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Learning from Faculty Mentors Who Had to Mentor and Evaluate Teacher Candidates Completing a Remote Practicum in the Early Stages of the COVID-19 Pandemic in Canada

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Abstract

In the Spring of 2020, the COVID-19 global pandemic impacted all aspects of life throughout the world, including education. Teachers who had never taught online before, all of a sudden had one week to get ready to engage with their students in a virtual setting. On top of these changes, our small post-degree Canadian teacher education program had teacher candidates on practicum in K-12 schools. That meant our faculty mentors, responsible for recommending teacher candidates for certification, had to figure out how to mentor, support, and evaluate teacher candidates who were teaching remotely. This research aimed to address the following two questions: a) What were these faculty mentors' experiences when having to move mentoring of teacher candidates on a remote practicum? and b) What recommendations do these faculty mentors have for teacher education programs trying to support faculty mentors having to mentor teacher candidates who are teaching remotely? Results illustrate challenges with workload, anxiety, screen time, teacher mentors limiting teacher candidate opportunities, and figuring out how to evaluate certification readiness.

Keywords

university supervisors; teacher education; remote practicum

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Introduction

In the Spring of 2020, the COVID-19 global pandemic impacted all aspects of life throughout the world, including education. In British Columbia, Canada, in mid-March, all Kindergarten to Grade 12 (K to 12) schools were closed and were moved to online teaching and learning (or remote instruction). Teachers who had never taught online before, suddenly had one week to get ready to engage with their students in a virtual setting. On top of the stress of the pandemic itself, teachers experienced additional challenges in having to teach in a very different way.

Recognizing the challenges being faced by parents with students now at home, and teachers who may have their own children at home, school districts provided a great deal of leeway in how teaching and learning were to occur. For some, it meant setting up online classes that met together (synchronous learning), for others there were tasks provided to students to complete online independently (asynchronous learning), for others still, there were suggested weekly activities. Each classroom, school, and school district responded differently.

On top of these changes, our small post-degree teacher education program (TEP) had teacher candidates² (TCs) on practicum in K to 12 schools. This final 12 week, certifying practicum was only 4 weeks in when instruction moved to virtual platforms. Our TCs were fortunate in that the Teacher Regulation Branch responsible for the certification of teachers allowed their practicum to finish remotely. However, just like for teachers, how this looked for each TC depended upon where they were located (classroom, school, district). Despite the change in the delivery of instruction, recommendation for certification was still occurring the same way: teacher mentors (TMs, the K to 12 teacher(s) they were mentoring under in the classrooms) and faculty mentors (FMs, also referred to as university supervisors responsible for mentoring TCs in the field) were responsible for observing TCs and making a recommendation for certification based on their teaching performance.

In Canada, FMs or university supervisors represent the university voice within the field (Desbiens et al., 2015). During practica, FMs or university supervisors observe TCs and may make recommendations to the program on whether a candidate is ready to be certified. This role involves both mentorship of the TC (providing support and direction for ongoing development of teaching skills) and supervision (evaluating TC performance in order to make recommendations on a candidate's readiness to enter the profession). In our program, these FMs usually observed their TCs teaching in the classroom once a week for the entirety of practicum; this time in the classroom is often more than most programs. FMs also received weekly reflections from their TCs regarding their practice and learning in the classroom. Using these two pieces of evidence (observations and reflections), FMs would determine whether they would recommend each TC for certification. With COVID-19, this meant that not only were TCs and TMs having to figure out remote instruction and mentoring, so did the FMs. We were curious about this very quick and significant shift in practice for these FMs. This research aims to address the following two questions: (a) What were these FMs' experiences when having to move mentoring of TCs on a remote practicum? (b) What recommendations do these FMs have for TEPs trying to support FMs having to mentor TCs who are teaching remotely?

² Also known as preservice teachers or student teachers.

To address these questions, we examined research literature in relation to teacher education in Canada (to provide a context), the role of FMs, what it means to teach remotely, and what it means to mentor remotely.

Literature Review

Teacher education in Canada takes place within universities rather than colleges (e.g., they exist within a degree-granting post secondary institution). It combines university courses with practical teaching experience in the field (Desbiens et al., 2015; Falkenberg, 2015; Petrarca & Kitchen, 2016). The university coursework includes foundational courses in Indigenizing curriculum and instruction, educational philosophy and psychology, and school governance, as well as methods courses that relate to planning, assessment, classroom management, teaching English Language Learners, and supporting students with special needs. The practical teaching experience in the field (i.e., practicum) ranges from eight weeks to four months depending on the program. As education is managed provincially, so are teacher education programs. This can result in some significant differences in program length. There are concurrent programs that run for five years, while there are post degree programs that last for 10 months to two years.

In most of these programs, TCs engage in university theory work followed by practical experiences in the field. According to Desbiens et al. (2015), these field experiences are jointly supervised by a K to 12 classroom teacher (TM) and a university supervisor (FM). The classroom teacher oversees the classroom the TC has been placed in. Sometimes, depending on the placement, more than one teacher mentor may be involved. In the majority of programs, the FMs are retired school administrators that work on contract with the university. While these FMs may observe the TC teach in the classroom anywhere from one to twenty times, the majority in Canada observe only once or twice.

Faculty Mentors

Burns et al.'s (2016) meta-analysis of 32 studies reveals that FMs are primarily involved in the following activities: individual TC support, building collaboration between TMs and TCs, providing curriculum support, providing targeted assistance when TCs are struggling, and researching innovations to support TC development. Jacobs et al. (2017) concur with Burns et al. (2016), going further to note that FMs were rarely involved in supporting TC inquiry or action research. These studies, as well as Kolman's (2018) and Barahona's (2019) research, emphasize that while the traditional role of FMs has focused on the more clinical aspects of teaching, there is movement in the field to view FMs as supporting the development of autonomous, reflective, or critical teachers. This movement, however, would require recognition, professional development, and support from universities to enable FMs to take on this more nuanced role.

Steadman and Brown (2011) completed one of the few studies looking specifically at the role of the FMs in teacher education. Their interviews with 14 FMs in the US revealed that they worked with a great deal of autonomy and, as such, were quite varied in their approaches to supervision. These variations included some requiring planning from TCs, while others did not; some required weekly reports, while others did not; and some focused on a single observation while

others looked at development over time. The one consistency was that there seemed to be a disconnect between what FMs perceived as best teaching practice and what was taught at the university. Capello's (2020) case study of 27 FMs and two program coordinators discussed how little training FMs received (e.g., 1hr) leaving the FMs to rely almost solely on their own technical experiences of teaching K to 12. All the FMs in that study shared how they did want more formal training, but the program coordinators did not have the resources to support that training.

