

Tipping, S., & Dennis, J. (2022). K-12 school leaders' application of Professional Learning Communities (PLCs) during a pandemic. *International Journal for Leadership in Learning*, 22(1), 364-395. https://doi.org/10.29173/ijll15

K-12 School Leaders' Application of Professional Learning Communities (PLCs) During a

Pandemic

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Abstract

Using reflective practice inquiry (Schön, 1983), this article highlights the role of K-12 school leadership approaches in facilitating Professional Learning Communities (PLCs) (Dufour & Dufour, 2012; Dufour & Eaker, 1998; Dufour et al., 2008) during the COVID-19 pandemic. In a constantly changing and uncertain world, school leadership is acknowledged as being more complex and multi-faceted while also becoming more intensified, demanding, and diverse than ever before (Canadian Association of Principals (CAP), 2014; Pollock & Schleicher, 2015; Wang & Hauseman, 2015;). Leadership continues to evolve and become more multi-layered during a pandemic, requiring both face-to-face and remote learning options. Therefore, a leader's responsive approach may differ based on the situational context. Educational research in instructional leadership (Hallinger, 2003, 2005; Robinson, 2011), shared leadership (Dewitt, 2017; Leithwood, 2012), and adaptive leadership (Bagwell, 2020; Dunn, 2020; Heifetz et al., 2009) have shown these to be effective leadership approaches. A PLC is an organizational path for leadership to facilitate the building of relational trust, and especially during complex, uncertain times, such as during a pandemic. To be an effective leader, trust becomes an essential factor within schools (Bryk & Schneider, 2002; Fink, 2015). Strengthening relational trust between teachers and the principal fosters conditions for members of a school community working together as well as social and academic progress for student learning (Bryk & Schneider, 2002; Tschannen-Moran & Hoy, 1998). The leadership implications for K-12 principals require adaptability and resilience to the ever-changing context while always maintaining ethical and moral standards. This article highlights the critical role in developing PLC collaborative opportunities to establish teacher connections based on relational trust to support student learning.

Keywords: leadership, reflective practice, professional learning communities (PLCs), trust, pandemic

Introduction

The co-authors are two principals reflecting on the recent COVID-19 pandemic crisis. They

represent the leadership of two separate school staffs in geographically diverse and international

locations. One leader has thirty years of teaching experience internationally and has been a vice-

principal and principal in K-12 English and French schools, currently working in the Netherlands. The other leader also has thirty years of teaching experience in K-12 and has been a vice-principal and principal in K-12 English schools in Alberta, Canada. Together, both principals spent time reflecting on their perceptions and experiences of leading through the COVID-19 pandemic.

Context

This paper examined leadership perceptions that emerged during the COVID-19 pandemic crisis between March 2020 to January 2022. We explored how the pandemic experience impacted our leadership practices as the events of the crisis unfolded. Our discussion is based on our reflective practices as we navigated our schools' staff through the pandemic. The experiences reinforced our leadership beliefs that collaboration continues to provide both professional and personal support.

The overarching question we attempted to answer was: *How do principals' experiences* and perceptions inform their leadership practices during a pandemic crisis?

We responded to the question by drawing upon our leadership experiences from March 2020 to January 2022 and using reflective practice inquiry before and during the ongoing COVID-19 pandemic. Our continued reflections helped us to value our multifaceted experiences in our respective schools and understand our perceptions of leading a staff during this time. Building strong relationships through collaboration demonstrated how PLCs and team experiences can be at the heart of advancements in building trust and collective efficacy (Donahoo, 2017, 2018).

Theoretical Perspective

Schön's 1983 book, *The Reflective Practitioner: How Professionals Think in Action*, guided the authors' reflective inquiry. According to Schön (1983), reflective practice is the ability to reflect on one's actions for the purpose of engaging in professional learning. Schön (1983)

described reflection "as the deliberate, purposeful, metacognitive thinking and/or action in which educators engage in order to improve their professional practice" (p. 2).

Schön (1983) described the concept of "*Knowing-in-action*" as actions based on an intuitive understanding of an event or situation. When leaders reflect upon an action after the event has happened, they are able to apply their knowledge when they make decisions (Schön, 1983). Developing tacit knowledge, or implicit knowledge, comes when leaders reflect deeply on their work as well as their experiences. *Knowing-in-action* is specifically important in the education profession whereby leaders, teachers, and students adapt to new situations of learning by applying their knowledge and expertise. Schön (1983) describes professionals as being able to seamlessly problem-solve. Unfortunately, professionals are "unable to describe the knowing which [their] action reveals" (Schön, 1983, p. 54). The practical knowledge or competence helps professionals make decisions and judgements in events, situations, and interactions with others; therefore, the *knowing-in-action* comes across as unconscious competence (Burch, 1995).

