

The Implementations of Professional Learning Communities (PLCs) in Beijing and
Ontario Schools

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Abstract

Since the knowledge-based economy has become a fashion over the last few decades, the concept of the professional learning community (PLC) has started being accepted by educational institutions and governments as an effective framework to improve teachers' collective work and collaboration. The purpose of this research was to compare and contrast the implementations of PLCs between Beijing schools and Ontario schools from principals' personal narratives. In order to discover the lessons and widen the scope to understand the PLC, this research applied qualitative design to collect the data from two principal participants in each location by semistructured interviews. Four themes emerged: (a) structure and technology, (b) identity and climate, (c) task and support, and (d) change and challenge.

This research found that the root of the characteristics of the PLCs in Beijing and Ontario was the different existing teaching and learning systems as well as the test systems. Teaching Research Groups (TRGs) is one of the systems that help Chinese to organize routine time and input resources to improve teachers' professional development. However, Canadian schools lack a similar system that guarantees the time and resources. Moreover, standardized test plays different roles in China and Canada. In China, standardized tests, such as the college entrance examination, are regarded as the important purpose of education, whereas Ontario principals saw the Education Quality and Accountability Office (EQAQO) as a tool rather than a primary purpose. These two main differences influenced principals' beliefs, attitudes, strategies, and practices. The implications based on this discovery provide new perspectives for principals, teachers, policy makers, and scholars to widen and deepen the research and practice of the PLC.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

It is a consensus that the world of the 21st century has been changing more rapidly than ever before. In order to raise the global labor competitiveness, some Asian countries such as Japan, Korea, Singapore, and China started to transfer theories and practices of the professional learning community (PLC) into their education systems in the last few decades. After a few years' implementation, some research (e.g., Hairon & Dimmock, 2012) has suggested that PLC is based on the Anglo-American system and will develop specific characteristics in countries that have significantly different contexts. Generally, Asian countries, like China, have developed cultures more collective than Western countries (The Hofstede Center, 2013). Wong (2010) contends that the tradition of collectivism has laid a more solid foundation for teachers to work collectively than their Western counterparts. However, Asian cultures also have relatively strong hierarchical systems so that existing educational strategies may “remain the modus operandi” (Hairon & Dimmock, 2012, p. 417) in the processes of building PLCs. Researchers, such as Seo and Han (2012), argue that Korean teachers' performance of collaboration at the practice level is the worst compared to other performances in PLCs. In addition, controversies exist among Asian researchers' understanding of how the pressure of standardized tests influences the performance of PLCs. This study is rooted in the different characteristics between PLCs in Asian countries and those in the West and will provide new perspectives on the evaluation and implementation of PLCs in both locations.

Background to the Study

With the economic growth and the transformation to 21st century knowledge-based economies (Dimmock & Goh, 2011; Hairon & Dimmock, 2012) over the last

decades, the concept of PLC has been adopted by an increasing number of educational institutions and governments as a vehicle to improve educational quality (Hord, 1997, as cited in Seo & Han, 2012). The ideas of a “learning organization” were embraced from the business sector and could be tracked to Senge’s (1990) work. He emphasized the essential of building a learning organization in which people could continually develop the relationship of learning, sharing values and norms, and expanding the capacity to see the organization as a whole. These ideas have evolved into the education and schooling contexts by educators such as Hord (1997, as cited in Seo & Han, 2012). As Stoll, Bolam, McMahon, Wallace, and Thomas (2006) explain,

Hord (1997) defined PLC as a process in which teachers and administrators continuously seek and share learning, and act on their learning. The goal of their actions is to enhance their effectiveness as professionals for the students’ benefit; thus, this arrangement may also be termed communities of continuous inquiry and improvement. (p. 1)

Educators and scholars keep developing PLC with new ideas, explanations, and frameworks. For example, Louis, Kruse, and Bryk (1995) emphasized the importance to provide teachers with supporting and engaging working environments in order to increase their teaching effectiveness. Seashore, Anderson, and Riedel (2003, as cited in Stoll et al., 2006) focused on the establishment of “a school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically examining practice to improve student outcomes” (p. 3). A PLC was also suggested to be an ongoing and growth-promoting process (Mitchell & Sackney, 2011). Researchers, such as Hord (1997, as cited in Seo & Han, 2012), DuFour and Eaker (1998), and Westheimer (1999, as cited

in Stoll et al., 2006) also identified numerous characters of PLCs. In addition to those elements previously mentioned, these scholars regarded the following elements as the valuable components of PLCs: supportive and shared leadership (Hord, 1997, as cited in Seo & Han, 2012), concerns for individual and minority views and meaningful relationships (Westheimer), and collective inquiries and results orientation (DuFour & Eaker, 1998). Most of these characteristics emphasized that the core value of PLCs is the quality of community (Stoll et al., 2006).

PLCs that have been employed in certain Asian educational reforms perform differently from those in the West. These characteristics may result from different cultures, educational goals, and policy contexts. For example, Singapore's government focused on improving professional learning, more than the interest in the development of school-based community (Hairon & Dimmock, 2012). The government employed the notion of PLC publicly in 2009 because their Minister of Education realized the twin requirements of educational reforms: (a) to provide curriculums that can help students to adapt to the labor market in knowledge-based economies, and (b) to maintain high academic performance in high-stake assessments (Hairon & Dimmock, 2012). The government and education policy makers believed that more professional training to teachers and principals would be an effective and direct approach to raise the country's internal competition as well as to maintain the test-oriented system.

Korean researchers So, Shin, and Son (2010) cited Craig's (2009) opinion in comparing and contrasting the developments of learning communities in Japan and Korea. As they mentioned, Craig suggested that teacher communities within the school context could be regarded as PLC or knowledge communities. Craig identified PLCs as

those initiatives that were imposed externally by leaders, whereas knowledge communities were characterized by the members' interactions. Unfortunately, So et al. did not develop this idea sufficiently in their research. As they described, in Japan, bullying and high dropout rates became a social crisis in the 1980s (Cave, 2001, as cited in So et al., 2010). Therefore, educators suggested that schools should focus on building caring and collaborating communities in order to fix the situation that put too much emphasis on competition and academic performance (Tsuneyoshi, 2008, as cited in So et al., 2010). Thus, when the United States researchers introduced the concept of PLC, Japanese educators and their education system had already developed consensus about the importance of building learning communities. By contrast, Korea imposed the idea of school community in the late 1990s (Ro 1998; Kim 2001, as cited in So et al., 2010); however, this idea has not been fully shared and implemented nationally. PLCs in Korea, as they mentioned, were stopped on surface changes. Ironically, So et al. confused readers by using different concepts, such as school community, learning community, professional community, and so on, to describe similar ideas.

Context of the Study

The concept of a knowledge community may be helpful to understand the subject-based Teaching Research Groups (TRGs, Jiaoyanzu) in the Chinese educational system. As Wong (2010) notes, TRGs are representatives of a Chinese educational norm that emphasizes sharing teachers' "personal daily practice" as an essential approach for teachers to improve teaching competency. TRG was introduced from the Soviet Union in the early 1950s. It was designed to strengthen teachers' professional capability by turning teachers' individual work into contrived collaborations. After more than 60 years'

development, it is rational to regard TRGs as knowledge communities that are characterized by Chinese culture and educational system. One of the characteristics, as Wong mentioned, is the collective responsibility that derived from Chinese collectivism. Another significant one is the authoritarian-oriented leadership in schools. These cultural characteristics emphasize achieving consensus and social harmony. Unfortunately, it was overly optimistic for Chinese researchers to believe that this cultural foundation could reduce conflict and achieve common goals among colleagues more easily (Sargent & Hannum, 2009; Wong, 2010).

Authoritarian-oriented leadership is rooted in Asian high power-distance societies (The Hofstede Center, 2013). In Singapore, according to Hairon and Dimmock (2012), this “hierarchical and efficient public administration system” is mostly motivated by economic pragmatism and breeds a culture of “taking directives from the top” and “productive efficiency” (p. 417). In such a centralized system, PLCs may be restricted as a place where innovations about education only focus on pedagogical practice, curricular designs, and teaching materials. Furthermore, Hairon and Dimmock cited Ball’s (2003) and Fink’s (2008) critiques about how governments treat school leadership as a tool to manipulate teachers into a cycle of “ever-increasing performativity and managerial cultures, emphasizing output, standards and accountability” (p. 418). Therefore, it is easy for teachers to regard the policies of PLCs as extra workload and generate resistance to the reform. In a highly centralized structure, these resistances could be finally transformed to be intangible barriers. Moreover, empowering people (teachers) in such an unaligned situation would be counterproductive (Senge, 2006) because, as Hargreaves (2003) argues, “hierarchical systems of control lead to artificial collaboration” and

“contrived collegiality is more than a scaffold of structures and expectations that promotes and supports collaboration. It is a prison of micromanagement that constrains it” (as cited in Mitchell & Sackney, 2011, p. 165).

Similar situations are happening in China because China and Singapore share the same high power-distance and centralized educational system. Song (2012) mentioned that in 2001, certain basic educational curriculum reforms started to emphasize teacher empowerment. However, traditional professional trainings have not prepared teachers to accept this new concept. Ironically, this opinion had not been further developed in Song’s research. On the contrary, almost all the related research positively and optimistically reported the PLCs as an effective approach to raise Chinese teachers’ competency (Sargent & Hannum, 2009; Song, 2012; Wong, 2010). However, these PLCs focused only on collective professional learning and pedagogical practice. Thus, according to the theories of Hargreaves (2003, as cited in Stol et al., 2006), Ball (2003) and Fink (2008, as cited in Hairon & Dimmock, 2012), results and conclusions of these researches need to be further explored.

PLCs in Asian countries are also strongly influenced by the standardized-test assessment system. As formerly mentioned, Singapore’s educators and educational system have tried to balance the requirements of students’ holistic growth and test performance (Hairon & Dimmock, 2012). Similarly, Sargent and Hannum (2009) question the influence of examination pressure on PLCs in schools of Chinese rural areas. On one hand, examination pressures may motivate teachers’ interdependent supports and cooperation; on the other, it also limits teachers’ time to attend interactions and professional learning activities. However, the authors did not provide the answers in their

research. Wong (2010) proposes that the high competitive and examination-driven educational system in China fosters collaboration and becomes “a magnet to adhere teachers together having a shared goal and shared practices of their teaching” (p. 629), but Wong did not provide empirical and theoretical evidence to support this opinion. Hairon and Dimmock (2012) argue that standards and accountability could be used as tools to control educational stakeholders. Therefore, Chinese researchers’ results need time and evidence to support.

According to Mitchell and Sackney (2011), “Bureaucratic structures and standardized practices do not adequately serve students” (p. 4). Most Western educators and educational researchers might generally accept this opinion, but bureaucratic structures and standardized-test oriented education is the reality of certain Asian countries.

Purpose of the Study

This research will compare and contrast how and what factors influence the results and applications of PLCs in Ontario and Beijing schools. The following questions will serve as the guidance of this study:

1. How do school principals in Ontario and Beijing schools define a PLC?
2. How do school principals in Ontario and Beijing schools develop personal, interpersonal and professional capacity for PLCs in their schools?
3. How did the PLC help principals make changes to their schools?
4. What challenges do principals think need to be paid attention to in the future?

This study used qualitative interviews with principals in two Ontario schools and two Beijing schools to compare and contrast their experiences with PLCs.

Rationale

Principals and teachers are considered the main groups to benefit from this study. Chinese principals grow up in an authority-oriented culture and work in a hierarchical education system. They have to face the pressure of accountability from supervision as well as the critiques from parents, scholars, and the media. They also have to worry about internal problems such as releasing teachers' pressure, promoting teachers' professional abilities, and motivating their passion. The theories and practices of PLCs may provide new perspectives for them to deal with these conflicts. However, PLCs may cause new problems as well. This research may provide a new understanding of PLCs by comparing and contrasting the Eastern and Western educational context and by helping principals in China to properly apply PLCs in their schools.

Chinese teachers may also face more challenges than before. Chinese curriculum reforms increase the workload of students as well as teachers. Meanwhile, they have to contribute time and effort into professional learning activities. Trying to properly express their needs and ideas to leaders and colleagues without injuring the group's harmony may be difficult. This research may help teachers to know PLCs better and to take good advantage of this relatively new approach to promote their professional development and happiness of their careers.

Organization of the Document

Chapter One has included an introduction, background, context to the study, rationale of the problem, and the purpose of the study. This chapter starts with an introduction of the PLC and a brief history of it in Asian countries. This chapter discusses the influence of hierarchical and test-oriented education systems to the implementation

PLCs in those countries. It also explains that by comparing and contrasting the ideas and practices, this research will benefit principals and teachers in significant different educational background.

Chapter Two reviews the related literature and provides a theoretical guide of this research. This chapter roots from Senge's (2006) idea of learning organization, and builds a framework to explain differences in the performance of PLCs in different areas. The framework is mainly based on two models from Western scholars. One is Mitchell and Sackney's (2011) capacity development model. This model explains how PLCs provide opportunities for professional development on three levels: personal, interpersonal, and organizational. Another model is provided by DuFour and Eaker's (1998) research. The model identifies the role of PLCs in building mission, vision, values, and goals as four blocks in schools. These two models help organize the results from various Chinese researches into a structure and reinforce the discussions of the characteristics of PLCs in Eastern and Western countries.

Chapter Three outlines the methodology of the research and the procedures that were used for this study, including methodology and research design, site and participant selection, instrument and data collection, data analysis procedures, scope and limitation, and ethical consideration.

Chapter Four presents the qualitative data according to the themes that emerged from analysis of the data. These themes include: structure and technology, identity and climate, task and support, and change and challenge. Principals reflected on their personal experience and understanding of the effect of PLCs based on the school's internal and external context, their successful improvement, and the challenges they

thought worth sharing.

Chapter Five discusses the significant findings of this research, provides implication for practice and policymaking, and offers recommendations for further research. For Ontario principals, clarifying and sharing the notion of the PLC is essential to guarantee the consistency of learning community within and across the schools. Some provincial-wide policies for releasing teachers' workload and providing time for collective work and learning are needed as well. By contrast, transforming from result assessment to process assessment is the main challenge for Chinese educators and teachers. It is the precondition of widening the roles of PLCs in schools. In future research, this research suggests that involving the pattern of the PLC in a hierarchical system into the Western-oriented research might benefit the practice as well as the general understanding.