Capello's (2020) study also discussed the dual roles of the FM: mentor and evaluator. While the FMs that were interviewed shared that they preferred their mentor role in guiding and supporting TCs in their development, they also held the, at times, conflicting role of having to evaluate and determine whether the TC was ready to be certified as a teacher. Cuenca (2010) looked at research related to faculty mentoring and proposed a conceptual framework to outline these responsibilities. The typical observation involved a pre-observation review of a lesson, the observation of the TC teaching that lesson, and a supervisory meeting to review what had happened. Cuenca saw FMs as "teaching pedagogues" that responded to the immediate needs and context of a TC with thoughtfulness and tact. While in these studies, FMs were completing observations in a F2F environment, they illustrate how the work of a FM is complex and critical to the development of new teachers to the profession. However, despite the impact they have on the development of new teachers, there is little supervision and even less formal training provided. As such, FMs are left to rely solely on their own experiences in K to 12 classrooms. This becomes a concern when those classrooms are using technology and teaching remotely as this is quite different than what these FMs would have experienced in their own careers.

Teaching with Technology and Teaching Remotely

With the COVID-19 pandemic, all teaching had to move from a F2F environment to teaching remotely or online. Some teachers were more successful when moving to remote instruction if they had experience teaching with technology (Dolighan & Owen, 2021). While teaching with technology was not new in the Spring of 2020, it was not pervasive in Canadian classrooms. Furthermore, the concept of mentoring in a remote environment was near non-existent. Given this wide gap in research literature on mentoring a remote practicum, we will look first at best practice around teaching with technology and we end with the brief research related to mentoring remotely.

SAMR Model for Teaching with Technology

Dumont et al.'s (2010) OECD report on what innovative teaching for the 21st century looks like emphasizes the impact of technology on teaching given the movement from an industrial economy to one that is knowledge-driven (given its easy access). To address these shifts, teachers need to be able to engage students with inquiry, service, and cooperative learning; learn with technology; and focus on formative assessment over time. When looking at teaching with technology, we found the SAMR conceptual frameworks the most useful for teachers and mentors to understand (Puentedura, 2006).

The SAMR model presents a continuum for technology integration in a classroom: substitution, augmentation, modification, and redefinition (Puentedura, 2006). At the lower end, teachers engage in substitution using technology (e.g., having students type up an essay on the computer rather than write it out by hand; making a video of a lecture that students can watch on their own). In substitution, there is a direct tool replacement. Augmentation involves a direct tool replacement that provides an added benefit. One example could be completing a voice thread response to question rather than written response to ensure that students are not held back by their own writing ability. Alternatively, rather than writing on a whiteboard, a teacher could have students brainstorming on a shared Google Doc that enables all of their ideas to be represented in real time and saved for later. A modification would mean that the technology being used would allow for a significant redesign of a task/activity. For example, students could be creating a blog or website to showcase what they have learned. The deepest level of technology integration would be a redefinition when the technology enables the creation of a brand-new task. For example, students could be using Book Creator to make a digital portfolio of their learning. Book Creator enables students to include pictures, movies, text, voice threads, etc.

The power of the SAMR framework is that technology is not looked at as something that is simply added to a classroom solely for fun or novelty, nor is it just substitution. Instead, it is about using technology to purposefully increase student engagement, accessibility, and 21st century skill development. Emphasis is placed on knowing why you are using technology and being purposeful about the type of technology you are using to meet this purpose.

The International Society for Technology in Education (ISTE, 2019) set standards for virtual instruction that emphasize similar skill sets: developing students as change agents, connecting with learners, collaborating, working as a learning designer, being a professional learning facilitator, using data-driven decision-making processes, and development of students as digital citizen advocates. Both competency sets (Farmer & Ramsdale, 2016; ISTE, 2019) emphasize the power of virtual instruction for moving beyond industrial models of education that focus on knowledge to be acquired by students, to instruction that is personalized, and develops empowered, collaborative learners.

Based on the literature just discussed, there are numerous frameworks and guideposts for teachers who are working in a remote environment; however, given how few virtual programs existed in Canada prior to the pandemic, and the low number of teachers working in these programs, very few teachers had been exposed to these conceptual models or standards. In most cases, teachers were given only one week to prepare to deliver their instruction remotely when schools were closed for F2F instruction in Canada. This was not enough time to gain the knowledge, let alone the expertise, to deliver effective lessons and assessments remotely. This problem was then compounded when asking to have FMs mentor TCs working in a remote environment where the TMs were unable to provide experienced support.

Mentoring Remotely

Currently, research examining the efficacy and issues related to mentoring a TC who is teaching remotely/virtually is almost non-existent. Very recent research has looked at the efficacy of having a FM observe remotely when the TC is teaching in a F2F environment. In these instances,

research indicates that remote observations are possible, efficient, and useful; however, ongoing training and technology support is needed for the FMs (Ardley & Johnson, 2019; Hamel, 2012, MacMahon et al., 2019; Lynch et al., 2021; Theriot et al., 2020). In each of these studies, very small samples were used (two to eight participants) and emphasis was placed on what kind of technological supports were needed by the TCs and the FMs. We found only one study that looked at FMs mentoring TCs who were completing a remote/virtual practicum. Piccolo et al. (2020) used documents, online observations, and discussions with 90 TCs, FMs, and US state officials to examine the mentoring of a virtual practicum. The types of mentoring activities involved F2F discussions between FMs and TCs via Zoom, sharing lesson plans via email, and observing online instruction of small groups (including the use of online manipulatives and classroom management techniques). Results indicate that: (a) a wide variety of strategies were needed by FMs, (b) there was increased stress for all involved, (c) there was an increased emphasis on communication, (d) that TCs had to be flexible, and (e) TEPs needed research and guidance on how to support online practica.

Based on the few studies listed above, there is a real lack of empirical evidence around how to support FMs who are mentoring TCs working in a remote environment. Given that most FMs have never taught in remote environments themselves, and at the time of the pandemic, very few TMs had taught remotely, mentoring TCs trying to negotiate this new medium was an extreme challenge. Given the uniqueness of this situation, this study aims to build on the Piccolo et al. (2020) study in a Canadian context, while also providing the recommendations needed for TEPs.