Schön (1983) describes "*reflection-in-action*" as the generation of meaning when individuals can think consciously, and assign meaning during interactions in learning situations. Professionals think about what they are doing, notice and observe during the action itself, then improvise and adapt to make new sense of their actions. In other words, one can observe a teaching moment in action and then determine which process guided their professional practice afterward. Likewise, leaders improve upon their own practice when time is taken for "*reflection-in-action*" and know what they should reflect on as they engage in ongoing interactions. For this article, this meaning-making process was an important framework in coming to understand the situation through interpretation of the *knowing-in-action* that took place.

Literature Review

Professional Learning Communities

Professional Learning Communities (PLCs) optimize the shift required in professional learning to allow educators to be more actively involved in their learning (Timperley, 2011). PLCs create an opportunity for a "culture of collaborative professionalism" (Fullan & Hargreaves, 2016, p. 7) to occur, connecting both professional development and professional learning together to alter practice and address specific student needs. For professional learning to occur and to be effective in changing practice, teachers need to be engaged (Thoonen et al., 2012), have their previously held professional assumptions challenged (Timperley, 2011), and be made to focus on their student learning needs as per their specific context (Blase & Blase, 2000; Leithwood & Azah, 2017; Robinson, 2006, 2011; Robinson et al., 2008; Timperley, 2005, 2011).

There is no universal definition of PLCs (Lomos et al., 2011; Stoll et al., 2006; Stoll & Louis, 2007); the foundational understanding is that staff use a collaborative inquiry and action research process that is purposeful and job-embedded. This process challenges the staff's pedagogical practice reflectively and inclusively to improve student learning (Dufour et al., 2008 Stoll et al., 2006; Vescio et al., 2008). Three elements are necessary to create a successful PLC: setting goals for student learning based on their needs, establishing a strong collaborative culture, and finally, educators working together with research-based practices (Dufour, 2004).

Instructional Leadership

Instructional leadership is leading while encouraging and developing teachers' professional learning (Blase & Blase, 2004; Blasé et al., 2010; Hallinger & Heck, 2010; Leithwood, 2012; Robinson, 2011; Southworth, 2002) which ultimately enhances the quality of teaching and learning within schools. More specifically, Leithwood (2012) described instructional

leadership as being compartmentalized into four areas: setting direction, developing people, refining and aligning the school organization, and improving the instructional program. As stated in the Alberta Education, *Leadership Quality Standard*:

Quality school leadership occurs when the school leaders' ongoing analysis of the context, and the school leaders' decisions about what leadership knowledge and abilities to apply, result in quality teaching and optimum learning for all students in the school. (Alberta Education, 2019, p. 2)

Shared Leadership

Shared leadership creates a collective responsibility and purpose amongst the members (Carson, 2007). This leadership approach deconstructs the hierarchy to include all staff voices in the decision-making process and maximizes the team effectiveness of all its members (Bergman et al., 2012; Leithwood & Sun, 2012; Lynch, 2012). Shared leadership has been associated with increased teacher motivation (Leithwood & Jantzi, 2012; Louis et al., 2010; Wallace Foundation, 2010), as well as the building of teacher capacity, and having an impact on student engagement and achievement (Leithwood & Jantzi, 2012; Louis & Wahlstrom, 2012). In the development of PLCs, shared leadership becomes essential to develop the sense of shared and collective responsibility amongst teachers (Carpenter, 2015; Hord & Sommers, 2008). Wang et al. (2014), in their meta-analysis research, found that shared leadership provided a higher team effectiveness. Empowering teachers through a shared leadership approach creates and supports the foundational elements required to support PLCs—trust, collaboration, and a positive school culture to facilitate a collective responsibility to impact student learning (Tipping, 2020).

Adaptive Leadership

Adaptive leadership has been an approach that has been acknowledged since 1994 (Heifiez, 1994); however, it continues to be overshadowed by other leadership approaches. According to Northhouse (2019), the "theoretical underpinnings of adaptive leadership remain in the formative stages" (p. 257). This approach requires additional inquiry-based research to strengthen the understanding and relevance of this type of approach as we continue to address complex educational challenges. Adaptive leadership is very apparent and applicable given the current complex pandemic situation that required a significant shift in educational philosophy and approaches, which was unprecedented. These types of situations could continue to emerge and the adaptive leadership approach may offer leaders insight into how to approach these issues. Through our reflections and our experiences, we realized that this leadership approach would be applicable and practical for future situations requiring meaningful change.