CHAPTER TWO: REVIEW OF RELATED LITEATURE

The development of professional learning communities (PLCs) accompanying educational reform in the Western world has lasted for a long time. According to Stoll et al. (2006), certain ideas of PLCs can be tracked back to John Dewey's philosophy in the early part of the 20th century. By contrast, the PLC is a relatively new notion in China, and has been employed since the 1990s (Xu, 2013) in a complicated educational system that is quite sophisticated and is diverse to that in the West. This literature review will illustrate the difference between the understandings of PLC in Asian countries, such as China, and in North American countries. The illustration is based on two frameworks. One is created by Mitchell and Sackney (2011), which characterizes PLCs as building capacities on three levels: personal, interpersonal, and organizational. The development of capacity building in PLCs is what DuFour and Eaker (1998) describe as collective inquiry. This inquiry not only reinforces people's curiosity to diverse possibilities, but also values the process rather than the result of learning. Therefore, it enables team members to develop new capacity and skills. A second framework is suggested by DuFour and Eaker. They believe one characteristic of PLC is shared mission, vision, and values, which creates a collective commitment to principles that guide people's beliefs and goals. They regard these guiding principles as the difference between a PLC and a traditional school. Different PLCs in different educational contexts might have their own distinctions and perform significantly differently in these two frameworks.

Capacity Building for the PLC in Chinese and Western Contexts

The notion of a PLC arises from the requirements of an educational paradigm shift in the last few decades in the Western world. According to Mitchell and Sackney

(2011), this shift assumes that the principles of social institutions should have transformed from managed systems to living systems. Capra (1996, as cited in Mitchell & Sackney, 2011) notes that the living system operates from an ecological perspective, which recognizes the organization as a whole. This perspective means that any parts of an organization should be understood from its relationships with other parts and from its connections with the external context. From this perspective, to understand an organization as a living system means it has to be “built to reflect and accommodate the structural, environmental, and relational conditions that support and sustain life” (Mitchell & Sackney, 2011, p. 3). Therefore, such organizations create boundaries among members based on shared values, common norms, collective meanings and purposes, and so on. These boundaries provide dynamics to confront disturbances, support potential growth, and maintain integrity of the organization (Mitchell & Sackney, 2011).

In responding to the requirements of this alternative perspective, Mitchell and Sackney (2009, 2011) emphasize the effect of PLCs on the development of educational capacities in personal, interpersonal, and organizational contexts. They argue that PLCs are communities that help educators to deconstruct the personal narrative that restrains personal development and to reconstruct capacities both in cognition and practice. As individuals’ learning is significantly influenced by people’s relationships and the character of the group they live in, an interpersonal relationship is a key part of a PLC. An interpersonal context that encourages sharing values and goals, and that builds spaces for open and critical collective reflections with mutual respect will motivate educators’ growth. Finally, the notion of PLCs can help build organizational capacities that support teachers’ learning and teaching.

On the other hand, in Asia, the notion of a PLC develops in “more culture-sensitive ways” (Hairon & Dimmock, 2012, p. 420) because it is a consensus that new ideas introduced from the West have to adopt the existing systemic powers, influence relationships and policies, and educational philosophies (Hairon & Dimmock, 2012; Tsui & Wong, 2010). Most Asian countries have educational contexts that perform certain characteristics of managed systems. This kind of traditional system follows the “old language of command and control” (Mitchell & Sackney, 2011, p. 3) in which “power flows up the hierarchy and blame flows down” (p. 145). That is, educational systems in Asian countries are commonly hierarchical. In this context, Lu and Cao (2009, as cited in Xu, 2013) identify some disadvantages of traditional professional development in China. First, teachers’ development and training are controlled by external policy makers and administrators. The teachers are not involved in the decision-making process. From this perspective, Chinese teachers and other educational actors probably have little power over the decisions being made. Most of the decisions, such as educational values, goals, strategies, and assessment of teaching outcomes, are made by powers outside of schools. Educators are expected to cope with the rules and requirements rather than use their autonomy to make changes. Unfortunately, although they are less powered, they have to endure the public blame for students’ lacking the ability of creativity and practice (Mitchell & Sackney, 2011).

Second, most of the trainings are designed around curriculum, textbooks, and policy in order to solve immediate problems (Lu & Cao, 2009, as cited in Xu, 2013). As Hairon and Dimmock (2012) emphasize, a strong hierarchical social structure plays a critical role in restraining PLCs from being the communities that dominantly focus on

pedagogical practice, subjects, and assessments. This observation is supported by other Chinese and Asian scholars' contributions, such as Sargent and Hannum (2009), Seo and Han (2012), So et al. (2010), Song (2012), Tsui and Wong (2010), and Wong (2010).

The third disadvantage is that the model of Chinese professional training regards teachers as passive receivers (Lu & Cao, 2009, as cited in Xu, 2013). Therefore, the main form is lecturing that is generally given by outside experts, and most of the content is theory focused.

This centralized structure, together with the test-oriented educational system and the culture that emphasizes achieving consensus and being harmonious, are elements that deeply influence the performance of PLCs in the personal, interpersonal, and organizational perspectives in Chinese schools.

The Characteristics of PLCs in Personal Capacity

Teachers working in a hierarchical and test-oriented educational context share “core teaching activities and established teaching methods [that] stems from their main pre-occupation of achieving high student academic test results” (Hairon & Dimmock, 2012, p. 414). Since academic achievement is still the top priority for educators and parents, these teachers may question whether it is worth sacrificing their core methods to examine new cognitive and practical understandings of education. Therefore, as Hairon and Dimmock argue, the PLCs in such a context may develop more restricted models that support professional development that only focuses on the innovation of teaching practices in classrooms.

Outcomes of standardized tests can also manipulate teachers' interests into test preparation. Similar is what has happened in the implementation of No Child Left Behind

in the United States (Hursh, 2007). Mitchell and Sackney (2011) also remind that test results could be used to determine the distribution of resources across schools, so teachers and administrators might have no choice but to focus on teaching to the test, which turns teaching and learning into instrumental activities. Test-centered teaching is almost the default condition in China that nearly every elementary and secondary educator has to face. This situation is supported by the Chinese literatures that were reviewed for this study because most of them do not ask any questions about the system. Although Xu (2013) cited Lu and Cao's idea to describe the subject-based training as a disadvantage of Chinese professional training, the author did not elaborate this view. In another example, Tsui and Wong (2010) quoted teacher Li, a mathematics teacher, who offered the opinion that although teachers try to broaden their educational knowledge from overseas cases, they have to focus on "conceptual matters and the knowledge points" (p. 304). As a result, teachers' personal capacity is hard to develop beyond pedagogical skills.

On the contrary, learning communities that stand on the basis of living systems are able to reconstruct educators' professional narrative because this system encourages cooperation, respects people's diversity, and builds spaces for challenges to the usual way of teaching (Mitchell & Sackney, 2011). In this kind of PLC, reflective action becomes a critical and common strategy (DuFour & Eaker, 1998; Mitchell & Sackney, 2009, 2011; Stoll et al., 2006). In PLCs, individuals develop their personal capacity from formal learning as well as informal methods. Professional knowledge or explicit knowledge, such as pedagogical skill for instance, can be transformed in formal trainings, workshops, and lectures. However, there is another important component of learning called implicit knowledge, which is easily neglected by educators. As Mitchell and Sackney (2011)

argue, this knowledge is commonly learned from informal learning, such as getting involved in reflective actions in day-to-day lives in schools. To improve one's implicit knowledge means to deepen awareness of the gap between the expectation and the facts and to evaluate an individual's beliefs as well as actions. Thus, critical reflection is essential. Similarly, Senge (2006) believes that reflection starts from the recognition of "leaps of abstraction" (p. 177), which means that people make up their minds and generate ideas too fast without testing whether the ideas are correct. Critical reflection can show when these leaps of abstraction have occurred, and it can help individuals learn how to understand the other's perspective when disagreement happens. DuFour and Eaker cite Louis, Kruse, and Marks (1996) and Sarason's (1996) idea that reflective dialogue is essential to maintain teachers' motivation to keep improving pedagogical practice. They emphasize that reflective dialogue is important to foster a school's ability to change.

Since the action of reflection confronts "unpleasant truth" (Mitchell & Sackney, 2011, p. 24), it might cause peril. However, if there is sufficient psychological safety, and if reflections can reach deep analysis of the truth, then educators can accept the valuable information and improve their personal capacity. Therefore, individuals should feel safe enough to open their professional identity and expertise and to make personal changes.

In fact, such a reflective action is hard to achieve (Mitchell & Sackney, 2011; DuFour & Eaker, 1998). For example, in Ontario, the Teacher Performance Appraisal (TPA) policy uses classroom observation as its dominant assessment approach (Larsen, 2009). Classroom observation consists of a pre-observation meeting between principals and teachers to prepare the class observation; after a preplanned classroom observation,

teachers receive reflection from principals in a postobservation meeting. At the end of the meeting, a report and a learning plan will be finished according to the result of the observation. Finally, principals will evaluate the teachers based on their response to the reports. The whole process can be regarded as a professional reflection that is designed to improve teachers' professional capacity. However, as Larsen notes, most teachers criticize this reflection as subjective, unfair, inefficient, and unable to improve their abilities. Some teachers think a preplanned class observation only reflects the relationship between teachers and principals. Other teachers believe that teachers' professional capacity cannot be evaluated in only one observation; multiple observation and more comprehensive evaluation should be created. This example presents how difficult it is to improve personal capacity through formal organized reflective actions.

By contrast, the Chinese culture that emphasizes a harmonious climate and respect of authority leads reflection in a different direction. Wong (2010) and Xu (2013) argue that the collaborative culture is the advantage of Chinese education that lays a solid foundation for PLCs. Considering the worries about the "unpleasant truths" that could happen in critical reflection, is the Chinese context healthier for PLCs to grow? In all schools in China, Teaching and Research Groups (TRGs) play an important role in educational development. TRGs can be to some extent regarded as PLCs characterized by the Chinese educational climate. Similar to the TPA in Ontario, lesson observation is an important reflective practice within a TRG (Tsui & Wong, 2010). This reflection also consists of classroom observation (preplanned), postobservation conference, and "the subsequent enactment of ideas for improving teaching" (p. 293). However, even though Tsui and Wong believe this practice has proven to be very efficient to improve teaching

skills, the conclusion still needs more discussion because Walker (2007) reminds that the Chinese people tend to inflate the ratings to please superiors. Thus, it is reasonable to assume that teachers might not reflect their real ideas in order to keep the climate harmonious and to make superiors happy. This idea can be supported by Lee, Zhang, and Yin's (2011) research. As they found, "the degree of shared vision at the teachers' level was lowest" (p. 826) compared with other characteristics of the PLC.

These outcomes and arguments highlight the importance of the "critical friend" (Mitchell & Sackney, 2011, p. 25) in reflection activities. Critical friends, according to Mitchell and Sackney (2011), are people who can provide safe and comfortable circumstances for reflective conversations, in which teachers share the experiences of successes as well as failures and sufficiently challenge each other in a milieu of deep respect and trust. From this perspective, it can be assumed that without critical friends in group discussion and reflection, the harmonious climate of TRGs might not lead teachers to efficient reflection and professional improvement.

On the other hand, Walker (2007) suggests that learning "relational understanding and values" (p. 266) rather than the methods of the mechanisms of assessment is more important to leadership. This argument highlights the importance of understanding the values of people's behavior in evaluation, which also helps to recognize the reflective activities within TRGs. Since almost all of the professional activities in TRGs are subject-based (Tsui & Wong, 2010), little attention is given to understanding the behaviors of teachers. That approach might not be sufficient to develop educators' personal capacity that is built on changes in both cognition and practice (Mitchell & Sackney, 2011). Changing cognitively relies on constructivist learning, which regards

learning as a process that can help to achieve qualitative changes in understandings (Prawat, 1999). From the perspective of constructivist learning, teachers' learning should be based on "a larger set of socially constructed and culturally conditioned cognitive frameworks and conceptual understandings" (Mitchell & Sackney, 2011, p. 38) and become "a natural, organic, evolving process that develops over time as people receive and reflect on ideas in relation to their work in the organization." (p. 40). Thus, learning that is restrained in pedagogical skills and knowledge points should be understood as a significantly limited part of professional knowledge.

In order to support constructivist learning approaches, PLCs should be built as communities that empower teachers. Song (2012) argues that a PLC is a "forward predictor of teacher empowerment ... [that] allows teachers to experience autonomy, impact, and self-efficacy" (p. 87) because PLCs create a collaborative culture that encourages mutual support and shared accountability. Tsui and Wong (2010) also provide an example from their research to highlight the importance of empowering teachers in reflective activities. They cite an interviewee, Teacher Chen, who emphasized that young teachers cannot feel engaged in reflective activities, such as challenging and critical thinking, until they experience the right to express their opinion. These arguments support the idea that personal capacity should be built on the basis of giving educators voice and creating spaces for them to "restructure basic assumptions about learning and learners" (Conley, 1993, p. 50). The first step of building a culture that encourages such conversation and respect is to develop interpersonal capacities within the PLCs.

The Characteristics of PLCs in Interpersonal Capacity

The different result of classroom observation between Ontario and China reflects

the notion that individuals' learning is "deeply affected by the nature of the relationships and the character of the groups" (Mitchell & Sackney, 2011, p. 53). Stoll, Fink, and Earl (2003) also argue that teachers' professional development is closely related to conflict resolution, the culture of a school, leadership, and teambuilding. Hence, the Chinese education system that is highly test-oriented, the culture that emphasizes the spirit of harmony and collectivism, and the hierarchical social structure deeply influences the effect of PLCs on the development of educators' interpersonal capacity.

Harmonious-preferred relationships and hierarchical social structures build a rigid interpersonal framework that deeply shapes PLCs in Chinese schools. Wong (2010) cites Stoll and Louis's idea to note that the key to make PLCs successful in China is not only about know-what and know-how, but also know-who, which "refers to the social capital of the communities" (p. 635). According to Wong, Chinese people see interpersonal relationships (Guanxi) as the key of success, especially the relationships with their supervisors. Therefore, Chinese teachers prefer to please their supervisors in the process of reflective activities. Walker (2007) argues that in achievement cultures where status "is based on accomplishments" (p. 266), leaders encourage feedback because they see it as a description of their performance. However, leaders in a culture where status "is based upon who the person is" (Walker, 2007, p. 266) avoid direct reflection because they tend to see it as the evaluation of the person. Therefore, Walker argues that in Chinese societies (e.g., Hong Kong), negative feedback between unequal-status individuals (e.g., up or down the hierarchy) becomes more acceptable when delivered through more soft, nonpersonalized, and polite ways. Feedback within equal-status individuals (e.g., among peers) are acceptable if done "gently and in a 'round-about'

way” (Walker, 2007, p. 266). In such a hierarchical society, it can be difficult for principals to encourage other stakeholders to reflect openly and honestly in the process of decision making.