Methods

This was a phenomenological study (Creswell & Poth, 2018) as we were interested in the lived experiences of FMs who had to switch from F2F observations to remote practicum supervision³. We specifically wondered: (a) What were these FMs' experiences when having to move mentoring of TCs on a remote practicum? (b) What recommendations do these FMs have for TEPs trying to support FMs having to mentor TCs who are teaching remotely? To address this inquiry, we asked open-ended questions encouraging participants to share their experiences and their perceptions of those experiences.

Bracketing

To ensure participant voices are focused on during data analysis, Creswell and Poth (2018) emphasize how critical it is for researchers to bracket their experiences prior to collecting and analyzing data. Bracketing involves bringing the researchers' own experiences to light so that they can be kept in mind and not integrated into the data analysis process. It requires active attention to the data and the ability to try and suspend the researchers' own perceptions.

Both researchers were FMs during the Spring of 2020 when practica moved to remote instruction. We each had a great deal of experience working with technology both as mentors and as classroom teachers; Deirdre had taught *Teaching with Technology* courses at the university and had spent a number of years as a technology integration specialist for a school

³ Ethics approval through [name of university], January 5th, 2021, HREB approval #100649.

district. Both researchers, when practica moved to remote instruction, considered not only what could be done using technology, but also what was considered best pedagogy when teaching online. We recognized that best practice in an online environment was different than when F2F. Using Putendendura's (2006) SAMR model, Sheryl was working at the modification stage while Deirdre was working at the redesign stage. As such, when working with our TMs and TCs, we engaged in discussions around not only what was possible, but what effective teaching looked like. We were able to provide a great deal of guidance, providing suggestions for both TMs and TCs. These included: how to maximize video production, synchronous learning in Zoom, Google Classroom, MS Teams, asynchronous work plans, social media communication platforms, and shared document tools (e.g., Google Docs, Office 365, Padlet, whiteboard.fi).

We provided support around available technology, appropriate pedagogy for that technology, and appropriate use of content knowledge in relation to technology. Consequently, mentoring time and activities remained similar to what we had done prior to going remote, focusing each week on reflections and observations (of either synchronous or asynchronous work). The workload did not increase, it just changed in focus. Looking ahead to the interviews, we knew that there was a range of technological abilities in the participants. We wondered if that would affect the type of support they provided or the workload they experienced.

Data Sources

The university where this research took place is in the Lower Mainland of BC, in a small suburban university. The teacher education program is post-degree, taking one-year to complete. TCs take university classes from mid-August to mid-October, when they head into schools for a five-week practica. They then return to university coursework from mid-November until mid-February. In February, they begin a 12-week certifying practicum. In the year this took place, TCs had been in their certifying practicum for four weeks when they had to move to a remote practicum. There were 64 TCs (32 elementary and 32 secondary) in the program that year. To support the FMs, meetings that focused on procedural expectations and collaborative problem solving (amongst senior and new FMs) occurred five times a year.

After university ethics approval, we sent an invitation to participate to the 22 FMs who had been mentoring when practica had to move remote instruction (representing a purposeful sampling). Of those, 8 chose to participate (seven that identified as female, one who identified as male). Creswell and Poth recommend between three and eight participants for phenomenological interviews, making this an acceptable number to report out on. Participants were sent the interview questions ahead of time and completed their consent forms ahead of the interview itself. The questions used in the interview protocol were: (a) How would you define the work of a faculty mentor? (b) What are some significant experiences from the Spring of 2020 when you had to start mentoring TCs remotely? (c) What recommendations would you give to teacher education programs supporting FMs who have to mentor remotely? Zoom was used to complete the interviews given the social distancing required for the pandemic at that time. Otter.ai was used to audio record and transcribe interviews. All participants completed a member check to approve the final transcript prior to data analysis and chose the pseudonym to be used for reporting out.

As part of our demographics, we asked each participant to describe the number of years they had worked in K to 12 classrooms, years as a FM, their level of comfort with technology, and the comfort their TMs had with technology in the Spring of 2020. We used four different levels to describe comfort with technology. The first level was someone who did not feel comfortable with technology at all; they primarily only used email or texting with no synchronous experience prior to the pandemic. The second level was someone who felt comfortable with technology and was able to learn or adapt; however, they had never used technology as part of their classroom teaching experience. The third level was someone who had used technology as part of their classroom teaching experience (e.g., FreshGrade, SeeSaw, Google Classroom, document cameras, etc.). The fourth level would be those with experience teaching online. While both researchers would be a level four, none of the participants were. See Table 1 for participant demographics.

Data Analysis

For data analysis, we used Saldana's (2009) sequence of first and second level thematic coding. Our three questions represented a priori categories: describing a faculty mentor, experiences, and recommendations. Within each category, our first level coding was descriptive. This involved identifying significant statements from the transcripts and assigning a descriptive code, usually a noun. For example, "Riley" described the "emotional stress" involved in moving to a remote practicum and we coded that as *anxiety*. We completed this first level descriptive coding independently. We then came together to compare coding. We found that we both chose the same significant statements but may have coded them slightly differently (e.g., *anxiety* vs *stress*). We then negotiated the code that best described each set of statements. Together we then grouped these codes into similar themes. For example, *anxiety*, *lack of F2F time*, *screen time*, and *evaluating TCs* were grouped into the theme: *challenges*.

Creswell and Poth (2018) discuss how phenomenological research can often lead to both contextual (the essence of an experience) and structural (resultant or dependent aspects of an experience) themes. When examining our themes, there were a number that described the experience of being a remote FM (contextual), while there were two that mediated that experience (structural). In the results section below we report out on the themes and subsequent codes for each of the three categories, followed by an examination of the mediating factors.

Findings

Based on the questions we asked these eight participants, our analyses led to several key themes we can report out on. We first begin by sharing how the participants viewed the role of faculty mentor. There was a great deal of overlap with how available literature refers to FMs, but we felt it was important to be clear about how the participants discussed their role. We then share the key themes that emerged when asked about their experiences when moving to remote instruction. We will look at the challenges they experienced; the ingredients that may have led to a successful remote teaching, learning, and mentoring experience; and the unintended benefits that

Table 1*Participant Demographics*

Pseudonym	Classroom Experience	Years as FM	Comfort with Technology	TM Comfort with Technology
Stretch	34yrs	7yrs	Level 1	2 comfortable 2 were anxious
Jamie	35yrs	4yrs	Level 1	4 comfortable 2 challenging
Joe	30yrs	20yrs	Level 1	Mixed
Kelly	30yrs	2yrs	Level 3	Secondary comfortable Elementary anxious
Francine	35yrs	6yrs	Level 2	Mixed comfort 1 terrified
Celeste	32yrs	1yr	Level 3	3 comfortable 2 resistant
Mandy	34yrs	3yrs	Level 2	Two anxious One terrified
Riley	37yrs	1yr	Level 1	Most challenged One resistant

were reported as a result of moving to remote instruction. We then look at two mediating factors that seemed to determine whether the experience was successful or not (attitude and the technological skills of the TM). Finally, we share the key recommendations that participants had for TEPs trying to support FMs remotely.

