

Professional Learning Communities: Beyond Teachers' Isolation and Attrition

by

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A Project Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Education

In the Department of Curriculum and Instruction

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University of Victoria

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Abstract

Studies show that teachers suffer from professional isolation and schools experience great rates of teacher attrition. This paper suggests that establishing a Professional Learning Community (PLC) in schools could solve teachers' isolation and attrition. In addition to addressing teachers' isolation and attrition, PLCs shows considerable potential for increasing teacher professional satisfaction, providing essential support for new teachers, improving teachers' practice, and raising students' learning outcomes. While there is strong evidence for the importance of establishing PLCs in schools, not all PLCs result with their desired outcomes. For this reason, this study provides an overview of successful PLC practices and offers a number of guidelines and suggestions for implementing and establishing PLCs in schools. This study found major elements that could contribute to the success of a PLC, such as, building trust among teachers, finding ways for teachers to discover common goals and shared values to work towards achieving in PLCs, and using action research and inquiries as the main approach to solving problems and developing improvements in school. This paper also suggests ways to organize PLC meetings and recommends crucial roles both teachers and principals could contribute to successful PLC practices.

Introduction

I was sitting in a circle at the age of five, paying close attention as my Kindergarten teacher peeled a boiled egg, cut it in half, and explained how eggs change their colours and take the form of their eggshell after being boiled. My eyes and mouth open wide in amazement as I took a quick look around to discover the same fascination in my classmate's faces. At that moment, I decided to work towards becoming the hero I perceived my Kindergarten teacher to be. Years later, after many experience of babysitting Kindergarten age children and approximately four years of undergraduate education and training to become a Kindergarten teacher, I grew to become the Kindergarten teacher I had desired to be. However, being a new teacher quickly felt overwhelming, due to the amount of workload demanded by the profession. This was accompanied with a sense of professional isolation, which led me to feel unhappy and unsatisfied with my chosen profession. Not long after starting to teach children in a Kindergarten, I quit the profession.

Teachers' experiences of being overwhelmed and isolated as professionals have been the subject of considerable discussion in the academic literature. Many teachers reported experiencing professional isolation within the profession, which may have led many of them to quit or have the desire to quit the profession (Fullan, 2007; Jones, 2012). Davidson & Dwyer (2014) found in their study of reducing professional isolation among music teachers that teachers' professional isolation is one of the key factors leading to teacher attrition (p. 39). Although studies do not indicate the percentage of professional isolation that contributes to teacher attrition,

the rate of teacher attrition in recent years is significantly high. Teacher attrition is a worldwide concern, yet few countries have statically documented the rate of teacher attrition. Kelley (2004) stated that “the [United States] Schools and Staffing Survey and Teacher Follow-Up Survey found that more than a third of beginning teachers leave the profession during the first 3 years, and almost half leave after 5 years” (p. 438). Mason & Matas (2015) found that half of new teachers in Australia leave the profession within the first several years (p. 45). Although each province and territory has slight variations, the average rate for teachers’ attrition in Canada is 30% during the first five years of employment (Phillips, 2002, p. 27).

One of the most frequently cited measures to address teachers’ feeling of isolation and teacher attrition is to invite teachers to participate in a social professional network, such as a professional learning community (PLC) (Fullan, 2007; Davidson & Dwyer, 2014). Establishing a community, such as a PLC can encourage a sense of professionalism, which can help teachers feel part of a team rather than feel isolated. Tam (2015) explained that PLCs can also help generate trust among teachers, which leads to openness, which then leads to collaboration and therefore a decreased sense of professional isolation (p. 23). The feeling of teachers’ isolation includes not being able to observe other teachers’ practices, interactions, and sharing of resources and opinions on curriculum (Davidson & Dwyer, 2014, p. 29). Teachers need to first observe their colleagues teaching in classrooms to be able to give effective suggestions. Peskin et al. (2009) also found that during the practice of PLCs, experienced teachers found it pleasant to receive collegial feedback after being observed in classrooms (p. 33). One of the experienced teachers stated the following in an interview to help understand teachers’ perspective of PLCs: “[t]eaching is a conservative profession, repeating year after year. We don’t get feedback from the others nor know what is going on in others’ classrooms. Interacting with people helps us to

receive constructive suggestions from colleagues which make a difference from individual work” (Tam, 2015, p. 432). PLCs can provide the opportunity to observe and be observed by peers during class time (Richmond & Manokore, 2011; Peskin et al, 2009).

Battersby & Verdi (2015) found that PLCs assisted teachers who previously desired to quit their profession to change their desire towards wanting to continue working in the same profession (p. 25). Tam (2015) also found that over time after participating in PLCs a number of teachers’ initial professional negative beliefs changed into positive ones (p, 29). Part of this change may be that participation in PLCs can assist teachers with essential emotional support, which in turn fosters a feeling of appreciation and encouragement (Tam, 2015, p. 29). Moreover, PLCs can especially help teachers of non-academic subjects such as physical education and music by providing much needed specialized support, thus helping teachers to become more recognized and appreciated (Beddoes et al, 2014; Battersby & Verdi, 2015). Woodland & Mazur (2015) also stated that PLCs are often designed to satisfy professional needs, such as solving teachers’ isolation (p. 20). This aims to ensure that participating teachers are feeling comfortable and enjoy their professional duties, which could potentially decrease the rate of teacher attrition, studies reveal lower rates of teacher attrition and isolation after the implementation and practice of PLCs (Battersby & Verdi, 2015; Weißenrieder et al, 2015; Beddoes et al, 2014; Wong, 2010; Wells & Feun, 2012; Tam, 2015; Woodland & Mazur, 2015).