Similar to Xu (2013), who regards the culture of collaboration as an advantage, other scholars tend to regard this harmonious climate as one of the advantages when comparing China to Western counterparts. For example, Bush and Haiyan (2000) see “stressing collectivism” and “adoring authority” (p. 60) as common in Chinese schools. Wong (2010) also argues that such culture leads to less conflict and makes it easier to achieve collective goals. He cites Rousseau (2004) and Dooner, Mandzuk, and Clifton’s (2008) opinion to hint that Chinese society has already equipped the social dynamic of PLCs which Western scholars understand as shifting the process from learning knowledge to learning how to share beliefs and resolve conflicts. This point is worth deeper discussion because it is a consensus that Chinese culture does emphasize achieving collective norms and valuing collectivism and collaboration (Song, 2012; Tsui & Wong, 2010; Walker, 2007; Wong, 2010). However, the question remains as to whether or not this milieu really equips PLCs to promote the growth of interpersonal capacities.

Western theories also support that learning is a collective process (e.g., DuFour & Eaker, 1998; Jurasaitė-Harbison & Rex, 2010; Mitchell & Sackney, 2011). In this process, groups create climates to support, sustain, and engage learning; they also develop shared goals and understandings. From this perspective, PLCs provide the learning climate within which individual and collective learning are interdependent and mutually influencing. These learning behaviors are shaped by group norms, expectations,

interactions, conversations, and so on (Mitchell & Sackney, 2011). Besides, PLCs provide a climate in which “contradictions and paradoxes are welcome” (Mitchell & Sackney, 2011, p. 54). Similarly, Mitchell and Sackney (2011) argue that in order to achieve deep understanding and exchange of ideas, educators should see conflict as opportunities that lead to improvement rather than problems that should be avoided. DuFour and Eaker argue that conflicts should be regarded as evidence of “mistakes or mismanaged process” (p. 49). Harvey (1977, as cited in Burke, 2010) refers to most kinds of conflict as “phony conflict” (p. 119). As Burke cites, such conflict might be a symptom of real differences or the agreement among people not to show their disagreement. People refuse to act not because of a disagreement, but because of “action anxiety, negative fantasies, real risk, or psychological reversal of risk and certainty” (Burke, 2010, p. 119) that might arise from a disagreement. Therefore, building the affective climate is essential because it creates mutual respect for disagreement and differences as well as invites stakeholders to participate in the learning process.

Wong (2010) believes that China has already equipped the basis of collective learning to support teachers’ interpersonal development. He provides a valuable opinion that the facts of concentrating on examinations foster dynamics that unite teachers to learning collectively. Thus, shared personal daily practice becomes a norm among Chinese teachers. This phenomenon can be explained by the opinions given by Jurasaitė-Harbison and Rex (2010) as well as Mitchell and Sackney (2011). That is to say, if a common educational goal has been achieved (which in China is achieving high test scores), PLCs have been a stage that supported teachers’ professional development. Stoll et al. (2006) remind that such kind of learning or developmental activities should “go

beyond superficial exchanges of help, support, or assistance” (p. 227).

Unfortunately, a contradictory finding in Wong’s (2010) research is that collective learning cannot be simply achieved. As he recorded, some English teachers did not see that the collaborations in TRG were at an in-depth level; they regarded such shared practices as a “mere formality and lacked mutual engagement” (p. 630). They also reflected that some teachers did not pay much attention to the process of sharing and tried to prevent open conflict. These behaviors weakened the effect of sharing and withdrew the development of “an experimental-oriented working pattern” (Wong, 2010, p. 630). This result is similar to the case in Tsui and Wong’s (2010) research where some young teachers refused to engage in collective reflection.

These facts can probably also be understood as the influence of a hierarchical educational system. Xu (2013) mentions that Chinese education designers assume the necessity of bringing in external experts in order to build a model of “ideal teacher” (p. 32). Thus, the professional knowledge and skill will be delivered from leaders to followers following a top-down pattern (Bing, 2006; Lu & Cao, 2009, as cited in Xu, 2013). However, Chinese teachers prefer to accept this pattern as well. Tsui and Wong (2010) found that about 80% of Chinese teachers preferred guidance from backbone teachers, expert teachers, or external specialists rather than discussions among peers. Tsui and Wong call it “mentoring practice” that belongs to the apprenticeship model of practice. They mention that this kind of practice is rooted in “subject matter knowledge” and “pedagogical content knowledge” (p. 288). Chinese mentors are more concerned about increasing teachers’ understanding of “subject matter knowledge and instructional strategies” (p. 288). This argument is supported by Xu’s (2013) research. In addition,

Tsui and Wong describe an interesting detail about mentoring practice: that at the beginning of the process, new teachers might face direct criticism from mentors, but in the end they realize that their professional capacity has been improved. In spite of this end result, Tsui and Wong note that this model has been criticized by Western scholars for restraining the creativity of teachers.

One problem of surface learning is that it cannot help teachers reach the implicit understandings in collective learning. Individual learning in a group is deeply influenced and shaped by dominant metaphors and implicit understandings that are shared by members but are seldom noticed or spoken (Mitchell & Sackney, 2011). Citing Capra (2002), Mitchell and Sackney (2011) explain that the implicit understandings “not only define the community and bind its members, but shape perceptions, contain experience, and frame the legitimate knowledge” (p. 61).

In order to reach the implicit understandings, Mitchell and Sackney (2011) suggest that the PLCs should support professional conversation to enhance people’s interpersonal capacity. Different from collective reflection, professional conversation contributes not only in-depth professional discussion, but also things about tacit beliefs, understandings, and so on. It provides opportunities for educational stakeholders, such as teachers, students, and parents, to build common views of teaching and schooling in order to figure out individuals’ values about education. Thus, it grounds the basis of shared purpose and common understandings. Dialogue is one method of this conversation. David Bohm (1965) defined dialogue as the platform on which members can share the flow of meaning and “open to the flow of a larger intelligence” (as cited in Senge, 2006, p. 222) rather than just professional knowledge.

The Characteristics of PLCs in Organizational Capacity

TRGs could be understood as Chinese-specific professional learning communities. The notion of TRG was introduced from the Soviet Union in the early 1950s (Wong, 2010). Nowadays, it has developed to be one of the most distinct learning communities around the world (Tsui & Wong, 2010). Similar to any learning community, TRGs are also shaped by Chinese educational culture that is both hierarchical and test-oriented. When comparing and contrasting the role of TRGs and PLCs in China and those in Western countries, two key elements are worth considering in the development of organizational capacity.

The first key element is the relationship between collectivism and individualism. The Chinese educational system is strongly influenced by collectivism. Commonly, people believe that maintaining harmonious social relationships is more valuable and important than achieving individual success (Nisbett, 2003). Asians, such as the Chinese, tend to bind personal happiness with the feelings of belonging to and being involved in the group or achieving the collective expectations. Therefore, the aim of building TRGs is to serve the top-down, collective goals rather than to push forward the educational reform. Song (2012) mentions that the requirement of teacher empowerment has emerged with the basic educational curriculum reforms that started in Mainland China in 2001. However, he also reminds that the traditional teacher training programs “have not yet assumed responsibility for implementing this concept” (p. 83). Song emphasizes that although the TRG has no power in a school’s decision-making process, it has a strong influence on pedagogical practices. This situation could also be understood that the influence of TRGs is restricted to pedagogical practices only. This opinion can be

supported by Xu's (2013) research as well. He argues that one challenge of PLCs in China is "expanding the role of PLCs" (p. 129) to "address broader educational issues beyond school level" (p. 132). From this perspective, Chinese collectivism could be understood as sacrificing individual rights and benefits for collective benefits.

This kind of collectivism might result in insufficient collective learning and conversation and prevent the growth of organizational capacity. Lee et al. (2011) propose that the reason might be the staff establishment "which led to bureaucratization, a tendency for conformity and for the proliferation of abstract rules together with impersonal relationships" (p. 826). However, Lee et al. also believe that learning communities that emphasize building relationships, collective learning, and shared practice could be implemented even in a top-down political structure and restrictive conditions, if PLCs can provide a safe climate for conversation that can develop shared goals and help teachers transform strategies from subject-discipline strategies to student achievement-oriented practices. They also cite Wang and Collard's (2009) idea that it might be possible to introduce and adopt Western perspectives of the PLC into Chinese educational culture; however, the process might be slow and incremental.

On the other hand, Western cultures are commonly regarded as individualistic. In some specific areas, such as education, as Mitchell and Sackney (2011) argue, individualism has proven to be useful to achieve certain educational purpose and worthwhile results. However, individualism and isolation become problems when they interrupt the collective communication, mislead the purpose, or lead to disharmony. Therefore, Mitchell and Sackney (2011) recommend a shift from individualism to a collegial culture. However, this kind of collectivism or collaboration should not be built

on sacrificing personal benefit or rights because people have the right to be involved in decisions that will affect them, in spite of whether or not their participation “makes the process more effective, or leads to a better decision, or results in consensus” (Young, Levin, & Wallin, 2007, p. 80). Thus, PLCs have to develop a sophisticated debate platform or, as Senge (2006) describes, a dialogue in which a group can access a large “pool of common meaning” (p. 225) that individuals alone cannot access. Similarly, Mitchell and Sackney (2011) also recommend that a learning community is “better served by horizontal stratification in which hierarchical levels are reduced and power is dispersed throughout the school” (p. 99) because teachers cannot achieve collective learning and belief-sharing until the structure opens spaces for free conversation.

The second key element is educational leadership. One can assume that the dominant purpose of the professional activities in TRGs is to help teachers’ understanding of subject matters, knowledge points, and pedagogical skills (Tsui & Wong, 2010; Wong, 2010). Leaders’ responsibility is how to organize the learning process more effectively and efficiently through a top-down process. Most Chinese teachers tend to accept the hierarchical mentoring and training model. The question is: Does this leadership really provide organizational capacity to motivate teachers’ learning?

MacBeath and Cheng (2008) introduced the notion of leadership for learning to emphasize the connection between the leadership and learning. When the dynamics of teachers, students, managers, and other stakeholders are united, “there is a liberating sense of conjoint power to recreate the school as a learning and ‘leaderful’ community” (p. 329). Fullan (1993) argues that the challenge of sustaining the successful

transformation of a school to a PLC is to develop a group of teachers to be agents of change (as cited in DuFour & Eaker, 1998). Mitchell and Sackney (2011) highlight the responsibilities of school leaders for creating a community of leaders rather than only for sustaining schools. DuFour and Eaker (1998) point out three functions of educational leaders. First, DuFour and Eaker believe that leaders should be teachers as well, citing Gardner's (1986) words that "every great leader is clearly teaching -- and every great teacher is leading" (p. 19). Second, leaders should be effective communicators. Last but not least, the assessment of a leader should not be based on his/her own results, but rather on the motivation given to others. This means that a learning community not only focuses on learning, but also motivates teachers to be leaders (DuFour & Eaker, 1998; Mitchell & Sackney, 2011).

A learning community also motivates people to analyze and narrow the gaps between existing contexts and expectations. This leadership activity invites different people to create their own leadership in the community. Besides, scholars, such as DuFour and Eaker (1998) and Mitchell and Sackney (2011), note that administrators in schools are crucial to build mutual, respectful, and interdependent relationships and to guarantee that practices are focused on learning and teaching. By contrast to the leaderships in TRGs, the purpose of leading learning in PLCs is to motivate teachers to find the gaps between "existing conditions and desired realities, and to find effective and desirable ways to close at least some of those gaps" (Mitchell & Sackney, p. 124). To lead an effective PLC, people should regard "identifying, promoting and protecting shared vision and values as one of their most important responsibilities" (DuFour & Eaker, 1998, p. 185) rather than relying on regulations and procedures.

Sharing Mission, Vision, Values, and Goals in PLCs

Senge (2006) believes that since a shared vision reflects personal visions, it becomes the larger vision that wins people's support. He highlights the importance of shared vision: It can maintain the learning process under pressure, it encourages people to give up their own deep view, and it fosters experiments. Based on his theory of learning organization, most theories of PLC recognize sharing values, visions, and goals with members as a characteristic of PLCs (e.g., DuFour & Eaker, 1998; Mitchell & Sackney, 2011). In addition, DuFour and Eaker add the concept of mission into their theory and create a framework that includes mission, vision, values, and goals as four building blocks of a PLC.

The four building blocks ask different questions of people in schools (DuFour & Eaker, 1998). The mission probes the fundamental purpose of the organization. It represents the direction that guides people in the organization and helps them to identify priorities. The vision visualizes the purpose of the organization into a picture of a clear and attractive future that can motivate a school's members to reach the vision. The values of an organization clarify the members' behaviors, attitudes, and commitments that make the shared vision a reality. Finally, the goals help a PLC to establish priorities by means of providing "ongoing accountability" (p. 100). The goals can be used to measure the progress toward the vision.

Since causal relations exist among the four blocks, PLCs in different contexts may have diverse performances in these four blocks. Asian scholars have noted that, commonly, the main purpose of Asian schools is students' test scores (Sargent & Hannum, 2009; Seo & Han, 2012; So et al., 2010; Song, 2012; Tsui & Wong, 2010;

Wong, 2010; Xu, 2013). Chinese scholars such as Wong and Xu, believe that the accepted purpose of the Chinese educational system has laid the foundation for collective learning and collaboration. Wong, for example, believes that the pressure of the outcome of examination is widely accepted by Chinese schools and that this acceptance fosters the purpose of education. This consensus creates the motivation of teachers' collaboration. Xu concludes that it is the culture that shapes the nature of teachers' collective work. However, he does not identify how culture works to develop the tradition of teachers' collaboration. Therefore, Owens and Valesky's (2010) definition and description of culture could help understand this topic. They clarify that culture is

A system of shared values and beliefs that interact with an organization's people, organizational structures, and control systems to produce behavioral norms. In practical terms, *shared values* means "what is important"; *belief* means "what we think is true"; and *behavioral norms* means "how we do things around here". (p. 141)

In this definition, *shared values* and *belief* are close to DuFour and Eaker's (1998) definition of the vision and value. The control system is similar to Dufour and Eaker's goals and purpose. According to this definition, the culture in a school is equal to the systems that identify and clarify the members' target, their image of the future, and the priority of actions undertaken to foster practice and to change behavior. Therefore, Wong's and Xu's opinion can be understood that the shared purpose of achieving high scores in examinations plays an important role in the Chinese educational culture and shapes the collective working climate.

Shared vision is essential to building a learning community. Senge (2006) lists

building shared vision as one component of building an effective learning organization. DuFour and Eaker (1998) provide five scenarios from Senge, Ross, Smith, Robert, and Kleiner's (1994) work for an organization to implement a vision. The five scenarios include telling, selling, testing, consulting, and co-creating. The process of telling and selling means the administrator assumes he/she knows the vision and tries to deliver it to members either through a top-down authority or persuasion. Testing means the administrator prefers to collect reflections before proceeding. The fourth scenario is that the administrator organizes members to develop their own vision and then makes a decision about whether to accept the vision or not. Finally, through a co-creating mechanism, the administrator creates vision with members. DuFour and Eaker argue that although the co-creating method is not the most efficient, it is critical to a learning community. Since the Chinese educational system is hierarchical, that may narrow the responsibility of PLCs into pedagogy and may separate teachers from decision-making processes. The first four scenarios could be assumed to be the main methods for implementing visions in Chinese schools.