How do you Define a Faculty Mentor?

Participants described the role of the FM as being both supportive and evaluative. “Stretch” described being supportive as knowing, “What [it is] that they’re passionate about. I want to help them recognize their gifts as teachers, and really build on that.” “Celeste” shared that she “nudges a TC’s learning, [I am the] voice of wisdom.” “Kelly” took this idea of sharing wisdom and discussed the reciprocity involved in being a FM.

I think there's a reciprocity to it, where we are coaching, we are guiding, and we are learning from the experience as well...where I'm also learning and spurring off of them,

and having discussion...I think that's part of my role, to really help to develop that critical thinking piece, that collegiality piece.

Participants also discussed how FMs were also responsible for evaluating TCs. Riley shared that, “the evaluative piece is huge.” Participants recognized themselves as a type of gatekeeper for the teaching profession. “Mandy” was able to effectively describe how these two roles, being a supportive mentor and being an evaluator, often occurred sequentially.

It's a two-pronged approach. When I go into my year, I think of it as heavy in the mentoring to begin with and then we move over into more of the summative evaluation toward the end...Part of my job is to evaluate the strengths and challenges in our TCs and then help set the path toward growth.

These two roles, being supportive and being evaluative, were affected differently when moving to remote instruction as reported out by these participants.

Faculty Mentor Remote Experiences

When we asked these participants to discuss their experiences regarding remote mentoring, we kept our questions very broad; we wanted to know what stood out for them. The experiences they shared led us to four themes; within each theme are a number of codes. The theme of challenges had the most codes. In contrast to challenges, the participants also discussed the ingredients for success and the unintended benefits. Finally, emerging from their experiences, the participants discussed two mediating factors that seemed to lead to either a successful or challenging remote teaching situation. We discuss each below.

Challenges

When TCs had to move to remote instruction, FMs were no longer able to visit schools to do in-person visits. Instead, they had to find other ways to support and evaluate the TCs in relation to their classroom management, effective teaching skills, assessment, knowledge of content, knowledge of students, and working with parents/guardians among others. When sharing their experiences, these participants shared a number of challenges that made their work more difficult. These challenges were varied (anxiety, lack of F2F time, evaluation of the TC, screen time, FM workload, TMs perceived as limiting TC opportunities).

Anxiety. Interviewees discussed the anxiety that their TCs were experiencing, both because they were having to move to remote instruction, but also because of the pandemic that we were all experiencing: “it's the whole mental health piece of the pandemic which was something that can't be ignored. It has to be factored in as well” (Mandy). As shared by Riley, this anxiety really expanded the supportive role of the FMs. “There was a lot more emotional stress that that we had to work through with them. That depended on the different personalities. I took that very seriously wanting to reassure them and help them feel less stress.” Stretch shared how this anxiety was also being experienced by the TMs, and as a FM, she felt this was something that she needed to address as well. “I could see that they were completely stressed out but I had to keep in mind that we were, as FMs and TCs, to support the TMs in any way that we could.”

Some of this anxiety was seen as being even greater for those TCs with families. As Mandy shared, “they were concerned about their students; they were concerned about their families.”

Lack of F2F Time. Given all the stresses and anxiety these FMs perceived amongst their TCs, they felt the need to be as supportive as possible. However, given the restraints of the pandemic, this need was exacerbated by the lack of F2F time that they had with both their TCs and TMs. FMs had gone from having weekly F2F time with both, to having none. “Francine” shared that, “sometimes the messages that you're taking away from [an email or phone call] is not actually the message that they're intending. The communication and relationship building is just so much easier in person. I really missed going into the schools and seeing them.” Stretch found that the move to remote instruction resulted in a quite a reduction in communication: “The communication between the TC and the TM, and then the TM and FM...was barely there. It was pretty minimal; it was tough.” The lack of F2F time also impacted FMs ability to evaluate the TCs.

Evaluation of the Teacher Candidates. Many comments were made by these participants regarding how they had to alter their evaluation of their TCs. Traditionally, in a F2F environment, FMs relied heavily on weekly visits to schools that enabled them to observe TCs teaching lessons to, and interacting with, students. While there were reflections and lesson/unit plans that were used in that evaluation, the majority of the decision related to those F2F observations. As noted earlier, the move to remote instruction drastically impacted FMs ability to evaluate TCs. This was further complicated by some school districts deciding that teachers needed to minimize what was required of families at home (given the stress of the pandemic and access to technology). For some TCs, this meant that the assessment and evaluation of the curriculum became near extinct. This then impacted FMs ability to observe certain aspects of a TC's development. “There were some sections when writing the final report that were almost impossible to do, like the assessment goal” (Celeste). This lack of traditional evidence caused some FMs concern, especially if a TC still had areas to improve on. “Is this going to be sufficient” (Jamie)?

Some FMs shared how they worked around the lack of F2F observations. Celeste focused on the attitude that TCs demonstrated: “Seeing how they managed with that and just how disappointed they were that they couldn't go in and teach their units. I just thought, wow, okay, they're gonna be good. They're gonna be fine.” Joe shared, “that the TC responded so clearly by keeping detailed logs of everything she did in a day. So in some ways, we got a much clearer idea around what she was actually doing on a day to day, rather than what she would have happened say if she was only observing this person once a week.” Kelly appreciated that some of her TCs could record synchronous online lessons with students that she could watch, but that was not possible for all TCs. School districts may have had strict rules around the use of videos of students, while other classrooms did not engage in any synchronous sessions with students at all. In those cases, FMs had to find evidence from wherever they could.

Because you want to make sure that if you're saying that they are certification ready, that you've covered your bases and make sure that they are. So I spent a lot of time going through and looking at whatever it was that they had created, emailing with the TMS, or chatting with them. (Francine)

Trying to gather evidence from wherever possible led to more screen time and a higher FM workload.

Screen Time. Given the need to work on Zoom, and send and receive information through email, this resulted in an increase in screen time for FMs. Celeste shared that, “I was also surprised at how tiring Zoom was; it was really draining even though at the beginning of the lock down, it was a novelty and kind of fun.” This was supported by Stretch: ““If you don't love technology it's a lot. My problem is that I can't sit in front of the screen for a long time.” In relation to this, Joe was concerned about the “health risks” that came along with increased screen time, as well as stress working in a foreign environment for everyone, TCs and TMs included.