According to Heifietz and Linsky (2002), there are two types of challenges where adaptive leadership would be applicable within schools—technical problems and adaptive problems. Technical problems are clearly defined and can be addressed with expert technical knowledge, whereas adaptive problems are more complex and require multiple perspectives and dialogue (Heifietz et al., 2004). Adaptive leadership requires leaders to tackle complex problems through co-created solutions and collaboration (Heifetz & Linsky, 2002). PLCs create an ideal structure during the pandemic to help solve problems because they incorporate multiple perspectives and collaboration opportunities.

Relationship Building in Professional Learning

Relationships are key in establishing the foundational elements and conditions for a PLC to exist, in either an in-person or virtual format. Developing relational trust and a positive

collaborative culture allows staff to take risks and be vulnerable to learn from others. We realized that it was important to have PLCs established before the pandemic because it allowed for deep pedagogical discussions that exposed transparency and professional vulnerabilities.

Trust

PLCs flourish when trust is developed amongst its members (Louis & Wahlstrom, 2011). Trust creates the "ethical foundation" (Robinson, 2011, p. 17) and "social glue" (Fullan & Quinn, 2016, p. 73) that binds staff together in a sense of shared commitment and responsibility (Fullan & Quinn, 2016; Kruse & Louis, 2009; Tschannen-Moran, 2009). Having an established sense of trust allows staff to become more engaged in their professional learning (Lee et al., 2011; Louis & Wahlstrom, 2012; Robinson, 2011; Tschannen-Moran, 2009) to take risks (Gruenert & Whitaker, 2015; Sharratt & Planche, 2016), to be more innovative (Robinson, 2011) and to participate in reciprocal dialogue within a collaborative practice such as PLCs (Talbert & McLaughlin, 1994).

Bryk and Schneider (2002) studied the impact of trust on school improvement. They found that relational trust was the most significant for school improvement and a foundational element for collaborative work. Their research found that a high level of relational trust created a positive impact on social and academic development, on relationships within the school community, and heightened collaboration to positively influence school improvement (Bryk & Schneider, 2002, 2003; Hargreaves & Fullan, 2012; Hoy & Tarter, 2004; Sharratt & Planche, 2016).

Trust develops through staff interactions. Louis and Wahlstrom (2012) found that there was a correlation between leadership action and staff trust. The importance of school leaders demonstrating and modeling the elements of trust becomes paramount in developing trust amongst staff and within the school community. Although leaders cannot establish and develop trust on

their own, their actions and relational interactions with staff (Bryk & Schneider, 2002) created these conditions of a positive school culture allowing for collaborative opportunities to occur.

Collaboration

In many organizational settings, such as educational contexts, the term collaboration is widely used to identify a means of communication to share ideas and resources, as well as dialogue and problem-solving amongst members. The difference in a collaborative discussion in comparison to a cooperative one is the depth of purposeful engagement in learning. Conceptualized collaboration is seen as "co-labouring" (p. 4) where members are:

responsible and accountable for [their] own work while supporting the work of other collaborations. Co-labouring fosters interdependence as we negotiate meaning and relevance together. Trust collaboration involves a sense of parity and reciprocity as we set clear goals, develop trust, and foster strong relationships, which will drive and sustain our learning as a collective. (Sharratt & Planche, 2016, p. 4)

Collaboration has several benefits. Through collaboration, collective responsibility is developed, helping educators to build a common practice (Sergiovanni, 2005), develop both social and professional capacity (Hargreaves & Fullan, 2012), in addition to positively impacting student achievement (Dufour & Marzano, 2011; Lee et al., 2011; Leithwood, Leonard & Sharratt, 1998; Lomos et al., 2011; Louis et al., 1996; OECD, 2016; Talbert & McLaughlin, 1994; Tichnor-Wagner et al., 2016; Vescio et al., 2008).

To facilitate collaboration, leaders can scaffold collaborative activities to support productive dialogue. Staff experiences need to be positive to maintain trust and skills to be incrementally developed throughout the process (Rosenholtz, 1985, 1989). Through the establishment of positive collaborative staff experiences, they will develop collective efficacy

resulting in the belief that they are able to contribute to the improvement of student learning (Donahoo, 2017, 2018). Leaders need to be aware that the importance of building collaboration in an ethos of trust takes time before purposeful and meaningful collaboration can be embedded into the school culture.