Since DuFour and Eaker (1998) emphasize the link between vision and values, values can be understood as the support to the vision. They argue that the process of sharing values helps group members to recognize their commitments to achieve the mutual goals. Thus, the values and goals of a school might be deeply influenced by the scenarios that principals take to implement the vision. In a Chinese hierarchical educational system that is deeply shaped by a collective culture, individuals might prefer to give up their personal vision and follow a collective vision. In such a structure, the vision, values, and goals that are produced by the pressure of the examinations-oriented

policies and external superiors might be effectively shared by school staffs. Other scholars, such as Lee et al. (2011), however, question whether this system might lead to insufficient collective learning and reflection.

Chapter Summary

Compared to Western countries, the Chinese educational system is more hierarchical, subject mattered, and focused on the accountability of standardized tests. It is shaped by a collectivist culture that emphasizes a harmonious climate. The context might turn the PLCs into platforms where teachers' and educators' personal, interpersonal, and organizational capacities might be restricted to pedagogical activities and knowledge. On the other hand, contradiction exists among Chinese scholars. Some of them (e.g., Bush & Haiyan, 2000; Wong, 2010; Xu, 2013) believe that Chinese collectivism and learning communities, such as TRGs, build a nature that encourages educators' collaboration. By contrast, Wong (2010) and Tsui and Wong (2010) argue that this collaboration might be difficult to lead to deep learning because, first, Chinese teachers might feel more comfortable to be led by senior experts rather than the equal discussions with peers, and second, they prefer not to speak different ideas in order to please their supervisor.

By contrast, it is a fashion among Western scholars and educators to see education as a living system. On a personal level, the perspective of living system requires educators to open their professional identities and positively and critically engage in collective reflections to develop capacities beyond pedagogies. On interpersonal and organizational levels, building communities with a safe and comfortable climate for sufficient conversation, mutual respect for diversities, and shared vision and values is

believed to be the main purpose of PLCs. Finally, since leadership for learning could motivate teachers' development of leadership in their own positions and narrow the gap between conditions and expectations, some scholars suggest that this leadership might support these communities better.

The different character of PLCs between China and Western societies, such as Canada, can be explained from another perspective. The Chinese traditional educational system and culture provide a test-oriented purpose and vision for schools and build top-down, collective learning community such as TRGs. According to DuFour and Eaker's (1998) framework of four building blocks of PLC, the shared purpose and vision that is widely accepted by educators influences the values and goals that direct educators' behavior in schools. This educational nature characterizes the performance of Chinese PLCs in personal, interpersonal, and organizational levels of capacity building. Based on the TRG system, China has developed its own PLC system.

CHAPTER THREE: METHODOLOGY

The purpose of this research was to broaden the understanding of the PLC by comparing and contrasting narratives from principals in Beijing and Ontario schools. This chapter describes the qualitative research methodology that was applied to collect and analyze data from principals' personal experiences. First, this section discusses the reason why narrative approach was the best design for this study. Second, it describes how the sites and participants were selected, as well as the process of data collection and analysis. Finally, a discussion about the limitation of this design and the ethical consideration is provided.

Methodology and Research Design

According to the limitation of time and resources, it is hard to implement quantitative approach into this research. On the other hand, qualitative research is a method that emphasizes understanding and meaning by analyzing phenomena (Edmonds & Kennedy, 2013), and it is often implemented to explain the initiations and mechanisms of systems or human behaviors by using words as data. It can help explore the principals' understanding, feelings, and implementation of PLCs in Beijing and Ontario schools from their personal narratives. Therefore, I used qualitative research as the methodology.

Since a narrative approach has a significant concern on understanding the reason of a phenomenon through participants' stories (Edmonds & Kennedy, 2013), it is more appropriate to this research. In order to emerge valuable opinions from individual stories, semistructured interviews with open-ended questions were used in this research because semistructured interviews allow the interviewees some freedom to

explain their thoughts and to highlight areas of particular interest and expertise that they felt they had, as well as to enable certain responses to be questioned in greater depth, and in particular to bring out and resolve apparent contradictions. (Horton, Mrcve, & Struyven, 2004, p. 340)

Similarly, open-ended questions allow interviewees to provide whatever answers they want rather than designed options (Check & Schutt, 2012). This method is usually used to collect as much information as possible without “limiting the responses” (Check & Schutt, 2012, p. 168).

Four principals (two in each country) were invited to participate in interviews. I used a semistructured interview with open questions to interview Ontario principals face-to-face. Meanwhile, Beijing participants were interviewed through WeChat (a Chinese mobile text and voice messaging communication service). In order to decrease misunderstanding caused by language barriers, Chinese was used to apply these interviews. A semistructured interview allowed me to guide the conversation as well as gave flexibilities for interviewees to create potential topics.

Site and Participant Selection

The group of this research was principals in primary and secondary schools who have been interested in the introduction and implementation of PLCs in their schools. To gather as much valuable information from personal experiences and narratives as possible, it is crucial to motivate participants' cooperation. Convenience sampling is the way that selects individuals “because they are available and wiling to participate” (Edmonds & Kennedy, 2013, p. 16) and is an appropriate sampling approach for this study. In addition, this research requires a high level of the understanding, knowledge,

and practice of PLCs. Purposive sampling is another efficient and essential method because it selects participants based on specific needs or purposes (Edmonds & Kennedy, 2013). Therefore, four participants (two in Ontario, two in Beijing) were chosen conveniently and purposively from principals who have experience with participating in PLCs professional activities. I was acquainted with individuals in each of the school boards who provided names and e-mail addresses of a number of possible participants. In order to follow the advice of the Research Ethics Review Board, I requested my personal contacts to provide the study information and the Letter of Invitation to possible participants and asked them to contact me directly if they were interested in participating in the study. Therefore, my personal contacts would not know who the final participants were and the final participants should not feel obligated to participate.

Chinese interviewees were from Beijing, which has the most advanced educational system and ideas in China. Educators in these places commonly keep in touch with international education notions. Since the notions of PLC might be quite new to China, educators from big cities might have opinions and experience about PLCs. On the other hand, Canadian principals were from Ontario. This province has provided PLC as the important approach to develop professional capacities; therefore, participants from Ontario could be expected to have enriched experience and narratives to share.

Instrument Development and Data Collection

The interview questions were designed according to Mitchell and Sackney's (2011) capacity-developing framework. Questions were designed to motivate interviewees' reflection on their experiences of PLCs in four aspects. The first aspect was about participants' general understanding and attitude toward PLC. This aspect focused

on recognizing participants' basic knowledge and their feelings about PLC. The second to fourth questions were about participants' development of personal, interpersonal, and organizational capacity. These questions were related to themes such as professional development, peer relationship, teacher empowerment, leadership, and so on. Each aspect had three to four questions (see Appendix for a copy of the interview guide).

Each interview lasted 1 to 1-1/2 hours. For those Chinese interviewees, they were encouraged to answer questions in Chinese so they could express their experiences and narratives as clearly as possible in their first language. Data were collected by audiotaped interviews on how these principals implement or participate in PLCs in their schools. I recorded the face-to-face interviews with Ontario principals and collected information from Beijing principals through online software.

I sent an invitation and permission for an interview to each interviewee in advance. After they accepted the invitation, they received a set of materials including an introduction, the framework for the study, the questionnaire, and an explanation that contained any information they should know in advance. These materials were given to interviewees 1 week before the interviews were conducted. The interviews, which mainly focused on the reflections of feelings, understanding, experience, and practice of PLCs in daily life, were finished in the middle of June. I input the content into the computer manually to create transcripts of each interview.

Data Analysis

Narrative analysis focuses on the “integrity of personal biographies or a series of events that cannot adequately be understood in terms of their discrete elements” (Reissman, 2002, p. 218, as cited in Check & Schutt, 2012, p. 312). It discovers the big

pictures of personal narratives rather than separated elements. As Check and Schutt mention, the coding strategy of narrative analysis is classifying stories into general patterns by means of reading these stories (p. 312).

After the transcribing was completed, I used within-case analysis and thematic analysis to illustrate the data. I read the transcripts for the information and opinions that might emerge from participants' personal narratives. I compared and contrasted participants' various opinions from the two areas: Beijing in China and Ontario in Canada to develop the understanding about PLCs. First, I designed a set of labels based on Mitchell and Sackney's (2011) framework of how PLCs could improve educators' personal, interpersonal, and organizational capacity as well as DuFour and Eaker's (1998) model of shared mission, vision, values, and goals. Second, a worksheet was constructed to sort participants' experiences and narratives. I highlighted the ideas from the transcriptions, coded them, and categorized them into the worksheets. Then I made a list of common ideas across the four transcriptions by rereading the descriptive data and the labels. I generated themes from the similarities and differences of the ideas and narratives from each participant. Finally, I reread all the transcripts again in order to avoid missing important information and potential emerges. The final themes that were generated from the thematic analysis were: (a) structure and technology, (b) identity and climate, (c) task and support, and (d) change and challenge.

Scope and Limitations

Ideally, the ethnographic approach would be more appropriate for the topic. Longitudinal observation and more interaction with participants would provide more sufficient information. However, by the limited time and resource, interviews became the

only practical method. These limitations narrowed the scope of this research and can only provide limited information about interviewees' opinions about PLC. In addition, most data that are collected from interviews are just explicit opinions. Without observation, it is hard to recognize their implicit opinions or to collect information from behaviors.

Ethical Considerations

The research was conducted according to the ethical requirements established by the Brock University Research Ethics Review Board (file # 13-296). Participation in this study was voluntary. If participants wished, they could decline to answer any questions or participate in any component of the study. Further, they could decide to withdraw from this study at any time and could do so without any penalty.

In order to protect the confidentiality of Canadian participants, I conducted the face-to-face interviews at their work office. In addition, I kept the audio-recorded sessions and the transcripts in a secure location, as to maintain confidentiality of the participants' information. The electronic files were kept in a password-protected file in my home computer and I kept the paper copies in a locked box. I kept the personal identification information separate from the transcripts, and I did not use personal identifiers in any reports of the data. All information gathered in the research remain in my secure possession; contact information shall be updated periodically to enable the possibility for continued communication should it be necessary to clarify the participants' experiences.

Shortly after the interview was completed, I sent each participant a copy of the transcript and my interpretation of their transcript to give them an opportunity to confirm the accuracy of our conversation and to add or clarify any points that they wish. The

review was finished in 5 days. Further, to ensure informed consent, I explained the purposes of the research to each participant before conducting the interview. I also informed them that they have a right not to answer any question they might not wish to answer and that they can withdraw from the study at any time, without penalty. Before the public presentation of the research findings, I gave each participant a copy of their own transcript and my interpretation of their transcript to ensure accuracy of information, and I gave a reader's copy to each of the participants to ensure they were satisfied with the maintaining of their confidential status within the final version.

Chapter Summary

This chapter described the methodology for the qualitative research of the personal narratives from four principals' implications of PLCs in Beijing and Ontario. It includes the approaches of the selection of site and participants, the data collection and analysis, a description of the limitation of the design, and the ethical consideration about how to protect participants. Findings are presented in Chapter Four.

CHAPTER FOUR: FINDINGS

The purpose of this research was to provide more lenses to improve the understanding and experience of the implementation of PLCs by comparing and contrasting four principals' narratives and thinking. In order to examine the opinions, contexts, practices, and challenges of PLCs, this research collected data by interviewing four principals, two of them: CPA and CPB who work in the Chinese capital of Beijing; another two principals: OPA and OPB, who come from Ontario. The inquiry was framed by two theoretical frameworks. One is Mitchell and Sackney's (2011) discussion about how PLCs improve educators' personal, interpersonal, and organizational capacity. Another one was provided by DuFour and Eaker's (1998) model of shared mission, vision, values, and goals. There are four themes in this chapter: (a) structure and technology, (b) identity and climate, (c) task and support, and (d) change and challenge. In addition, themes also include the influences of the pressure and supports that come from outside schools.

Structure and Technology

The first theme is about how PLC influences structure and technology of their school. This section includes the principals' experiences of how they implemented PLCs to strengthen or reform the existing system in order to improve collective work. It also includes their definitions of PLCs and how PLCs influenced the decision-making process in their schools.

PLC and the Approaches that Already Exist

Schools in Beijing and Ontario have significantly different learning communities that provide opportunities to improve teachers' professional development and collective

work. Those existed communities were compared with the PLC by principals. Principal CPB believed that “[a]lthough the concept is not the same as PLC, but similar contents always exist. In Chinese system, TRG is as similar as PLC.” He observed, “A deep difference between Chinese educational system and that in other countries is teacher training. It is a feature of our country.” He explained this idea from two perspectives. On one hand, he recognized TRGs as communities that provide dynamic supports for teachers to solve their problems during their daily works. He said:

In the contexts such as TRG and so on, teachers’ problems happen during their daily work and practice, it is a dynamic. Teachers’ positive behavior of problem solving is not under the administrative pressure. The organization [TRG] is administrative, but ... if confusions about works exist, [members] make discussions at anytime. Some of the works are administrative tasks, but behind them, is the freedom of conversation among teachers. Problems might be solved inside of the team.

On the other hand, he explained the essence of TRGs from a human resource perspective. He noted that the school staffs’ mobility in Beijing might be much less than their counterparts in Ontario. Therefore, a teacher might work in a school for a long time. He stated:

In China, when someone becomes a teacher, he/she will become equivalent of those people within the system and have a protection of their career... When the team becomes stable, teachers’ development is the key that they should be thinking of... From this perspective, Chinese system is always concerning about teacher training and the PLC.

Therefore, when the concept of PLC was introduced and implemented into his school, he used it to strengthen “the construction of TRG and make it more purposeful” because “the PLC helps the reviews and practices during teaching and encourages conversation that aims to the problems. The conversation is also a process of making comparisons and rethinking.”

The other Chinese principal had similar ideas. Principal CPA agreed that the PLC has been mainly organized on the structure of TRG and some other Chinese traditional learning communities such as Lesson Preparation Group (LPG, *beikezu*). He introduced PLCs into TRGs in order to “reform some traditional methods without changing the agenda and spaces.”

Chinese traditional learning communities, TRG and LPG for instance, helped the principals to organize routine time for teachers’ collective working. As principal CPA introduced, these activities were basically “arranged in teacher’s working hours.” Principal CPB’s school has “six TRG activities per semester, one time every two weeks...They are all included in teacher’s working time.” TRGs and LPGs also provided convenient meeting spaces for teachers as well. “Teachers who are in the same subject and same grade work together in the same office. Their desks might be also very close,” said principal CPB. These traditional communities have laid a solid structural foundation in most of the schools in China; therefore, the principals tended to apply PLCs as tools to strengthen the content and emotional elements of the existed system. Principal CPB said:

It is hard to impose new concepts only, even though they are advanced concepts. They should adapt to the local context. I am applying PLC in my school without mentioning the concept and I don’t think we should rearrange groups in TRGs,

because it would be hard to realize.