Faculty Mentor Workload. A traditional workload for FMs involved a weekly reflection to review from a TC, visiting the school once a week for an observation, and the review of a lesson plan each week. When remote instruction came into place, that structure ceased to exist and it resulted in an increased workload. “I think it was more work in a lot of ways. I felt like I was on the computer a lot compared to a normal situation. Either phoning them, going to these meetings with all of the teachers that had TCs. I was working more than if I was just going into the classroom and observing them” (Jamie). Riley detailed this workload.

In an effort to alleviate the stress of the TMs...a bigger responsibility was given to the FMs. I was receiving so much stuff, and we were supposed to okay everything. I was reading and reviewing emails, lessons, materials, videos...all of the materials they were sending to TMs and families, and then getting weekly logs. There was a lot of emailing with TMs and TCs, to try and reassure them.

Given such a dramatic change in how they could evaluate TCs, FMs had difficulty determining what they should be using as evidence. The default was to look at everything. “I was checking out everything. It was way more work I have to say than normal” (Francine). For these authors, we wonder about the ability of FMs to work at the level of substitution: what could they evaluate instead using technology?

Teacher Mentors Perceived as Limiting Teacher Candidate Opportunities. In contrast to their own workload, nearly all these FMs shared an experience where a lack of authentic work was a problem for the TC. Whether due to the stress of the pandemic, or a lack of knowledge regarding technology or how to approach remote instruction, FMs discussed how some TMs held TCs back from doing much for the rest of their practicum: “They were given limited, menial things to do” (Celeste). “The TMs were slow to hand over things to the TCs and they were sort of sitting there with nothing to do” (Jamie). Mandy shared a specific example.

It made for a very difficult practicum for the TC, who had more computer acumen than the TM and wanted to try some things. The TM was very reticent to allow her to do that. It was a difficult situation, brought on by the pandemic.

For some of the FMs, this did not change: “I expected that the two TMs who were really, really overwhelmed, would gradually feel more and more comfortable as time went on, but there wasn't

a lot of change” (Stretch). Fortunately, for some of the TMs, as time went on and the TC was able to demonstrate what they could do, the TM would gradually allow them to be more involved. Kelly shared that, “They put it on video and they did whatever they could do, as if they were teaching, until we could get those teachers to feel comfortable enough to get online.” For the FMs, when the TMs limited what the TCs could do, they limited the type of evidence that FMs could gather to evaluate certification readiness. As a result, this limiting of TC opportunities impacted the role of the FM considerably. Thankfully, there were some factors that FMs did identify where helpful in supervising a successful remote practicum.

Ingredients for Success

While FMs were able to discuss numerous challenges to a successful move to remote instruction and mentoring, they shared several key aspects that, when present, did appear to enable success. While we do not see these as a comprehensive list of what would be considered beneficial, these are the key things that stood out to these FMs (collaboration and giving TCs responsibility).

Collaboration. When TCs and TMs worked together, or sometimes even multiple teachers at a given school, this collaboration was linked to a successful move to remote instruction. Kelly saw this as relationship building: “We were all in this together. So there was a real sense of connectedness and talking and supporting each other that you might not get when you come in the classroom once a week.” Celeste expanded on this: “All the TMs and the other teachers at the grade collaborated. And the TCs, they would go to all the staff meetings; there was one a week, and then they attended their grade group meetings.” The more collaboration that existed, the more successful the move to remote instruction, and Joe saw the school district as having a role in that success.

Giving Teacher Candidates Responsibility. For a practicum to be successful, regardless of whether it is F2F or remote, the TC needs to be given responsibility over the class. “Once I think the TMs saw that the TCs could do more stuff with technology, more interesting things with technology, then it opened it up for them” (Jamie). In many cases, when the TM was willing to give substantial responsibilities to the TC, parents/guardians and students also experienced the benefits. This provided FMs with the opportunity to evaluate more and varied skills of TCs.

[The TM] was very grateful and in fact she made a point of emailing me to let me know what the TC had done. It was a Zoom meeting with a group of students to touch base with families, and she was very grateful and very proud of her TC. One ELL family was really struggling, and this TC took pictures, and created step-by-step instructions for them with pictures and was able to get that family hooked up as well. It was appreciated and acknowledged. (Riley)

Working with parents/guardians was a critical role for TCs. “Then there was the parent piece that the TCs were really, really helpful with. Because they were making all of the contact” (Francine). Kelly was impressed with the variety of ways that her TCs were able to use technology: “The TCs took the initiative to create lessons online, use technology as if they were meeting with the students online.” She expanded to share how she, “had one of the TCs who was super techy. So she really worked with her TMs and moved us all forward in technology, just by

giving little tips of the trade.” While the TCs had varying levels of technology skills, they were all able to learn quickly and provide support.

Unintended Benefits

While none of these FMs would have ever chosen to move to a remote practicum, they discussed two unintended benefits that they had not expected from this experience (different abilities and power of technology).

Different Abilities. In the experiences these FMs shared, they realized that the move to remote instruction enabled them to see very different abilities amongst their TCs that they may not have been able to realize had they remained in the traditional F2F classrooms. In some instances, it meant seeing TCs in a very different light: “Individual TCs that shone, that would not have shone in another situation but did through the technology. They did things that I did not know they could do. Their creativity, leadership, and professionalism were applied through the remote experience” (Kelly). In other instances, it involved TCs being able to be involved with parents/guardians and students in a very different way. Francine talked about the opportunities TCs had with parents/guardians: “Certainly the parent piece. For the TCs, I think it really gave them an opportunity to develop that skill. It’s such an important area that they need to be able to address for supporting the kids.” This was true for all grades, but especially for secondary where communication with families can sometimes be quite limited. Kelly commented on how technology actually enabled TCs to demonstrate their creativity: “I was able to see some real creativity, some real leadership I think, that I wouldn’t have seen.” Jamie related this increase in creativity to a decreased focus on classroom management: “They weren’t having to worry about the kids’ misbehaviors, etc. They could really focus in on their lessons and create some really interesting lessons.” Celeste appreciated how, “it gave the TCs lots of opportunity to figure out ways to grow on their own.” She further noted how, “I think the lock down prepared the TCs to face a similar situation arising in the future.”

