



Leading the Pandemic Practicum: One Teacher Education Response to the COVID-19 Crisis

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Abstract: This article will outline one Canadian teacher education response to the closure of kindergarten to grade twelve schools due to the COVID-19 pandemic and the resultant online teacher education practicum that was subsequently developed, termed the pandemic practicum. In the month of March 2020, teacher educators across Canada were prompted to move to online delivery of content for preservice teachers and, in many cases, this pivot was, while not simple, at least imaginable. More difficult was the integration of an online solution for the teaching practicum, a cornerstone of teacher education. The following article outlines the steps taken to ensure a credible and engaging online experiential offering. Themes were generated through the self-reflections of the design and leadership team, as well as through a survey completed by postsecondary students undertaking the online practicum. Findings included the initial challenges as noted by the design team including program and licensing requirements, as well as philosophical differences among stakeholders as to the role of practicum in teacher education. In addition, a number of important opportunities were presented by this shift to an online practicum, including the importance of the pedagogy of online learning and the need to re-vision and question the practicum.

Keywords: online pedagogy, practicum, teacher education, online practicum



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Résumé: Cet article présente une réponse de la formation des enseignants canadiens à la fermeture des écoles de la maternelle à la douzième année en raison de la pandémie de la COVID-19 et le stage de formation des enseignants en ligne qui en a résulté et qui a ensuite été développé, appelé stage pandémique. Au mois de mars 2020, les formateurs d'enseignants de tout le Canada ont été invités à passer à la diffusion en ligne de contenus destinés aux enseignants en formation initiale et, dans de nombreux cas, ce changement, bien que loin d'être simple, était au moins imaginable. Plus difficile était l'intégration d'une solution en ligne pour le stage d'enseignement, pierre angulaire de la formation des enseignants. L'article suivant décrit les mesures prises pour garantir une expérience en ligne cohérente et attrayante. Les thèmes ont été générés par les réflexions de l'équipe de conception et de direction, ainsi que par une enquête réalisée auprès des étudiants de l'enseignement supérieur qui ont effectué le stage en ligne. Les conclusions ont porté sur les défis initiaux relevés par l'équipe de conception, notamment en ce qui concerne les exigences en matière de programme et de certification, ainsi que sur les différentes conceptions des parties prenantes quant au rôle du stage dans la formation des enseignants. En outre, ce passage à un stage en ligne a présenté un certain nombre de possibilités importantes, concernant notamment l'importance de la pédagogie de l'apprentissage en ligne et la nécessité de revoir et de remettre en question le stage.

Mots clés: pédagogie en ligne, stage pratique, formation des enseignants, stage en ligne

Introduction

At various points in March 2020, much of Canada's population found itself quarantined to prevent the spread of COVID-19. Social distancing became an integral part of the Canadian vocabulary, and access to many of the institutions and businesses that are central to the country's understood way of life was curtailed. In the area of education, this loss of institutional access included the move to emergency remote learning for traditionally in-person kindergarten to Grade 12 (K-12) classes. Across the nation, postsecondary institutions, though not all closed officially, encouraged students to leave campus residences and classes and return to their homes, and officials directed instructors and professors to move to online delivery almost overnight. Preservice teacher education was strongly impacted by this change and, at the time of this writing, how coursework will be delivered in the future is uncertain. Like other faculty members, teacher educators were prompted to move to online delivery of content for preservice teachers. In many cases, this pivot was, while not simple, at least imaginable. More difficult was the integration of an online solution for the teaching practicum, a cornerstone of teacher education. What follows is a description of one institution's leadership response to this dilemma and the development of what has now been called the pandemic practicum.

Literature Review

The practicum has been described as the most important part of teacher education (Bullock & Russell, 2010; Ralph et al., 2009; Vick, 2006). Traditionally, it has been viewed as an opportunity for preservice teachers to connect theory to practice (Allen & Wright, 2013; Brown, 2008; Smith & Lev-Ari, 2005). However, a good practicum must also provide the opportunity for reflection (Brookfield, 2009; Schön, 2009) and for trying out new ideas (Johansson & Sandberg, 2012; Schulz, 2005). The multitude of experiences provided by the teaching practicum, along with its highly experiential component,

makes it both a complex endeavour and one that is absolutely critical to the education of preservice teachers.

