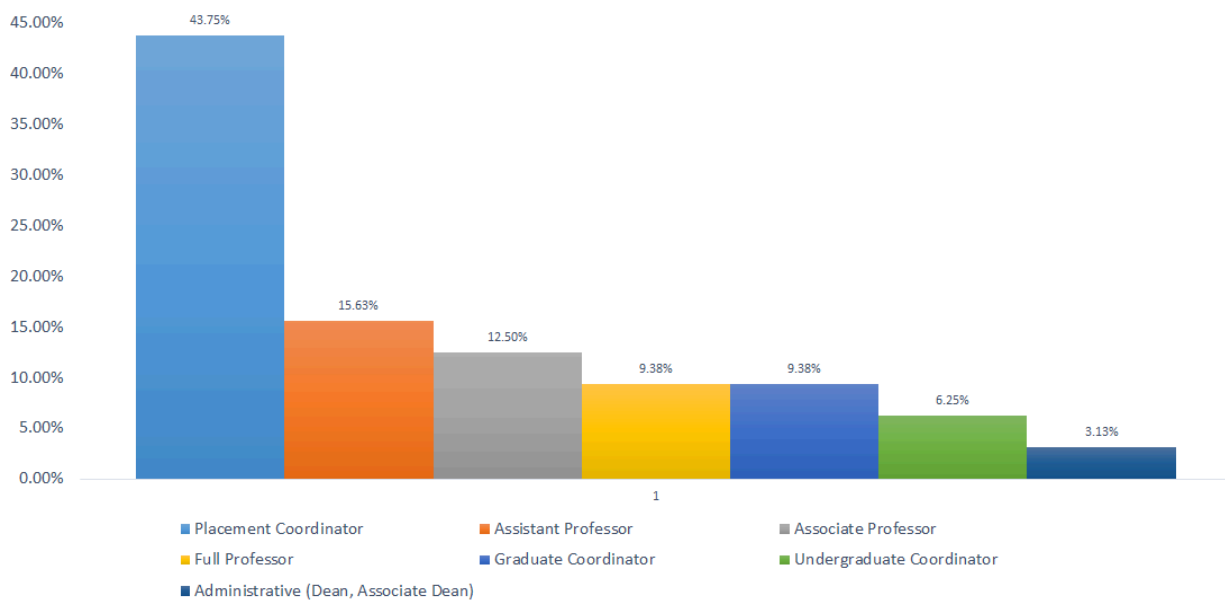


Figure 3. The respondents' current position(s) in their institutions' education faculty.

To describe some background information about the respondents, the survey asked “what is/are your position(s) in this program?” Placement coordinators were most represented in the survey (i.e., 43.75%), followed by assistant, associate, and full professors (i.e., 37.5%), then graduate and undergraduate coordinators (i.e., 15.6%), and finally deans at 3.1% (see Figure 3).

When compared with Kennedy and Archambault (2012a), we also received the largest percentage of respondents from institutions that had fewer than 5,000 students. However, given the differences in size between the two countries, further comparisons in number and size of institutions is not useful. While both studies had placement coordinators as the largest percentage of respondents, this study had comparatively fewer administrators respond (i.e., 33% in the US study versus 3%); otherwise, the remaining categories were in alignment.

State of Programs with Field Experiences

To understand the state of programs that had field experience, respondents were asked, “does your school offer field experiences in K-12 online program settings (e.g., guided observations, internships, apprenticeships, etc.) for pre-service or in-service teachers?” Eight respondents replied that they did provide field experiences (i.e., 32%), and 17 responded that they did not (i.e., 68%).

The eight respondents who said that they did provide K-12 field experiences in their programs elaborated further on the nature of those experiences. Two specifically reported that they partner with elementary schools. Of those two, one has a partnership with an organization outside of their province and one has a partnership with an organization within their province. One of the schools, from Quebec, also specifically mentioned that in their elementary school partnership they are able to place around 200 inservice teachers in blended field experiences annually.