Power of Technology. These different abilities that became observable, came as a result of using technology. “I thought that the whole experience really brought to light the value of technology” (Kelly). As Celeste commented, “going virtual made everyone realize that they need a strong technology component in their F2F classrooms.” For some of the FMs, like Francine, the opportunities made available by technology were illustrated during this time.

Just watching the kinds of things that the TCs were coming up with in their lessons and their use of technology was just fantastic. I just loved watching their lessons that they created, whatever it was. They were all really thoughtful. You could see that they’d thought about the kids.

Mandy provided a specific example of something she had not even considered in the past: “Videos can be made and uploaded for students who are absent or need the reinforcement of viewing the instructions or learning multiple times. It is another tool for the toolkit.”

Mediating Factors

Having looked at the challenges, ingredients for success, and unintended benefits shared by these FMs, we turn our attention to two themes that were discussed as mediators for success when moving a practicum to a remote environment. Attitude and the TM's technology skills were discussed as components that could make or break a remote practicum.

Attitude. When word came through that schools were moving online, there was a great deal of concern over how that would be done. For the TCs, their concern was first around whether they could complete their practicum. When the Teacher Regulation Branch deemed it was acceptable, their excitement at this news was quickly changed into a focus on how they could meet this challenge.

The TCs were very disappointed about having to teach remotely because they wanted to teach their units...the flip side of that was how quickly they adjusted and jumped on board and made the most of it and didn't dwell on the negative. They switched gears pretty quickly. (Celeste)

This switch in gears required an attitude that made you "willing to get into that uncomfortable zone; to try things. That's big. You have to be willing to take some risks and be self initiated so that you will seek out and try and find answers to things" (Jamie). Mandy described this as TC's ability to "pivot" given the move to remote instruction. Kelly discussed the importance of TC's attitude at length.

I was really impressed with how the TCs stepped up to the plate. They just took the bull by the horns. They showed their leadership. They showed that: "I really want to be in this profession, I belong here, and I'm just going to work through this with everybody."

Stretch emphasized that attitude was ultimately more critical in the end than technology skills. "TCs were not totally familiar with doing things with technology but they were just really wanting to do something fun and exciting. They were so enthusiastic. So they might not have had more comfort, but their attitude was different." This attitude was critical to a successful move to a remote practicum.

Teacher Mentor Technology Skills. While the TCs' experience with technology was not a mediating factor for the move to a remote practicum, the TM's comfort with technology was. As the FMs we interviewed worked with multiple TMs, they talked about how the TMs' comfort with technology impacted whether or not their TC was able to engage with students during their practicum; if the TC was limited in their interactions, FMs had less evidence to evaluate for certification readiness. For example, "There were two TMs, in one school, who were comfortable with technology and got going with on-line learning pretty much right away" (Celeste). In contrast, "She was slow to get going in the remote learning because her teacher mentor was not comfortable with technology" (Jamie). Stretch illustrated this tension in her interview.

There was such a striking difference between all of the TMs and their comfort level... One of them was super comfortable because they were Middle School and used a lot of technology... And then the other two TCs were just kind of discouraged...their TM said that there's complications with making videos, or making videos of yourself doing a read aloud. She was told not to do that. What would have helped: the TM has to be comfortable with teaching remotely in order to mentor their TC effectively.

In the aforementioned examples, when TMs were able to work at a minimum level of augmentation, they were comfortable giving TCs more opportunities to demonstrate their skills and interact with students. However, for those teachers who were not even ready for substitution, TCs were limited in their interactions with students. Mandy was the only FM to provide an example where the TM's positive attitude trumped their technology skills.

Three of the TMs weren't very comfortable with remote learning, but they had to do it to do the job and they were the type of people who really wanted to connect with their students and do the best for them. They were going to do what it took to get the job done.

In this instance, the TMs worked with each other and their TCs to make remote instruction, and thereby remote practicum, a success.

Having looked at the major themes that emerged from interviews with these eight FMs, we turn our attention to the specific recommendations they made for TEPs having to support FMs during a possible remote practicum in the future. We will start by overviewing what the department did do in response to having to move the practicum online to provide a context for the FMs' recommendations.

Faculty Mentor Recommendations for Teacher Education

When it was announced that schools in British Columbia would be moving to online teaching for K to 12, the first task the department attended to was to communicate with the Teacher Regulation Branch and other teacher education programs in the province to determine the new guidelines around certification in a remote teaching environment. From there, the department developed a set of guidelines and expectations for the completion of practicum. The department took this to the FMs, seeking their input, ultimately coming to a set of final decisions.

In recognizing the shift the department itself had to make, and the consequent impact on FMs, TMs, and TCs, an additional week was given for everyone to acclimatize prior to resuming their regular duties in practicum. This time was used to adapt and communicate guidelines. There were several virtual meetings with FMs. The intention was to support the FMs in every way possible while they, in turn, needed to provide extra support to TMs and TCs. Throughout the remainder of the certifying practicum, the department held weekly meetings with the FMs online. These meetings enabled the department to hear directly from the FMs, and the FMs to hear from each other, creating a small professional learning community.

During the interview process we asked the interviewees what went well and, given their experiences with the shift to remote learning, what recommendations they would have moving forward.

What Worked Well

All the interviewees recognized that this was an unfamiliar situation to everyone and reported that under the circumstances, the department did the best they could within the time limit and the resources available. Mandy commented:

In reflecting on last year, the pandemic really took everybody by surprise. Going to remote learning was new and untried. The way that [university] handled it was the best that they could do under the circumstances. It was the same for all of us – we were all just trying to do our best.

FMs appreciated the frequent communication and the weekly meetings where they could share their experiences and problem solve together. This gave FMs a sense of being supported: “...and I feel that [university] did support us that way with having our meetings and talking about what it's going to look like and being reassured that you know it was going to be okay” (Jamie).

Apart from provincially mandated guidelines related to certification, the department did not take a top-down approach. Plans and proposals were shared with FMs during meetings, and their input was sought and frequently implemented. As Riley reported, this resulted in FMs feeling validated and part of a team.

I felt very validated and respected that our input was taken, and was applied also, because it was obviously much more time efficient for the faculty to come up with a plan before bringing it to us, but our input was appreciated and was considered.

As mentoring and evaluating in a virtual environment was unfamiliar, and a learning experience for most FMs, the department shared several resources with FMs, such as examples of how various program goals could be met in an online teaching situation, and various digital resources that FMs and TCs could access: “that amazing document with examples of possible evidence for the 14 goals...that was really helpful to me. I could help the TCs connect to the many ways that they were still getting authentic evidence for those goals” (Riley). In addition, FMs were also able to rely on each other for support. As pointed out by Francine, those faculty with more technical expertise and experience teaching with technology made themselves available to help whenever possible.