The teaching practicum relies on a partnership between the school, mentor teacher, preservice teacher, and university instructor, who together provide an opportunity for the preservice teacher to teach under supervision. The mentor teacher is defined as the in-service teacher employed by the K-12 school responsible for mentoring and evaluating the preservice teacher who is the university student pursuing their Bachelor of Education degree. The university instructor is someone employed by the university and observes the preservice teacher in the school, also for the purposes of mentorship and evaluation¹. The teaching triad has traditionally been viewed as consisting of preservice teachers, partner teachers in the school, and university instructors (Haigh & Middleton, 1998; Veal & Rikard, 1998). More recently the literature recognizes the significance of K-12 students in this relationship (Lawson et al., 2015). As K-12 educational institutions face uncertainty as to how schooling may continue given the COVID-19 pandemic, the integrity of these partnerships has been called into question.

Practicums must do more than just provide an opportunity to practice the art and skill associated with teaching. They must provide an opportunity for preservice teachers to try new ideas and learn from their teaching (Schulz, 2005). In this way, the practicum is so much more than on-the-job training. It is an opportunity to experience the classroom,

¹ The participants in the teaching triad are known by many terms dependent upon the university offering the program. Some common terms used for mentor teacher are partner teacher and cooperating teacher. Preservice teachers are often referred to as student teachers. Finally, university instructors are often also called university associates or field experience instructors.

evaluate preconceived ideas about teaching, and determine if those ideas are accurate (Leavy et al., 2007). In order to learn from their teaching, preservice teachers must engage in reflection about it (Schön, 2009). Schön (2009) described two types of reflection that occur during the practicum: (a) reflection in action, when the teacher reflects during the experience and makes changes based on that reflection, and (b) reflection on action, which occurs after the fact, thus allowing more time for processing the event. In order for the reflection to lead to better teaching, it must include reflexive thinking, which involves consideration of how to change teaching practice in order to improve as a teacher (Hill et al., 2018).

Teacher education programs are continuously adapting to the changing nature of schools. Modern classrooms are made up of a diversity of students who come from a wide variety of cultures and whose families often have fluency in languages other than English. Additionally, students come with differing learning needs and talents as well as different physical and medical challenges (Foster et al., 2010). The pivot from face-to-face classrooms to emergency remote learning as a result of the COVID-19 pandemic created an intense level of complexity for all students and teachers that was layered on top of daily challenges. Online delivery of courses has been increasingly commonplace in the postsecondary environment (Kentor, 2015), but the experiential nature of the practicum makes it one of the more challenging forms of teaching and learning to adapt to an online environment. Online courses typically rely heavily on readings and text-based assignments (Bonk & Zhang, 2008), and many online learners are unprepared for the shift in responsibility required for online learning (Garrison, 2006), where they must often summarize and synthesize material independently (Hewitt, 2001).

Johnson et al. (2017) examined online discussions in practicum courses, and Jackson and Jones (2019) and Wilkens et al. (2015) examined virtual practicum experiences for

graduate level preservice teachers; however, there has been little exploration of online practicums for undergraduate preservice teachers in a Canadian context. School systems in the United States have embraced online education, with every state offering some form of online learning and four states requiring at least one course be completed online in order to graduate from high school (Kennedy & Archambault, 2012). However, only 1.3% of teacher education programs in the United States provide online practicum experiences (Kennedy & Archambault, 2012). In Jackson and Jones' (2019) examination of a certificate program designed for in-service teachers instructing K-12 students online, peer feedback and observation of peer teaching were found to contribute to in-service teacher learning. Similarly, Wilkens et al. (2014) found that the online practicum experiences enhanced preservice teachers' ability to provide feedback. Developing an online practicum experience for preservice teachers was not even on the radar of most teacher education programs before March 2020, as the face-to-face experience has always been viewed as a necessary and untouchable aspect of entry into the teaching profession. There appears to be no literature that examines the issue of delivery of a practicum course in an online environment for preservice teachers planning to teach in a face-to-face environment. Therefore, creating an online practicum course to replace this irreplaceable feature of preservice teacher education was not merely a pivot from instructional delivery, as was the case in other university-level courses—it necessitated a complete reimagining of teacher education programming.