PLCs can be defined as “a community of professionals who come together for sharing, interaction, and mutual support leading to personal and professional growth” (Padwad & Dixit, 2008, p. 2). Most of the literature’s descriptions of PLCs include some aspect of school growth and reform through improving teachers’ professional practices using collaboration. Woodland & Mazur (2015) stated the following regarding PLCs:

PLCs engage teachers in the most critical questions that exist for educators: What should students learn? How should we teach them and how will we know when they have learned? What will we do when students do not learn, and what will we do when they do learn? [Furthermore,] they allow schools to recognize and harness the talent that exists within their organizations; they treat teachers as the generators of knowledge instead of seeing them merely as people who need improvement to happen to them. (p. 9)

According to the *Glossary of Education Reform* (2014), an online source for journalists, parents, and others interested in reform concepts discussed by educators in the public school system, a PLC “is a group of educators that meets regularly, shares expertise, and work collaboratively to improve teaching skills and the academic performance of students” (p. 1). Ferguson (2013) also defined PLCs as “a group meeting of educators who, as a collective, use inquiry and data to enhance student learning while at the same time increasing teacher knowledge and learning” (p. 51). Furthermore, Mitchell & Sackney (cited by Peskin, Katz, & Lazare, 2009) defined PLCs as “a group of people who take an active, reflective, collaborative, learning-oriented, and growth-promoting approach toward the mysteries, problems and perplexities of teaching and learning” (p. 25). In this paper, PLC is defined as a community of collaborating teachers who meet regularly to work towards improving the teaching profession using action research and honest discussions with the support of principals.

PLCs can offer a lot more than potentially solving teachers attrition and isolation. PLCs can help develop the school by potentially turning teachers living in isolation into a collaborative team working together for a continuous learning experience to improve their practice, therefore, benefiting students’ learning.

The following literature review explores how PLCs can benefit teachers by providing a collaborative environment for an effective continuous learning and professional development beyond mandatory workshops and lectures. Furthermore, PLC can be especially beneficial for new teachers because new teachers can often feel overwhelmed with their teaching obligation and school duties. The following will also reveal that new teachers can be in desperate need of collegial support. A PLC has the potential to improve teachers' practice by providing opportunities for to reflect and question individual practice then share these reflections to find solutions for problems that may occur. PLCs can also help increase teachers' self-efficacy. Finally, the following literature review will give examples and explain how PLCs can help improve students' learning by improving teachers' practice.

Benefits of Establishing PLCs in Schools

Poulos, Culberston, Piazza, & D'entremont (2014) explained that schools thrive based on their team collective efforts to further improve, learn, and innovate; PLCs can provide the opportunity for fostering such collective efforts (p. 28). Establishing PLCs could be the best way to establish a continuous learning environment for teachers (Davidson & Dwyer, 2014; Stahl, 2015; DuFour, 2014; Owen, 2015). In fact, DuFour (2014) explained that, "the professional learning community (PLC) process provides the best environment for powerful professional development" (p. 31). Woodland & Mazur (2015) added that PLCs emerged as the best approach to keep teachers improving and learning throughout their profession (p. 9). Moreover, Ferguson (2013) articulated that "there is a general consensus that effective professional development needs to involve active learning for teachers, be sustained and on-going, integrated with school-improvement plans, collaborative, and job-embedded," which PLCs can provide (p. 57). Tam

(2015) added that establishing PLCs is a way to maximize professional development in schools in today's age (p. 424).

Many teachers engage in extra professional workshops or especially designed professional development lectures; however, presentations and short-period workshops assigned for teachers may not be adequate to improve teachers' practice. McConnell et al. (2013) added that designing specific workshops for one or limited specialized subject teachers such as earth science teachers can be costly and not efficient (p. 268). Ferguson (2013) is more blunt; she stated that, "traditional forms of professional development where experts present a one-time workshop are ineffective" (p. 67). This lack of effectiveness could be because traditional workshops and lectures place teachers in a passive role, while in PLCs teachers function as a collaborative community of active learners. As Tam (2015) notes, "[r]esearch has documented that collaborative learning activities lead to teacher learning" (p. 425); such activities include teachers observing each other's practices, giving and receiving feedback, engaging in a professional inquiry, and participating in reflectional conversations, which are all activities characteristic of PLCs (pp. 425-426).

Poulos et al. (2014) found that many "teachers still are not comfortable with being critical of one another at the level needed" (p. 30). This discomfort suggests an opportunity for a positive change, as honest feedback and positive criticism are crucial for improvement. Sims & Penny (2014) observed that PLCs provide a safe place for such criticism by providing the opportunity for open and transparent professional conversations between teachers (p. 43). Not only do teachers seek opportunities to strengthen their knowledge using PLCs but also those who seek opportunities for professional improvement value the advice and sharing of ideas and expertise they receive from other teachers and from one another (Fullan, 2007; Richmond & Manokore,

2011). Davidson & Dwyer (2014) and Peskin et al. (2009) confirmed this after interviewing a number of teachers about their experience with PLCs; their research revealed that teachers enjoyed sharing their expertise, resources, and materials. Furthermore, Richmond & Manokore (2011) added that teachers stated that they had learned more about the teaching profession from other teachers in PLC than from discussions with teachers who were not participating in a PLC (p. 567). These findings suggest that teachers' collaboration within PLCs might be more effective than random collaborative incidences between teachers; the reason for this could be because of other elements PLCs provide for more effective learning (this topic will be explored in a later section in more detail). PLCs' professional discussions are deeply meaningful because the ideas comes from teachers from different discipline and/or perspectives due to their different backgrounds and training, as well as from what teachers share, such as, research, their personal philosophy of education, or their experience (Owen, 2015, p. 64). Advices and suggestions teachers give to one another in PLCs are most likely to be effective because they are used in practice rather than theory. Davidson & Dwyer (2014), McConnell et al. (2013), and Richmond & Manokore (2011) summarized what the teachers they interviewed found most valuable and beneficial about PLCs; even though they interviewed different groups of teachers, they found similar results. The benefits of PLCs, from the perspective of participants are:

1. Sharing information and sources.
2. Learning new perspectives and practices based on evidence, which is transferred to classrooms.
3. Learning about practical solutions.
4. Developing professional friendships.
5. Accountability.

The following outlines more specific benefits in establishing PLCs in a school:

The Value of PLCs for New Teachers.

PLCs are especially crucial for new career teachers for the following reasons:

New teachers...

1. Experience a shift from collegial recognition and support as trainees and students to the reality of isolation in the profession (McConnell et al, 2013; Woodland, & Mazur, 2015).
2. Can benefit from of the mentoring of other experienced teachers regarding the unique operations of their school, which is likely not covered by pervious educational institutes (Beddoes, Prusak, & Hall, 2014, p. 23).
3. Experience great unpreparedness and are often overwhelmed with their teaching and school duties (Jones, 2012, p. 74).
4. Are in urgent need of supporting sources and curriculum documents and planning support (Davidson & Dwyer, 2014, p. 46).
5. Value insights from colleagues regarding real practice rather than theoretical ones on paper (McConnell et al, 2013; Woodland, & Mazur, 2015).