Having somebody to hold your hand when you get to the point where you can't solve this problem anymore and need some help. And I knew that I could count on [other FM]. I'm sure I could have asked anybody on faculty and they would have been fine too. It's nice to know that [faculty] are there to support my technical needs.

What We Still Needed

With the benefit of hindsight, interviewees were able to make key recommendations for TEPs supporting FMs remotely. From these recommendations, we were able to identify several key themes around infrastructure, clarity of communication, professional development, and support.

Infrastructure. The department, and most FMs, relied on email to share documents and disseminate information, resulting in more time spent online searching for and organizing digital content. This was not seen as an efficient use of time and as was mentioned previously, resulted in an increased workload. To solve this problem, our interviewees unanimously recommended that a robust infrastructure is necessary to allow all key participants to function more efficiently. Mandy and Francine both expressed a desire for a “one stop shop.” There was a clear recommendation that the university should provide access to a platform where all digital copies of materials would be housed and accessible to whoever needed them: “I would like a one stop shop for documents. I would like reflections and unit plans and lesson plans, all to be uploaded into one area that we could all access” (Mandy).

Along the same lines, FMs were also frustrated at not having access to district platforms used in the schools. District platforms such as Microsoft Teams, Google Classroom, Moodle, or Canvas were only available to school district employees. Special access was given to TCs in the schools, but not to all FMs. This made it difficult for FMs to observe in the virtual classroom environment. Therefore, an additional recommendation was made by FMs for the university to work with school districts to provide ways to allow FM access to any platforms being used in a virtual learning or blended learning environment. In addition, these FMs also recommended that the department be more proactive in trying to reduce the inequities between each practicum placement. Could the department request/recommend specific activities they wanted TCs to do while completing their online practicum? These things could include: organizing and running small group classes online, contacting parents/guardians to help them set up their virtual platforms, make videos to support student learning, or managing platforms and communication. In this study, TCs were left to the whim and technology comfort levels of their TMs. Could the department assist in managing these inequities by being upfront with some expectations for TCs?

Kelly and Jamie also recommended that when TEPs require FMs to work remotely, that consideration be given to the fact that they were using personal devices, many of which had their own limitations with respect to newer applications, and also were paying for their own internet and data usage: “Obviously I’m using my iPad and a phone. So, that piece, you’re limited by your bandwidth, your personal device capabilities because we’re working remotely” (Kelly).

Clarity of Expectations. Although FMs felt that the department did a good job of communicating, and they felt very supported, there were still recommendations around clarity. Due to the novelty of the situation, as Kelly pointed out, FMs were often unsure of what, or how much, was expected of them or the TCs. “I think in the remote experience what I was a little unclear about maybe as to what was expected or what we could expect or what we should expect.” Where previously, in a F2F environment, FMs felt very comfortable having a degree of autonomy regarding week-to-week activities, Celeste suggested that in the less familiar virtual

environment, mentors would benefit from, “a week to week outline of what was expected by the education program.”

As was evident from the comment made earlier in this article by Francine, many FMs were unsure of how to define how much was enough, so they ended up looking at everything. Stretch recommended: “making those clear expectations for remote learning.” Celeste suggested that “...when we weren't going into the schools, some suggestions on how to manage all the necessary communication (like a bank of things to do), would have been great.” Much of the impetus for more clarity stems from the lack of experience teaching in virtual environments, or with technology integration. To that end, there was a strong recommendation for professional development.

Professional Development. The recommendations for professional development fell into two categories which reflect the two main challenges experienced by FMs, many of whom self-identified as lacking in technology skill, or experience teaching with technology. Firstly, FMs recommended a provision for access to professional development aimed at helping them learn the mechanics of using platforms used by the university or schools. During the pandemic, most FMs encountered a steep learning curve in this area before they ever got to the work of supporting and evaluating their TCs. “Some training for FMs around how to utilize a sharing platform would be necessary in order for success” (Mandy). Francine reiterated the sentiment by noting that “maybe one of the challenges would probably have been my ability with some of the programs...maybe a little bit more support there.”

Secondly many FMs had little experience teaching with technology, and most had no experience at all in a completely virtual environment. This resulted in many feeling out of their depth in terms of providing support or pushing the learning of TCs with respect to the different pedagogy required, or what apps or programs to suggest to TCs. “It would be helpful to level the playing field for FMs by sharing some standardized information. This could be done through teaching videos that we can just access and use to enhance our own learning” (Mandy). Celeste suggested that “there must be online learning platforms that could have provided us with ideas to share with our TCs.”

The signs are there that some degree of remote or blended learning can be expected in the future in most schools (MacDonald & Hill, 2020) and our interviewees recommended that it is paramount that we not only provide in-service for all mentors and TCs with respect to the use of, and pedagogy associated with, technology, but also to actively recruit mentors who either have experience or are willing to further their learning in this area. Mandy suggested asking the question: “What if we went remote, would you be able to mentor your TC in the same way that you would in a F2F situation? Would you be able to give your TC some responsibilities teaching remotely?” This recommendation around professional development is reiterated in the finding that TEPs need research and guidance on how to support an online practicum (Picollo, 2020) and need targeted professional development opportunities (Desbiens et al., 2015).

Support. A key recommendation from our interviewees for FMs trying to navigate the unfamiliar landscape of online pedagogy was having a strong support system in place. Apart from support directly related to infrastructure and professional development, it was felt that there

was a need for direct support on a more personal level. Francine recommended “having somebody to hold your hand when you get to the point where you cannot solve this problem anymore and need some help,” while Celeste felt that she “would like my own mentor.” While many FMs did have a colleague in the virtual situation, that colleague may not have met their specific needs in terms of online pedagogies or basic technology skills related to productivity. “So I think it's really important that you have an expert that will solve problems and delineate skills that are needed...and then you are assigned a buddy to go through the process” (Joe). This speaks to the need for defined leaders who are accessible for help, support, and advice related to both working and teaching online, or in a blended environment.

Having reviewed the experiences and recommendations of FMs working to support TCs completing an online practicum, we make connections to specific areas of the literature review, starting with responding to Piccolo et al.'s (2020) study.

Discussion

In this discussion we look first at comparisons between the work of these FMs with FMs working in F2F environments, followed by a discussion around the impacts of a remote practicum.