School Culture

Trust and collaboration require a positive school culture to facilitate and foster growth in these areas. Therefore, for a PLC to be embedded into the pedagogical practice within a school, a positive school culture needs to be established. A culture, as described by Deal and Peterson (2009), is the "underlying social meanings that shape beliefs and behaviour over time" (p. 6).

A collaborative, positive culture is considered the "theoretical nirvana of school cultures" (Gruenert & Whitaker, 2015, p. 10). This type of a culture supports professional learning within the school through a sustained and shared focus on student learning. Staff challenge each other in their pedagogical practice to encourage professional growth and support each other in learning.

Leaders need to be aware that the creation of a collaborative culture takes time. They must provide support to incrementally develop collaborative skills and scaffold experiences to create a collaborative culture with a shared sense of responsibility, norms, values, and beliefs.

Our Personal Experiences: Two Vignettes

The vignettes below reflect the authors' experiences using Schön's (1983) principles of reflective practice, i.e., our *knowing-in-action* with regards to creating PLCs while teaching online during the pandemic crisis. Note that the participants' experiences as educators in international school systems, and their perceptions as experienced principals impacted their observations and reflections. Vignette 1, for instance, was written by a practicing elementary school principal in the Netherlands. Therefore, the illustrations and interpretations often entailed an analytic part in which

the perceptions are compared to (previous) experiences as both teacher and principal. Both accounts are written in first-person narration, which highlights the personal importance of the pandemic for the leaders.

Vignette 1

Shock rippled through our community, as it was similarly occurring throughout the world. Schools were closing. A lockdown was coming into effect, and everyone would be working from home. In effect, our reality resembled science-fiction. The shock and disbelief were soon interrupted by frantic emails and urgent phone calls. Staff began to exhibit signs of panic and questioned how to proceed. My own sense of unease started to swell up inside, but it was soon overcome by the instinct to remain calm in these situations. I continued to repeat the message "We are stronger together" to reassure others that the problem was not insurmountable. As information started to disseminate, staff communication became a priority as I started to plan our approach to this new reality with my leadership team.

Meanwhile, questions whirled in my mind: How do we proceed? How do we plan and organize for student learning? Do staff have the skills required to support students in this situation? How do we continue our collaborative work and mitigate the anticipated sense of isolation?

My mind leapt forward towards the challenge of maintaining our positive, collaborative, and supportive culture in these circumstances. I knew we had laid a solid foundation during the school year, but could it be sustained? I knew the first step would be to ensure that staff did not feel isolated, and I thus started with daily check-ins with grade-level groups. I encouraged many staff to text, email, or call if they had questions. After a couple of weeks, I established a regular check-in meeting for those who had questions or wanted to connect with others. We met regularly to review, plan, and discuss how to teach virtually. Looking at the school calendar, I realized that we had a professional development day fast approaching with a focus on literacy. My first thought was: Do we have the skills to implement this new pedagogical practice under these circumstances? Do we need to focus on pedagogical or technical skills? Although setting up an interactive, collaborative professional learning session was daunting, I knew that I, like the teachers, had to address the unknown—to show vulnerability and shift thinking to learn new skills to engage others in professional learning. Reflecting on our wellestablished routines and collaborative culture, I realized that we had staff who had already been involved in integrating technology into the literacy program. I felt that we could incorporate pedagogical practice with some additional technological skills. I approached the grade level team members. Their enthusiastic response made me feel less apprehensive as we started to plan together. Knowing that the staff was at various stages in their technological skills, we created break-out rooms in which the staff was able to go in and out of sessions based on their interests and current needs to support their online programming.

I was filled with hope and a great sense of pride as they teamed and learned from each other. The staff was able to share expertise and demonstrate leadership during a digital EdCamp format, and this created a more cohesive, collaborative, and supportive staff given these unprecedented circumstances. It reinforced my belief that we are stronger together and that even faced with challenges, our collaborative, positive culture can overcome daunting situations to continually support students in their learning, as well as our own. We knew that we could overcome any future challenges if we worked together. Although we were physically isolated, our emotional and collaborative efforts would always bind us together.

Vignette 2

Walking down the hallway of the middle school on March 16, 2020, still feels a bit surreal in my memory. I was already missing the chatter of student voices, the smell of coffee coming from the staffroom, and phones ringing off the hook. I was in my second year as a principal at this school, and the night before, news from Alberta Education revealed that all schools in Alberta were moving to online learning. Students would not be returning to school the next morning. I was experiencing a sense of panic. My heart pounded and my temples throbbed. I received instructions that I needed to prepare teachers to immediately start teaching online, and I only had a couple of days to prepare. As a school leader, I felt an overwhelming sense of fear as I asked myself if my commitment to leadership and my passion for helping teachers was strong enough in the face of a pandemic.