When asked if the online or blended field experience was a requirement for their institution's teaching degree, two respondents answered: one saying "yes" and the other "no." When asked if the field experience was a requirement for teacher licensure in their province one replied "yes" and the other "no." Only one respondent answered the questions related to the time requirements of the field experience, saying that the teachers are required to spend four to eight hours a week, for four to eight weeks, in the online or blended environment. This respondent also discussed the responsibilities of these teachers during this time, indicating that they are engaged in creating new online course content, evaluating students' work, filling out paperwork, and attending professional development sessions.

One respondent, from New Brunswick, chose to go into further detail about the field experiences their institution provides. In this program, they place about 12 pre-service teachers each year in elementary blended field experiences. These teachers come from a B.Ed. program specifically designed for First People who work in elementary First Nation classrooms. Many of the teachers are already working full-time and are taking the degree part-time. In preparation for the field experience practicum, they take several courses about using technology in education. When it's time for the field experience, the pre-service teachers are placed in an online partnership with a participating blended teacher. They typically assist that teacher by teaching portions of the class online, but occasionally attend classes in-person as well when time permits. This program had existed for over five years.

Both of the US studies provided a caveat to their data on schools having an online field experience (Archambault et al, 2016; Kennedy & Archambault, 2012a). They reported two numbers: the number of institutions that stated they had an online field experience and the number of institutions that provide evidence. In both cases, the latter was much lower. Since all

eight of our respondents did provide additional information, we can use that number (32%) as a basis for comparison. In the two US studies, the percentage of institutions who responded in the affirmative and provided evidence were 1.3% and 4.1%, respectively.

Reasons Programs Do Not Want to Have Online Field Experiences

Of the eighteen respondents who indicated whether or not their program should offer K-12 field experiences for pre-service teachers, the majority reported they should not (55.6%), while forty-four percent responded that they should. When asked “why not?” their responses were in four basic categories: 1) lack of resources (n=6), 2) not knowing enough about it (n=4), 3) limited usefulness for their teachers’ future careers (n=3), and 4) rules discouraging online field experiences (n=2).

The responses for “why” respondents should offer field experiences in the future were in two basic categories: 1) allowing greater access to pre-service teachers who are studying at a distance (n=4), and 2) allowing more flexibility for pre-service teachers to customize their program with what they are interested in (n=3). One of the respondents replied that they would like to offer online field experiences in the future, but did not provide any reasons why and so their response could not be categorized. Some of the respondents’ replies were in multiple categories.

Lack of resources. The main reason respondents reported they were unwilling to implement online field experiences was a lack of resources (n=6). The resources they referred to were items such as funding, management, or evaluation. Often, the respondents seemed to imply that they faced a zero sum scenario where every resource devoted to online field experiences would be diverted from existing face-to-face teaching experiences. They explained that in this scenario, face-to-face must come first.

Lack of knowledge/need more information. The next reason provided for not having online field experiences (n=4) was that the respondents did not currently know enough about these experiences to include them. The responses in this category demonstrated a wide range of understanding with regards to online field experiences. For example, one respondent clearly had already studied the option, but was unsure of how it would work in Saskatchewan. That respondent remarked:

We do provide extensive instruction to students in using digital media and teaching in on-line learning contexts, but as of yet, have not attached a formal internship experience to this, partly because we have not yet fully explored what these possibilities might look like in Saskatchewan.

The other two respondents were confused about the term “online field experiences” itself and stated they were unable to answer the question.

Not useful for future careers. Three respondents replied that online field experiences had limited usefulness to pre-service teachers’ future careers. One respondent from Ontario remarked, “at this point in time, there are insufficient career paths to make this a viable alternative to face-to-face field experiences.” A respondent from New Brunswick added, “online is just another way of providing instruction. If you can take on full teaching responsibility in a classroom, you probably can handle an online course if you know how to use the technology.” A third from Alberta mentioned, “most teaching is face to face and highly relational.”