Comparing the Work of FMs

When we compare the types of activities these FMs, mentoring a remote practicum, were engaged in to the typical FM activities outlined by Burns et al (2016), they were similarly involved in collaboration, curriculum support, and researching innovations; however, they were not able to provide as much individual support or provided targeted assistance given the lack of observations of actual teaching. These FMs were very concerned about how to evaluate TCs given their inability, in most cases, to observe them teaching. As noted by Cuenca (2010) and Capello (2020), a FM's dual role of mentor and evaluator is critical to their work. Through typical observations, FMs are able to provide nuanced and targeted feedback and evaluation. Given the lack of observations, the concern these FMs had over how to evaluate was more pronounced than with FMs mentoring in a F2F environment. Finally, similar to Steadman and Brown (2011), these FMs were quite varied in their approaches; however, this variety was due to the comfort of the TM's and/or FM's comfort with technology.

Working with a Remote Practicum

When we compare with the small amount of research on mentoring remotely, similar to Piccolo et al.'s (2020) study, our FMs reported increased stress, a need for professional development, and a need for clarity. In contrast, our interviewees also had concerns regarding workload. We believe this difference is the result of an inability to rely on the traditional observation cycle. Piccolo et al.'s TMs all had small group teaching online that the FMs were permitted to watch; this enabled the traditional observation cycle, just in a different medium. This would be at the most basic substitution level of the SAMR model (Puentadura, 2016). As a result, there was no need to find alternative types of evidence. Our FMs were unable in most cases to utilize an

observation cycle and, as a result, wound up accepting everything and anything from TCs to try and gather evidence that they could use.

Interestingly to us personally, neither author experienced an increase in workload. This may have been due to our much higher comfort with technology and the pedagogies associated with teaching online. Would FM comfort with technology be another mediating factor? That is worthy of further investigation. Piccolo et al.'s (2020) study also did not mention FM recommendations around providing them with their own devices with up-to-date operating systems or reimbursement. This may be due to those FMs being provided with those resources; it is unclear. Finally, Piccolo et al. called for studies that could provide TEPs with recommendations for FMs negotiating an online practicum; there were several key recommendations that came from our interviewees (see results). In this discussion, we provide more elaboration around their recommendations for professional development.

Professional Development for Faculty Mentors

The lack of training and professional development for FMs, regardless of an online practicum, are well documented in research literature (Barahona, 2019; Burns et al., 2016; Capello, 2020; Jacobs et al., 2017; Kolman, 2018; Steadman & Brown, 2011). We believe this is magnified even further when FMs, who are primarily retired teachers/administrators that did not use technology in the classroom when they were teaching, have to support a remote practicum; this is significant given how much FMs rely on their own Kindergarten to grade 12 teaching experience (Capello, 2020). These interviewees strongly supported the need for professional development; however, what we found interesting related to the type of professional development they sought.

With a few exceptions, the FMs in this study mainly focused on wanting to learn how to use certain programs, apps, or platforms; none of them discussed the need to learn about pedagogy in relation to online or virtual teaching. We believe this may be due to their self reported lack of expertise with technology in general, minimal experience with technology in the classroom, and/or being overloaded with the changes that they were needing to make in such a short period of time. Not surprisingly, none of the FMs referenced the SAMR model (Puentedura, 2016). As a result, we would recommend that professional development occur in two areas: software experience (platforms, apps, programs) and best practices in relation to teaching with technology. Given the prevalence of technology in classrooms today, regardless of teaching solely online, this would be beneficial for all FMs going forward. The pedagogy portion of this professional development would include learning about the TPCK (Mishra & Koehler, 2006) and SAMR models (Puentedura, 2016), as well as a look at best practice for blended learning (e.g., Burns, 2017; Tucker, 2020) that would involve assessment and technology, multimodal opportunities for learning, and increasing student engagement.

An important consideration with regards to providing professional development for FMs relates to compensation. As the majority of FMs are not provided with, or paid for, training, can it be mandatory? If is not, what if FMs choose not to participate? Given the importance of their role in a successful practicum experience for TCs, we believe that it would be ideal for professional development to be mandatory and compensated. This is something for individual TEPs to

consider when looking at these recommendations. We now turn our attention to the limitations and implications of this study.

Limitations and Implications

When considering the implications of this study, it is important to consider the limitations that existed. This research occurred during a global pandemic that impacted everyone's stress levels and safety. We learned from a small group of FMs, the majority of whom identified as female, who work in a small TEP in the Lower Mainland of BC. This research may not be applicable to larger programs, or programs that do not have FMs so integrated into the field (these FMs were used to observing TCs in the field a minimum of 17 times over the year). All participants were also limited in their technology experience and knowledge, requiring us to extrapolate based on our own experiences.

Recognizing these limitations, we believe, going forward, that there are several implications for the field. This study is very practice orientated and impacts all programs going forward, regardless of online or virtual practicums. Moving to a remote practicum magnified things that we needed to have attended to PRIOR to the pandemic. TEPs need to be clear about expectations of their FMs, provide central repositories where information is available, and it is important to have access to district platforms. This study magnified the importance of providing training for FMs. When moving to an online practicum, this training becomes critical when FMs are having to work outside of the traditional observation cycle they are used to; this directly and negatively impacts FM workload. Given the prevalence of technology in today's classrooms, whether F2F or remote, providing professional development around both the types of technology and best practice in relation to using technology is critical. Finally, returning to our results, while it is not a surprise, attitude matters. As a mediating factor, having a growth mindset was pivotal to a successful online practicum: a growth mindset for everyone involved from TMs to FMs to TCs. The pandemic exposed weaknesses and brought into focus critical areas that TEPs now have the opportunity to address.

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Author Biographies

Sheryl MacMath is an Irish and Scottish settler on Stō:ló Temexw, land of the River Peoples, in what is now known as Abbotsford, BC. At UFV she teaches courses in planning, assessment, classroom management, math methods, and social studies methods. She spent time mentoring teacher candidates during their practica, remaining close with practicing teachers by regularly

providing professional development. Before coming to UFV she worked as an elementary school teacher in school districts #48 and #53, as well as a sessional lecturer for the University of Victoria.

Deirdre DeGagné was born and raised in Ireland and upon completion of high school, took her degree at Trinity College in Dublin. After subsequently moving to Canada, she enrolled in the PDP program at Simon Fraser University and became a teacher. Deirdre became fascinated by the role that technology can play in education and pursued a Masters degree in Education Technology at UBC. She was a technology helping teacher for the Abbotsford School District and, since joining the UFV Teacher Education Department, and prior to her current role as joint program coordinator, she was a faculty mentor and taught courses on technology in education.