The Programmatic Response to COVID-19

Problem and Solution

At the time of K-12 school closures in the province of Alberta, Canada, the program of practicum experiences under study had two levels of practicum: a senior-level practicum that served as the final element in the Bachelor of Education program and

was in progress and a junior-level practicum that had not yet begun. The senior-level situation proved easier to manage, as preservice teachers at this level already had extensive practicum experience that exceeded the provincial requirement, and so they were able to end their program at that time without any long-term consequences. The more difficult scenario existed within the junior-level practicum, where preservice teachers had been scheduled to begin their in-classroom placements the Monday following the announcement of K-12 school closures.

“How can we teach in our subject areas in the absence of children and youth?” was the guiding question for preservice teachers and instructors. This question became of particular importance as K-12 school administrators and teachers were also trying to reconceptualize schooling for the remote environment, making the inclusion of preservice teachers in that equation impossible.

The solution, which later was referred to by the design team as the pandemic practicum, was an online course that attended to two critically important aspects of the practicum in teacher education. First, the online experience retained elements that would allow preservice teachers to plan and implement meaningful learning experiences, allowing them to work on connecting the theory that had infused their teacher education program with the practice of teaching others. Second, the course had to adhere to the *Teaching Quality Standard* (Alberta Education, 2018), a document created by the Alberta government to guide the professional growth of all teachers in the province.

Timeline of Events

To truly understand the development of the pandemic practicum, it is important to understand the timeline under which many Alberta postsecondary institutions were operating. Various government decisions to close K-12 schools meant postsecondary

institutions were looking for options for preservice teachers that would allow for completion of their degrees in a timely manner, without undue delay or interruption. In the case of Alberta, this often meant finding solutions to be implemented over the weekend.

Within the program described here, the result was a discussion among a team of teacher educators on a late Friday afternoon that required a result 36 hours later. This initial discussion revolved around the need to create an online, 4-week experience for preservice teachers that would allow them to complete their coursework within the term and begin their summer employment in May, provided the lockdown was over and life had returned to normal. The instructional designers realized that the course development would have to include an orientation to online instruction to familiarize the postsecondary instructors with the technology and the course content. Following this week of workshops about online pedagogy, exactly 10 days from the initial discussion, the course launched to ensure preservice teachers would not be delayed in completing their programs. It was an ambitious endeavour, which proved very successful.

Course Design

The course was designed to provide preservice teachers with 4 weeks of instructional practice, with each week focusing on a different element of K-12 education. Developed using the designers' knowledge about the best practices for online course delivery, the course employed a variety of teaching strategies including synchronous and asynchronous teaching sessions using Zoom, online discussion, and multimodal forms of content delivery, such as traditional written articles, podcasts, webinars, and social media posts.

The first week was dedicated to a re-examination, through the lens of well-being and online instruction, of detailed, ethnographic notes taken during an observational practicum in the previous term. Thus, preservice teachers were still able to delve deeply into the K-12 context through additional examination of classrooms they had already observed and could develop lesson plans based on their understanding of the needs of children and youth. Guided by carefully constructed discussion questions that asked preservice teachers to consider who the learners were and how their well-being was impacted by the pandemic, they were asked to develop a lesson plan for those students.

The second week of the course then narrowed the focus slightly to include feedback and the role of reflective practice, both in a K-12 classroom and in the online environment. The synchronous and asynchronous work included having preservice teachers consider how feedback could be made more effective for learners and the ways in which feedback could amplify their own teacher presence as they worked to become confident teachers. Preservice teachers were taught how to provide and accept peer feedback, thus preparing them for the feedback they would receive from their partner teacher in subsequent practicums. They were then given ample time during their synchronous Zoom sessions to teach the lesson they had developed to their peers in small groups. During this small group instruction, the course instructors and preservice teachers provided feedback on how this lesson could be improved. At the end of this second week, the preservice teachers completed an individual reflection on their lesson.

The respectful integration of Indigenous perspectives is a key element of the *Teaching Quality Standard* (Alberta Education, 2018) but one that preservice and in-service teachers feel unsure of at times. The third week challenged preservice teachers to explore resources that would incorporate Indigenous perspectives into their teaching, in

the context of this course and in the future. This opportunity allowed them to investigate these resources in a safe, collaborative environment. The preservice teachers taught the rest of their cohort about their chosen resource, providing each individual with valuable large group instruction. Many of the instructors created Google Docs or other online repositories to store the varied resources shared during this week.