By contrast, the two Ontario principals have never had the structural foundation to guarantee the time in working hours. Principal OPB described “finding the time” as “the hardest part of applying PLCs” into the school. In explaining how she organized time in one school, she said school staffs and she would move all the students to the gym and workers would do activities with the whole school [students], as it wasn’t that many [students]. Half of the staff is at the gym ... and the other half is being able to meet and working on school improvement plans. So that’s how we provide the time.

However, when she moved to a new school that was much bigger than the previous one, it became a real challenge for her to organize the time again.

On the other hand, principal OPA believed that the PLC “provides time for school staffs to communicate and learn together.” As a new principal in her school, she was significantly concerned about how to embed PLC activities into teachers’ daily work. She started her PLC by inviting staff members to participate in PLC meetings that were “during school time not after school.” Each meeting commonly lasted 42 minutes, but “it is at the end of the day, so ... there is no pressure that they had to be back in class.” Before implementing PLC into the school, principal OPA and the staff had staff meetings once a month. “In some schools, staff meetings become PDPs [Professional Development Programs] where they [school staffs] might bring someone in to speak to them after school. I found that it was more effective to embed into the day [rather than at the end of the day].” She explained:

So there was a period of time where we would bring in teachers [from outside]

and trained them [the teachers in the school]. So you might train one or two teachers in the school and expect that teacher to teach everybody else. But it is not a very effective model because there is no time provided for teachers to come in and do that. If this model still exists, the PLC will be a perfect opportunity for that teacher, leader teacher, to come in and work with them [other teachers].

The Definitions of PLC

Principal CPA made a contrast between the definitions of PLC and TRG. He labeled TRG as a “knowledge-based form” because “TRG is more close to the researches that focus on certain topics and contents.” By contrast, the PLC was a “knowledge plus emotion-based form” that strengthens both the knowledge basis and the emotion basis of TRG.

Principal CPA believed that the difference between TRGs and PLCs was “the systematization of the content.” He said, “If the activity is structured on meaningful contents, the activity is valuable.” He observed that the traditional form of lecturer-centered activities “has already existed before, but now we are strengthening the systematization of the topics,” and “If you don’t have a framework to structure the knowledge system, what you have done is scattered. Meaning is essential, meaning provides dynamic.” As principal CPB stated, “TRG has to do activities as well,” but PLC changes the form that “the topics of activities become more systematic.” Obviously, he used the PLC as the framework to systematize the topics of activities and to enhance the knowledge basis of the TRG.

Principal CPA highlighted that PLC turns the learning community to be more emotional. In explaining his understanding of the difference between PLCs and TRGs,

principal CPA stated, “I think the major difference is that PLCs concern about the emotion during collaboration.” Since the PLC “emphasizes the meaning of listening, support, and collaboration among the partners during the process of learning,” it “refers to the support of people’s emotion and cooperation more.”

Principal OPB defined PLC as a community where “professionals come together to support each other for a common goal.” She emphasized the effect of PLCs that help people keep their focuses. She said, “Teachers have always had community. Teachers are always very good at sharing things. But I think a PLC is keeping it focusing on a goal, keeping it professional.” Principal OPA reported how PLCs involve teacher’s informal community. She said, “The PLC we have are not always structured. One session might just be to wrap up something that they are doing, they want to investigate something else. It’s pretty open-ended.”

Decision Making

Since PLCs were used as the tools to strengthen TRGs or LPGs in Chinese schools, it did not have direct influence in the decision-making process. Principal CPB’s description of TRGs presented a quality of hierarchy and academic-orientation. He said,

The leaders of every TRG are as equal as the mid-level supervisors. The school needs to consult them before any important decisions are made. TRG members have certain voice in the school, especially team leaders who are responsible for academics. These leaders have certain authority.

When asked whether ordinary teachers had a voice, principal CPB said:

[They can reflect their opinion] through some other channels, for example, a guild. On the other hand, a policy should be accepted by everyone before being

implemented. Thus, even the top-down policy needs to be clarified by principals. Besides, there is no reason to *refuse* teachers' and team leaders' reflections from bottom-up. The key elements of the management and culture of a school is listening to everyone's opinion.

By contrast, principals in Ontario agreed that PLC provided more opportunities for teachers and school staffs to be involved in decision making. They preferred to distribute the powers to teachers and encourage them to make decisions by their own. Principal OPB said, "I try to keep it really simple. I put on the deadlines, [but] the structure that I want teachers to negotiate with has to come from them." Principal OPA described that when they have a discussion time about school improvement plan, it was her only time to say, "Okay, this is what data is telling us. We have to decide what direction we are going to move and how we are going to get there and what do you need from me so I can help," but she emphasized that PLC "does provide that opportunity, more opportunities."

Traditional learning communities, such as TRG and LPG, strongly influenced principal CPA's and CPB's definition and description of the PLC. These communities have already arranged routine time and spaces and have deeply shaped the decision-making mechanism in schools. Principal CPA and CPB tended to define the PLC as the additional tools that strengthen the content of the activities and emotional interactions with staffs. By contrast, without the strong influence of certain sophisticated communities, Ontario principals have been trying to reform the structure or to reorganize the activities by means of PLCs. They also use PLCs as the tunnel to distribute the power to school staffs, and encourage them to make the decisions of their own.

Identity and Climate

In this theme, principals described two main topics. The first one was how principals identified their roles in the process of implementing PLCs. Second, they explained their contributions to create or improve the collective work climate in schools. It includes how they built the conversations in their PLCs, how they motivated teachers and other staffs to participate in PLCs, and how they dealt with disagreement.

The Role of Principals

Principal CPA mentioned that even though he has applied the PLC in his school for 3 years, he had to dominate the organization of the activities, “I still played a very important role in the whole process to organize, induct, or direct them.” Differently, in replying to the questions about his main responsibility, principal CPB mentioned his professional limitation when he said, “Support. My responsibility is serving teachers, because my own professional knowledge can only guide them in a very limited range. So I have to serve my teachers, invite experts for instance.” Besides, he argued that even taking activities is administrative tasks for teachers, but “how to initiate the activity needs the cohesion and collaboration inside the group.” Thus, “encouraging and supervising them to do activities” became his essential responsibilities as well.

Similar to principal CPB, principal OPA also emphasized her professional limitation. She called herself *facilitator* three times in the interview. When she explained the reason why some principals do not understand the PLC, she said:

They feel intimidated by [it] because they think they have to be the people that know everything, but it's really not. I am just a facilitator. When I started, I directed a little more...but once they [teachers] master that, they more or less

direct which direction it is going. I just sit, support, and facilitate if they need anything.

She argued that it was very important to identify herself as a facilitator to support teachers and school staff members because “when I take the pressure off them, they become better at what they do.” She explained:

I make arrangements so that they don't have to cover their classes.... I look for money, so that I can provide more release time for them, or resources that they need. I am getting in contact with people that I think can be helpful for them. And maybe schedule them to come in. So I am more of their facilitator, secretary.

Similarly, principal OPB agreed that she preferred to give power to the people and let them make the decision because she thought she could only be a facilitator rather than be an expert of everything.

Besides the identity of facilitator, both principal OPA and OPB located themselves in a low position. Principal OPA emerged the idea that administrators in schools should identify themselves as teachers. She said, “From an administrator's perspective, I am a teacher, too. And I think that people in my role need to remember that they are not here to just manage.” Principal OPB regarded herself as a learner. OPB believed that her staff members are all experts at their areas and she, as a generalist, had learned a lot from them in PLCs. She defined her job as to put the PLC as a framework around the common goals that they can focus and set the timetable. She said, “I have to be a part of the PLC as well. Not the leader of it, but a part of it... My role as the principal is to supervise. Just put the dates in and set the framework.”

Collective Working Climate

Strong leadership. Principal CPA introduced his experience of developing several PLCs in other schools and communities. He stated:

They [the PLCs] have strong leadership and organizational mechanisms to guarantee that the task is very clear... to guarantee individuals have the opportunity to share their learning results in the group; to set a period of time that everyone will have a comprehensive conversation after they finish their researches; to guarantee that everyone's reflection has the opportunity to be shared across different groups. Sharing, team support, especially cooperative support, are the key words in my understanding of PLC.

In his opinion, strong leadership and organizational mechanisms were the precondition to create the opportunities and regular time for staffs to share the results.

Collective goals. Principal CPA regarded the process of setting a collective goal and sharing the results as an important approach to build a motivating climate:

How to motivate teacher's initiation? By setting tasks for them to let them do their own research, exploration, share with everyone, and then get positive reflections. After that, giving them a wider range of topics, so they feel their academic value is being recognized.

Principal CPB agreed that a shared goal was one important principle of the PLC. He said, "the core principle is that teachers who have the same target and value sit together to do the research." He believed that the same goals could help build an inspirational condition. He stated, "People inspire and improve each other during the practice. The nature is to cultivate teacher's positive potential."

Ontario principals agreed on the importance of sharing goals in collective work.

Principal OPB had more concern about how to set the goals together with her staff. She even questioned whether she had the power to decide the priorities of the goals. She commented:

I don't set the goals. We set it together. Because that is not only my project, I want it to be theirs [teachers']...It can't come from just me because who am I to say: this should be the goal. Everybody has a piece of the puzzle. I am not even the one that chooses what the highest strategies are. The teachers are the ones who set the goal and find the resources.

She observed that shared goals could improve teachers' relationships because "when they are achieving a goal together, it feels good to work with someone to achieve the goal together and also everybody has something positive to share."

On the other hand, principal OPB emphasized the effect of a good personal relationship to improve teachers' reflections. She believed that a good climate of conversation in the PLC means "a commitment that you have to feel comfortable talking to people." Therefore, she decided to start slower when she planned to start a new PLC in a school that she was not familiar with. She said:

So I am going to have to start a little slower than I would start here [the school she is going to leave]. And I have to be more prescriptive to begin with because they are not used to working collaboratively. So I have to build that capacity before we can really move forward. It could be more of building relationships.

When people start to converse, they might become more reflective. Principal OPB explained:

They have also become more reflective in their own practice because when they

have to speak about what they are doing, to talk about their lessons, or create the lesson with someone, they start to see different points of views [and understand that] what can work may be little different than what they do. So they become more reflective.

Resistance and disagreement. Principals CPB and OPB saw different reasons for teachers' resistance. However, their attitudes toward the disagreement that happen among teachers were considerably similar. Principal OPB concluded the reason for teachers' resistance to the changes was that they "want to let it go in old ways" because "they have been doing it in their way, and their way has been worked for 20 years, so why change it." Some other teachers might think PLC activities as extra workloads. Therefore, principal OPB was "trying to convince them it's just different work, not more."

By contrast, principal CPB thought that teachers basically would not resist PLC. He argued, "It is a profession learning community, so if teachers are focusing on their professional development in the community, why will they disagree and resist?" He noted that certain teachers

have insufficient ability at the beginning and they have to face the requirements which will give them pressure. But with the help of senior teachers and team leaders, they can finally achieve those requirements. When they feel the success, (their resistance will be released).

In discussing their attitudes toward teachers' disagreement, principals CPB and OPB believed that most of their teachers were professional enough to cope with different ideas and personal relationships. Principal OPB mentioned that she has not had to remind

the respectful attitude to teachers. She said:

I found even when teachers may not like each other personally, but putting that framework [the PLC] in and setting what the goal is, they are professional enough to work together for that common goal. And set aside personal situations. I think that's why it is important to put the professional learning community there.

Principal CPB saw disagreement from another perspective. He regarded it as the reflection of teachers' attitudes toward their researches and as the opportunities to deepen their professional capacity:

Disagreement is normal. But it represents people's serious attitude towards their researches. It is totally acceptable, because it is not conflicts between people, but conversation and confrontation about certain questions. Disagreement deepens teachers' cognition of professional knowledge and helps them understand some core concepts from various lenses.

As he mentioned, disagreements could be understood as collective supports which "help personal development and learning. And even lead people to do the research of their own."

In this section, data abstracted from the interviews presented principals' different identification of their roles. Principal CPA stated himself as a leader to lead people, whereas other principals located themselves in a relatively low position such as participator, facilitator, or supporter. One reason was that they thought their professional capacity was limited. For example, principal OPB positioned herself as a learner and preferred to distribute power to staffs to let them make their own decision. Since Beijing principals were concerned more about teachers' professional and academic capacity

development, they might not imagine teachers would resist PLCs. In contrast, Ontario principals were more focusing on building the flexible and flat structure of PLCs because they believed people would not like changes. They recognized that their responsibility was to explain the profit of PLCs. Most participants had similar ideas about disagreement. On one hand, they believed that most of the staff members were professional enough to cope with academic dispute. On the other hand, they saw disagreement as the opportunities to improve teachers' researches as well as motivations to strengthen both personal and collective development.

Task and Support

The third theme is about how testing helps to determine the tasks of the PLCs and how internal and external supports influence the PLCs in these schools.

Testing

All principals reported that the standardized test is one of the most concerned goals that have to be achieved. However, Beijing principals had significantly different attitudes to the test results compared to Ontario principals. In the context of Chinese education, which makes a tight connection between academic achievement and higher social status, the principals could not avoid contributing most of their effort to tests. As principal CPB explained:

Chinese educational context emphasizes the values that higher academic achievement leads to better job, higher economic status and/or to be a higher official. So education is gathering more and more concerns. These concerns are mainly on test scores and teachers' teaching.

He added,

The process assessment has been widely distributed, but because of senior high school entrance examination and college entrance examination, teachers do not pay enough attention to it.

Principal CPB also observed that testing could be seen as a kind of ability. He said, “The students have to focus on testing. The testing itself is a kind of ability as well. It is compression training for children...but in students’ daily learning, it is important to develop their comprehensive capacity.”

Ontario principals believed that test results play multiple roles. First, both principals used testing scores as the data that helped them to design the collective goals. Then, as principal OPA described, scores could be recognized as a kind of energy to drive the teachers, because

we use the data from that [test]. That drives what we are doing but it’s not the only driver for us. It’s just a piece of the puzzle [to show]: This is where we need to go. It is an important piece to give us ideas about where we were going.

Principal OPB explained about how to use data to drive teachers. She preferred test scores as measurable goals that bound teachers into the goals. Thus, the collective work happened and teachers would have “tougher and higher learning and thinking [capacity].”

Test scores were seen as an important standard of teachers’ accountability as well. Principal OPA agreed that if teachers were measured with the score, it would reflect their teaching level. However, she also reminded that testing was not everything. It was only a limited part of accountability and it might cause tension because teachers do not like tests. Therefore, a PLC is needed to develop a nonthreatening environment. She said:

I think that the person sitting in this chair needs to be flexible, needs to understand that the test is just a snapshot. And we cannot govern everything by that. You have to look at it as an open mind and to say that it is not to be punitive to teachers to say they did not do very well. Because there are so many variables. So I think you need to understand that. And by creating a PLC, it allows you to let the teachers be more accountable but also to have better understanding of where they are going with their students. And then that becomes not threatening.