Tam (2015) interviewed a number of international teachers regarding their beliefs about learning in PLCs; one of the new teachers stated the need for PLCs for new teachers as the following:

We learn knowledge about teaching in pre- or in-service programmes, but actually such kind of knowledge is overwhelmingly theory. In reality, holding theory is insufficient for coping with issues arising from the complexities of teaching. We need to learn from our colleagues, especially

those who have rich experiences in solving problems in day-to-day practices and demonstrating effectiveness in student learning. (p. 431)

Furthermore, new teachers expressed higher levels of isolation than experienced teachers in their profession, while typically schools do not propose a framework to encourage or support teachers' collaboration (Battersby & Verdi, 2015; Beddoes et al, 2014). In an effort to solve the issues of isolation among new teachers, some schools assign an experienced teacher as a mentor for new teachers. However having been assigned to one mentor may not be effective enough or offer sufficient support for new teachers (Jones, 2012, David & Dwyer, 2014). PLCs, however, seem to provide new teachers with opportunities to form professional friendships with experienced teachers based on trust and mutual professional support, such as, offer of advice, sharing of expertise, sharing of school responsibilities, and collaboration. PLCs can also help provide an opportunity for new teachers to ease and organize professional duties and obligations by sharing and exchanging educational materials and school resources with experienced teachers in their school. For example, experienced teachers can suggest different ways for new teachers to spend less time preparing lesson plans.

PLCs Contribute to Improved Teachers' Practice

Many studies reveal that PLCs can improve teachers' practice and professional growth through collaboration, action research, and discussions. PLCs can also provide opportunities for teachers to reflect on their own practice and share their professional practice reflections with one another. This reflection presents a critical chance for teachers to consider new perspectives, examine challenges, receive positive feedback, and identify new approaches (Poulos et al, 2014; Tam, 2015). Sims & Penny (2014) stated that, "PLCs can give teachers opportunities to question,

investigate, and find solutions concerning aspects of their practice” (P. 43). PLCs further improved a number of teachers’ practices in China, in the case of mathematics teachers, by providing “a platform to them to unlearn their old concept of teaching mathematics and to rethink their goal of teaching in a broader context” (Wong, 2010, p. 138). In addition, PLCs can deepen teachers’ professional knowledge beyond textbooks, teaching materials, and university programs (Richmond & Manokore, 2011; Woodland & Mazur, 2015). For example, Davidson & Dwyer (2014) quoted a teacher involved in a PLC explaining:

I didn’t have adequate training in my tertiary education. The state of the field was completely different to what I learned at uni. I have since pursued professional development and have received much more support with planning and teaching.
(pp. 43-44)

PLCs can also positively impact teachers’ self-efficacy and overall practice since through PLC teachers can communicate to address different obstacles within the profession to help improve their practice (Eberhardt, Koehler, & Lundeberg, 2013; Ferguson, 2013). Weissenrieder et al. (2015) cited Bandura’s (1997) definition of teachers’ self-efficacy as the “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 30). In other words, self-efficacy equals to teachers’ confidence in their own practice and development; teachers’ professional confidence and development may lead to a more effective practice. This is crucial because teachers may experience uncertainties regarding the efficacy of their practice (Fullan, 2007; Sims & Penny, 2014). Therefore, having a collaborative supportive work environment can positively impact teachers’ confidence (Thornton & Cherrington, 2014; Davidson & Dwyer, 2014). Tam (2015) explained that during the practice of PLCs “teachers readily disclosed their uncertainties and invited comment and advice from others” (p. 35).

PLCs Contribute to Improved Students' Learning

PLCs can provide teachers with opportunities to consider and support students' academic and non-academic needs in various ways (Poulos et al, 2014, Wong, 2010; Wells & Feun, 2012). Sims & Penny (2014) explained that scheduled PLC meetings allow teachers to further examine topics or concepts students struggle with by participating in professional discussions and debates, and then addressing together gaps in their lesson plans (p. 41). One of the teachers Sim & Penny (2014) interviewed revealed the following:

[B]eing able to bounce ideas off of one another and being able to talk with other people about what you are going to do or what your kids are struggling with. [It] not only creates a sense of community, it also creates a sense of wanting to strive to make sure the students are getting the best possible education from four or five different teachers. (p. 41)

Woodland & Mazur (2015) also explained that “teachers are able to use evidence about student performance as the center of [a] structured dialogue, to make decisions about how to change their teaching method, and to then take actions in the classroom that lead to new heights of achievement for learners” (p. 9). Student performance is not exclusive to mandatory tests, but it includes all available student data that can be studied by teachers, such as, student participation or behaviour during class, and students' performance regarding assignments/homework/projects. PLCs provide teachers with opportunities to gather and have such professional dialogues and discussions. In an interview, a teacher involved in PLCs stated: “[o]ur discussions enhance the possibilities to solve our problems, such as ineffective teaching strategies, unsatisfactory academic performance and inattentive behaviours of students” (Tam, 2015, p. 432).

Sims & Penny (2014) revealed that implementing PLCs has positive outcomes on student learning (p. 39). A number of teachers who participated in a PLC managed to increase their students' academic performance and attributed the improvements to PLCs (Richmond & Manokore, 2011, p. 562). Owen (2015) also found that teachers reported great improvements in regards to students' learning; for example, students experienced less struggle understanding concepts in different subject areas, more participation in different learning activities, and more effective usage of resources and materials (p. 59). Owen (2015) clarified that soon after implementing a PLC in a school, teachers became more comfortable using more innovative approaches to teaching, such as, using multi-disciplinary and co-teaching with students, which allowed their students to achieve higher scores in particular literacy and numeracy skills compared with students who were taught by teachers working in isolation (p. 65). Most of the students who completed a survey in this study also indicated a deeper understanding of scientific concepts from collective teachers' efforts led by PLCs (Owen, 2015, p. 65). Furthermore, Owen (2015) believes that one of the reasons for this improvement is that PLCs can help teachers better link educational theories with practices in classrooms, which in turn promotes students' engagement (p. 65). Also, teachers can gather for a focused discussion on any matter in their profession, such as, assessment strategies, classroom instructions and organization, etc. This collaboration potentially assists students' non-academic school needs. For example, Owen (2015) reported an incident where:

[A] student with a significant social disability and lack of speech became increasingly social in the innovative context from the learning that the teacher did (arising from working with others in the PLC) about working one to one with this student. (p. 68)

In Owen's case study (2015) individual teachers also reported evidence of growth in self-confidence and emotional learning for a number of students (p. 69).