Regulations. A final explanation for not being able to implement online field experiences had to do with the regulations or standards of their province’s Ministry of Education or teacher union. A respondent from Alberta stated that the “[Alberta Teachers Association] disapproves.” Another respondent, from British Columbia, said, “the [British Columbia] Teacher Regulation

Branch does not allow it.” A different respondent from British Columbia, who did not answer this question, referenced this issue in a response to a later question about implementing field experiences, he/she said, “currently our certification regulations do not allow us to do this.”

Despite having no plans to implement field experiences in the near future for the reasons listed above, some of these respondents mentioned extenuating circumstances where they did/would allow it. A respondent from Alberta explained that they allowed a student to have her field experience online because she had a serious visual impairment. A respondent from British Columbia discussed how they sometimes allow online field experiences to cater to pre-service teachers in remote locations. These respondents’ reasons for allowing online field experiences despite their commitment to face-to-face teaching, touch on the reasons other respondents’ programs have embraced the idea of having online field experiences in the future: access and flexibility.

Similar to what Kennedy and Archambault (2012a) found, a key reason for not providing an online field experience was that respondents valued face-to-face teaching experiences more and did not want to divert resources from those experiences. Additionally, many of the US respondents were under the impression that face-to-face skills were easily transferred to the online environment. The US respondents also expressed regulatory concerns from their state boards of education. Finally, the US respondents were unsure of the usefulness of the online field placement option, since most teachers are likely not going into the field to exclusively teach online and post-baccalaureate training would suffice.

Reasons Programs Want to Have Online Field Experiences

Increased access was the most popular reason for being in favor of having online field experiences with four respondents mentioning it. One respondent from Ontario described how

this would increase access for the pre-service teachers – they would be able to work with teachers, students, and environments they would not have access to normally. The other three – from British Columbia, Manitoba, and Saskatchewan – focused on how this would provide more convenient access to field experiences for the pre-service teachers living in remote parts of their respective provinces. The respondent from Manitoba said:

It sounds like a potentially interesting concept particularly for our ‘distant education’ students... to offer up field experience and programming to our Northern educators who struggle with commuting to the Institution for spring & summer sessions in order to gain their degree and certification – currently regular session (fall & winter) is really not an option for them because of distance.

Increased access for online field experiences is an important part of pre-service teachers’ training, especially for those in more remote areas, bridging the geographic barriers for many students.

Increased flexibility was the other reason respondents were in favor of implementing field experiences (n=3). A respondent from Saskatchewan discussed how it should be an option for pre-service teachers interested/specializing in teaching in online settings. The other two respondents in this category did not elaborate on what they meant by flexibility, and so it is unclear if they too were referring to the flexibility of pre-service teachers to specialize in it, or if they were using the term “flexibility” in the same way the other respondents were using “access,” or if they were referring to some other flexibility altogether such as the flexibility for pre-service teachers to make the field experience fit their schedule more easily.

In the US study (Kennedy & Archambault, 2012a), those with favorable opinions of online field experiences cited slightly different reasons. They tended to emphasize the need to

address the pedagogical differences in online and traditional learning. With that said, the US responses tended to be more pragmatic in nature, where comments centered on vague notions of future needs (e.g., wave of the future, it is coming so we need to, etc.). Not much was said about access to education in remote areas.

Future Plans for Online Field Experiences

In the survey, respondents were asked if their teacher education program currently is in the process of designing online field experiences for pre-service and in-service teachers. Twenty-one respondents answered, 17 (i.e., 81%) said they currently did not, and four (i.e., 19%) said that they did.

These four respondents described what these programs would look like. The respondent in New Brunswick whose program already has online field experiences for First Nation students replied, it would be “more of the same thing our [First Nation] students are doing.” A different respondent said, “we would look at best practice and determine what could work with our program – it is unique in that our students go in blocks to do their placements all over the province.” Another, from Saskatchewan replied, “not sure yet. It will use cooperating teachers across the province but with technology to deliver and collect content.” Another respondent put simply “course and supervision.”