Finally, in the fourth week, preservice teachers were encouraged to examine differentiated instruction and the need for collaborative practices that enhance inclusion within classrooms. They had to consider how learners in online courses with unique learning needs, such as auditory or visual barriers and learning exceptionalities, might be effectively taught in online environments. Responding with great creativity and reflexivity in determining how to personalize their instruction in an adapted environment, they demonstrated what they understood of inclusion by delivering a lesson to their entire cohort. This lesson delivery also provided them with crucial large group instructional practice.

Challenges

The move to an online practicum created a number of challenges, both logistical and philosophical, that impacted leadership decisions made in this time of crisis.

Program and Licensing Requirements

Leadership of the pandemic practicum required extensive consideration and weighing of the requirements for the program and provincial licensing within the stark realities of the time. In the province of Alberta, all teachers seeking certification require 10 weeks of supervised practicum with a licensed teacher. In a period of uncertainty due to the COVID-19 pandemic, this requirement raised questions. Was it necessary for those 10 weeks to be completed in a K-12, face-to-face classroom or could preservice teachers support their mentors in an online environment? Was it necessary for those educators

mentoring preservice teachers to be licensed in Canada or was an international teaching certificate also acceptable? These questions highlighted the complexity of the political system in which preservice teacher education was functioning, adding to the concerns raised. Ultimately, while licensing parameters were of importance and seriously considered, the structure of the program allowed the pandemic practicum to move forward.

Practicum placements, as a critical part of teacher certification, had already been arranged for the preservice teachers, so the course team members were initially hopeful that preservice teachers would be able to assist their mentor teachers with online teaching. However, with the situation changing on a daily basis, schools indicated that it was best to give teachers the opportunity to set up their online classrooms before involving preservice teachers. Given that the pandemic practicum was 4 weeks in length and would be followed by another 14 weeks of practicum under the supervision of a current K-12 in-service teacher, the faculty leadership decided they could experiment with these 4 weeks, ensuring preservice teachers received a quality experience that they could take with them into future practicum placements.

Differing Views on the Role of Practicum in Teacher Education

Perhaps more difficult to navigate from a leadership perspective was the decision to undertake an online practicum course in place of a more traditional, face-to-face experience. Even in the short timeframe of course development, this change led to a number of philosophical debates around the role of any practicum in teacher education. Central to this debate was the concern that microteaching among peers, which formed the core of the pandemic practicum, heightened the technical-rational aspects of teacher education, essentially replacing authentic moments with children and youth with a chance to practice a set of prescribed skills. Halliday (1998) described this approach to

teacher education as “the notion that good teaching is equivalent to efficient performance which achieves ends that are prescribed for teachers” (p. 597). Within the context of the pandemic practicum, this concern was mitigated by a course design that promoted the teacher as a reflective practitioner.

The philosophical debate described above was highlighted by the many differing viewpoints expressed by preservice teachers and university instructors when the decision to move to an online practicum was shared. The design team noted that this course provided a unique opportunity to gauge pre-service teacher perceptions regarding the shift from the in-school practicum they originally expected to the online course and received ethics to administer the survey at course conclusion. The survey was completed by 228 of 435 preservice teachers, clearly demonstrated a change in perception as to the value of an online practicum. While the survey is not the focus of this chapter, it is interesting to note that, initially, preservice teachers indicated they were extremely disappointed that their experiential course was switched to an online course. However, through the 4 weeks, they came to realize that they required online instructional skills as a part of their future teaching practice. In fact, 75% of the survey respondents indicated they were extremely or very unhappy initially with the change to the structure of their practicum; by the end of the course, 81% agreed or strongly agreed that their perception of online teaching had changed. Illustrating this change in perception, one preservice teacher noted in the survey:

My perception of online learning prior to this course was of students working through online modules individually before working through multiple choice online quizzes as this was my experience with an online course in high school. Now however, I have seen just how engaging online learning can be. There was a high level of teacher-student contact and high amounts of diversity regarding lessons and activities.

This sentiment was echoed by another preservice teacher, who stated in the survey that they were at first skeptical about the effectiveness of an online practicum experience, but after taking the pandemic practicum course, they “now realize that gaining experience teaching in an online environment is highly valuable and a testament to how important it is for teachers to be able to adapt to any circumstances.” Through careful planning and a focus on well-being, this sense of unease shifted strongly to an appreciation of the competencies gained through the pandemic practicum.