Summary

Many schools experience teachers attrition and partly this could be due to teachers working in isolation. In this paper, building PLCs into schools may provide one way to address teachers' isolation and attrition. PLCs can potentially help schoolteachers shift from working in isolation to working in collaboration. PLCs can also help increase the professional satisfaction in several ways, for example, increasing teachers' feeling of appreciation for their teacher colleagues, which could potentially decrease teacher attrition rates. Schools, teachers, and students can gain much more from establishing a PLC. PLCs can be especially helpful by providing collegial support for teachers with limited experience, since these teachers may be overwhelmed with the challenges of teaching and other school obligations. PLC can also help teachers by providing them with the opportunity for continuous learning thus enabling these teachers to improve their professional knowledge and practice. Establishing PLCs in school is more likely to be a pleasant experience for teachers because many of them value and enjoy the community that PLCs offers where teachers are able to openly share ideas, resources, educational materials, and expertise (Davidson & Dwyer, 2014; Peskin et al, 2009). PLCs also require teachers to meet regularly to openly share their reflections their expertise, concerns, and suggestions. This collaboration between teachers can positively impact students' learning outcomes.

Establishing PLCs in Local Schools

Based on the proceeding literature review, establishing PLCs in schools have great potential for developments and improvements. Such improvements include establishing a collaborative environment for teachers' continues learning, providing teachers the opportunity to support one another, focusing on effective ways to improve students' learning outcomes teachers' performance. However, studies show that establishing and sustaining PLCs in a school can be difficult or may not accomplish the desired results (Sims & Penny, 2014; Tam, 2015). The literature also reports a number of cases where teachers resist being involved with PLCs (Beddoes et al, 2014; Davidson & Dwyer, 2014).

Building a successful local PLC requires a strong commitment of time and effort by participating teachers (Colmer, Waniganayake, & Field, 2014; Owen, 2015; Woodland & Mazur, 2015). Therefore this project aims to provide a number of research-based guidelines and suggestions to establish successful PLCs in schools. The following elaborates a number of considerations to establish successful PLCs in schools: building trust between teachers, organizing and facilitating PLC meetings, accomplishing shared goals for teachers to pursue achieving, using inquiries and action research to accurately collect data and apply improvements, identifying both teachers' and principals' roles in PLCs.

Key Principals for Establishing PLCs

Trust among teachers in PLCs. Trust between teachers is an important factor of effective PLCs (Wong, 2010; Sims & Penny, 2014; Spanneut, 2011). In PLCs, trust includes competence, respect, transparency, vulnerability, and kindness (Fullan, 2007, p. 143). Thornton & Cherrington (2014) explained the meaning of trust in PLCs as the following:

‘[R]elational trust is the connective tissue that binds individuals together to advance the education and welfare of students’ (p. 44). Relational trust involves four considerations: interpersonal respect; personal regard for others; competence in role; and personal integrity. Interpersonal respect involves listening to others and valuing their input whereas personal regard involves providing support and caring for others in both their personal and professional roles. Acting with competence an essential aspect of demonstrating trustworthiness, and integrity is an important quality for all those in positions of leadership and involves consistency between words and actions. (p. 95)

Ferguson (2013) found that PLCs will not be effective without having trust between all members of a PLC (p. 58). Hallam, Smith, Hite, Hite, & Wilcox (2015) added: “Some researchers assert that trust may be a precondition of success in teachers’ collaborative teams” (p. 195). Hallam et al. (2015) also quoted Bryk, Camburn, and Louis (1999) explaining: “[w]hen teachers trust and respect each other, a powerful social resource is available for supporting collaboration, reflective dialogue and deprivatization characteristics of professional community” (p. 195). Since mutual respect among teachers is an essential part of trust in PLCs, without it a PLC may not succeed. As Thornton & Cherrington (2014) & Hallam et al. (2015) explained, the absence of trust among teachers limits teachers’ professional growth, which can lead to a dysfunctional team since teachers in such situation would likely not discuss their mistakes and weaknesses. Tam (2015) observed a number of experienced teachers who did not respect new teachers’ inputs due to the limited teaching experience of these new teachers in their school; that resulted in a negative experience for new teachers as experienced teachers criticized the new teachers (p. 434). Not

only does trust lead to openness that in turn leads to collaboration but the opposite in the case: not having trust can lead to isolation. As Adams (2013) explained: “[t]eachers are more likely to teach behind closed doors and limit interactions with colleagues when trust is low” (p. 367). Watson (2014) also recognized the danger of isolation PLC can bring to a group of teachers, instead of individual teachers, if members did not establish trust and openness with one another or resisted participating (p. 25).

Establishing respect in social interaction is a prior and crucial element to building trust; for example, a teacher mentioned that, “[t]rust is built through listening to everybody’s complete thoughts—not jumping in the middle of them and disagreeing, but listening” (Hallam et al, 2015, p. 202). Building trust among teachers can also be accomplished by establishing a sense of community and spending some time socializing between all members of a PLC on a personal level, such as over a meal or festive gathering (McConnell et al, 2013; Tam, 2015). In PLCs, teachers work as a team on understanding students’ performance by sharing and comparing each other’s’ practices and the data of their students’ achievement; Hallam et al. (2015) believe that “[t]he use of data in these interactions initially creates a sense of vulnerability with team members, which necessitates the development of trust” (p. 195). Trust can also develop among teachers when every teacher arrives to PLC meetings prepared to achieve her/his individual task and by being tolerant and affectionate with one another (Hallam et al, 2015, pp. 201-202).