Both US studies (Archambault et al, 2016; Kennedy & Archambault, 2012a) provided little data on future plans. In general, they were similar to the vague notions of the future mentioned earlier. Interestingly, the authors did mention several instances of the survey itself being a potential impetus for exploration. The authors lamented that perhaps survey respondents were unclear on terminology, as evidenced by multiple “don’t know/unsure” responses. While it may be more acceptable to be unaware of the nuance with online teaching during the time the

studies were conducted, that is less likely now. On the other hand, the lexicon has changed, and terms like hybrid learning, blended learning, and remote teaching have nuanced definitions that many outside of the field rarely understand. As such, while using the same survey allows for better comparisons, an updated or revised survey may be necessary.

The results of the study provided some additional insight on the current state of online teacher preparation when compared to the studies in the US. Data from the two countries were similar in many respects. Reasons against institutions not having an online field experience included deficiencies in resources, knowledge, and perceived demand. Regarding reasons for, there were slight differences between the two countries. Canada's reasons emphasized access to education for remote areas, while the US reasons were more generic, centering on the inevitability of technological progress. However, respondents from both countries noted that training for online learning should look different from training for traditional teaching.

Discussion

Beyond the comparisons of what was found in the Canadian context in relation to the earlier studies in the United States, given the reality that regardless if it is because of a pandemic or natural disaster or weather, schools systems will need to close again in the future. It may be more localized than what was experienced with COVID-19, and the duration may be much less, but school systems will need to close again and teachers will need to be prepared to provide learning at a distance. As such, it is important to explore these results through the lens of Hodges et al. (2022). When doing so, one could see a difficult but not impossible path to making online field experiences the norm rather than the exception. Research-based online teaching standards, or lack thereof (Adelstein & Barbour, 2016), presents a challenge due to inertia (i.e., there needs to be a willingness for researchers and institutions to design and develop standards

and support with research). In addition, the authors suggested that after standards are developed, they would need validated instruments to see if the standards are being met. Again, this would require buy-in from institutions and provincial governments for support and implementation. With the increase in online learning research from the pandemic, as Woo et al. (2023) have noted, the empirical support should be gaining traction. Conversely, standards would also need institutional and provincial support (Barbour & LaBonte, 2017), and the data in this study have clearly shown a lack of interest. We found that a minority (i.e., 32%) of the respondents' programs currently have online or blended field experiences for their pre-service and in-service teachers. Surprisingly, none of those field experiences are newer than five years old (i.e., they were all established prior to 2012). It appeared that rather than the field experiences in these programs being motivated specifically to prepare teachers for the current challenge of online and blended learning environments, they were formed by necessity due to the high quantity, the remoteness, or the tight schedules of the teachers enrolled.

Respondents who currently do not have online field experiences and currently have no plans to change listed four general reasons why: lack of resources, lack of knowledge, lack of value (i.e., utility), and current regulations. As Woo et al. (2023) and Gedak et al. (2023) noted, the pandemic provided a wealth of experiences that could shift some of these opinions. For example, respondents felt that online field experiences were not useful for future careers. Post-pandemic, perhaps the respondents - with increased experiences - now feel differently. With respect to resources, both K-12 and higher education shifted resources toward online learning across the board. These resources (e.g., cameras, microphones, LMS), many of which are physical, are still available for use. Put differently, some of the costs associated with startup are

no longer needed, and additional resources need only be spent on replacement and license renewal.

The third step Hodges et al. (2022) suggested was to expose teacher candidates to more online and blended experiences as students. Even before the pandemic, the number of students in online environments has doubled in the last decade, and the number of students in blended environments has almost doubled in the last three years (Barbour & LaBonte, 2019). As such, this would require little effort on the part of institutions other than ensuring that each and every teacher candidate takes some amount of coursework online. Having education faculty trained in online teaching practices would not only serve this purpose, but possibly the next step as well.