Instinctively, I knew that everyone on my staff would look to me for guidance. We had so many needs and new things to learn. They needed a brave principal to lead them. One day at a time, I thought. Then I made a plan.

I gathered the staff in our school's large gathering area. We called it a Collaborative Classroom. It occurred that it was appropriately named for the work we were about to embark upon. On the first morning together, we created new norms. We agreed to support and lean on each other, to communicate twice a day in our Collaborative Classroom, focus on student learning, and show kindness to each other. We spent the next couple of days organizing our classrooms and cleaning all surfaces. We met again in the afternoon to ensure our tasks had been completed and the staff's emotional well-being was healthy.

The staff decided to work in collaborative grade teams. This was not new for us as our grade teams already often planned collaboratively together. We assembled our teachers who taught

the same grade plus one Educational Assistant (EA) each. I was on the grade-six team, which was purposeful. I needed my staff to see me as working alongside them. We worked in our grade teams and tediously packed up all the students' belongings, placing them in labeled bags in the gym for parents to pick up. At the end of the day, during our staff check-in, I found out the grade five team wasn't finished. In an inspiring testament to collaboration, the entire staff then pitched in to help and stayed late until the work was completed. We were tired, but our hearts were full as we worked together to complete our purpose. We realized we needed each other as we faced the unknown.

I brought in a technical expert from the school division to help the staff improve our technology skills. The first step was to be able to communicate effectively with each other and with our students and families. The technical expert helped our staff download the WhatsApp application on our phones to facilitate communication. Once we accomplished this, he taught us how Google[®] Classroom worked as none of us had used it before. I had learned more in two hours from him than the last two years of owning my Chromebook. I felt overwhelmed, yet I was amazed at my new technology skills. The best part was that I was really pushing myself and my staff saw me struggle and learn alongside them.

Our grade teams worked together to collaborate on our grade level Google[®] Classrooms for all students in the school. Each teacher on the grade team was responsible for teaching one core course—either Math, Language Arts, Science, or Social Studies. The EA on each grade team was included in the Google[®] Classroom to support our Inclusive Education students throughout the days to come. We all shared the load. We met twice each day when we began teaching online, and I realized that the meetings were opportunities to share our feelings and challenges, and to support and encourage each other. Our staff needed each other, both emotionally and for technological support. The teachers were able to lean on each other to teach, post lessons, assess, and help each other monitor the students in the grade. We created collaborative Google[®] Classrooms to provide engaging, interactive lessons and to deliver effective feedback and assessments.

As a leader, my confidence grew. Our staff was collaborating beyond my own expectations. Within a short couple of days, the staff learned a new technology platform to post lessons to their students. This support increased communication while connecting both students and parents, all while demonstrating kindness and support of one another. Our school maintained the strength of a learning community as it was transformed into a virtual platform. I felt proud and humbled. Although each staff member was at a different level with technology, we all helped one another through the difficulties. The staff rose to the challenge to continue student learning in the face of a crisis. Their professionalism demonstrated high moral standards. We were ready to let the online journey begin.

Discussion

This reflection paper examines how PLCs helped leaders and teachers with online learning practices in their respective schools in the Netherlands and Alberta during the COVID-19 pandemic transition. Principals and teachers quickly learned new technology and built capacity on how to use technology effectively. The PLCs created opportunities for staff members to plan and create new and engaging lessons, discuss online teaching practices, discuss ways to connect with students, problem-solve together, and build relationships with colleagues and the parent community. Using the vignettes as examples, reflections will focus on context, collaboration, benefits of PLCs and the importance of adaptive leadership.