Teachers’ professional shared goals, visions, and values. Establishing a PLC can be a difficult, because changing existing teacher culture is difficult (Tam, 2015, p. 28); especially since PLCs require both principals and teachers to agree on the expectations for shared responsibilities within the PLC in their school (Poulos et al, 2014, p.29). Another issue is that in order to agree comfortably to the change of establishing a PLC, teachers must share the same or

similar professional goals, beliefs and values (Battersby & Verdi, 2015; Wong, 2010; McConnell et al, 2013; Peskin et al, 2009; Woodland & Mazur, 2015; DeMatthews, 2014). Richmond & Manokore (2011) explained the following from their findings: “it is clear that the presence of like-minded colleagues and the opportunity for substantial collaboration around issues of teaching and learning on a regular basis are critical for change to occur” (p. 566). Watson (2014) argues that the concept of a community in PLCs may seem ironic as it may cause teachers who choose not to be involved in a PLC to suffer from greater isolation apart from members of a PLC in their school (p. 26). However, both Tam (2015) and Owen (2015) revealed that teachers’ professional values, views, and goals are more likely to change and adapt to new initiatives when they engage in regular collective reflective practices and discussions regarding their own teachings. This means that it is likely that all teachers in one school can find a common goal to work towards achieving using PLCs and thus without excluding any teacher. Principals can also propose thought provoking and professionally related questions or topics to be discussed by teachers to help find or construct a common teaching belief or goal for teachers to work towards in PLCs. One example of such a topic could be whether students’ motivation for learning is entirely innate or can motivation be constructed or enhanced with the help of teachers and various learning methods? Spanneut (2011) added that trust and professional dialogues between teachers helps identify shared professional goals and beliefs (p. 101). Additionally, discussing professional topics is essential for new members to find common vision and a shared goal with the rest of the group. Owen (2014) remarked that not only do new participants bring new ideas to an already existing PLC but also gradually acquire the beliefs of others within the community (p. 57). Therefore, as Beddoes et al. (2014) points out, patience and persistence are crucial for

overcoming the inevitable conflict of interests, decisions, and visions among members of PLCs (p. 24).

Teachers could be enticed to become involved in a PLC if they agreed on the importance of achieving certain goals and/or improvements. PLCs might not succeed if teachers were forced to participate instead of encouraged to voluntarily participate because it might cause professional dissatisfaction for these teachers. Richmond & Manokore (2011) reported that interviewed teachers did not agree with the notion that PLCs would have greater impact if it became mandatory for teachers to participate (p. 566). However, there seems to be a lack of research about the possible impact of teachers' voluntarily participation in PLCs verses mandatory participation. If a teacher who did not wish to be involved in a PLC was forced to do so, her/his professional satisfaction might decrease. On the other hand, if a teacher was excluded from the school's PLC, his/her professional isolation might increase. The ideal solution may be to have this particular teacher go through a trial period with a PLC then decide whether to continue being involved in a PLC or not. It is important to note that in this case the critical factor is professional satisfaction since a number of teachers may prefer to work alone and thus professional isolation may not be presented as an issue for those teachers. In other cases, a number of teachers, such as music or physical education (PE) teachers, may not wish to participate in their schools' PLC because participating may be perceived as a waste of time to them, since the nature of the subjects they teach may require one teacher per school and they may feel as they cannot contribute or benefit much from PLCs. In this case, they could be invited to attend few meetings and participate in discussions with other teachers in a PLC, especially if discussions involved concern for students' music or PE. Another solution is for music and PE teachers to be involved in a different type PLCs, such as Online PLCs, that are specialized for music or PE teachers; in

such PLCs these specialist teachers may find that they can better relate to the issues faced by colleagues teaching students similar subjects.

Action research and inquiries. Action research can be defined as a series of inquiries or research carried out by teams or individuals in efforts to improve their own practice (Beausoleil-Holt, 2008, p. 42). Carr & Kemmis (1986) added that action research is not only used to help improve teachers' professional practices, but also "their understandings of these practices, and the situations in which they practice" (p. 180). Members of PLCs usually engage in active inquiries and/or forms of action research. This makes PLCs an opportunity for further education and experience for new teachers beyond previous university courses and practicum, to become a community dedicated to continuous learning and improvement (Thornton & Cherrington, 2014; McConnell et al, 2013; Stahl, 2015; Watson, 2014; Owen, 2015). For Example, Tam (2015) found that an emphasis on practical inquiry learning in a PLC challenged teachers' traditional beliefs of learning, which resulted with "all teachers' beliefs and practices about learning had shifted from teacher-centered to student-oriented" (p. 34). In addition, professional inquiry helped shift a number of teacher's culture from isolation to collaborative as they were compelled to be more attentive and offer solid intellectual and social support (Tam, 2015, p. 432).

Action research in the context of teaching goes through a cycle of collecting data of an existing problem or area in order to improve, reflect, and determine the best action to take. This action usually includes planning, implementing, and evaluating the action. In this way, conducting an action research project allows teachers to focus on a singular educational issue, such as, lack of students' participation. Then discuss and research applying possible actions to solve the problem. After that, teachers would gather to report and discuss the result of the actions they have applied by asking questions such as, what worked? What did not? Has any new

problem occur? After that teachers could adapt and change the action needed to apply accordingly. Thus are involved in every stage of the action research spiral (Carr & Kemmis, 1986, p. 163). Furthermore, conducting an action research project allows teachers to increase their autonomy and leadership in PLCs by taking charge of their professional development and continuous learning. Teachers in PLCs decide the topic and/or area that need improvement. Then, using action research, these teachers can assess the situation and decide the appropriate solution. This process of assessment and reassessment after applying solutions also leads to new understandings of the situation studied, which also a form of professional development.

A successful practice of action research in PLCs could contribute to empowering teachers with knowledge and the means to access knowledge, teachers' equality, and cooperation (Carr & Kemmis, 1986; Hine & Lavery, 2014). Successful practices of action research in PLCs include several considerations by teachers. For teachers to understand the rationale of their own practices they need to undergo "self-reflective inquiries" (Carr & Kemmis, 1986, p. 162). Reflective inquiries are crucial for action research because they provide important data about current practices and situations. Ogbuanya & Owodunni (2015) defined a self-reflective inquiry as "a thinking process through which individuals examine their experiences to better understand the assumptions and implications of events and actions in their [teaching] through a close examination for information or truth" (p. 44).

Practical Considerations

Organizing PLC meetings. The number of teachers involved in a PLC and the time of day or hours spent on PLCs' meetings or practices depend on participating teachers. For example, a number of teachers may have limited or no time for PLC formal/informal meetings during the school day due to their demanding teaching schedule, school duties, and grading (Battersby &

Verdi, 2015; McConnell et al, 2013). In this case, meeting after school hours might be a fitting option; Fullan (2007) believed that teachers who wish to improve their practice are more likely seek other teachers' advices in and out of school and beyond working hours (pp. 140-141). However, Ferguson (2013) found that even though after school hours PLC meeting was the most fitting option for a school in Canada, a number of principals find it challenging to arrange PLC meetings after school hours if the teachers' union is against extending teachers' working hours.