Decisiveness in a Time of Crisis

While the COVID-19 pandemic did provide some time in which to see what challenges might arise, the time between school closure and the need to implement an alternative to an in-person practicum remained very short. This resulted in the need to expedite the decision-making process, a need that is not unusual in times of crisis. Smith and Riley (2012) noted that all crises present as “an urgent situation that requires immediate and decisive action by an organization and, in particular, by the leaders of the organization” (p. 58). In the case of the pandemic practicum, the decision to move to an online practicum was, of necessity, made very quickly and this lack of consultation between the design team and those who would be teaching in the pandemic practicum proved challenging in some ways. As they were not a part of the decision-making process, instructors in the pandemic practicum were left having to simply accept that (a) placements with teachers in the online environment were not possible, (b) the pandemic practicum course would provide preservice teachers with the robust engagement and opportunities they required, and (c) preservice teachers would be willing to engage in the revised course. Not only was there inadequate time to gather feedback on possible alternatives to offering a practicum course online, but the design team was left with insufficient time to gather input from instructors into the pandemic practicum course itself. In this case, relational trust was a central aspect of developing this course, as the

leadership, instructors, and designers were willing to work together to ensure that the course would provide for the needs of those taking it.

Opportunities

Many opportunities presented themselves as a result of having to create the pandemic practicum, particularly for those who made up the design team. The design team included the three Directors of Field Experience whose role it was to both lead and organize all practicum experiences for preservice teachers in the program. The primary opportunities described below constitute the perceptions of the design team, as well as senior leadership, within the program and came under a larger umbrella of program reflection, whereby those leading this work were able to truly consider what counts as important knowledge and critical experience within teacher education. Each person engaged in the work of the pandemic practicum recognized a fundamental strength in the structure of the program as it was offered. The structure of the program meant that preservice teachers were engaged in practicum experiences at regular intervals. Therefore, the interruption to the in-school practicum that was caused by COVID-19 was not an impediment to graduation nor would it limit the preservice teacher practicum experience solely to the online environment. Preservice teachers would, in all cases, have a mix of online and in-school experiences as a part of their program. Indeed, the preservice teachers being educated at this time in history could arguably have a more robust overall practicum experience, given they will be exposed to both online and face-to-face contexts. Reflection on the structural program elements also encouraged reflection on other elements of content within the program, including the need to consider online pedagogy as a more central part of preservice teacher education more generally.

The Importance of the Pedagogy of Online Learning

While online learning has been well studied (Means et al., 2013), little attention has been paid to best practices in ensuring that preservice teachers have the skills and competencies to work with students in online or alternative environments. The development and enactment of remote emergency instruction in response to the COVID-19 pandemic highlighted a significant gap in both in-service and preservice teachers' digital instructional literacy, which could be described as educators' confidence, motivation, and competence in using educational technology to instruct students in online environments.

Despite the ubiquitous place of technology in classrooms and the expectation in the *Teaching Quality Standard* (Alberta Education, 2018) that teachers will use digital technology competently in their professional practice, practicum programming has largely followed a traditional trajectory that privileges face-to-face instruction. Online teaching and learning have become a significant part of K-12 student school experiences (Kentnor, 2015), but they hold a very small space in preservice teacher education courses. As the pandemic practicum course was implemented, this gap became readily apparent in preservice teachers' and the university instructors' responses. The narrative responses from the pre-service teacher survey indicated that many of the preservice teachers did not immediately see a need for increasing their online teaching competence; their overarching feeling at the beginning of the course was that they would be teaching in a school environment and learning online instruction was impractical and unrelated to their teaching practice. These responses point to the limited understanding we all held about the nature of the pandemic at the time and appear to convey the opinion that the pandemic would be a short lived, one-time occurrence. Thus, furthering the belief that the redesigned course was of a make-work nature designed to replace the time that they would have spent in schools.

During our weekly instructor meetings, several instructors expressed doubt about their own digital instructional literacy. Many of the instructors were new to online teaching and were learning alongside their preservice teachers and colleagues. As the instructors for the course were selected based on their experiences observing pre-service teachers in the classroom, the course designers recognized the need to create a supportive environment for those new to online teaching. The instructors and course designers formed a community of practice to support instructors with their questions and challenges but also to recognize and celebrate the innovation and creativity that this online opportunity had presented.