Context

Context played an essential role in the educational practices of leaders and their response to issues and challenges within schools. With certainty, the context of the COVID-19 pandemic

caused unprecedented disruption to students' lives in the way they received their education. The pandemic demonstrated how technological learning was accelerated. Upon reflection, the authors in Alberta and the Netherlands believed that because they already had the PLC culture and structure in place, this allowed for accelerated learning to occur. In our opinion, without PLCs, culture shift, change resistance, time and sustainability would become imminent leadership challenges. However, this was not the case for the authors because the foundational elements of trust, collaboration and positive school culture had already been embedded within both schools. The leaders were able to shift their cultural practice online, and because their trust was previously established, this expedited the learning to focus more on teacher needs. Therefore, the cultural online change advanced through professional learning faster than if the structures and cultures were not already established (Kruse & Louis, 2009). Research has often shown that this change in practice could cause further isolation and resistance (Hord & Sommers, 2008; Robinson, 2011; Rosenholtz, 1989), and the authors found that there was minimal resistance to change and that a culture existed that allowed for collaboration. Upon reflection, they felt that this may be due to the previously established practices that were supported through trust, and to a positive collaborative culture already embedded into school practice. Even with trust and a positive collaborative culture, the change in teacher practice from isolation to collaboration was perceived to cause less resistance (Hord & Sommers, 2008; Robinson, 2011; Rosenholtz, 1989) and there was an openness for teachers to be vulnerable, which reduced the sense of resistance (Sergiovanni, 2005). The leaders realized they needed to be aware of the importance of just-in-time learning (Brandenburg & Ellinger, 2003) and in communicating how to best proceed and work together in the PLCs. Conditions for PLC practice were already embedded into the regular practice; however, with the pivot to online learning, the leaders realized the importance of communication. Scheduling needed

to be embedded into the regular teaching timetable to provide opportunities for staffs to collaborate (Hord & Sommers, 2008; Reeves, 2006; Tipping, 2020) and facilitate the PLC collaborative process.

Importance of Collaboration in PLCs

Through the ongoing collaboration and well-established PLC frameworks in both schools, a sense of unity was created as the staff teams confronted the pandemic crisis together. The impact of announced school closures led initially to shock and negative feelings which increased the perception that the task ahead was insurmountable. However, with the PLC framework in place, a perceived overwhelming task soon became a manageable one. As the staff came together to engage in problem-solving, they experienced the power of collaboration and a sense of agency (Calvert, 2016a, 2016b). They felt stronger together, empowered to overcome obstacles and address issues that arose in their own specific context. However, it was evident in both leaders' situations that although there were negative feelings and anxiety initially, these negative emotions resulted in positive outcomes through the application of the PLC framework. The "grassroots problem-solving" (Northouse, 2019) allowed staff to work together to conquer any difficulties that they experienced. The school staffs became stronger together.

The PLCs created a safe space for people to feel vulnerable to learn and plan together. Often, in education, the sense of teacher autonomy creates isolation. If people suffer insecurity, or are otherwise left to feel vulnerable, they often choose not to participate or become less productive in the PLC. As the afore-mentioned vignettes highlight, the pandemic forced everyone to confront an unprecedented reality. This resulted in everyone feeling vulnerable and needing to be open and transparent in their own practice, and to work collaboratively to function effectively and to be successful. The PLCs provided not only a haven for professional learning, but it also created socialemotional support for staff to face the unknown together. Through these challenging times, the two leaders felt that there was observable evidence of PLCs in both their schools to support that PLCs during the pandemic de-privatized teaching practice (Rosenholtz, 1989; Vescio et al., 2008), improved collective efficacy (Donohoo, 2017, 2018; Lee et al., 2011), built trust (Bryk & Schneider, 2002), created mentorship relationships (Hargreaves & Fullan 2012) and developed critical thinking skills through problem-solving collectively (Deal & Peterson, 2009; Leithwood & Azah, 2017).

The PLCs built a morally responsive school community due to the trust formed through strong interpersonal relationships as staff members worked together (Sergiovanni, 1992). Sergiovanni (1992) stated that "collegiality comes from within as teachers feel the necessity of and the responsibility for sharing and working together" (p. 16). The teachers elevated their human potential when they moved to learning online, as they built trust, shared both values and responsibilities while empowering each other. According to Feldman and Fataar (2014), As the world becomes more digitally connected, the power of online PLCs can be leveraged to grow staff professionally and improve the education of their students, whilst still providing a "safe space" where through deliberative and supportive conversations the teachers can critically reflect and challenge one another (p. 1537).

Lessons Learned

Throughout the initial stages of the pandemic, the significance of communication and active listening to teachers was evident in both the work of the leaders and the staff. Active listening was essential to know what teachers needed and to create a support plan that was authentic and meaningful to build capacity, and which allowed for the implementation of quality online learning (Goldschagg & Wilmot, 2020; Tucker & Quintero-Ares, 2021). Providing teachers the

opportunity to "act purposefully and constructively to affect their professional growth and contribute to the growth of their colleagues" (Calvert, 2016a, p. 4), this supported the development of teacher agency. Reflecting on the differing educational situations, both leaders faced the same challenges regardless of physical distance but were bound together in common problem-solving approaches.