While many schools may find it helpful to engage all school teachers in a formal PLC meeting, many other schools may find that having multiple meetings for a small number of teachers based on subject area or grade level to be more convenient. For example, elementary teachers may find that meeting in small groups based on grade level to be more convenient, while secondary teachers may find that meeting based on subject area to be more effective. As a former Kindergarten teacher, I find that meeting with other level 3 Kindergarten teachers would have resulted in a shorter and more focused meeting time. Since the curriculum in the Kindergarten I taught was theme based with different complexity levels, meeting with other teachers teaching students of the same level grade means that collaborating with those teachers would have been more relevant. Elementary teachers may find that being separated for PLC meetings based on grade level more relevant, since they are more likely teaching the same students. Having a small group of teachers in a PLC meeting allows them to share and collaborate without taking up too much time (Sims & Penny, 2014; Richmond & Manokore, 2011). It is probably easier to find time for a smaller group to meet than for a larger group since fewer teachers per meeting means less time. For example, if there are four teachers in one group and each teacher needs to speak for 6 minutes then all of them need to discuss a topic for an additional 10 minutes, that's 34 minutes, which is not a lot of time. However, students cannot be

neglected while their teachers are attending a PLC meeting during school hours. Ferguson (2013) found that a principal implemented “Buddy Day” in her school as a solution for this issue; “Buddy Day” places students of different grade levels to spend a period of time together, while being watched over by one of the grade level teachers while the other teachers attend a PLC meeting. After the first PLC meeting, teachers switch to have the ones watching over the students leave for the start of the second PLC meeting while the other teachers watch over the students (p. 53). Therefore, the students remain watched over by teachers throughout the period of time it takes for both groups of teachers to enrol in a PLC meeting. There are other methods for teachers to consider when arranging PLC meetings:

1. Meeting before the school day starts.
2. Meeting after the School day.
3. Using Professional Development (PD) days for PLC meetings, if applicable.

Facilitating PLC meetings. PLCs meetings are necessary in schools because teachers have limited time to consult with one another due to their teaching obligations and school organization (Battersby & Verdi, 2015; Peskin et al, 2009; McConnell et al, 2013). Weißenrieder et al. (2015) added that PLCs meetings create occasions filled with opportunities for teachers to share their expertise and collaborate (p. 32). This means that members of PLCs must gather often and regularly (Battersby & Verdi, 2015; Peskin et al, 2009; McConnell et al, 2013); for example, meeting once every two weeks. Such regular meetings enable teachers to share and discuss what they have experimented with and the results of trying new approaches and ideas. This is especially the case when teachers are conducting an action research, since sharing what is working is part of the action research. For best use of time and effort on working collaboratively

for more improvements, meeting periods must be prescheduled with an arranged space (Woodland & Mazur, 2015; Sims & penny, 2014).

Teaching is an emotional profession; therefore, teachers can benefit from the support, recognition, and practical learning opportunities PLC can provide for teachers on a personal level with colleagues (Davidson & Dwyer, 2014; Tam, 2015). This means that naturally, members often spent a short amount of time at the beginning of PLC meetings to socialize with one another on a personal level (Richmond & Manokore, 2011; Woodland & Mazur, 2015). This time is important because personal conversations between members at the start of every PLC meeting are crucial to the success of PLCs as it help relax participants before the meeting agenda gets going (Ferguson, 2013, p. 54). As mentioned in an earlier section, teachers need to build trust among each other for a successful learning and collaboration in a PLC; socializing on a personal level at the start of meetings help build and sustain trust between teachers.

Principals do not always lead in PLCs, in fact successful and sustained PLCs practice a shared leadership as a characteristic among teachers (Wells & Feun, 2012; Owen, 2015). Spanneut (2011) added that successful practices of PLCs include finding opportunities to change and explore different responsibilities among teachers (p. 101). Such responsibilities include suggesting discussion topics, organizing materials, ensuring that all teachers receive equal opportunity to participate in meetings by a deeper level of encouragement to ask questions, reflect, and share ideas and most importantly support teachers' participation (Thornton & Cherrington, 2014; Wong, 2010). Wong (2010) also found that teachers in a PLC are involved in research activities, such as, action research, which led them to explore new learning and teaching ideas and practices (p. 137). Tam (2015) explained that PLCs changed the main roles of a number of teachers from being limited to preparing lessons, maintaining order in classrooms,

and following textbooks to curriculum planners and mentors to colleagues (p. 34). Furthermore, PLCs are effective when all members share leadership in different areas of the practice (Thornton & Cherrington, 2014; Battersby & Verdi, 2015). The most common type of leadership among teachers in a PLC is a distributed leadership, which Göksoy (2015) describes as a democratically shared leadership model where the group acts as “collective intellect” (p. 111). Pekin et al. (2009) described that distributed leadership “involves recognizing expertise, rather than hierarchical position or formal role, as the basis of authority” (p. 27). DeMatthews (2014) explained that in PLCs “[w]ho leads and who follows is not just associated with traditional roles but to what the problem, task, or situation dictates, or who has the prerequisite knowledge and skills under particular circumstances” (p. 183). An effective teacher leader’s values must include collaborative action research, professional inquiry, and professional discussions (DeMatthews, 2014, p. 183). DeMatthews (2014) also suggest that principals need to identify teachers who are capable of leading and support them with organizational knowledge (p. 183).