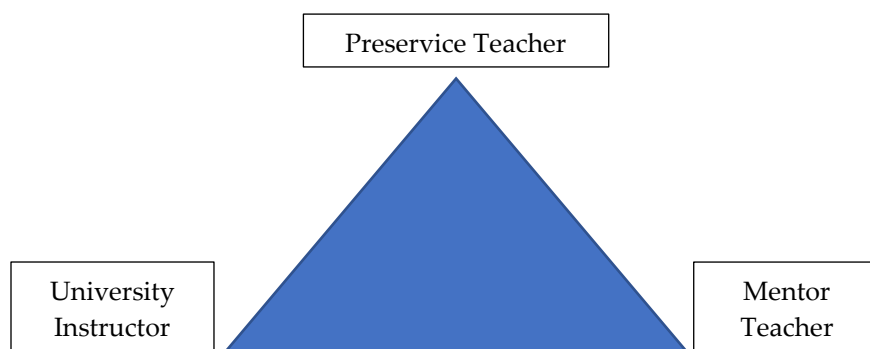
Communities of practice are defined as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger et al., 2002, p. 4). Communities of practice counter notions of the individualistic nature of learning by demonstrating how group learning can evolve through social processes (Farnsworth et al. 2016). A community of practice is a learning partnership where each member contributes with the intention of extending the knowledge of the group. Weekly Zoom meetings with instructors and course designers were held to support the course learning objectives, as well to provide guidance with the Zoom and Desire2Learn (D2L) platforms. During this community of practice, instructors began to take turns sharing their lesson ideas and artifacts from preservice teacher learning. Instructors and course designers also consistently contributed to an instructor D2L shell where resources, lesson plans, and professional readings were available for all course instructors to utilize. During our weekly meetings, the instructors and course designers also expressed appreciation for the opportunities that this emergency transition created as they began to consider the pedagogy of online learning as an important aspect of every preservice teacher’s education.

Re-visioning and Questioning the Practicum

As course designers, we were challenged to reconceptualize the traditional teaching triad (Haigh & Middleton, 1998; Veal & Rikard, 1998). At present, we are unsure what form schooling will take over the next few years, but we realize that we must be prepared for several possibilities. If schools reopen and preservice teachers are able to return to the classroom, the traditional version of the teaching triad will be possible (see Figure 1).

Figure 1

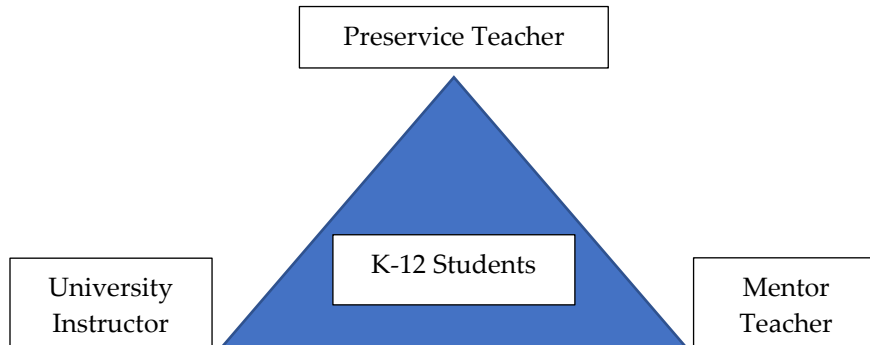
*Schools Open and Preservice Teachers Are Able to Complete Practicum Fully in Schools
(Traditional Preservice Teaching Triad)*



If schools shift to online instruction or blended learning, we envision preservice teachers joining their mentor teachers to support them in the face-to-face and online environment (see Figure 2). In this case, given the added complexity of an online or blended environment, K-12 students will become important participants in the teaching triad. While it could be argued that this is the case with any practicum situation, we believe it will be pronounced in the blended or online environment given all parties are adjusting to a new normal.