School closures during the pandemic steered the authors, in different countries, to experience challenges they had never faced before. Both leaders saw the new situation imposed on school communities as an opportunity to find innovative ways to acquire knowledge, and to instill new technological pedagogy. The pace for professional development was accelerated due to the urgency of implementing remote learning. Each of the leaders felt incredible satisfaction in the professional learning of their school teams as they modeled the importance of lifelong learning alongside their staff and worked collaboratively to enhance both technological skills and instructional skills in a digital format simultaneously. Both leaders gained much confidence and self-efficacy in their abilities to produce knowledge alongside their teachers as they built online learning materials, supported one another through online platforms and gave guidance and mentorship to their teachers.

Importance of Leadership

The most critical realization throughout the reflective process was that the leaders reinforced their beliefs about the importance of always keeping the students and staff at the heart of their work and their associated leadership decisions. The anxiety and concern regarding the unknown were evident throughout the vignettes and for others who experienced the pandemic situation in the educational field. Maintaining the focus on learning and wellbeing, the leaders were able to navigate this unprecedented time through this focus and knowledge that their leadership decisions made a difference in staff outlook and support to student learning in a new virtual format.

The leaders acknowledged through the reflection process that leadership is key in establishing PLCs in schools and even more critical when shifting the PLC work to online platforms. Upon reflection, the two leaders realized that this critical time in education required a moral and ethical responsibility to ensure that students were maintaining their learning in a new format while simultaneously supporting teachers in their learning. Both leaders focused on the importance of creating a supportive and safe environment to allow staff to learn together. Through reinforcing the structures already in place for the staff and emphasizing the existing skills and supports, this helped them through these unforeseen circumstances. Creating a safe, supportive, and familiar structure to allow staff to learn together and maintain the focus allowed staff to concentrate on student learning (Justis et al., 2020).

Reflecting on the process of implementing PLCs, the two leaders identified the importance of instructional leadership as critical in embedding the PLC process initially in the school culture. Instructional leadership during the initial stages of the pandemic crisis was evident when the two leaders were learning alongside teachers and ensuring that they had the resources required. As instructional leaders, role-modeling and learning simultaneously with staff demonstrated a growth mindset in complex situations to alter our traditional ways of knowing and doing. Shared leadership was also evident within the PLC structure and allowed those with stronger technical skills to provide collegial support with other staff.

As a result of this unfamiliar pandemic situation, the leaders came to realize that adaptive leadership was also required to respond to the unprecedented crisis and the complex issues that emerged during the unique contextual challenges it posed. The requirement to adapt to the

accelerated pace of change was necessary in an education setting; therefore, adaptive leadership was evident throughout the complex and multifaceted nature of the pandemic. Schön's (1983) form of *knowing-in-action* practice led the leaders to realize the importance of adaptive leadership, which they employed to help manage and lead the necessary change required by the pandemic context. Both leaders expected to continually adapt to new situations of learning as the change was certain throughout the pandemic. As a result, they repeatedly applied their knowledge and expertise to adapt and respond to challenges as they arose. The *knowing-in-action* was particularly prominent as the leaders observed teachers collaborating in their PLCs and analyzed situations and adjusted their actions based on their understanding and their leadership experience.

The leaders' actions reflected adaptive leadership in numerous ways. First, leaders need to understand and know the approach to manage and support their followers during change. An adaptive leader is not a leader who is the "savior who solves problems for people, [but is] conceptualized ... as one who plays the role of assisting people who need to confront tough problems" (Northouse, 2019, p. 257). Creating a supportive environment to assist staff in facing difficult issues and mobilizing staff to address change, reflects an adaptive leadership approach. The adaptive leadership approach provides structure and direction; however, the leaders do not provide the solution but are part of the solution process (Northouse, 2019). The staff has a voice and, through collaborative problem-solving, solutions emerge. In both leaders' experiences, they knew what their tasks were, and via problem-solving, the vignettes reflected on how they were going to address these issues. The leaders provided guidance and parameters, but then divided the work into smaller work tasks, giving voice to their staff members.

Second, adaptive leadership also gives "the work back to the people" (p. 269). The leaders were not in control of every situation but shared this role of problem-solving with the staff. For

example, in Vignette 2, the staff knew that they were going to use Google Classroom and together, the staff decided that they would focus on developing lessons on one specific subject area within a grade level to facilitate workload. The leader provided parameters but then divided the efforts into manageable chunks. PLCs give voice to people, and the leader is not in control but shares this role with other staff. Vignette 1 also empowered the staff to address their learning needs through the professional development offered by staff. By providing them with choice, the staff was able to organize and address their specific learning needs to support their pedagogical practice.