Standardized tests become not threatening because we are on the same page.

Principal OPB also stated, “EQAQO [a provincial standard test in Ontario] scores are very important to everybody...We think EQAQO tests are important, but we don’t stress about them too much. We want to do well. But it’s not the end of anything.”

Support

Principals from Beijing and Ontario presented significantly different supports in the interviews. Ontario principal OPB contributed herself into creating and exploring internal and external resources to the teachers. She mentioned that the PLC is about finding a time and giving teachers “a task and getting them to focus on it in working together in professional talk.” In contrast, Beijing principals preferred teachers’ emotions and feelings in the school. Principal CPB mentioned that “from the perspective of cultural climate, the trust and support among members is essential. It includes communicating with them emotionally.” Principal CPA pointed out that his participation was the reason for the successful implementation of PLCs. He said, “I am not advocating administrative stuff, but the academic freedom of speech... Everyone is equal.”

The most significant characteristic of Chinese PLCs was the dependence on experts, especially external experts. Principal CPA stated different benefits that internal and external experts might provide. He described the importance of having an expert group or a mentor as guidance in school to support teachers' research and to make the PLC successful. He said:

There must be an expert group, or a mentor, who knows how to organize PLC, how to make professional knowledge systematic, and how to support researches in details. If people have professional guidance, their researches will get supported as well as be verified. Such support and cooperation happen between novices and experts. It makes the PLC viable.

He also noted how observation and evaluation from outside can motivate people:

I invite external experts. I ask these people to present certain topics. Or when some presentation has achieved a certain degree, I will invite people to watch out. Because observation and evaluation from outside is better than those only given by me. The whole process is to mobilize teachers' and other staff members' understanding and feelings by the motivation from different resources.

Principal CPB added that more supports could be provided by external experts.

He described the effect of inviting external experts to participate in the PLC activities as the "Catfish Effect." He believed that these experts could guide teachers because "people with the same interests [might not make improvement] only by sitting together and chatting. They need an academic authority to inspire and coach them and deepen their understanding." Therefore, introducing experts can help build "a higher, upward cohesion and target."

By contrast, Ontario principals were still concerned about the needs of time. Principal OPA reported that she secured some grants to provide 3-1/2 days of release for her teachers to organize PLC activities. Principal OPB looked for help from external organizations and school boards. When she introduced professional development programs for the staff, these programs actually provided times for applying PLCs and solved her problems.

This section represented the principals' experiences about how to set the tasks based on standardized test results and how internal and external support helped. Beijing and Ontario principals had significantly different ideas about the results of the test. As principal CPB mentioned, higher expectation of students' future social and economic status reinforces the principals' and teachers' attention to the test score. Therefore, the PLC activities in his school were mainly focusing on teachers' teaching. In contrast, test scores played various roles in the Ontario schools. Test scores could be used as data to direct school tasks or as assessments of teachers' accountability. They could provide both pressure and motivation to teachers. However, Ontario principals did not recognize tests to be as heavy as Beijing principals did. On the other hand, in reporting what kind of internal supports they provided to the communities, Beijing principals tended to take care of teachers' emotions and to provide academic freedom to motivate teachers' professional development. Meanwhile, Ontario principals preferred to offer various helps such as time and tasks to guide teachers' collective work. Principals had obviously different tendencies to external supports as well. Beijing principals relied on experts to support, evaluate, and inspire teachers' professional development. However, Ontario principals tried to introduce various resources to guarantee time for PLC activities.

Change and Challenge

This theme is a collection of the ideas and phenomenon that could be categorized into two topics. One is the changes that have happened from the principals' personal opinions to the organizational level. Another topic is the challenges that need to be paid attention. It includes the consistency of the PLC, general difficulties, time-consuming, getting people's focus, the challenge of changing teacher's identity, and the tradition that reduces the opportunity of cooperation.

Changes of Principals' Personal Opinions

Principals reported that they have been changed since they tried to build PLCs in their schools. Principal CPA changed his attitude about sharing and cooperation. He now believes that collective working and idea sharing provide more benefit to people. He said:

I think people should cooperate. Previously, I prefer to finish all the things by myself. But now I believe that it is important to finish tasks by cooperation, especially by mutual supports. I have changed the opinion of protecting my ideas from being stolen to openly share them with someone else. Nowadays, I believe that sharing makes people learn more. We learn and grow together.

Principal CPB reported that his main changes in leadership were “the awareness of service” and “more respect to teachers' different voice and both the formal and informal group they have.” Principal OPA mentioned that PLC helped her develop new scopes to see her teachers. She said:

It gives me a good idea of what the capacity of staff is. Then I can see maybe I need to bring in some external support for Math or something else. Because I have a better idea of what their needs are, and how I can support them that they

can become better teachers for their students.

Principal OPB emphasized the importance of teachers' spontaneity. She made the connection between the principal's distributed leadership and the consistency of the PLC. She mentioned, "I learned to let go... I just put the framework around it. But I learned I cannot control it at all. They [teachers] come to me with the ideas and I say: great, go for it. I support them." She noted that in other schools she had done most of the jobs to practice PLCs, "but I knew when I walked away, it was over. That's not the way it should be because it should be sustaining. So I learned to let it go." Principal OPB added his strategies to motivate teacher's spontaneous work:

In the beginning, I did the most of that...But as they became more confident, they took more control of it. And I can step back and just be part of it. And they became more effective in that way because it's what they want...You get to the point when they feel they are independent enough to go off and you're just there to support and see what they need and step in when they need it.

Principal CPA reported a similar experience:

I designed the curriculum, but they did the content and the research by themselves. Then I found that these peoples have been significantly changed. So I let them go, to let teachers to organize their research of their own pedagogy and subjects. During the process, about half of them did a good job.

Organizational Changes

Since TRGs and other communities have already existed in Chinese schools, Beijing principals were mostly talking about how PLCs have changed these existing systems. Principal CPB pointed out that building TRG and LPG in school is an

administrative task in China. However, he argued, “After introducing the PLC, the form of activities becomes more sharing and conversational.” Principal CPA agreed that, “before the implementation of PLC, we commonly saw these activities as tasks that had to be finished. Therefore, these activities were neither systematic nor meaningful.”

Differently, Ontario principals valued the PLC for its providing a safe and open climate. In describing the changes after she introduced PLC into her school, principal OPB said:

The doors are open. People are not afraid to say: I don’t know how to do this. Can you help me out? There is no juggling for: I am going to do it better than you...because everyone is in a very open environment.

Principal OPB believed that the climate has been more flexible and nonhierarchical:

Sometime we just have discussions about students themselves and that might not be academic...Teachers have the opportunity to speak. It is not a hierarchy because everyone has something to offer.

Principal OPA described the openness of the PLC as “the beauty of it” because:

It provides them with that opportunity that they are not afraid to say, “I don’t agree with you” and why they don’t agree...They are not afraid to say that, because in the close-door environment, they will just complain to the partner and nothing will get done. This way they are very open to say: “I don’t like the way this is working and I can’t understand how are you doing that.”

Another reason that teachers were not afraid was their partner’s support. Principal OPA added: “They are not afraid to take risks with each other, they are not afraid to say, ‘I don’t understand this,’ because they have someone in the group that would say, ‘Here,

this is how I did it.’

Principal OPA also explained why teachers preferred to keep isolated: “Teachers tend to keep to themselves. They go along, follow a menu. Sometimes if they might be apprehensive about vulnerability, they don’t want to show their vulnerability to their colleagues so it becomes more isolated.”

By contrast, principal OPA mentioned that most of those teachers in the open and safe climate of PLC might finally change their mind:

Finally they give in and started participating because if they don’t, they are on their own. That becomes isolating, because the staff is welcoming and open. It is nonthreatening. Once they feel that is nonthreatening, they become more comfortable participating.

Challenges

Principals reported various challenges that reflect problems from teachers’ personal capacity to organizational defects. This section included two main challenges: consistency and time consuming.

Consistency. One major problem was the consistency of the PLC. Principal OPA remembered that the PLC could not be sustained when she left a school. However, it worked very well in the school where she was now working. The difference, as she said, is “they [staffs] are very keen to carry on. And that is really the important piece” because “they believe in it and they see the value in it and they want to continue whether I am here or not.”

The difficulty of sustainability referred to the reasons from teachers. One reason mentioned was teachers’ insufficient understanding of PLC or the problems of teachers’

identity. Principal OPB reflected that she never thought of teaching teachers to understand PLC because the idea of PLC is only known by those older principals. She said, “I just thought we model it and they will know.” By contrast, principal CPB decided not to tell teachers the foreign concept. He preferred to introduce core values of the PLC to his school. Meanwhile, principal CPA raised the problems of teachers’ identity because “they have never had this kind of education before. So they are lacking sufficient knowledge, capacity, emotion, and attitude.” He explained that the Chinese traditional teaching method might be one reason that leads to the problem. He said:

Our traditional teaching method makes less opportunity to cooperate, debate, and do collective research. It is harder for us to build a PLC. The key is to grasp the model of it. So I think a lot of people might know about PLC, but cannot grasp it because they are short of knowledge and experience.

If teachers were not prepared for PLCs, it was difficult to encourage them to change.

Principal OPA recognized that convincing teachers to believe PLCs as a more effective use of their time was a challenge because those who “have been allowed to continue to do things in ways that they’ve done for 20 or 25 years” might feel reluctant to make changes to their works. However, she believed that “if we do it slowly and we create an environment that is nonthreatening, that might help people open that door a little wider.”

Principal OPB reported another reason: that it was hard to get all people to “focus on the same thing, because everybody has his own agenda. They have different ideas. That’s the hard part.”

Time consuming. Most principals reported that the implementation of PLCs generally takes a long time to achieve a certain level. For example, principal CPA

mentioned that even though the PLCs have been applied for 3 years, “there is still a long way to go,” and

It has not achieved to the level that can transfer the results of research into the system. In my design, a habit can be involved into the system when it develops into a certain extent. But it has not happened yet in my school.

Principals OPA and OPB also agreed that there was still a long way to go. Principal OPA reflected: “It took us 5 years to get to this point ... I don’t have to direct what they are doing because they are understanding where they need to go and what they need to do to get there.”

She added that the principal’s participation was critical to cope with teachers’ hesitation in this long process, “I think it’s important that I become a part of that because they need to know that I value what they are doing and value the time they are taking. It does take a lot of time.”

In this section, principals reported that after a few years’ effort, they had achieved some successes to develop certain levels of PLCs in their schools. Most of the principals had changed their leadership into more a open, flexible, and sharing style. They improved their capacity with multiple lenses to understand teachers. PLCs also helped them cultivate teachers’ spontaneous work. On the organizational level, principals used PLCs to make changes in their schools. In the two Beijing schools, PLCs helped to make TRG’s activities more valuable and to reform traditional methods. In Ontario, PLCs were mainly applied to build an open and safe school climate that motivated teachers to participate in collective work.

Unfortunately, principals in this research reported certain challenges as well. Most

of them agreed that building PLCs in schools is a time-consuming process. Another significant challenge was how to make PLC consistent. One barrier was teachers' lacking of sufficient preparation and training for them to adapt the PLC in both Beijing and Ontario. Structural obstacles in Chinese schools that caused less opportunity for teachers' cooperation, debate, and collective research might be a serious problem in China.

Chapter Summary

Chapter Four has presented four themes from data analysis of the participant interviews. These four themes—structure and technology, identity and climate, tasks and context, and challenge and changes—provide perspectives on these schools, their internal and external context, and their changes and obstacles to share the experience and ideas for discussing.

One of the most significant differences between the educational system in Beijing and Ontario is the relatively mature system that all Chinese schools might have. The system includes teachers' learning communities such as TRG, LPG, and so on. It might be one of the reasons why PLCs perform differently in these two areas.

CHAPTER FIVE: DISCUSSION AND IMPLICATIONS

The purpose of this research was to illustrate the characteristics of the implementation of PLCs in Beijing schools and Ontario schools. By comparing and contrasting these characteristics, educators and scholars could learn the lessons from each other. This chapter includes a summary of the research, discussion of the results, implications for principals and policy makers in Beijing and Ontario, recommendations for further research, and the conclusion.

Summary of the Study

A review of literature showed certain characteristics of PLCs as implemented in China and other Asian countries compared to those in Western schools. In order to analyze, explain, and understand the reason of the characteristics, this research drew on a cross-country qualitative study of two Beijing schools and two Ontario schools. Since China has a very different educational system and background than Canada, the purpose of this study was to benefit the practice and the general understanding of the PLC by means of comparing and contrasting the principals' narratives in different systems. Mitchell and Sackney's (2011) model of developing capacity on personal, interpersonal, and organizational levels laid the foundation of the theoretical framework and research design. Mitchell and Sackney (2011) argue that transforming from a managed system to a living system is essential for contemporary education. Thus, on the personal level, PLCs could encourage educators to participate in the process of collective reflection that leads them to the state of deep learning. It could open their original identity to achieve the cognition of both personal knowledge and the relationship with their context. On the interpersonal level, the PLC should provide a safe and comfortable community for

conversation, decision making, and sharing. As a guarantee of building such communities, the leadership should distribute powers to teachers and develop educators to be leaders. The literature review argued that the test-oriented and hierarchical education might manipulate educators to focus on classroom teaching practice and subject materials, which might limit teachers' professional development.

The literature review also discussed the fact that the Chinese specialized learning community, TRG, has built a foundation for collective learning and working. However, this foundation was argued to maintain the harmonious climate and to present a barrier to real critical reflection. The literature review showed that since the TRG was developed under a hierarchical context, teachers may not get sufficient voices in the decision-making process. DuFour and Eaker's (1998) framework was applied to explain what kind of mission, vision, values, and goals were shared in the PLCs in Beijing and how they have been shared. Specifically, the purpose of Chinese education is shaped by standardized testing. This purpose is shared and accepted by educators through the hierarchical structure and becomes the collective norm in the school.

A qualitative research design was used to examine the different characteristics of the PLCs in Beijing and Ontario. Narrative approach was selected to collect the personal experiences and narratives from four principals, two of them in Beijing, another two in Ontario. This research collected the beliefs and practices of the four principals by semistructured interviews.