Figure 2

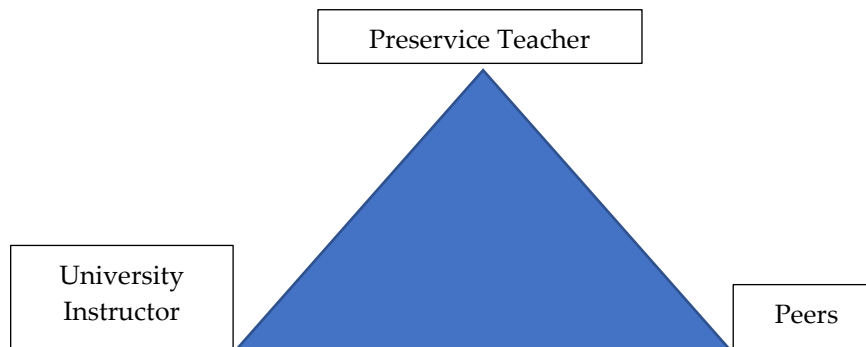
Schools Move to a Blended or Online Mode of Delivery and Preservice Teachers Work with Mentor Teachers in That Environment (Alternative Preservice Teacher Model)



However, should preservice teachers be unable to engage with K-12 in-service mentors, even in the online environment, it will be necessary for the pandemic practicum to continue (see Figure 3), and the role of peer preservice teachers to provide feedback and act as students for the lessons of their classmates will continue to be vitally important.

Figure 3

Schools Remain Closed and Preservice Teachers Must Complete Practicum Online (Pandemic Practicum)



These three scenarios will challenge our leadership team to analyze the structure of the practicum to ensure that we can fulfill both the practicum course learning objectives as well as teacher certification requirements in Alberta. Our learning from this emergency online field course will also support the design principles that will guide future iterations of practicum courses. It is through close collaboration with institutional leaders, Alberta Education, and K-12 jurisdictions that we may consider innovative and creative solutions to complex educational challenges. COVID-19 has presented us with the opportunity to critically reflect on our current practices and consider our response. This crisis has also ignited a historical moment in education to reimagine the possibilities for practicum and how preservice and in-service teachers can support K-12 students during and post-COVID-19.

Conclusion

As a result of the COVID-19 pandemic and actions taken to protect public health, the world as we know it has been changed forever. Going forward we do not know what schooling and teaching will look like for K-12 students or for preservice teachers. In order to plan judiciously for possible outcomes, however, there are a number of recommendations faculties of education may want to consider. The first of these is the

need to consider development of multiple versions of practicum courses which take into account the swiftly changing landscape of K-12 education in the COVID-19 era. This is likely to mean each practicum course will require both a face-to-face option as well as an online option that will allow preservice teachers to move fluidly between the two in response to their own exposure to COVID-19 as well as to the possible repeated closure and re-opening of K-12 schools. Secondly, education faculties ought to consider ways to include online instruction as a regular and on-going part of the preservice teacher practicum. This goes beyond merely including technology courses or expecting preservice teachers to create digital presentations to an understanding of e-learning, both theoretically and in practice, as an effective form of instruction for K-12 learners. Improving the digital instructional literacy of preservice teachers may become a necessary next step to ensure that online pedagogy is well designed for K-12 students. Finally, and given the constant state of flux created by COVID-19, practicum instructors should be provided training to improve their own digital instructional literacy to ensure that they can provide meaningful feedback for preservice teachers.

As regards the program in which the pandemic practicum was developed and delivered, the opportunities and challenges presented by the COVID-19 pandemic and the resultant closure of schools has led to two important philosophical shifts. First, as recommended above, we will be considering the ways in which a more blended approach to practicum can be achieved. That practicum occurs in schools has remained largely unquestioned but the realities that resulted in the pandemic practicum made it clear that we will require rich, engaging alternatives that are seen as equal to the experience of spending time in a K-12 classroom. Preservice teachers may yet again require the opportunity to teach one another or to participate in practicum experiences that occur in online classrooms in the K-12 school system and it behooves us to ensure that these opportunities are well-developed and integrated into the program, versus

being considered an add-on when required. Secondly, it is clear that there is a role for online pedagogy, both in postsecondary education and in the K-12 school system but that this must extend beyond mere study of the technology to ensure a clear understanding of online pedagogy to ensure exceptional learning experiences for young learners. In making online pedagogy an important part of the program, we can help to ensure new teachers take these understandings and skills into the K-12 classroom.

Working directly with children and youth in schools will always be the foundation of teacher education, but it is a foundation that must now be expanded. Increasing teacher capacity through online preservice teacher practicum experiences and targeted instruction in online pedagogy can assist them to perform successfully in online environments and will likely be necessary to prepare professionals for an uncertain future.

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