The leaders also engaged the following two additional adaptive leadership techniques: addressing staff distress and helping to shift them to a broader perspective. To confront the change process, the first leader regularly engaged with her staff to regulate their distress. As the leader, she was able to monitor individual stress levels and support staff emotional wellbeing through the establishment of a calming environment and via the purposeful pacing of new skill development aligned with staff needs. Although the rate of change was rapid, pacing mitigated the experience of distress. The staff became at ease in professional learning groups, which reinforced their comfort and ability to maintain a similar level of collaborative structure that was already in place. While the staff was experiencing emotional distress due to the new pedagogical and technical challenges, the PLCs provided a "vessel of safety" (Northouse, 2019, p. 268) and familiarity to navigate these challenges and to assist them to manage their distress. This created a safe, structured, and procedural space that allowed them to tackle the change together (Northouse, 2019). Furthermore, the second leader found that her leadership approach of "getting on the balcony" (p. 262) to understand the big picture and thus remove herself from the situation, helped her to gain perspective and get a clearer view of the reality. Since the second leader was a member of the

grade level group, she was able to see how the issues were interrelated, and she could then move seamlessly between seeing the big picture and the minute details.

Finally, both leaders were effective in directing staff and helping them to maintain focus on student learning. As leaders, we also had to help our staff shift to an adaptive mindset (Dunn, 2020). Moving from in-person to online learning platforms, staff needed to be more flexible, adaptable, and open to change. The impact of the knowing-in-action technique was particularly evident as the leaders observed teachers collaborating in their PLCs and addressing situations based on their understanding of their leaders' actions. For example, the leaders facilitated professional learning, such as creating content in Google[®] Classrooms. This, the online instructional methods, and the new online teaching practices brought staff closer together and created a shift in their mindset. Dunn (2020) postulated, "an adaptive mindset understands that taking the first step is important" (p. 33). The first step for the leaders was to pivot to leverage PLCs. They created a safe, supportive culture for teachers to learn and grow together in a manner that was conducive to having them rethink their traditional pedagogical ways and empowering them to explore new ways of connecting with students, colleagues and parents. Through wellestablished practices, the leaders instinctively continued their regular interactive methods; however, as they paused and reflected, they realized that adaptive leadership was necessary for educators to move learning forward in a solution-based response that empowered educators to be part of the problem-solving process. The opportunities for teachers to come together to network, to connect and collaborate professionally, and to support one another, decreased the fear and anxiety that educators were feeling and ultimately strengthened the established PLCs.

Through their use of vignettes and personal reflections, the authors realized that adaptive leadership was a critical tool to leverage that helped them respond to the unprecedented changes

required due to the pandemic. Through "collaboration as a key element in adaptive leadership" (Squires, 2015, p. 16), and the PLC structure, the leaders felt that "adaptive leadership [helped] manage unprecedented change" (Goode et al., 2021, p. 36). They regulated distress, created a safe environment, and provided direction while always keeping the focus on student and staff learning and wellbeing.

Conclusion

Unprecedented school closures shocked the world and created a shift in pedagogical and educational leadership practice during the COVID-19 pandemic. When the governments in Alberta and the Netherlands shut down the schools in their respective countries, the governments, as the source of authority, required all educators to comply. This was philosophically challenging since it was felt that students needed to be in school; however, the school administration was required to enforce the government's mandate, maximize student learning, and provide leadership and support for their staff. Although a combination of instructional and shared leadership was evident in both leaders' approaches prior to COVID-19, the leaders agreed that they assessed adaptive leadership as more impactful for leadership during the crisis. Using their previously established PLC structure to facilitate a new pedagogical practice, the leaders realized that exercised adaptive leadership demonstrated vulnerability, while working alongside staff to solve technical and adaptable obstacles that arose was very effective.

Upon reflection, we learned two important lessons. First, we realized the importance of having previously established strong PLC structures in place to accelerate the technological learning process for teachers to move from in-person learning to online learning. Second, adaptive leadership was important to manage unprecedented change in a crisis such as the COVID-19 pandemic. These realizations during the COVID-19 pandemic underlined the importance of first-

hand leadership experience and the ongoing process of personal reflections. This new understanding emphasized that K-12 leaders require adaptability and resilience to confront an ever-changing context while always maintaining ethical and moral responsibility that keeps students, staff, and families at the heart of their decisions.

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