The fourth step, requiring teacher candidates to have specific training in teaching online, is again hampered by the lack of standards. As Moore-Adams et al. (2016) have lamented, a clearly defined set of skills specific to teaching online is needed to justify a course (or content within a methods course) dedicated to this topic. In addition, respondents listed a lack of knowledge as a barrier to online field experiences, as well as resources. With respect to resources, respondents stated that any online endeavor comes at the expense of face-to-face requirements. A standalone course would be an additional course on an already full curriculum. On the other hand, incorporating online teaching into current coursework would require the instructors of non-educational technology courses to be fluent in online teaching pedagogy, and Johnson's (2023) research reported faculty finding it difficult to teach online effectively. Another area for improvement would be more empirical research on online teaching at the teacher preparation level, as Martin et al. (2023) found this to be an area where research was relatively scarce.

The fifth step, requiring online field experiences, was the centerpiece of this study. Again, only one-third of the respondents claimed to offer some online field experience, and these were well-established. Further, of those programs that did not currently have any online field experiences, 55.6% also believe that they should not provide them in the near future. However, as Brennan (2003) discussed, this perception may not be completely accurate. Brennan found that successful online teaching required distinct skills – such as understanding the mechanics and affordances of the medium, keeping up with constant changes and updates, navigating new types of relationship with students, managing a new type of workload, and adjusting to a radically different learner-centered approach. Other reasons for not providing online field experiences were that these programs felt that they were not helping pre-service teachers get a job, or they simply did not know enough about them. However, post-pandemic, employers may see these skills as an asset regardless of whether or not teachers are in-person or remote. For example, as Woo et al. (2023) noted, relationship building was key to successful online teaching; it is also key to traditional instruction as well.

Finally, Hodges et al. (2022) stated that the final step would include tying online field experiences to accreditation. Once again, this can only be done after the previous five steps are in motion. Respondents stated that regulations from both the ministry and the union were barriers to implementation. Negotiations between stakeholders would need to take place in order to codify online teaching into preparation programs. It is likely that this would only occur as a result of a nationwide modernization effort for teacher education and professional learning, as Al-Ansi (2022) suggested, and Hill et al. (2020) and Farhardi and Winton (2020) supported.

Overall, the survey results would indicate a stagnation in the progress toward making online field experiences a key component of preparing Canadian educators. However, given the

similarities between this study and the studies on which it was modeled (Archambault et al, 2016; Kennedy & Archambault, 2012a), and given the fact the data were collected prior to the start of the COVID-19 pandemic, there should be optimism that change is possible. The blueprint provided by Hodges et al. (2022) could potentially be used by stakeholders and policymakers to make the necessary changes.

Conclusions and Implications

In this study, we examined the current state of online field experiences in Canadian teacher preparations programs, replicating a series of studies that were conducted in the United States. Much like our southern neighbors, the adoption of online field experiences has not kept pace with the demand for online instruction at the K-12 level (Barbour et al., 2020). While data for this study were conducted before the COVID-19 pandemic, it still provides a current snapshot of the landscape, as any full-scale changes made post-pandemic are likely still in the planning stages.

In order to have widespread incorporation of online field experiences, teacher education programs and their faculty can do several things. As researchers, faculty can follow lines in inquiry that help to validate online teaching standards and instruments to assess teacher candidates. This would require pilot programs (where exceptions to regulations would need to be approved), which would include finding partner schools with whom to collaborate. These pilot programs would facilitate changes to programs if successful. In addition, faculties of education need to address online teaching in both the hiring process as well as the tenure and promotion process (through professional learning requirements, for example), making sure that new faculty are or can become comfortable and successful teaching online. Last, colleges of education need

to initiate conversations with policymakers, provincial governments, and teacher unions to ensure that the needs of all stakeholders are met.