This research used within-case and thematic analysis to categorize the information from the transcripts into four themes: (a) structure and technology, (b) identity and climate, (c) task and context, and (d) changes and challenges. Analysis showed that the

main differences between PLCs in Beijing and Ontario root from the existing systems, TRG for instance, which Ontario schools do not have. First, principals had different strategies to implement PLCs. Beijing principals preferred to use TRGs as the tools to strengthen TRGs. However, Ontario principals applied the PLC as the framework to build learning communities and decision-making approaches. Second, Ontario principals positioned themselves lower than Beijing principals. They built flexible and flat structures that could help teachers work collectively. Meanwhile, Beijing principals were mainly focusing on developing teachers' pedagogical capacity. Data also showed that all principals regarded disagreement among teachers as opportunities to deepen the understanding of professional knowledge. Third, standardized tests played different roles in the two areas. In Beijing, the outcome of test became the purpose of education and provided high pressure to teachers and principals. Meanwhile, Ontario principals used the data from tests to measure, motivate, and direct their teachers. Data also showed that Beijing principals emphasized the importance of introducing external experts to support teachers, whereas Ontario principals were more likely to look for supports to release teachers for more time for professional learning activities. Finally, principals listed certain successful changes and several challenges, which provided valuable experience for future research.

Discussion of the Findings

The following discussion includes three components: (a) the transformation of principals' identity; (b) the phenomenon of sharing vision, values, and goals in PLCs from principals' lens; and (c) the influence of existing systems as well as their contexts.

The Transformation of Principals' Identities

Since PLCs are based on the ideas of living systems, which encourages people's behavior of sharing, cooperation, and mutual respect of diversities (Mitchell & Sackney, 2011), it provides opportunities for educators to deconstruct their original self-identity that confines their professional development and to reconstruct their new identity to create an effective learning climate in schools (Mitchell & Sackney, 2009, 2011). All of the principals in this research presented different transformations of their identities.

Scholars have defined characteristics of leaders in successful PLCs. These characteristics could be found in the participants' narratives. For example, Hord (1997, as cited in Seo & Han, 2012) argues that leaders in the PLC should be more supportive and prefer to share, and this identity characteristic was evident in the data. Principal CPA mentioned that the most significant change for him was the transformation from isolation to cooperation and openness. He believed that collective work is more important than individual effort. He also valued the behavior of sharing that leads to group members' collective growth. Principal CPB identified himself as a server to support teachers and other school staffs. He mentioned that the PLC helped him to understand the importance of respecting voices. Principal OPA described herself as a "facilitator" and "secretary" who finds resources for teachers. This identity helped her to know about teachers from diverse perspectives.

In another example, DuFour and Eaker (1998) as well as Mitchell and Sackney (2011) argue that leaders in PLCs should take as an asset both improving teachers' learning and encouraging their leadership. This idea is supported by principals CPB and OPB's opinions. Principal CPB argued that even though doing activities is an

administrative task, PLCs helped him encourage group members to initiate the activities by their collaborations. Similarly, principal OPB believed that teachers' self-management and autonomy was the precondition of the sustainability of the PLC. Thus, she said that she learned how to "let it go" instead of controlling.

Compared to Ontario principals, Beijing principals positioned themselves in relatively higher locations, which could be recognized from their words and descriptions. For example, besides the talk of collaboration and sharing, principal CPA also used words such as "induct" and "direct" to describe his role in PLCs, which placed him on a higher level than teachers. Principal CPB noted that there was "no reason" to refuse the ideas and voices from bottom-up, which represents a passive attitude towards teachers' responses. By contrast, Ontario principals were more close to their teachers. Principal OPA believed that principals should always recognize that they are not only a manager but a teacher as well. Principal OPB identified herself as a "generalist" and her responsibility was to be an active part of the community rather than a leader. These slight differences led to diverse performances of PLCs in sharing values and goals.

Sharing Vision, Values, and Goals

According to DuFour and Eaker (1998), the behaviors and mechanics of sharing vision, values, and goals are key components of building PLCs. Mitchell and Sackney (2011) emphasize that one important responsibility of leaders in PLCs is to protect the climate of sharing in schools. Therefore, sharing vision, values, and goals between principals and school staffs could be regarded as one decisive interaction that shapes the characters of PLCs.

Sharing the vision. Vision is the image of school purpose that draws the

attractive future of the organization to motivate organizational members to work together to achieve the goals (DuFour & Eaker, 1998). Meanwhile, even though the knowledge and practice of PLCs might change principals' identities and their leadership, the vision sharing would probably be shaped by the existing decision-making process. As DuFour and Eaker note, in a hierarchical organization, administrators assume that they understand the vision of the organization and try to tell or sell it to followers by explanation or clarification. This assumption was evident in this study. For example, principal CPB mentioned that even in a top-down system, a policy should be accepted by everyone in the organization before being implemented, and that a principal's responsibility is to clarify the policy. Principals CPA and CPB agreed that TRGs represent the top-down structure in Chinese schools. However, as principal CPA described, the PLC has changed his leadership. He reported his successful experience of changing teachers to be positive learners and organizers. After he designed certain curriculums for teachers' profession, he let teachers organize their own academic research. Half of the teachers finally "did a good job." This is a good example that supports the idea that the principal plays a key role to foster collective and spontaneous learning communities in schools (DuFour & Eaker, 1998; Hairon & Dimmock, 2012; Mitchell & Sackney, 2011).

By contrast, the Ontario principals preferred to involve their school staffs into the decision-making process and build their own vision in a relatively open and flatter approach. The PLC provided a framework for them to create the approaches. Principal OPA highlighted that the community should not be hierarchical because everyone has things to share. Principal OPB encouraged teachers to make various decisions, including their own direction, their strategies and needs, setting the deadlines, and even building

their own structure. These elements could help build the vision of the school as well.

There are two major differences between the sharing patterns. On one hand, the vision is delivered in a top-down flow in Beijing schools, whereas Ontario principals preferred to encourage teachers to develop their own structure. On the other hand, the PLC activities in Beijing were mainly focusing on teachers' academic research, but the Ontario teachers had more power and responsibilities for the management, such as finding the external resources, making decisions, and so on. According to the definition given by DuFour and Eaker (1998), principal OPB was trying to co-create the vision during collective works. Principal CPA was trying to distribute the power to teachers, but since teachers' activities were restrained, they had not yet achieved the co-creating. Besides, since principal CPB also regarded that listening to people's voices was a key point of his leadership, it could be understood that the PLC had helped him transform from telling and selling to asking and consulting.

One interesting finding was in the principals' attitudes toward sharing the concept of the PLC with their staffs. Principal CPB disagreed to introduce the PLC as a new concept to the teachers. Rather than providing new concepts, he believed that introducing the core principles of the PLC and adopting them to the Chinese context in order to develop its own approaches was more important. This phenomenon reflects the popular fact that Asian educators, scholars, and policy makers prefer to adapt new Western ideas and concepts into their existing system rather than to build new systems based on it (Hairon & Dimmock, 2012; Tsui & Wong, 2010). Meanwhile, as principal OPB mentioned, the idea of the PLC was introduced to the principals more than 17 years ago; therefore, the younger principals and teachers do not know about this idea. However, she

never considered clarifying the concept to the teachers. She assumed that when she was modeling, the staffs would know what the PLC was. These two narratives represent an interesting similarity in the principals' strategies and attitudes. They both preferred to avoid spending time on explaining the theory of the PLC to their staffs because they assumed that the concepts might cause nothing but confusion among the teachers.

Unfortunately, not explaining the theory of the PCL might become an obstacle to transfer teachers and staffs into agents of changes (Fullan, 1993, as cited in DuFour & Eaker, 1998). In a living system, the whole organization should be seen as a whole, and boundaries among people are developed through an understanding of the shared visions and values (Mitchell & Sackney, 2011). Thus, when principals try to implement PLCs into their schools, the concept of PLC might become not only a tool but also a part of the school's vision and values. However, without sufficient sharing and learning about the PLC, they might lose the precondition of the co-creating of the PLC and cultivating staffs to be agents of change, which might negatively influence the consistency of the PLC. It is the reason why even though principal OPB had successfully motivated teachers' spontaneity, she did not achieve the co-creating vision. Similarly, principal OPA had the experience that when she left a school, the PLC she had built could not be sustained. Thus, she highlighted that the key to maintaining the PLC is to develop staffs' passion and knowledge about it. Without a clear understanding of what the PLC is, this goal might become a challenge to any principal.

Sharing the goals. The vision provides a perspective for measuring the progress of PLCs in school according to the organizational goals (DuFour & Eaker, 1998). Since the vision is shared differently in the school systems in Beijing and Ontario, the goals

played significantly different roles in the participants' schools.

Interviews of Beijing principals support the opinions that Asian schools regard high performance on standardized tests as the main goal (Sargent & Hannum, 2009; Seo & Han, 2012; So et al., 2010; Song, 2012; Tsui & Wong, 2010; Wong, 2010; Xu, 2013). Principal CPB extended this idea. He observed that high-stake tests also develop students' capacity of enduring pressure, which he believed was one of the comprehensive qualities of students. He also mentioned that the context of Chinese education emphasizes the tight connection between academic performance and future social economic status. This belief presented a barrier to the comprehensive development of students and is manifested in educators focusing on test scores. From this perspective, the goal of high testing scores became the mission of the schools in Beijing and shaped the fundamental purpose.

On the contrary, the findings from Ontario principals confirm the idea that PLCs should help people to realize the gaps between the reality and the expectation and then motivate them to create efficient approaches to narrow the gaps (Mitchell & Sackney, 2011). As DuFour and Eaker (1998) clarify, the high-priority goals of a school should be the accountabilities that reflect the process rather than the outcomes of educational changes. This idea helps to explain the different attitudes to the test results between Beijing and Ontario principals. Principal OPA recognized the result of the tests as important data but only saw them as snapshots of accountabilities. She and principal OPB took various uses of students' test results. In addition to the measurement of the teachers' performances, they also used the data as the guidance to design an educational goal with teachers; these clear and collective goals then bound and drove the teachers forward.

Compared to their counterparts in Beijing, they treated the tests as the dynamics of improvements instead of the purpose and pressure of the education. This phenomenon confirms that the result orientation is a characteristic of PLCs, and the highest priority of a learning community is not an individual's knowledge and skills but the collective capacity development of staffs (DuFour & Eaker, 1998). In order to achieve this task, the principal's responsibility is to protect and promote the shared vision and values.

Sharing the values. The values illustrate the behavior, attitude, and commitments that are essential to achieve the shared vision in the PLC (DuFour & Eaker, 1998). Building a PLC that shares the values among the school's stakeholders should meet at least two interrelated conditions. One is a condition that encourages collective learning through teachers' critical reflections; another is a comfortable and safe climate that provides opportunities for teachers and other staffs to make conversations.

Some scholars have found certain positive effects of disagreements during professional reflection. Mitchell and Sackney (2011), for example, believe that disagreement creates the opportunities for educators to deepen their understanding and exchange opinions with each other. DuFour and Eaker (1998) have found that disagreement might reflect problems or mistakes that happen during the process. Harvey (1977, as cited in Burke, 2010) understands people's disagreement as the behaviors that cover their psychological insecurity of uncertainty and risk. In this research, all the participants had positive attitudes toward disagreement. For example, principal CPA noted that with the help of PLCs, he and his staff could change quarrels into collective supports. The supports provided opportunities to improve personal learning as well as to create collective learning based on similar research topics. Principal CPB believed that

disagreement was representative of teachers' serious research and that it deepened teachers' professional cognition. These attitudes helped them to foster collective learning and research with the help of PLCs.

An interesting finding emerged from principals' beliefs of their teachers' professional qualities. In answering how their teachers cope with disagreement, all principals mentioned that their teachers are professional enough to differentiate the academic disputes from personal ones. Because of this belief, the principals did not emphasize the attitude of respect. However, since they are the director and supervisor of PLC activities, their conclusions might not reflect the real situation. Because reflective conversation, or dialogue, as Senge (2006) argued, might produce discomfort, a safe climate is essential to improve the personal and interpersonal capacity (Mitchell & Sackney, 2011). More research is needed to understand this finding.

Creating a safe condition plays an important role in the process of sharing the values in schools. Mitchell and Sackney (2011) explain that the safe climate relies on psychological feelings of safety and the motivation that comes from the depth of the reflections. In this research, most principals provided various ideas and experience about developing a safe and open climate as well as how to deepen teachers' research and reflection.

Academic achievement was the main focus of Beijing principals. They introduced PLCs as the guidance to organize teachers' academic activities and to improve their engagement. Principal CPA reported his approach that motivated his teachers' passion on the PLC activities. He set the academic goals for them and guaranteed the result of the research to be shared within and across groups. Then he would widen or deepen the topic

to improve their research. The target—share—motivation—new target circle was his major design. Since the main content of the activities was research based, principal CPA could resolve the tension of disagreement because all the disputes were academic instead of personal. By means of building an equal and “academic free” climate, he achieved successful results. Another principal, CPB, understood the collective reflection and inspiration as a major characteristic of the PLC. He inspired teachers by supporting their academic research and result sharing as well. Both principals agreed that the PLC improves the effectiveness and efficiency of activities. However, these activities have only improved teachers’ explicit knowledge of the professional capacity. According to Mitchell and Sackney’s (2011) opinion, deep understanding and reflection relies on the implicit knowledge from people’s daily work and informal interaction and learning. Therefore, the data from Beijing principals cannot make the conclusion about whether or not PLCs have improved teachers’ deep understanding because principals could not provide enough data from their position.

On the other hand, principal OPA preferred to create a psychologically safe climate at first for teachers to converse. It included releasing the pressure from teachers and improving the relationship. The first thing for principal OPA to start with was to build an open environment so that teachers would get to know each other. Then, a nonthreatening community will help “take the pressure off.” Teachers would feel safe to express their vulnerability and they would be brave enough to take risks to expose their limitation of capacity and start to cooperate and learn from each other. As she reported, the reflection among teachers had improved because they had to be reflective during the collaboration in order to achieve a collective goal. It cultivated their ability to recognize

and understand problems from various angles, which could be regarded as the approach that assisted teachers to achieve a deeper view of professional knowledge.

The Influence of Existing Systems and the Contexts

Most of the major differences and some of the similarities in the former discussion find their root in the influence of existing systems in the two areas. One significant difference comes from the Chinese sophisticated community, which Ontario does not have. Another difference is the test systems that Beijing and Ontario have. This section discusses how different learning communities determine the schedule for teachers' collective work and learning as well as influences the effect of PLCs; and how test systems shape principals' strategies.

Time. Compared to their Ontario counterparts, Beijing principals did not have to worry about reforming or rebuilding the school schedule to create the time during school hours for PLC activities. The TRG has already arranged routine time for collective works (Xu, 2013). As principal CPB introduced, the TRG set six regular times every semester for meetings, and the PLC provided more effective methods for Beijing principals to improve the quality of these meetings. Unfortunately, how to embed time into working hours was one of the most challenging tasks for Ontario principals. Principal OPA reported that the traditional staff meetings, one 2-hour long meeting every month, was insufficient and had a low effect on teachers' training. Even if she could invite external teachers and specialists to train a group of teachers, these teachers had no time to help other teachers. Thus, she had to add more meetings per semester, shorten the time from 2 hours to 45 minutes, and move the meeting in school hours. Principal OPB used to save time for PLC activities in a small school. However, when she moved to a much bigger

one, finding the time became a challenge to her as well. In addition, lacking time caused teachers' resistance. Principal OPB reported that she had to clarify that participating in PLC activities was not extra work. DuFour and Eaker (1998) criticized a similar factor in the United States. They argued that lacking time for teachers' collaboration is the side effect of the factory model of school organization. This model belittles the value of teaching preparation, planning, collaborating with colleague, discussion, and so on, and fills teachers' school time with instructing. From this perspective, as the Beijing principals mentioned, TRG can be regarded as the representative of a Chinese tradition of teacher training that might be one of the advantages of Chinese education (Wong, 2010).