One of the most important leading opportunities for teachers during a PLC meeting is facilitating. A successful practice of a PLC includes involving facilitators to guide meetings (Richmond & Manokore, 2011; Colmer et al, 2014). Facilitators can provide teachers with information or resources that they are missing and can refocus the discussion when necessary (Richmond & Manokore, 2011; Colmer et al, 2014). Tam (2015) shares a short example of a failed discussion in a PLC meeting where teachers did not give or receive feedback since the facilitator did not encourage teachers to share their ideas (p. 436). Based on this, facilitators must also remind teachers that learning is one of the important goals of meetings and encourage them to speak their inputs and share their ideas. Principals should not facilitate PLC meetings because the authority relationship principals have over teachers may cause teachers to feel pressured to

perform or collaborate in a certain way, and/or share their practice and reflection. However, at the beginning period of implementing PLCs, a number of schools could benefit from a highly knowledgeable and experienced external facilitator (tam, 2015; Richmond & Manokore, 2011). Richmond & Manokore (2011) quoted what one of their interviewed teachers said about the facilitator of their PLC meeting; noting that the facilitator was a university professor, the teacher claimed: “I am not sure what we would do without him. We do not have that content knowledge . . . I now know inquiry methods of teaching” (p. 562). Richmond & Manokore (2011) added that teachers learn from external facilitators enough to apply their learning and become more independent over time (p. 565). Wong (2010) found that having external partnership with researchers or teaching institutes could further support PLCs with recourses. These partnerships can be fostered with principals’ support, however, such partnership should be conducted over a short period, just enough for teachers to learn to access resources and work independently (pp. 137-138).

Teachers’ role in PLCs. Teachers must acquire certain traits and play different roles for effective PLC practices; such as, in order for new learning to occur teachers must accept that there is always capacity for improvement (Peskin et al, 2009, p. 29). Tam (2015) revealed that a number of teachers perceived participating in a PLC as a waste of time and efforts because they believed that they have had plenty of experience teaching and therefore, there was no need for further education or development (p. 433). Experienced teachers who *think* that no further development is needed because they *think* their teaching knowledge is adequate can assist teachers with limited experience, and in doing so in a PLC these teachers may discover that they, even though experienced, still have something new to learn. Teachers also need to be willing to adapt and be flexible with PLC meeting times as many teacher have other obligations, such as,

household and family to attend to. This may acquire a higher level of time management and focus. Furthermore, teachers should also be open to interact positively with one another as PLCs is based on the amount of interaction between teachers (Thornton & Cherrington, 2014; Sims & Penny, 2014). The preceding literature review noted that professional isolation is a problem in the teaching practice, therefore teachers should help make teaching a more supportive profession, where teachers share their experience with one another (Owen, 2014, p. 58). This can be accomplished by inviting other teachers to observe classroom lessons when possible. Tam (2015) stated that teachers should replace professional isolation, conservatism, and traditional privacy by openly collaborating with colleagues (p. 423). In addition, teachers in PLCs together share the responsibility of their learning and their students' learning outcomes and growth to ensure that each student is learning what teachers want them to learn and help the ones experiencing difficulties learning the content (Beddoes et al, 2014; Wong, 2010; Watson, 2014). This commitment means that teachers are responsible for their personal learning and their peers' learning in PLCs as they should learn from one another and learn together (Peskin et al, 2009, pp. 33-34). Teachers can also act as mentors to help explain the process of PLCs and further motivate new participants if needed (Tam, 2015, pp. 29-31). Wells & Feun (2013) then points out that "[i]n PLCs, teachers work collaboratively to study and learn from each other, hence, PLC work is about teaching and learning, one not exclusive of the other" (p. 236).

During PLC meetings, teachers should openly share professional stories, educational materials, personal professional practices, and words of wisdom or suggestions regarding their professional practice for the greater benefit of students as well as teachers (Sims & Penny, 2014; Battersby & Verdi, 2015). Sharing is important because teachers may feel inspired from the sharing they receive from one another regarding different teaching practices (Owen, 2015, p. 63).

Teachers should also give honest and positive feedback without being afraid of disagreeing while keeping an open mind about each other's individual teaching practice; this openness, can be accomplished when teachers build trust among one another (Colmer et al, 2014; Thornton & Cherrington, 2014). In addition, teachers should try to keep an open mind about different perspectives and ideas and try to accept feedback from other teachers for a smoother collaboration and further improvements to occur (Battersby & Verdi, 2015; Wong, 2010).

The role of the school principal in supporting PLCs. In many cases, principals' continuous support can determine the success or failure of PLCs. PLCs are also sustained in schools by the support of principals (Owen, 2015; DeMatthews, 2014). This section explains how principals can support PLCs.

School principals need to first understand the value and benefits of implementing PLCs, and desire to establish PLCs with teachers to improve the quality of their schools (Paulo et al, 2014; Battersby & Verdi, 2015). Also, principals trusted with hiring teachers for their schools play a role in hiring teachers who most fit within a school environment of collaboration (Poulos et al, 2014, p. 31). Before implementing PLCs, principals must show trust and appreciation in teachers' performance to help avoid frustration among teachers; Hallam et al. (2015) found that a teacher was dissatisfied with the idea of a PLC as he/she viewed it as a misplaced distrust in his/her teaching capabilities (p. 201). Principals should also fully explain the aim of establishing a PLC and provide teachers with simple documents and research that explains what is expected from teachers, the process of action research, and the general process of a PLC, since teachers may experience anger and professional dissatisfaction if expectations, or the process of implementing PLCs are not clear enough for participating teachers (Well & Feun, 2012, p. 253). PLCs can be implemented solely to improve students' academic achievement and thus may

neglect teachers' other needs (Sims & Penny, 2014, pp. 40-44). Raising students' test scores as the sole goal for establishing a PLC in a school is very limiting to the potential PLCs may contribute the school culture and teachers. PLCs promote teachers' collaboration over isolation, adds to their knowledge and potentially further improve their teaching practice, which therefore, may be reflected in students' well being. PLCs also promote building trust between principals and teachers and between teachers and other teachers so the school can be a safer environment where every member can attend to their duties comfortably. Furthermore, PLCs promote higher level of teachers' efficacy with problem solving using action research. This project argues that PLCs could be highly beneficial for teachers; therefore, PLCs should be used to study different aspects in the school for improvement, such as teacher attrition, and allow teachers discover new areas where further improvements can be applied. As Wong (2010) pointed out that:

Building professional learning community is not a quick fix to achieve the goal of improving students learning outcomes and school capacity. Rather, it is a time-consuming task to build or rebuild a school culture for the purpose of school improvement. (p. 138)

Principals must also ensure that teachers hold positive perception of PLCs at the start period of implementation by respecting teachers' voices, because teachers' perception of PLCs could determine how productive the PLCs will be. For example, Tam (2015) explained the following scenario:

Teachers did not believe that PLCs would foster learning from others, they therefore assumed that classroom observations would induce conflict among them. Teachers expressed their unwillingness to make these visits

for three reasons: the lack of inspiration in classroom observations, the anxiety of being observed and over-emphasised individual efficacy. (p. 436)