It is understandable that every new innovation takes time to adopt (Hall & Hord, 1987). The adoption often starts with administrators' attitudes (Huberman & Miles, 2013), administrators similar to many of those who were responsible for completing the survey in this study. To prepare future and current teachers as best as possible, it will be necessary to help current university administrators understand the benefits and challenges that online or virtual field experiences can provide in preparing teachers to work in the classrooms of the future (Kennedy & Archambault, 2012).

As Woo et al. (2023) and others have suggested, the increase in research on this topic during the pandemic needs to be put into practice. Future studies should begin on examining the effects of changes made to teacher preparation programs with respect to online field experiences. In addition to repeating studies such as this one (i.e., tracking changes to online field experiences in Canada), studies could include examining how prepared candidates feel about online teaching several years after matriculation. Further, if remote teaching is necessary due to another pandemic or climate disaster, research could look at how teachers adapted this time, as well as whether 'learning loss' was mitigated when compared to the COVID-19 pandemic. The topic of online field experiences is in its fourth decade, and while the throughline from research into practice in education is often slower than desired, this particular topic is inherently fast-paced, necessitating a sense of urgency for institutions and policymakers to make research-based change.

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Appendix A

Revised survey for Canadian context

Background Information

1. In which province is your teacher education program located?

- Alberta
- Saskatchewan
- British Columbia
- Manitoba
- Ontario
- Quebec
- Nova Scotia
- Nunavut
- North West Territories
- Yukon
- New Brunswick
- Newfoundland
- Prince Edward Island

2. What is the name of your school/institution?

3. What is/are your position(s) with this program? (Please check all that apply).

- Placement Coordinator
- Assistant Professor
- Associate Professor
- Full Professor
- Graduate Coordinator
- Undergraduate Coordinator
- Administrative (Dean, Associate Dean)

4. Approximately how many students attend your school?

5. Does your school offer field experiences in K12 virtual school settings (such as guided observations, internships, apprenticeships) for preservice or inservice teachers?

- Yes
- No NOTE: If No is answered, then the survey branches to Future FE Plans Pg.6

Current Field Experience Description

1. Which virtual school(s) do you partner with for field experiences?

2. Are virtual school field experiences only made within the same province as your university/college?

- Yes
- No

3. Approximately how many preservice teachers are placed in virtual school field experiences in a given year?

4. Approximately how many inservice teachers are placed in virtual school field experiences in a given year?

5. At which grade levels are virtual school field experiences offered? (Please check all that apply).

- K-4
- 5-8
- 9-12
- Other

Please specify

5. For how many years have you been offering these virtual school field experiences?

- 0-1 year
- 1-3 years
- 3-5 years
- 5+ years

6. Is the virtual school field experience component a required part of your teacher education program?

- Yes
- No

7. Does your province recognize/accept a field experience in a virtual school as part of its teacher certification?

- Yes
- No

8. Please provide an overall description of the virtual school field experience that pre service teachers participate in (i.e., duration, activities, expectations, structure, supervision). If there is an existing description, (URL, webbased or electronic resource) please copy and paste it here.

9. In general, what type of prior knowledge/background/experience is required for preservice or inservice teachers to participate in your virtual school field experience?

Field Experience Supervision

1. How is supervision handled in the virtual school field experience you have described? (Please select all that apply)

- There is an internship coordinator at the University.
- There is a course instructor at the University.
- There is a supervisor at the University.
- There is a supervisor at the Virtual School.
- There is a cooperating teacher at the Virtual School.
- Other (please specify)

2. What is the duration of the virtual school field experience?

- 04 weeks
- 48 weeks
- 812 weeks
- 1216 weeks
- More than 16 weeks

3. Per week, how much time is the preservice teacher required to spend in the online environment?

- 04 hours
- 48 hours
- 812 hours
- 1216 hours
- 1620 hours
- Other (please specify)

4. What are the online learning activities that preservice teachers participate in during their virtual school field experience? (Please choose all that apply):

- Facilitating class discussion forums
- Creating new course content
- Communicating with students
- Holding webinars
- Delivering synchronous instruction
- Evaluating students' work
- Tracking student progress
- Completing required paperwork
- Communicating with parent/learning coach
- Attending professional development sessions
- Attending faculty meetings
- Responding to student/parent questions
- Participating in extracurricular activities (i.e. clubs, sports, events, etc.)
- Other (please specify)

5. How are preservice teachers assessed for their participation in the virtual school field experiences? How do they document their experiences? (Please choose all that apply).