The effect of the PLC. Principals CPA and CPB saw the PLC as a similar idea with TRG, and tried to implement it as an additional approach to strengthen TRGs. Principal CPA described this as "reform some traditional methods without changing the agenda and spaces." They described the effect of the PLC as "more effective," "more systemic," and "more emotional." Generally, Beijing principals applied PLCs to strengthen the content and the pattern of activities in order to counteract the side effects of the administrative quality of TRGs. As principal CPB mentioned, the PLC activities helped teachers become more sharing and conversational. Principal CPA and CPB also agreed that the PLC assisted them to organize teachers' professional learning more systemically. Therefore, the strengthened academic content became the main dynamic to motivate teachers' participation, reflection, and collective work. This fact confirms Hairon and Dimmock's (2012) opinion that a centralized system confines the innovation to classroom teaching practices, subjects, and test scores. Although the principals also mentioned that the PLC has reinforced their concern about teachers' emotions through

collaboration and conversation, since the TRG is such a solid structure, they rarely mentioned that the PLC helped to engage teachers into decision-making processes that went beyond pedagogical skills. Thus, how to expand the effects of PLCs (Xu, 2013) might become a challenge to principals CPA, CPB, and any other principal who plans to implement the PLC.

Ontario principals implemented PLCs on a significantly different level. Without a sophisticated existing system, the principals had to apply the PLC as the framework to save time, create relationship, engage teachers and staff members, and so on. Principal OPA reflected her personal experience when she started to build a PLC in a school where teachers had no experience and habit to work collaboratively. She had to start with building relationships in the school before trying to create a decision-making system and a safe and open climate.

The influence of testing. Different purposes of standardized tests shaped the character of PLCs in Beijing and Ontario. In China, the most important standardized test, the college entrance examination (Gaokao), decides students' involvement in higher education, and it is recognized as one of the most decisive competition for students. As principal CPB mentioned, even though the Chinese educational system has been trying to implement process assessment for a long time, it is still lacking of concern by teachers. As similar as in the United States, focusing on the outcome of the standardized test manipulates Chinese education to be dominated by test-oriented teaching (Hursh, 2007). Therefore, both Beijing principals took the similar strategy. They were implementing the PLC to strengthen teachers' academic activities that mainly focused on pedagogical research and practice.

On the contrary, Ontario uses EQAO as the assessment of the accountability of teachers and schools. Both Ontario principals paid a lot attention to this test. However, it was a consensus to them that the purpose of the test was to measure teaching rather than students. As principal OPB mentioned, EQAO is important, but not the “end of anything.” Based on the result of the test and the framework of the PLC, they developed strategies to motivate, supervise, and support teachers’ personal and interpersonal capacity. The PLC provided opportunities and frameworks for them to build a stage for teachers to achieve collective working and learning.

Implications

Theories that are abstracted from people’s experiences represent, to some extent, the ideal models of what a part of this world should look like. Therefore, the more widely the theories are examined, the more flexible, accurate, and practical they might become. The theory of PLC carries an ideal model of how to transform educational institutions from the old pattern of managed systems to living systems in the context of a rapidly changing world. However, it is rooted in the Western educational system, which is significantly different from that of Chinese. This research examined part of Mitchell and Sackney’s (2011) model of professional capacity development and DuFour and Eaker’s (1998) framework of four building blocks in PLCs by analyzing the data from the interviews with four principals, two in Beijing and two in Ontario. Based on the findings, this section provides implications for practice and policy. Some recommendations for future research are also discussed at the end of the section.

Implications for Ontario Principals and Policy Makers

Unlike Beijing principals, Ontario principals should pay more attention to the

consistency of the PLC they have built because TRGs, the Chinese national wide learning community, have laid basic mechanisms of regular meeting, opportunities of collective work, and decision making for principals. However, Ontario principals have to build the system from the start, such as relationship, time for activities, and collaboration. In addition, it is a high risk that when they leave a school, the system cannot last long. Thus, the strategies of sustainability should be regarded as key components of the practice. In explaining how to maintain the changes that are carried by PLCs, DuFour and Eaker (1998) recommend to develop teachers to be the agents of change and then involve people into “chains of influence” (Hargreaves, 2004, as cited in Stoll et al., 2006, p. 247). The motivation of the agents and the chains of influence should not only build on the development of personal capacity and the improvement of results, but also be based on a consensus of the meaning of specific behaviours. Therefore, the first implication for Ontario principals is to share with teachers the understanding of the PLC both theoretically and practically so that they can generate sustainable changes.

The second suggestion is to simplify the understanding of the PLC. It would become a challenge to any principal who wants to share it with their staff, but it is worth spending the time and effort. If a principal moves to a new school, the simplified edition could help him/her to spread the disciplines and strategies more effectively and efficiently. Principals might need help from external resources to transform the complicated theory into simple ideas. One strategy would be to invite experts into the school and to work with the principal and staff members for a period of time, so that they could simplify and practice the notions together.

Ontario principals' reports reflected that schools need supports from policy

makers. These supports include, first, adjusting the educational task and reducing the work burden. This strategy could release more resource and working time for principals and school staffs to examine changes. Making changes, such as implementing PLCs, is time consuming, but it is critical to improve educational quality. Second, policies should build a provincial structure to motivate schools to build learning communities, and support schools to develop effective and sufficient collective work and learning. Chinese TRGs and LPGs might provide some valuable experiences for Ontario policy makers to reference.

Implication for Beijing Principals and Policy Makers

This research represented one major limitation of Beijing principals that PLCs are restricted to the teachers' pedagogical and academic performance. This situation is the result of certain reasons. One is the external pressure of standardized tests; another is the principals' attitudes toward a new concept. The existing system might play a role, as well. Therefore, trying to expand the role of PLCs in the school might need efforts to provide changes in these three areas.

Shifting from result assessment to process assessment is an important topic for Chinese education. Standardized tests, such as the college entrance examination, play an important role in deciding a child's future. China's one-child policy has made the responsibility even heavier for the only child to shoulder the entire burden of the family. Thus, the entire society delivers pressure to teachers. Even when the process assessment has been applied in the educational system, teachers and principals actually have little space and willingness to change the situation. Educational policy makers should bear in mind that the accountability of education could not be measured by any isolated

snapshots. Educators require more supports to develop the understanding and practice of how to help students to be better people rather than test machines. It is a key responsibility of policy makers to help transform education from the test-oriented pattern to a student-oriented pattern. The test score should not be the purpose, or as DuFour and Eaker (1998) say, the mission of the schools.

It is a consensus among the Chinese people that any ideas that come from the West should be adapted to the local disciplines. Applying foreign concepts to expand or explain traditional ideas is the fashion. The Beijing principals preferred to apply the practical disciplines and strategies from the PLC to strengthen the TRG rather than sharing new ideas with school staffs. However, professional capacity means not only cultivating teachers' knowledge and practice of teaching, but also improving their quality of self-development, collective work, reflective dialogue, and so on. Thus, even though the high pressure of testing from outside the school still has a strong influence on teaching, it is better for Beijing principals to share the notion of the PLC with teachers and staffs. It is the key approach of sharing the vision, values, and goals. It provides an opportunity to help teachers to be better people.

Trying to encourage teachers to be involved in the broader decision-making process needs to break the hierarchical authority of the TRG, because it was designed to train teachers in a top-down system. To cultivate more people to be organizers and leaders in their areas, there is a need to distribute power from principals and any administrative team leaders to all the people. The whole decision-making system should also be transformed in both horizontal and vertical directions. Cross-group, informal, and flexible communities will be encouraged as well. From this perspective, even if the TRG

has laid a strong foundation for the implementation of the PLC, it could be regarded as an obstacle as well. Chinese principals need strategies and courage to combine both kinds of learning communities and to encourage bottom-up changes to reform the existing system and values.

Recommendations for Future Research

There are certain limitations in this research. The first one is that it relies only on the voice from principals. Since principals are mainly concerned about interpersonal and organizational development in a school, this situation leads to a lack of information about teachers' personal learning and changes. The second one is the selection of participants. The participants were principals who have enough experience and understanding of the PLC. They are capable of providing information about the success and challenge. However, narratives about mistakes, failures, and struggles are essential for the research as well, but these data could not be collected from the voluntary participants. The third one is the data collection. Principal self-report data provide limited information of the details and real situation about people's, especially teachers', behavior and interaction because principals prefer to keep politically right in their talks. In order to collect data from people's daily work, observation is the essential method.

Several topics could emerge from these limitations that are worthy of further research. First, teachers' voices should be involved in future research, which could expand various topics. For example, most principals believe that their teachers are mature and professional enough to cope with disagreement. However, it might be important to collect teachers' personal opinions about the disagreement and the climate during meetings because the environment shapes their formal and informal collective learning.

More questions should emerge as to what is exactly happening with the teachers when disagreement happens and how these disagreements influence their professional development in the PLC. Research about these topics could be more reliable and valid if data are collected from teachers who are involved in inappropriate interpersonal relationships and collective learning climates.

Comparing and contrasting the opinions from both teacher and principal provides opportunities to understand the invisible structure. The major responsibility of principals is to maintain the organizations; thus, they are concerned more about the formal and visible structure of their schools. By contrast, teachers have their own informal groups and relationships. These intangible structures and subcultures have a strong influence on teachers' daily work and the deep learning from these works. One question that emerges from this research would be whether the clarification of the concept of the PLC will influence its effects. Is the idea of the PLC too complicated for teachers to understand? Which is the better approach to introduce the PLC: the nonverbal and implicit way or the verbal and explicit way? Answering these questions requires data from teachers' perspectives.

Critical reflection provides a more comprehensive understanding of the PLC. Some Chinese scholars and educators might question that if the test-oriented factor would not change in the near future, is it worthwhile to waste time on building teachers' capacity other than for classroom teaching? In addition, in those cultures, like China, where educators and teachers do not have a Western background, how can the theory of the PLC be adjusted to cope with the local context? Reports from those struggling principals and teachers might be more valid to these questions.

As the measurement of teachers' accountability and professional development should be regarded as a process, all the related questions should not be answered without data from observation. For instance, as Wong (2010) and Xu (2013) argue, the Chinese educational system has laid the foundation of teachers' collaboration, which, as they believe, is a good condition for the implementation of the PLC. It is unknown whether this foundation of collaboration could lead to deep and collective learning or whether it is collaboration that is fostered by administrative pressure or harmonious culture and could not create critical reflection in PLCs. The data from observation would be the most reliable and valid evidence.

Finally, the notion of the PLC has emerged in the climate of a democratic background. By contrast, a hierarchical and test-oriented structure widely exists in educational systems around the world. The examination that Chinese scholars and educators have been taking to introduce the PLC into the TRG provides a new lens for Western scholars to develop the theory. Ideally, the PLC works better in a distributed power system (Mitchell & Sackney, 2011). Meanwhile, in the reality in which hierarchy is inevitable, Chinese educators' efforts provide examples for examining whether the PLC could be implemented in a mutual top-down system and what kind of change it has fostered in the system. These narratives and experiences provide diverse lenses for scholars to review and adjust the existing theory of the PLC.

Conclusion

Few literatures compare the performances of PLCs in the background of Canada and China. This research found some important differences between the PLCs in Beijing and in Ontario, which can create new lenses for scholars and educators to review the

practice and theory of the PLC. The notion of the PLC was created and developed in the background of Western educational philosophy. As Mitchell and Sackney (2011) argue, contemporary education should shift from managed system to living system in order to keep pace with an ever-changing society. The PLC could provide supports and opportunities to organize learning communities that provide safe, comfortable climates with mutual respect of diverse ideas to foster educators' deep learning. It is a process that bonds with both formal and informal learning, conversation and collective practice rather than with top-down, lecture-centered training. This study has shown that educators' professional development should be beyond the classroom teaching skill and test-centered strategies and should also focus on the awareness of the realities and expectations and the mystery of learning. The PLC can motivate leaders in an organization and encourage the leadership for learning as the most effective leadership.

The implementation of PLCs in those schools in Beijing had certain different characteristics that might broaden the general notion of the PLC. Even if top-down structures and test-orientation are believed to be the barriers for PLCs to develop educators' professional capacity, it can, to some extent, provide various supports to an existing hierarchical system and foster minor changes. In the narratives of Beijing principals, principals applied PLCs into the TRGs and improved the effectiveness and efficiency of activities. In addition, PLCs also guided principals to distribute their power to staff members and motivated teachers' spontaneous learning and research. Principals can successfully improve defects of the traditional system with the practices of the PLC. It is certain that the PLC positively influences the principals in both Beijing and Ontario, which proves its applicability in diverse educational backgrounds.

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Appendix

Interview Guide

1. Please summarize what you know and feel about Professional Learning Community (PLC).
2. Describe how you initiate and develop the PLC in your group. (You could refer to the following aspects):
 - a. The formation of the PLC.
 - b. The impact on student learning.
 - c. The most impressive aspect of the PLC.
 - d. Others.
3. From the perspective of a principal, what role do you think external/internal supports play in the development of PLCs in the school?
4. What do you think of the impact of the PLC activities on your professional development? (You could refer to the following questions):
 - a. Do you feel PLC has changed your leading strategy?
 - b. Do you learn things that beyond the knowledge and experience of being a principal?
 - c. Do you think you have been changed by PLC activities to be a better people rather than only to be a better principal?
 - d. Others.
5. When you organize or participate a PLC activity, how do you describe the climate of relationships among persons during the process? (You could refer to the following aspects):

- a. Generally speaking, do people feel harmony during activities?
 - b. How do people cope with different opinions and positions?
 - c. Do you think it is an effective and efficient method to improve collective learning?
 - d. Do you think PLC help people to develop their capacities together?
 - e. Others.
6. How do you identify PLC as matching the vision of the school? (You could refer to the following aspects):
- a. School development (perception of the need of the school; prioritization of focus of school development).
 - b. Teacher professional development.
 - c. What is/are the vision(s) of the school, say in 5 years' or 10 years' time?
 - d. How does Learning Study help to achieve the vision(s)?
 - e. Others.
7. In what ways does the school structure facilitate the development of PLC in the school?
8. In what ways does the school culture facilitate the development of PLC in the school?
9. How do you identify the role of standard tests play in the initiation of PLCs in schools?
10. What are the challenges of PLC met, and how to deal with these challenges?