Principals should not confuse nor merge “staff meetings” with PLC meetings and should only interfere with PLC meetings if necessary, as teachers should have autonomy and leadership over PLC meetings. Principals can also encourage school librarians to participate in PLCs, Hughes-Hassell, Brasfield, & Dupree (2012) noted that school librarians can play a variety of roles in PLCs, such as saving and organizing all resources needed by teachers and becoming the “information specialists” in schools. (p. 31-32). Teachers comfortably participated in debates and shared their expertise during PLC meetings when principals positively encouraged them and supported them (Thornton & Cherrington, 2014; Beddoes et al, 2014; McConnell et al, 2013; Colmer et al, 2014). Ferguson (2013) found that principals’ support and encouragement for further professional development among teachers highly resulted with improvements in students’ achievement (p. 57). As previously mentioned, feedback between teachers is crucial; Poulos et al. (2014), and Spanneut (2011) suggested four ways for principals to construct effective and positive communication skills and honest feedback between teachers. Some examples would include the following:

1. Introducing critique as a natural part of teamwork and meetings.
2. Initiating professional discussions and proposing challenging questions relevant to the professional practices of teachers or in a team setting.
3. Being a model for having excellent communication skills and giving honest and positive feedback when and where it is needed.

4. Encouraging teachers to interact and collaborate informally one on one or more outside of scheduled meetings periods.

Issues That May Arise With PLCs.

Not all PLCs reach their intended aim, especially since in many cases teachers may feel discomfort and anxiety due to the potential interpersonal conflict (Tam, 2015, p. 425). The literature also reports a number of cases where teachers resist being involved with PLCs (Beddoes et al, 2014; Davidson & Dwyer, 2014). Reasons for this lack of participation or working with colleagues include: teachers resenting being held directly responsible for students' learning outcomes, fear of being criticized, lack of autonomy, misunderstanding the process of change, resistance to reveal personal practice to others, not being comfortable with exposing weaknesses in teaching, and choosing isolation over collaboration (Beddoes et al, 2014, Well & Feun, 2012). "If teachers treasure their isolation and individualism more than a contrived collaboration, the development of a PLC can do nothing," especially if teachers believed that collaborative work hampers their individual professional autonomy (Tam, 2015, p. 433). In such cases, the PLC could introduce tension and unhappiness among teachers. Furthermore, teachers may view working in a PLC as a burdensome task due to the *added* effort to an already busy profession. Therefore, a PLC can assist teachers with their professional duties if it perceived as beneficial by teachers rather than burdensome. PLCs may not succeed if teachers did not commit to attending PLC meetings since during PLC meetings, teacher collaborate using action research, share expertise, and discuss important issues. PLCs may also fail if teachers could not establish trust between each other and/or rejected sharing their expertise with one another. Conducting an action research in PLCs means that teachers can track whether or not improvements are made and the actions teachers are taking. Therefore, a PLC without action research may not succeed.

Recommendations for Future Research

While this paper mainly focused on face-to-face PLCs, more research can be conducted on related topics to add to the existing knowledge of PLCs. For example, more research is needed to help better understand the dynamic and general goals of different types of PLCs such as online PLCs (OPLCs). Further experimental research is also needed to provide more data regarding the major differences and similarity between other types of PLCs. This is essential for various educational institutes to determine the most effective and convenient approach to PLCs in terms of goals, process, practice, results, and evaluation.

Research on PLCs show a lack of data concerning a few related topics. For example, there seems to be an absence of research on the possible impact of teachers' voluntarily participation in PLCs versus mandatory participation. This calls for a great opportunity for a future research that aims to understand the psychology and of schoolteachers regarding PLCs and how teachers' attitude towards PLCs may impact their motivation to collaborate with one another and improve the quality of education in schools. Furthermore, there is limited amount of research on PLCs involving preschool teachers; therefore, more research on PLCs for preschool teacher is necessary to understand the value PLCs may bring to preschool teachers.

Summary

Establishing a successful PLC in schools is not an easy task, therefore, this paper suggested the keys principles of successful PLCs and some practical considerations when establishing and supporting a PLC. Since a PLC aims to bring teachers together to collaborate from working in isolation to further develop and improve their teaching performances, allowing time and opportunities for teachers to build trust among themselves is crucial. In addition,

teachers should use PLCs to reflect on their professional practice and discuss several issues in school with other teachers to find a common goal to accomplish. Focusing on few issues at a time is fundamental for improvements to occur; teachers should conduct action research methods and inquiries to gather data towards solving particular focused problems. Furthermore, each school considering establishing PLCs should also consider the best organizational format for teacher meetings. For example, for a shorter PLC meeting, elementary teachers may find that meeting in smaller groups based on grade level to be more convenient, while secondary teachers may find that meeting based on subject area to be more effective. During meetings, teachers should discuss educational topics and offer honest and positive feedback to one another. Such discussions accompanied with conducting action research shows promising potential to improve teachers' practice, which in turn is reflected positively in students' learning outcome. Having teachers collaborate in PLCs to support one another, solve problems, add to their knowledge, and improve their practice decreases professional isolation.

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Appendix

Questions for Teachers Considering Participating in a PLC:

1. Do you want to add to your existing knowledge and experience in the profession in order for new learning and improvements to occur effectively?
2. Do you believe in the value of reflecting and questioning your own professional practice?
3. Do you want to build trust and form respect with other teachers?
4. Are you open to share your expertise with other teachers and give honest and positive feedback while keeping an open mind regarding their individual teaching style?
5. Do you want to improve your teaching performance and experiment with new teaching methods?
6. Do you want to collaborate, interact, and socialize with other teachers informally outside of PLC meetings?
7. Do you want to participate in a professional inquiry or action research as one of the ways of identifying and possibly solving several issues within the profession?
8. Do you want to share leadership with other teachers and take responsibility of teachers' learning and improving in PLCs?

Questions for Principals Considering Participating in a PLC:

1. Do you understand the process and value PLC can bring to your schools, the teachers, and students of your school?
2. Can you use PLCs to its fullest potential to the school culture, teachers' professional improvements and job satisfaction, and student achievement as whole rather than focusing on one or two aspects?

3. Can you provide resources that would help explain or ease the implementation of PLCs for teachers and encourage them to participate?
4. Can you be a model for teachers by having excellent communication skills, form trust and respect, and propose challenging professional questions?