- Quizzes
- Journals
- Worksheets
- Logs
- Reflections
- Essays
- Observations
- Login/tracking data
- Other (please specify)

6. How are preservice teachers matched with their cooperating teacher? (Choose all that apply).

- Random
- Gradespecific
- Subject-specific
- Other (please specify)

7. What criteria is used to select cooperating teachers for the virtual school field experience?

8. Are preservice teachers and cooperating teachers given any type of personality matching inventory/test?

- No
- Yes please describe.

9. How do preservice teachers and cooperating teachers interact with each other? (Choose all that apply)

- Email
- Phone
- Facetoface meetings
- Virtual meetings (Wimba, Elluminate, Skype, Google Talk)
- Web 2.0 Tools (Facebook, Wiki, Blog, Twitter)
- Other (please specify)

10. Do cooperating virtual school teachers receive mentor training prior to working with preservice teachers?

- No
- Yes please describe.

11. If you'd like to add more information about your virtual school field experience or your program in general, please use the following space:

Future Field Experience Plans

1. If your teacher education program is not offering K12 virtual school field experiences for its preservice teachers, do you think they should?

- No
- Yes

2. Why or why not? Please elaborate.

3. Is your teacher education program currently in the process of designing a virtual school field experience for preservice or inservice teachers or planning to do so in the future?

- No
- Yes

4. If so, what might that experience look like? Please describe.

5. If you'd like to talk to us further about virtual school field experiences, please provide your email address here. We look forward to talking with you! Thank you again for your time!

Thank you very much for your participation in this survey. If you have documentation to share with us about your virtual school field experience, or if you'd like more information about virtual school field experiences, please email Nathaniel Ostashewski, nostashewski@athabascau.ca, and/or Michael Barbour, mkbarbour@gmail.com.

Appendix B

List of institutions the survey was sent to:

Memorial University of Newfoundland	St. Francis Xavier University
Mount St. Vincent University	Cape Breton University
St. Mary's University	Acadia University
Université Sainte-Anne	NSCAD University
University of Prince Edward Island	University of New Brunswick
Université de Moncton	St. Thomas University
McGill University	Concordia University
Bishop's University	Université Laval
Université du Québec à Chicoutimi	Université du Québec à Montréal
Université de Sherbrooke	Brock University
Queen's University	University of Ottawa
University of Windsor	Ontario Institute for Studies in Education (University of Toronto)
Lakehead University	Laurentian University
Niagara University	Nipissing University
Trent University	University of Western Ontario
Wilfrid Laurier University	York University
Regis College	Redeemer University College
University of Ontario Institute of Technology	Six Nations Polytechnic
Elementary Teachers' Federation of Ontario	University of Manitoba
University of Winnipeg	Brandon University
Collège universitaire de Saint-Boniface	First Nations University of Canada
University of Regina	University of Saskatchewan
University of Alberta	University of Calgary
University of Lethbridge	Grant MacEwan University
Concordia University College of Alberta	University of British Columbia
Mount Royal University	Simon Fraser University
University of Victoria	Thompson Rivers University
Vancouver Island University	University of British Columbia-Okanagan
Royal Roads University	University of Northern British Columbia
Trinity Western University	University of Fraser Valley
Selkirk College	British Columbia Institute of Technology
Capilano University	Aurora College
Yukon College	
Nunavut Arctic College	